



T Commands

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table-map (isis)

[no] **table-map** *policy-name* [**filter**]

Syntax Description

no Negate a command or set its defaults

table-map Table-map policy used to filter routes & tune attributes before downloading to RIB

filter Filter the routes based on policy results

policy-name Type: string

length: 63

A 'routing-rules' route-map name

Command Modes

- /exec/configure/router-isis/router-isis-af-ipv6

table-map (qosmgr)

table-map *default-tmap-enum-name*

Syntax	Description
table-map	Configure a table map <i>Not available in this release.</i>
<i>default-tmap-enum-name</i>	<p>cir-markdown-map value: 1 Exceed color markdown map</p> <p>pir-markdown-map value: 2 Violate color markdown map</p>
Command Modes	<ul style="list-style-type: none"> • /exec/configure

table-map (bgp)

[no] **table-map** *rmap-name* [**filter**]

Syntax Description

no	Negate a command or set its defaults
table-map	Apply table-map to filter routes downloaded into URIB
<i>rmap-name</i>	Type: string pattern: [!~]* length: 63 Route-map name
filter	Selective route download

Command Modes

- /exec/configure/router-bgp/router-bgp-af

table-map (eigrp)

[no] table-map *map* [filter]

Syntax Description	no Negate a command or set its defaults
	table-map Configure Table Map information
	<i>map</i> Type: string pattern: [!~]* length: 63 Route-map name
	filter Filter routes which are rejected by route-map
Command Modes	<ul style="list-style-type: none">• /exec/configure/router-eigrp/router-eigrp-vrf-common• /exec/configure/router-eigrp/router-eigrp-af-common

table-map (isis)

[no] **table-map** *policy-name* [**filter**]

Syntax Description

no Negate a command or set its defaults

table-map Table-map policy used to filter routes & tune attributes before downloading to RIB

filter Filter the routes based on policy results

policy-name Type: string

length: 63

A 'routing-rules' route-map name

Command Modes

- /exec/configure/router-isis/router-isis-vrf-common
- /exec/configure/router-isis/router-isis-af-ipv4

table-map (ospf)

[no] table-map *policy-name* [filter]

Syntax Description	no Negate a command or set its defaults
	table-map Policy for filtering/modifying OSPF routes before sending them to RIB
	<i>policy-name</i> Type: string pattern: [!~]* length: 63 Route-map name
	filter To block the OSPF routes from being sent to RIB
Command Modes	<ul style="list-style-type: none">• /exec/configure/router-ospf• /exec/configure/router-ospf/vrf

table-map (ospfv3)

[no] **table-map** *policy-name* [**filter**]

Syntax Description

no Negate a command or set its defaults

table-map Policy for filtering/modifying OSPFV3 routes before sending them to RIB

policy-name Type: string

pattern: [!~]*

length: 63

Route-map name

filter To block the OSPFV3 routes from being sent to RIB

Command Modes

- /exec/configure/router-ospf3/router-ospf3-af-ipv6
- /exec/configure/router-ospf3/vrf/router-ospf3-af-ipv6

table-map (qosmgr)

[no] **table-map** *table-map-name*

Syntax Description	no	Negate a command or set its defaults
	table-map	Configure a table map <i>Not available in this release.</i>
	<i>table-map-name</i>	Type: string length: 40 Table map name
Command Modes	• /exec/configure	

tac-pac (syscli)

tac-pac [*uri0* [**vrf** *vrf-known-name*]]

Syntax Description

tac-pac save tac info in a compressed .gz file at specific location

uri0 Type: uri
Select destination filesystem

vrf Display per-VRF information

vrf-known-name Type: vrf
Known VRF name

Command Modes

• /exec

tac-pac (syscli)

tac-pac [*uri0*]

Syntax Description

tac-pac save tac info in a compressed .gz file at specific location

uri0 Type: uri

Select destination filesystem

Command Modes

• /exec

tacacs-server deadtime

[no] tacacs-server deadtime *i0*

Syntax Description

no	Negate a command or set its defaults
tacacs-server	Configure TACACS+ server related parameters
deadtime	duration for which non-reachable server is skipped
<i>i0</i>	Type: integer min: 0 max: 1440 Length of time, in minutes

Command Modes

- /exec/configure

tacacs-server directed-request

[no] tacacs-server directed-request

Syntax Description	no	Negate a command or set its defaults
	tacacs-server	Configure TACACS+ server related parameters
	directed-request	enable direct authentication requests to server
Command Modes	• /exec/configure	

tacacs-server host

```
[no] tacacs-server host hostipname {key {0 s0|6 s6|7 s1s2} [port i1] [timeout i2][port1 i3]
[timeout1 i4]}|no tacacs-server host hostipname key
```

Syntax	Description
no	Negate a command or set its defaults
tacacs-server	Configure TACACS+ server related parameters
host	TACACS+ server's DNS name or its IP address
<i>hostipname</i>	Type: nameorip IPV4/IPV6 address or DNS name
key	TACACS+ shared secret
0	TACACS+ shared secret(clear text)
<i>s0</i>	Type: string length: 63 TACACS+ shared secret(clear text)
port	TACACS+ server port
<i>i1</i>	Type: integer min: 1 max: 65535 TACACS+ server port
timeout	TACACS+ server timeout period in seconds
<i>i2</i>	Type: integer min: 1 max: 60 TACACS+ server timeout period in seconds
6	TACACS+ shared secret(type-6 encrypted)
<i>s6</i>	Type: string length: 124 TACACS+ shared secret(encrypted)
7	TACACS+ shared secret(encrypted)
<i>s1</i>	Type: string length: 63 TACACS+ shared secret(encrypted)

port1	TACACS+ server port
<i>i3</i>	Type: integer min: 1 max: 65535 TACACS+ server port
timeout1	TACACS+ server timeout period in seconds
<i>i4</i>	Type: integer min: 1 max: 60 TACACS+ server timeout period in seconds
<i>s2</i>	Type: string length: 63 TACACS+ shared secret(clear text)

Command Modes

- /exec/configure

tacacs-server key 0

```
[no] tacacs-server key {0 s0 [timeout i0]|6 s6 [timeout6 i6]|7 s1 [timeout1 i1]|s2 [timeout2 i2]}|no tacacs-server key
```

Syntax	Description
no	Negate a command or set its defaults
tacacs-server	Configure TACACS+ server related parameters
key	Global TACACS+ server shared secret
0	default TACACS+ shared secret(clear text)
<i>s0</i>	Type: string length: 63 default TACACS+ shared secret(clear text)
timeout	Global TACACS+ server timeout period in seconds
<i>i0</i>	Type: integer min: 1 max: 60 Global TACACS+ server timeout period in seconds
6	default TACACS+ shared secret(type-6 encrypted)
<i>s6</i>	Type: string length: 124 default TACACS+ shared secret(type-6 encrypted)
timeout6	Global TACACS+ server timeout period in seconds
<i>i6</i>	Type: integer min: 1 max: 60 Global TACACS+ server timeout period in seconds
7	default TACACS+ shared secret(encrypted)
<i>s1</i>	Type: string length: 63 default TACACS+ shared secret(encrypted)
timeout1	Global TACACS+ server timeout period in seconds
<i>i1</i>	Type: integer min: 1 max: 60 Global TACACS+ server timeout period in seconds

<i>s2</i>	Type: string length: 63 default TACACS+ shared secret(clear text)
timeout2	Global TACACS+ server timeout period in seconds
<i>i2</i>	Type: integer min: 1 max: 60 Global TACACS+ server timeout period in seconds

