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icmpv6 cache disable

[no] icmpv6 cache disable

Syntax Description	no Negate a command or set its defaults
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icmpv6 ICMPv6 Commands

cache Disable cache

disable Disable cache

Command Modes	• /exec/configure
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icmpv6 cfs-queue

icmpv6 cfs-queue *size*|**no icmpv6 cfs-queue**

Syntax Description

no Negate a command or set its defaults

icmpv6 ICMPv6 Commands

cfs-queue cfs-queue

size Type: integer

Size for adjacencies to be sent in CFSOE payload

Command Modes

- /exec/configure

icmpv6 library mts-queue

icmpv6 library mts-queue *size*|**no icmpv6 library mts-queue**

Syntax Description

no Negate a command or set its defaults

icmpv6 ICMPv6 Commands

library library data queue

mts-queue mts-queue

size Type: integer

Size for icmpv6 data sap qlimit

Command Modes

- /exec/configure

icmpv6 mts-queue

icmpv6 mts-queue *size*|**no icmpv6 mts-queue**

Syntax Description	no	Negate a command or set its defaults
	icmpv6	ICMPv6 Commands
	mts-queue	mts-queue
	<i>size</i>	Type: integer Size for icmpv6 data sap qlimit
Command Modes	• /exec/configure	

import map

[no] **import map** *rmap-name*

Syntax Description		
no	Negate a command or set its defaults	
import	VRF import	
map	Route-map based VRF import	
<i>rmap-name</i>	Type: string	
	pattern: [!~]*	
	length: 63	
	Route-map name	

- Command Modes**
- /exec/configure/vrf-af-ipv4
 - /exec/configure/vrf-af-ipv6

import vrf default map

import vrf default [*prefix-limit*] **map** *rmap-name* | **no import vrf default** [*prefix-limit*] **map** *rmap-name*

Syntax Description	
no	Negate a command or set its defaults
import	VRF import
vrf	Virtual Router Context
default	VRF name (default)
<i>prefix-limit</i>	Type: uinteger min: 1 max: 2147483647 default: 1000 Maximum prefix limit
map	