Command Modes

- /exec/configure

tacacs-server timeout

[no] tacacs-server timeout *i0*

Syntax Description

no	Negate a command or set its defaults
tacacs-server	Configure TACACS+ server related parameters
timeout	Global TACACS+ server timeout period in seconds
<i>i0</i>	Type: integer min: 1 max: 60 Global TACACS+ server timeout period in seconds

Command Modes

- /exec/configure

tacacs+ enable

[no] "tacacs+" enable

Syntax Description	no Negate a command or set its defaults
	tacacs+ Enable tacacs+
	enable Enable tacacs+
Command Modes	• /exec/configure

tag happens in

[no] tag tag_id op tag_id [op tag_id [op tag_id]] happens threshold in interval|no tag

Syntax Description

no	Negate a command or set its defaults
tag	event tag identifier
<i>tag_id</i>	Type: string length: 029 tag name
<i>op</i>	boolean operator and value: 001 Use boolean and logic or value: 003 Use boolean or logic andnot value: 002 Use boolean andnot logic
happens	The number of occurrences before raising the event
<i>threshold</i>	Type: uinteger min: 1 max: 4294967295 Occurs value
in	Number of occurrences must occur within this time period
<i>interval</i>	Type: uinteger min: 0 max: 4294967295 Enter seconds value

Command Modes

- /exec/configure/event-manager-applet

tail (clic)

" | " **tail** [-n *lines*]

Syntax Description

| Pipe command output to filter

tail Display last lines

-n modify number of lines (default 10)

lines Type: integer

number of lines to print

Command Modes

- /output

tail (util_cli)

tail *uri0* [*i1*]

Syntax Description

tail Display the last part of a file

uri0 Type: uri

Filename to be displayed

i1 Type: integer

min: 0 max: 80

Enter the number of lines to be displayed

Command Modes

• /exec

tar

```
tar {create new-archive-file [{gz-compress|bz2-compress|uncompressed}]+
  [{remove|absolute|verbose}]+ files+|append archive-file [{remove|absolute|verbose}]+ files+|extract
  archive-file [{screen|to dest-dir|keep-old|verbose}]+|list archive-file}
```

Syntax Description

tar	archiving operations
create	create an archive (merge several files together)
append	append some files to an existing archive
extract	extract files from archive (unmerge them)
verbose	display files while merging/extracting
gz-compress	compress archive with gzip, the default -> .tar.gz
bz2-compress	compress archive with bzip2 -> .tar.bz2
uncompressed	don't compress archive -> .tar
remove	remove files after adding them to the archive
absolute	don't strip leading `/'s from file names
keep-old	don't replace existing files when extracting
screen	extract files to screen
list	shows the list of files which are part of the archive
<i>new-archive-file</i>	Type: uri the name of the archive (extension will be added if none of tar/tgz/tar.gz/tar.bz2/tbz2/tar.Z specified)
<i>archive-file</i>	Type: uri the name of the archive (extension will be added if none of tar/tgz/tar.gz/tar.bz2/tbz2/tar.Z specified)
<i>files</i>	Type: uri name of file to be added into archive
to	extract to specific directory (default is bootflash)
<i>dest-dir</i>	Type: uri destination dir where to extract to (created if not exist), default is bootflash

Command Modes

- /exec

tclsh (clic)

tclsh

Syntax Description

tclsh Execute
tclsh

Command Modes

- /exec

tclsh (clic)

tclsh *file* [*args*]+

Syntax Description

tclsh source tclsh script

file Type: uri
the file to run

args Type: string
args to tcl script

Command Modes

• /exec

telnet

telnet {sohost} [i0] [[**source** {host_srcinterface}] [**vrf** {vrf-namevrf-known-name}]]

Syntax Description

telnet	Telnet to another system
<i>so</i>	Type: string length: 64 Enter hostname
<i>host</i>	Type: ipaddr Enter a valid IPv4 address
source	Set source address in IPv4 header
<i>host_src</i>	Type: ipaddr Set IPV4 address as source
<i>interface</i>	Type: interface Set interface to send IPv4 packet
vrf	Display per-VRF information
<i>vrf-name</i>	Type: vrf pattern: [-a-zA-Z0-9_.;\$#@]* antipattern: vrf detail interface definition context forwarding member all l2-vrf topology passive length: 32 VRF name
<i>vrf-known-name</i>	Type: vrf Known VRF name
<i>i0</i>	Type: integer min: 1 max: 65535 Enter the port number

Command Modes

- /exec

telnet6

```
telnet6 {s1host1} [i0] [[source {host1_srcinterface}] [vrf {vrf-namevrf-known-name}]]
```

Syntax Description

telnet6	Telnet6 to another system using IPv6 addressing
<i>s1</i>	Type: string length: 64 Enter hostname
<i>host1</i>	Type: ipv6addr Enter a valid IPv6 address
source	Set source address in IPv6 header
<i>host1_src</i>	Type: ipv6addr Set IPV6 address as source
<i>interface</i>	Type: interface Set interface to send IPv6 packet
vrf	Display per-VRF information
<i>vrf-name</i>	Type: vrf pattern: [-a-zA-Z0-9_.;\$#@]* antipattern: vrf detail interface definition context forwarding member all l2-vrf topology passive length: 32 VRF name
<i>vrf-known-name</i>	Type: vrf Known VRF name
<i>i0</i>	Type: integer min: 1 max: 65535 Enter the port number

Command Modes

- /exec

telnet server enable

[no] telnet server enable

Syntax Description	no Negate a command or set its defaults
	telnet Enable telnet
	server Enable telnet
	enable Enable telnet
Command Modes	• /exec/configure

template

template *res-mgr-template-known-name-all*

Syntax Description

template Change the template for this vdc

res-mgr-template-known-name-all Type: string

Resource template for this vdc

Command Modes

- /exec/configure/vdc

template peer

[no] **template peer** *peer-template-name*

Syntax Description

no	Negate a command or set its defaults
template	Enter template command mode
peer	Template configuration for peer parameters
<i>peer-template-name</i>	Type: string length: 80 Neighbor template name

Command Modes

- /exec/configure/router-bgp

template peer-policy

[no] **template peer-policy** *peer-policy-template-name*

Syntax Description

no	Negate a command or set its defaults
template	Enter template command mode
peer-policy	Template configuration for policy parameters
<i>peer-policy-template-name</i>	Type: string length: 80 Name of peer-policy template

Command Modes

- /exec/configure/router-bgp

template peer-session

[no] **template peer-session** *peer-session-template-name*

Syntax Description

no	Negate a command or set its defaults
template	Enter template command mode
peer-session	Template configuration for session parameters
<i>peer-session-template-name</i>	Type: string length: 80 Name of peer-session template

Command Modes

- /exec/configure/router-bgp

terminal

terminal {**monitor**|**no** {**monitor1**|**monitor-force**}}

Syntax Description

terminal	Set terminal line parameters
monitor	Copy Syslog output to the current terminal line
no	Negate a command or set its defaults
monitor1	Copy Syslog output to the current terminal line
monitor-force	Copy Syslog output to the current terminal line

Command Modes

• /exec

terminal alias

[no] terminal alias [persist] [alias-name [command]]

Syntax Description

no Negate a command or set its defaults

terminal Set terminal line parameters

alias show aliases (if no arguments); create 'exec' aliases (not persistent). Persistent aliases are in config mode, see 'cli alias'

persist add terminal alias to <username>.rc.cli file (auto-executed at login time)

alias-name Type: string

Name of the alias. (if last argument: shows the value of that alias) Command lines can start with an alias and it will be expanded before parsing. An alias can also be used right after a pipe. The substitution text can contain things like '\$1 \$2' and those \$<number> will be substituted by correspondingly numbered token from the command line starting the counting after the alias.

command Type: remainder

Value of the alias (what the alias will be substituted with)

Command Modes

- /exec

terminal color

[no] terminal color [persist]

Syntax Description	
no	Negate a command or set its defaults
terminal	Set terminal line parameters
color	enable colorization of prompt(green if last command ok, red if error), command line (blue), output (default color)
persist	add command to <username>.rc.cli file (auto-execed at login time)
Command Modes	<ul style="list-style-type: none">• /exec

terminal context management

[no] terminal context management

Syntax Description		
	no	Negate a command or set its defaults
	terminal	Set terminal line parameters
	context	set the vrf context
	management	vrf context management

Command Modes	
	• /exec
	• /exec

terminal deep-help

[no] terminal deep-help

Syntax Description	no Negate a command or set its defaults
	terminal Set terminal line parameters
	deep-help enable cli syntax and list
Command Modes	• /exec

terminal dont-ask

[no] terminal dont-ask [persist]

Syntax Description

no Negate a command or set its defaults

terminal Set terminal line parameters

dont-ask Don't ask 'are you sure' questions, take default answer instead

persist add command to <username>.rc.cli file (auto-execed at login time)

Command Modes

• /exec

terminal edit-mode vi

[no] terminal edit-mode vi [persist]

Syntax Description

no Negate a command or set its defaults

terminal Set terminal line parameters

edit-mode set command line edition keys (vi or emacs; emacs is default)

vi edit like in vi; by default in insert-mode, use ~ for command-mode

persist add command to <username>.rc.cli file (auto-execed at login time)

Command Modes

• /exec

terminal event-manager bypass

terminal [*noarg*] **event-manager** **bypass**

Syntax Description

terminal	Set terminal line parameters
<i>noarg</i>	no value: 1 Negate a command or set its defaults
event-manager	Event manager cli event
bypass	Bypass event manager cli event publish

Command Modes

- /exec

terminal history no-exec-in-config (clic)

[no] terminal history no-exec-in-config

Syntax Description	no	Negate a command or set its defaults
	terminal	Set terminal line parameters
	history	configure terminal history properties
	no-exec-in-config	don't recall exec commands while in config mode

Command Modes • /exec

terminal history no-exec-in-config (clic)

[no] terminal history no-exec-in-config

Syntax Description

no	Negate a command or set its defaults
terminal	Set terminal line parameters
history	configure terminal history properties
no-exec-in-config	don't recall exec commands while in config mode

Command Modes

- /exec

terminal history no-exec-in-config (clic)

[no] terminal history no-exec-in-config

Syntax Description		
	no	Negate a command or set its defaults
	terminal	Set terminal line parameters
	history	configure terminal history properties
	no-exec-in-config	don't recall exec commands while in config mode
Command Modes		• /exec

terminal length (vsh)

terminal length *i0*

Syntax Description

terminal Set terminal line parameters

length Set number of lines on a screen

i0 Type: uinteger

min: 0 max: 511

Number of lines on screen (0 for no pausing)

Command Modes

- /exec/configure/console

terminal length (vsh)

terminal length *i0*

Syntax Description	terminal	Set terminal line parameters
	length	Set number of lines on a screen
	<i>i0</i>	Type: uinteger min: 0 max: 511 Number of lines on screen (0 for no pausing)
Command Modes	• /exec	

terminal lock

terminal lock

Syntax Description

terminal Set terminal line parameters

lock Locks the CLI Config mode

Command Modes

- /exec

terminal log-all

[*noarg*] **terminal log-all**

Syntax Description

terminal Configure terminal settings

noarg **no value: 1**
Negate a command or set its defaults

log-all Accounting log all commands including the show commands

Command Modes

• /exec/configure

terminal no

terminal no {length|terminal-type|width}

Syntax Description

terminal	Set terminal line parameters
no	Negate a command or set its defaults
length	Set number of lines on a screen
terminal-type	Set the terminal type
width	Set width of the display terminal

Command Modes

- /exec

terminal output xml

[no] terminal output xml

Syntax Description	no Negate a command or set its defaults
	terminal Set terminal line parameters
	output how output of show commands should be formatted
	xml xml output
Command Modes	• /exec

terminal password

terminal password *password* | **no terminal password** [*password*]

Syntax Description

no Negate a command or set its defaults

terminal Set terminal line parameters

password set a password to be used in copy scp/ftp commands; use online help on the argument to disable echo so you don't need to type control-x-e twice (to toggle echo), echo will be re-enabled after carriage-return

password Type: userdef

Enter the password (online help that you just did disabled echo so type your password and press return)

Command Modes

- /exec

terminal redirection-mode

terminal redirection-mode *mode*

Syntax Description		
	terminal	Set terminal line parameters
	redirection-mode	Set the redirection mode
	<i>mode</i>	ascii value: 0 Set the redirection mode to ASCII
		zipped value: 1 Set the redirection mode to ZIPPED
Command Modes		• /exec

terminal reset-role

terminal reset-role *num*

Syntax Description

terminal Set terminal line parameters

reset-role Reset the privilege role to default

num Type: integer
 min: 0 max: 15
 Enter the role num

Command Modes

• /exec

terminal reset vlan-config-mutex

terminal reset vlan-config-mutex

Syntax	Description
terminal	Set terminal line parameters
reset	Force reset of the vlan config mode mutex
vlan-config-mutex	Vlan configuration mutex

Command Modes	• /exec
----------------------	---------

terminal session-timeout

`terminal session-timeout i0`

Syntax Description	
<code>terminal</code>	Set terminal line parameters
<code>session-timeout</code>	Set session timeout
<code>i0</code>	Type: uinteger min: 0 max: 525600 Enter timeout in minutes, 0 to disable
Command Modes	<ul style="list-style-type: none">• /exec

terminal sticky-mode

terminal [*noarg*] **sticky-mode**

Syntax Description	terminal Set terminal line parameters
	<i>noarg</i> no value: 1 Negate a command or set its defaults
	sticky-mode Search for the command match in current mode only
Command Modes	• /exec

terminal terminal-type

terminal terminal-type *s0*

Syntax Description

terminal Set terminal line parameters

terminal-type Set the terminal type

s0 Type: string
Terminal type

Command Modes

- /exec

terminal tree-update

terminal tree-update

Syntax Description

terminal Set terminal line parameters

tree-update Updates the main parse tree

Command Modes

• /exec

terminal unlock

terminal unlock

Syntax Description	terminal Set terminal line parameters
	unlock Force unlocking of the CLI config mode
Command Modes	• /exec

terminal verify-only

terminal [*noarg*] **verify-only** [**username** *user*]

Syntax Description

terminal Set terminal line parameters

noarg **no value: 1**
Negate a command or set its defaults

verify-only Verify command and do not execute

username Username for aaa authorization

user Type: string
 length: 32
 Username for aaa authorization

Command Modes

• /exec

terminal width (vsh)

terminal width *i0*

Syntax Description

terminal Set terminal line parameters

width Set width of the display terminal

i0 Type: integer

min: 24 max: 511

Number of characters on a screen line

Command Modes

- /exec/configure/console

terminal width (vsh)

terminal width *i0*

Syntax Description	terminal Set terminal line parameters
	width Set width of the display terminal
	<i>i0</i> Type: integer min: 24 max: 511 Number of characters on a screen line
Command Modes	• /exec

threshold-percent

Syntax	Description
no	Negate a command or set its defaults
threshold-percent	Threshold parameters
percent-threshold	Percentage threshold
percentup	Up threshold
<i>up-percentage</i>	Type: integer min: 0 max: 100 Up threshold percentage
percentdown	Down threshold
<i>down-percentage</i>	Type: integer min: 0 max: 100 Down threshold percentage
Command Modes	• /exec/configure/tr-list-thrp

time-range

[no] **time-range** *name*

Syntax Description	no	Negate a command or set its defaults
	time-range	Define time range entries
	<i>name</i>	Type: string length: 64 Time range name
Command Modes		• /exec/configure

time daily

time {**daily** *s0*|**monthly** *s1*|**start** {**now** **repeat** *s2*|*s3* [**repeat** *s4*]}|**weekly** *s5*}|**no time** [{**daily** *s0*|**monthly** *s1*|**start** {**now** **repeat** *s2*|*s3* [**repeat** *s4*]}|**weekly** *s5*}]

Syntax Description

no	Negate a command or set its defaults
time	Specify a schedule to run jobs
daily	Specify a daily schedule
<i>s0</i>	Type: string length: 5 [HH:]MM
monthly	Specify a monthly schedule
<i>s1</i>	Type: string length: 8 Day-of-month {[dm:]HH:]MM} dm = 1 .. 31
start	Specify a future time schedule
now	Start-time = 2 minutes from `now`
repeat	Specify an interval
<i>s2</i>	Type: string length: 8 Interval {[dd:]HH:]MM} dd,HH,MM are +ve integers
<i>s3</i>	Type: string length: 18 Start-time {[[[yyy:]mmm:]dd:]HH:]MM +[[dd:]HH:]MM}
repeat	Specify an interval
<i>s4</i>	Type: string length: 8 Interval {[dd:]HH:]MM} dd,HH,MM are +ve integers
weekly	Specify a weekly schedule
<i>s5</i>	Type: string length: 10 Day-of-week {[dow:]HH:]MM} dow = 1 (Sun) .. 7 (Sat)

Command Modes

- /exec/configure/schedule

timers (eigrp)

[no] **timers** {**nsf** {**route-hold** *hold-interval*|**converge** *converge-interval*|**signal** *signal-interval*}|**active-time** [*max-active-time*|**disabled**]}

Syntax Description		
no		Negate a command or set its defaults
timers		Set EIGRP timers
nsf		EIGRP NSF timer
route-hold		EIGRP hold time for routes learned from nsf peer
<i>hold-interval</i>	Type: integer	min: 20 max: 300 default: 240 Seconds
active-time		EIGRP time limit for active state
<i>max-active-time</i>	Type: integer	min: 1 max: 0 default: 3 EIGRP active-state time limit in minutes
disabled		disable EIGRP time limit for active state
converge		EIGRP time limit for convergence after switchover
<i>converge-interval</i>	Type: integer	min: 60 max: 180 default: 120 Seconds
signal		EIGRP time limit for signaling NSF restart
<i>signal-interval</i>	Type: integer	min: 10 max: 360 default: 20 Seconds

Command Modes

- /exec/configure/router-eigrp/router-eigrp-vrf-common
- /exec/configure/router-eigrp/router-eigrp-af-common

timers (glbp)

```
timers {hello-time {hold-time|ms-hold hold-time-msec}|ms-hello hello-time-msec
{hold-time-sec|msec-hold hold-time-msec}|redirect redirect-time sec-hold-time}|no timers [{hello-time
[{hold-time|ms-hold hold-time-msec}]|ms-hello [hello-time-msec [{hold-time-sec|msec-hold
hold-time-msec}]]|redirect [redirect-time [sec-hold-time]]}]
```

Syntax	Description
no	Negate a command or set its defaults
timers	Adjust GLBP timers
<i>hello-time</i>	Type: integer min: 1 max: 60 Specify Hello interval in seconds
<i>hold-time</i>	Type: integer min: 2 max: 180 Specify Hold time in seconds
ms-hold	Specify hold time in milliseconds
<i>hold-time-msec</i>	Type: integer min: 1020 max: 180000 Hold time in milliseconds
ms-hello	Specify hello interval in milliseconds
<i>hello-time-msec</i>	Type: integer min: 250 max: 60000 hello interval in milliseconds
<i>hold-time-sec</i>	Type: integer min: 2 max: 180 Hold time in seconds
msec-hold	Specify hold time in milliseconds
redirect	Specify time-out value for failed forwarders
<i>redirect-time</i>	Type: integer min: 0 max: 3600 Interval in seconds to redirect to failed forwarders

sec-hold-time Type: integer
min: 610 max: 64800
Time-out interval in seconds for failed forwarders

Command Modes

- /exec/configure/if-eth-any/glbp

timers (hsrp_engine)

timers {*hello-time* {*hold-time*|**msec-hold** *msec-hold*}|**msec-hello** *msec-hello* {*hold-time*|**msec-hold** *msec-hold*}}|**no timers**

Syntax Description	no Negate a command or set its defaults
	timers Hello and hold timers
	<i>hello-time</i> Type: integer min: 1 max: 254 Hello interval in seconds
	<i>hold-time</i> Type: integer min: 3 max: 255 Hold time in seconds
	msec-hold Specify hold interval in milliseconds
	<i>msec-hold</i> Type: integer min: 750 max: 3000 Hold interval in milliseconds
	msec-hello Specify hello interval in milliseconds
	<i>msec-hello</i> Type: integer min: 250 max: 999 Hello interval in milliseconds
Command Modes	<ul style="list-style-type: none"> • /exec/configure/if-eth-any/hsrp_ipv4 • /exec/configure/if-eth-any/hsrp_ipv6

timers basic

timers basic *update invalid holddown garbage* | **no timers basic** [*update invalid holddown garbage*]

Syntax Description

no Negate a command or set its defaults

timers RIP set timers

basic RIP set basic timers

update Type: uinteger
min: 5 max: 4294967295 default: 30
RIP update period

invalid Type: uinteger
min: 1 max: 4294967295 default: 180
RIP route timeout period

holddown Type: uinteger
min: 0 max: 4294967295 default: 180
RIP route holddown period

garbage Type: uinteger
min: 1 max: 4294967295 default: 120
RIP route garbage period

Command Modes

- /exec/configure/router-rip/router-rip-af-common
- /exec/configure/router-rip/router-rip-vrf-af-common

timers bestpath-defer maximum

[no] **timers bestpath-defer** *bestpath-defer-time* **maximum** *bestpath-defer-time-max*

Syntax	Description
no	Negate a command or set its defaults
timers	Configure bgp related timers
bestpath-defer	Configure bestpath defer timer value for batch prefix processing
<i>bestpath-defer-time</i>	Type: integer min: 0 max: 30 Bestpath defer time (seconds)
maximum	Configure bestpath defer timer maximum value
<i>bestpath-defer-time-max</i>	Type: integer min: 0 max: 300 Maximum bestpath defer time (seconds)

Command Modes • /exec/configure/router-bgp/router-bgp-af

timers bestpath-limit

timers bestpath-limit *bestpath-timeout* [**always**]|**no timers bestpath-limit** [*bestpath-timeout*]

Syntax Description

no	Negate a command or set its defaults
timers	Configure bgp related timers
bestpath-limit	Configure timeout for first bestpath after restart
<i>bestpath-timeout</i>	Type: integer min: 1 max: 3600 default: 300 Bestpath timeout (seconds)
always	Configure update-delay-always option

Command Modes

- /exec/configure/router-bgp/vrf-cmds

timers bgp

[no] **timers bgp** *keepalive-interval hold-time*

Syntax	Description
no	Negate a command or set its defaults
timers	Configure bgp related timers
bgp	Configure different bgp keepalive and holdtimes
<i>keepalive-interval</i>	Type: integer min: 0 max: 3600 default: 60 Keepalive interval (seconds)
<i>hold-time</i>	Type: integer min: 0 max: 3600 default: 180 Holdtime (seconds)

Command Modes • /exec/configure/router-bgp/vrf-cmds

timers lsa-arrival (ospf)

timers lsa-arrival *interval* | **no timers lsa-arrival** [*interval*]

Syntax Description

no	Negate a command or set its defaults
timers	Configure timer related constants
lsa-arrival	Minimum interval between arrival of a LSA
<i>interval</i>	Type: integer min: 10 max: 600000 default: 1000 Interval value (milliseconds)

Command Modes

- /exec/configure/router-ospf
- /exec/configure/router-ospf/vrf

timers lsa-arrival (ospfv3)

timers lsa-arrival *interval* | **no timers lsa-arrival** [*interval*]

Syntax Description

no	Negate a command or set its defaults
timers	Configure timer related constants
lsa-arrival	Mimimum interval between arrival of a LSA
<i>interval</i>	Type: integer min: 10 max: 600000 default: 1000 Interval value (millisecond)

Command Modes

- /exec/configure/router-ospf3
- /exec/configure/router-ospf3/vrf

timers lsa-group-pacing (ospf)

timers lsa-group-pacing *interval* | **no timers lsa-group-pacing** [*interval*]

Syntax Description

no	Negate a command or set its defaults
timers	Configure timer related constants
lsa-group-pacing	LSA group refresh/maxage interval
<i>interval</i>	Type: integer min: 1 max: 1800 Interval value (seconds)

Command Modes

- /exec/configure/router-ospf
- /exec/configure/router-ospf/vrf

timers lsa-group-pacing (ospfv3)

timers lsa-group-pacing *interval* | **no timers lsa-group-pacing** [*interval*]

Syntax Description	no	Negate a command or set its defaults
	timers	Configure timer related constants
	lsa-group-pacing	LSA group refresh/maxage interval
	<i>interval</i>	Type: integer min: 1 max: 1800 Interval value (seconds)

Command Modes	<ul style="list-style-type: none">• /exec/configure/router-ospf3• /exec/configure/router-ospf3/vrf
----------------------	---

timers prefix-peer-timeout

timers prefix-peer-timeout *prefixpeer-timeout* | **no timers prefix-peer-timeout** [*prefixpeer-timeout*]

Syntax Description

no	Negate a command or set its defaults
timers	Configure bgp related timers
prefix-peer-timeout	Configure how long state for a prefix peer is maintained
<i>prefixpeer-timeout</i>	Type: integer min: 0 max: 1200 default: 30 Prefix Peer timeout (seconds)

Command Modes

- /exec/configure/router-bgp/vrf-cmds

timers throttle lsa (ospf)

timers throttle lsa *start-time hold-time max-time* | **no timers throttle lsa** [*start-time hold-time max-time*]

Syntax Description	
no	Negate a command or set its defaults
timers	Configure timer related constants
throttle	Set rate-limiting values (milliseconds)
lsa	Set rate-limiting for LSA generation
<i>start-time</i>	Type: integer min: 0 max: 5000 default: 0 Start interval (milliseconds)
<i>hold-time</i>	Type: integer min: 50 max: 30000 default: 5000 Hold interval (milliseconds)
<i>max-time</i>	Type: integer min: 50 max: 30000 default: 5000 Max interval (milliseconds)
Command Modes	<ul style="list-style-type: none"> • /exec/configure/router-ospf • /exec/configure/router-ospf/vrf

timers throttle lsa (ospfv3)

timers throttle lsa *start-time hold-time max-time* | **no timers throttle lsa** [*start-time hold-time max-time*]

Syntax Description

no Negate a command or set its defaults

timers Configure timer related constants

throttle Set rate-limiting values (milliseconds)

lsa Set rate-limiting for LSA generation

start-time Type: integer

min: 0 max: 5000 default: 0

Start interval (milliseconds)

hold-time Type: integer

min: 50 max: 30000 default: 5000

Hold interval (milliseconds)

max-time Type: integer

min: 50 max: 30000 default: 5000

Max interval (milliseconds)

Command Modes

- /exec/configure/router-ospf3
- /exec/configure/router-ospf3/vrf

timers throttle spf (ospf)

timers throttle spf *start-time hold-time max-time* | **no timers throttle spf** [*start-time hold-time max-time*]

Syntax Description	
no	Negate a command or set its defaults
timers	Configure timer related constants
throttle	Configure timer related constants
spf	OSPF SPF timers
<i>start-time</i>	Type: integer min: 1 max: 600000 default: 200 Initial SPF schedule delay in milliseconds
<i>hold-time</i>	Type: integer min: 1 max: 600000 default: 1000 Minimum hold time between SPF calculations
<i>max-time</i>	Type: integer min: 1 max: 600000 default: 5000 Maximum wait time between SPF calculations
Command Modes	<ul style="list-style-type: none"> • /exec/configure/router-ospf • /exec/configure/router-ospf/vrf

timers throttle spf (ospfv3)

timers throttle spf *start-time hold-time max-time* | **no timers throttle spf** [*start-time hold-time max-time*]

Syntax Description

no	Negate a command or set its defaults
timers	Configure timer related constants
throttle	Configure timer related constants
spf	OSPF SPF timers
<i>start-time</i>	Type: integer min: 1 max: 600000 default: 200 Initial SPF schedule delay in milliseconds
<i>hold-time</i>	Type: integer min: 1 max: 600000 default: 1000 Minimum hold time between SPF calculations
<i>max-time</i>	Type: integer min: 1 max: 600000 default: 5000 Maximum wait time between SPF calculations

Command Modes

- /exec/configure/router-ospf3/router-ospf3-af-ipv6
- /exec/configure/router-ospf3/vrf/router-ospf3-af-ipv6

timerstimers

timers *keepalive-interval hold-time*{**no**|**default**} **timers** [*keepalive-interval hold-time*]

Syntax Description

no	Negate a command or set its defaults
default	Inherit values from a peer template
timers	Configure keepalive and hold timers
<i>keepalive-interval</i>	Type: integer min: 0 max: 3600 default: 60 Keepalive interval (seconds)
<i>hold-time</i>	Type: integer min: 0 max: 3600 default: 180 Holdtime (seconds)

Command Modes

- /exec/configure/router-bgp/router-bgp-neighbor-sess

tr

```
"|" tr [{"-c|-d|-s|-t"}]+ SET1 [SET2]
```

Syntax Description

| Pipe command output to filter

tr Translate, squeeze, and/or delete characters

-c first complement SET1

-d delete characters in SET1, do not translate

-s replace each sequence of a repeated character from SET1 with single occurrence of that character

-t first truncate SET1 to length of SET2

SET1 Type: string

character SET1: CHAR1-CHAR2 = all characters from CHAR1 to CHAR2 in ascending order; special chars: \t (tab) \n (new line) [:alnum:] [:alpha:] [:digit:] [:graph:] (printable, no space) [:print:] (printable, with space) [:lower:] [:upper:] [:space:] (tab or space)

SET2 Type: string

character SET2 (for translation; length is extended to length of SET1 by repeating last char, excess chars are ignored): format same as SET1; [CHAR*] = copies of CHAR until length of SET1; [CHAR*REPEAT] = REPEAT copies of CHAR

Command Modes

• /output

traceroute

traceroute {*alphanumeric*} [**source** {*alphanumericinterface*}] [**vrf** {*vrf-namevrf-known-name*}]

Syntax Description

<i>numeric</i>	Type: ipaddr IP address of remote system
source	Set source address in IP header
vrf	Display per-VRF information
<i>vrf-name</i>	Type: vrf pattern: [-a-zA-Z0-9_.;\$#@]* antipattern: vrf detail interface definition context forwarding member all l2-vrf topology passive length: 32 VRF name
<i>vrf-known-name</i>	Type: vrf Known VRF name

Command Modes

- /exec

tracert6

tracert6 {*hosthostname*} [**source** {*hosthostnameinterface*}] [**vrf** {*vrf-namevrf-known-name*}]

Syntax Description

<i>host</i>	Type: ipv6addr IPv6 address format: aaaa:bbbb:cccc:ddd:eeee:fff:gggg:hhhh, aaaa::bbbb
<i>hostname</i>	Type: string Hostname of remote system
source	Set source address in IPv6 header
vrf	Display per-VRF information
<i>vrf-name</i>	Type: vrf pattern: [-a-zA-Z0-9_.;\$#@]* antipattern: vrf detail interface definition context forwarding member all l2-vrf topology passive length: 32 VRF name
<i>vrf-known-name</i>	Type: vrf Known VRF name

Command Modes

- /exec

track (hsrp_engine)

[no] track *object-number* [**decrement** *value*]

Syntax Description	
no	Negate a command or set its defaults
track	Associates track object to HSRP group
<i>object-number</i>	Type: integer min: 1 max: 500 Set the object number to the group
decrement	Decrements when tracked object goes down
<i>value</i>	Type: integer min: 1 max: 255 Set the value to decrement from priority

Command Modes	
	<ul style="list-style-type: none"> • /exec/configure/if-eth-any/hsrp_ipv4 • /exec/configure/if-eth-any/hsrp_ipv6

track (mcecm)

track *track-obj*|**no track** *track-obj*

Syntax Description

no Negate a command or set its defaults

track Tracking object to suspend vPC if object goes down

track-obj Type: integer

min: 1 max: 500

Tracked object

Command Modes

- /exec/configure/vpc-domain

track (otm)

```
track object-id [{interface ifnum {line-protocol|ipv4 routing|ipv6 routingv6}]{ip_v4 route
route-prefix|ip_v6 routev6 v6route-prefix} reachability|list boolean bool-val|list threshold
threshold-val}][no track object-id [force]
```

Syntax	Description
no	Negate a command or set its defaults
track	Object tracking configuration commands
<i>object-id</i>	Type: uinteger min: 1 max: 500 Tracked Object
interface	Interface to track
<i>ifnum</i>	Type: interface Interface type and number
line-protocol	Track interface line-protocol
ipv4	IPv4 parameters
routing	Track interface ipv4 routing
ipv6	IPv6 parameters
routingv6	Track interface ipv6 routing
ip_v4	IPv4 protocol
route	IPv4 route
<i>route-prefix</i>	Type: ipprefix Specify ipv4 route prefix
ip_v6	IPv6 protocol
routev6	IPv6 route
<i>v6route-prefix</i>	Type: ipv6prefix Specify ipv6 route prefix
reachability	Route reachability state
force	Completely remove the object
list	Object tracking list
boolean	boolean list type

bool-val boolean list type

and value: 0

List is TRUE if all Objects are TRUE

or value: 1

List is TRUE if any Object is TRUE

threshold threshold type

threshold-val threshold type

weight value: 3

Thresholds described by weight values

percentage value: 4

Thresholds described as a percentage of total

Command Modes

- /exec/configure

track interface

```
track {interface intf_num priority priority_value|object-num [decrement decrement-value]}|no track
[interface intf_num priority priority_value|object-num [decrement decrement-value]]
```

Syntax Description	
no	Negate a command or set its defaults
track	Track the availability of another interface/object
interface	Select the tracked interface(Native tracking)
<i>intf_num</i>	Type: interface
priority	Vr priority used when the tracked interface is down
<i>priority_value</i>	Type: integer min: 1 max: 254
<i>object-num</i>	Type: integer min: 1 max: 500 Set the object number to the group(Object tracking)
decrement	Decrements priority when tracked object goes down
<i>decrement-value</i>	Type: integer min: 1 max: 254 Set the value to decrement from priority

Command Modes

- /exec/configure/if-eth-any/vrrp

traffic-share

[no] traffic-share {balanced|min across-interfaces}

Syntax Description

no	Negate a command or set its defaults
traffic-share	How to compute traffic share over alternate paths
balanced	Share inversely proportional to metric
min	All traffic shared among min metric paths
across-interfaces	Use different interfaces for equal-cost paths

Command Modes

- /exec/configure/router-eigrp/router-eigrp-vrf-common
- /exec/configure/router-eigrp/router-eigrp-af-common

transmit-delay (ospf)

transmit-delay *delay*|**no transmit-delay** [*delay*]

Syntax Description

no Negate a command or set its defaults

transmit-delay Packet transmission delay

delay Type: integer
min: 1 max: 450 default: 1
(seconds)

Command Modes

- /exec/configure/router-ospf/vrf/router-ospf-slink

transmit-delay (ospf)

transmit-delay *delay*|**no transmit-delay** [*delay*]

Syntax Description

no Negate a command or set its defaults

transmit-delay Packet transmission delay

delay Type: integer
min: 1 max: 450 default: 1
(seconds)

Command Modes

- /exec/configure/router-ospf/router-ospf-vlink
- /exec/configure/router-ospf/vrf/router-ospf-vlink

transmit-delay (ospfv3)

transmit-delay *delay*|**no transmit-delay** [*delay*]

Syntax Description

no Negate a command or set its defaults

transmit-delay Packet transmission delay

delay Type: integer
min: 1 max: 450 default: 1
(seconds)

Command Modes

- /exec/configure/router-ospf3/router-ospf3-vlink
- /exec/configure/router-ospf3/vrf/router-ospf3-vlink

transport connection-mode passive

[{no|default}] transport connection-mode passive

Syntax Description		
	no	Negate a command or set its defaults
	default	Inherit values from a peer template
	transport	BGP transport connection
	connection-mode	Specify type of connection
	passive	Allow passive connection setup only

Command Modes

- /exec/configure/router-bgp/router-bgp-neighbor
- /exec/configure/router-bgp/router-bgp-neighbor-stmp
- /exec/configure/router-bgp/router-bgp-vrf-neighbor
- /exec/configure/router-bgp/router-bgp-template-neighbor

transport email from

transport email {**from** *s0*|**reply-to** *s1*|**smtp-server** {*hostipv4*|*hostipv6*|*hostname*} [**port** *il*] [**use-vrf** *s2*]}|**no transport email smtp-server**|**no transport email** {**from**|**reply-to**}

Syntax	Description
no	Negate a command or set its defaults
transport	Configure transport related configuration
email	Configure email transport related configuration
from	Configure from email address
<i>s0</i>	Type: string length: 255 Provide from email address, example: SJ-9500-1@xyz.com
reply-to	Configure replyto email address
<i>s1</i>	Type: string length: 255 Provide reply-to email address, example: admin@xyz.com
smtp-server	Configure SMTP server address
<i>hostname</i>	Type: string SMTP server(DNS name or IPv4 or IPv6 address)
<i>hostipv4</i>	Type: ipaddr IPV4 address of SMTP server
<i>hostipv6</i>	Type: ipv6addr IPV6 address of SMTP server
port	Configure SMTP server port (default:25)
<i>il</i>	Type: integer min: 1 max: 65535 SMTP server port
use-vrf	Configure vrf name
<i>s2</i>	Type: string length: 32 vrf name

transport email from

Command Modes

- /exec/configure/callhome

transport email mail-server

[no] transport email mail-server {*hostipv4hostipv6hostname*} [port *i1*] [priority *i2*] [use-vrf *s2*]

Syntax Description

no	Negate a command or set its defaults
transport	Configure transport related configuration
email	Configure email transport related configuration
mail-server	Configure SMTP server address (for supporting multiple SMTP-servers)
<i>hostname</i>	Type: string SMTP server(DNS name or IPv4 or IPv6 address)
<i>hostipv4</i>	Type: ipaddr IPV4 address of SMTP server
<i>hostipv6</i>	Type: ipv6addr IPV6 address of SMTP server
port	Configure SMTP server port (default:25)
<i>i1</i>	Type: integer min: 1 max: 65535 SMTP server port
use-vrf	Configure vrf name
<i>s2</i>	Type: string length: 32 vrf name
priority	Configure SMTP server priority (1-100) (default:50)
<i>i2</i>	Type: integer min: 1 max: 100 SMTP server priority

Command Modes

- /exec/configure/callhome

transport http proxy enable

[no] transport http proxy enable

Syntax Description

no	Negate a command or set its defaults
transport	Configure transport related configuration
http	Configure transport option for http urls
proxy	Configure proxy for http transport
enable	Enable the usage of proxy server for messages sent over http(s)

Command Modes

- /exec/configure/callhome

transport http proxy server

transport http proxy server *hostname* [**port** *il*]|**no transport http proxy server**

Syntax Description

no	Negate a command or set its defaults
transport	Configure transport related configuration
http	Configure transport option for http urls
proxy	Configure proxy for http transport
server	Configure proxy server address and port
<i>hostname</i>	Type: nameorip Proxy server name or IP address(DNS name or IPv4 or IPv6 address)
port	Configure Proxy server port (default:8080)
<i>il</i>	Type: integer min: 1 max: 65535 Proxy server port

Command Modes

- /exec/configure/callhome

transport http use-vrf

`transport http use-vrf s2|no transport http use-vrf`

Syntax Description

no	Negate a command or set its defaults
transport	Configure transport related configuration
http	Configure transport option for http urls
use-vrf	Configure vrf name
<i>s2</i>	Type: string length: 32 vrf name

Command Modes

- /exec/configure/callhome

transport type

```
[no] transport type {tcp [port tportnum] [access-class aclname]}|tls [{disable-remotecert-validation
[localcert localtp [{port tportnum [access-class aclname]}|access-class aclname [port tportnum]}]|port
tportnum [localcert localtp [access-class aclname]}|access-class aclname [localcert
localtp]}]|access-class aclname [{localcert localtp [port tportnum]}|port tportnum [localcert
localtp]}]|localcert localtp [{disable-remotecert-validation [port tportnum [access-class
aclname]}|access-class aclname [port tportnum]}]|port tportnum [{disable-remotecert-validation
[access-class aclname]}|access-class aclname [disable-remotecert-validation]}]|access-class aclname
[disable-remotecert-validation [port tportnum]}|port tportnum [disable-remotecert-validation]}]|port
tportnum [disable-remotecert-validation [localcert localtp [access-class aclname]}|access-class
aclname [localcert localtp]}]|localcert localtp [{disable-remotecert-validation [access-class
aclname]}|access-class aclname [disable-remotecert-validation]}]|access-class aclname
[disable-remotecert-validation [localcert localtp]}|localcert localtp
[disable-remotecert-validation]}]|access-class aclname [{disable-remotecert-validation [localcert
localtp [port tportnum]}|port tportnum [localcert localtp]}]|localcert localtp
[{disable-remotecert-validation [port tportnum]}|port tportnum [disable-remotecert-validation]}]|port
tportnum [disable-remotecert-validation [localcert localtp]}|localcert localtp
[disable-remotecert-validation]}]|remotecert remotetp [{localcert localtp [port tportnum
access-class aclname]}|access-class aclname [port tportnum]}]|port tportnum [localcert localtp
access-class aclname]}|access-class aclname [localcert localtp]}]|access-class aclname [localcert
localtp [port tportnum]}|port tportnum [localcert localtp]}]|localcert localtp [remotecert remotetp
port tportnum [access-class aclname]}|access-class aclname [port tportnum]}]|port tportnum
[remotecert remotetp [access-class aclname]}|access-class aclname [remotecert remotetp]}]|access-class
aclname [remotecert remotetp [port tportnum]}|port tportnum [remotecert remotetp]}]|port
tportnum [remotecert remotetp [localcert localtp [access-class aclname]}|access-class aclname
localcert localtp]}]|localcert localtp [remotecert remotetp [access-class aclname]}|access-class
aclname [remotecert remotetp]}]|access-class aclname [remotecert remotetp [localcert
localtp]}|localcert localtp [remotecert remotetp]}]|access-class aclname [remotecert remotetp
localcert localtp [port tportnum]}|port tportnum [localcert localtp]}]|localcert localtp [remotecert
remotetp [port tportnum]}|port tportnum [remotecert remotetp]}]|port tportnum [remotecert remotetp
localcert localtp]}|localcert localtp [remotecert remotetp]}]}}
```

Syntax Description		
no	Negate a command or set its defaults	
transport	Transport command	
type	Session transport	
tcp	TCP transport <i>Not available in this release.</i>	
tls	TLS transport	
disable-remotecert-validation	Disable Remote Certificate Validation	
localcert	Local Certificate	
<i>localtp</i>	Type: string	
	Local Trust Point Name	

remotecert	Remote Certificate Validation
<i>remotetp</i>	Type: string Remote Trust Point Name
port	Port number
<i>tpportnum</i>	Type: uinteger min: 1025 max: 65535 Number
access-class	Filter incoming connections based on IP access list
<i>aclname</i>	Type: string IP access list name

Command Modes

- /exec/configure/onep

trap bfd session-down

trap bfd session-down *startIndex startIndex-key endIndex endIndex-key*

Syntax	Description
trap	snmp trap
bfd	BFD commands
session-down	Session going DOWN
<i>startIndex</i>	Session diagnostic code noDiagnostic value: 1 noDiagnostic controlDetectionTimeExpired value: 2 controlDetectionTimeExpired echoFunctionFailed value: 3 echoFunctionFailed neighborSignaledSessionDown value: 4 neighborSignaledSessionDown forwardingPlaneReset value: 5 forwardingPlaneReset pathDown value: 6 pathDown concatenatedPathDown value: 7 concatenatedPathDown administrativelyDown value: 8 administrativelyDown reverseConcatenatedPathDown value: 9 reverseConcatenatedPathDown
<i>startIndex-key</i>	Type: uinteger
	help

endIndex Session diagnostic code

noDiagnostic value: 1
noDiagnostic

controlDetectionTimeExpired value: 2
controlDetectionTimeExpired

echoFunctionFailed value: 3
echoFunctionFailed

neighborSignaledSessionDown value: 4
neighborSignaledSessionDown

forwardingPlaneReset value: 5
forwardingPlaneReset

pathDown value: 6
pathDown

concatenatedPathDown value: 7
concatenatedPathDown

administrativelyDown value: 8
administrativelyDown

reverseConcatenatedPathDown value: 9
reverseConcatenatedPathDown

endIndex-key Type: uinteger

help

Command Modes

• /exec

trap bfd session-up

trap bfd session-up *startIndex startIndex-key endIndex endIndex-key*

Syntax	Description
trap	snmp trap
bfd	BFD commands
session-up	Session going UP
<i>startIndex</i>	Session diagnostic code noDiagnostic value: 1 noDiagnostic controlDetectionTimeExpired value: 2 controlDetectionTimeExpired echoFunctionFailed value: 3 echoFunctionFailed neighborSignaledSessionDown value: 4 neighborSignaledSessionDown forwardingPlaneReset value: 5 forwardingPlaneReset pathDown value: 6 pathDown concatenatedPathDown value: 7 concatenatedPathDown administrativelyDown value: 8 administrativelyDown reverseConcatenatedPathDown value: 9 reverseConcatenatedPathDown
<i>startIndex-key</i>	Type: uinteger
	help

endIndex Session diagnostic code

noDiagnostic value: 1
noDiagnostic

controlDetectionTimeExpired value: 2
controlDetectionTimeExpired

echoFunctionFailed value: 3
echoFunctionFailed

neighborSignaledSessionDown value: 4
neighborSignaledSessionDown

forwardingPlaneReset value: 5
forwardingPlaneReset

pathDown value: 6
pathDown

concatenatedPathDown value: 7
concatenatedPathDown

administrativelyDown value: 8
administrativelyDown

reverseConcatenatedPathDown value: 9
reverseConcatenatedPathDown

endIndex-key Type: uinteger

help

Command Modes

• /exec

trap lldp lldpRemTablesChange

trap lldp lldpRemTablesChange *lldpStatsRemTablesInserts lldpStatsRemTablesDeletes lldpStatsRemTablesDrops lldpStatsRemTablesAgeouts*

Syntax	Description
trap	snmp trap
lldp	lldp trap
lldpRemTablesChange	lldp remote table change trap
<i>lldpStatsRemTablesInserts</i>	Type: uinteger lldp remote table inserts
<i>lldpStatsRemTablesDeletes</i>	Type: uinteger lldp remote table deletes
<i>lldpStatsRemTablesDrops</i>	Type: uinteger lldp remote table drops
<i>lldpStatsRemTablesAgeouts</i>	Type: uinteger lldp remote table ageouts
Command Modes	• /exec

trap pim pimNeighborLoss

trap pim pimNeighborLoss *pimNeighborIfIndex* *pimNeighborAddress-in*

Syntax Description		
trap		Generate traps from cli
pim		PIM global configuration commands
pimNeighborLoss		pim trap for pimNeighborLoss
<i>pimNeighborIfIndex</i>	Type: integer	Neighbor ifindex
<i>pimNeighborAddress-in</i>	Type: ipaddr	Neighbor Address

Command Modes • /exec

trigger forwarding distribution module

`trigger forwarding distribution module module`

Syntax Description	trigger Trigger
	forwarding Trigger related to forwarding
	distribution Trigger distribution of forwarding data to LCs
	module distribute to a particular module
	<i>module</i> Type: integer module number
Command Modes	• /exec

trigger route download vrf

trigger route download vrf *vrf-name* {**ipv4** *route4*|**ipv6** *route6*} [**module** *slot-num*]

Syntax Description

trigger	Trigger
route	IP route related
download	Download
vrf	vrf
<i>vrf-name</i>	Type: string vrf name
ipv4	ipv4
<i>route4</i>	Type: ipprefix ipv4 prefix
ipv6	ipv6
<i>route6</i>	Type: ipv6prefix ipv6 prefix
module	Module
<i>slot-num</i>	Type: integer Slot number of the module

Command Modes

- /exec

tunnel destination

tunnel destination *{host-nameip-addr|ipv6-addr}* | **no tunnel destination** [*{host-nameip-addr|ipv6-addr}*]

Syntax Description

no Negate a command or set its defaults

tunnel protocol-over-protocol tunneling

destination destination of tunnel packets

host-name Type: string

host name

ip-addr Type: ipaddr

IPv4 address (A.B.C.D)

ipv6-addr Type: ipv6addr

IPv6 address

Command Modes

- /exec/configure/if-gre-tunnel

tunnel mode gre

tunnel mode gre [{ip|ipv6}] **no tunnel mode**

Syntax Description

no Negate a command or set its defaults

tunnel protocol-over-protocol tunneling

mode tunnel encapsulation method

gre generic route encapsulation protocol

ip over IP

ipv6 over IPv6

Command Modes

- /exec/configure/if-any-tunnel

tunnel path-mtu-discovery (tm)

```
tunnel path-mtu-discovery {age-timer [{age-time|infinite}]|min-mtu mtu}|no tunnel
path-mtu-discovery {age-timer [{age-time|infinite}]|min-mtu mtu}
```

Syntax	Description
no	Negate a command or set its defaults
tunnel	protocol-over-protocol tunneling
path-mtu-discovery	Enable Path MTU Discovery on tunnel
age-timer	Set PMTUD aging timer
<i>age-time</i>	Type: integer min: 10 max: 30 Aging time
infinite	Disable pathmtu aging timer
min-mtu	Min pmtud mtu allowed
<i>mtu</i>	Type: integer min: 64 max: 65535 Bytes

Command Modes • /exec/configure/if-any-tunnel

tunnel path-mtu-discovery (tm)

[no] tunnel path-mtu-discovery

Syntax Description	no	Negate a command or set its defaults
	tunnel	protocol-over-protocol tunneling
	path-mtu-discovery	Enable Path MTU Discovery on tunnel

Command Modes

- /exec/configure/if-any-tunnel

tunnel source

tunnel source {*intfip-addr*ip6-addr}|**no tunnel source** [{*intfip-addr*ip6-addr}]

Syntax Description	
no	Negate a command or set its defaults
tunnel	protocol-over-protocol tunneling
source	source of tunnel packets
<i>intf</i>	Type: interface interface
<i>ip-addr</i>	Type: ipaddr IPv4 address (A.B.C.D)
<i>ip6-addr</i>	Type: ipv6addr IPv6 address
Command Modes	<ul style="list-style-type: none"> • /exec/configure/if-gre-tunnel

tunnel ttl

tunnel ttl *ttl_val*|**no tunnel ttl** [*ttl_val*]

Syntax Description

no Negate a command or set its defaults

tunnel protocol-over-protocol tunneling

ttl set time to live

ttl_val Type: integer

min: 1 max: 255

time to line value

Command Modes

- /exec/configure/if-any-tunnel

tunnel use-vrf

tunnel use-vrf {*vrf-name**vrf-known-name*}|**no tunnel use-vrf** [{*vrf-name**vrf-known-name*}]

Syntax Description

no	Negate a command or set its defaults
tunnel	protocol-over-protocol tunneling
use-vrf	set tunnel vrf membership
<i>vrf-name</i>	Type: vrf pattern: [-a-zA-Z0-9_.;\$#@]* antipattern: vrf detail interface definition context forwarding member all l2-vrf topology passive length: 32 VRF name
<i>vrf-known-name</i>	Type: vrf Known VRF name

Command Modes

- /exec/configure/if-any-tunnel

typetype

type *fex*type|**type** *swcardid*|**no type**

Syntax Description

no Negate the command

type FEX Card type

*fex*type Fex Type

N2248T value: 99

Fabric Extender 48x1G 4x10G Module

N2232P value: 82

Fabric Extender 32x10G 8x10G Module

N2224TP value: 132

Fabric Extender 24x1G 2x10G SFP+ Module

N2232TM value: 164

Fabric Extender 32x10GBase-T 8x10G SFP+
Module

N2248TP-E value: 149

Fabric Extender 48x1G 4x10G SFP+ Module

swcardid Type: string

length: 30

Card type

Command Modes

- /exec/configure/fex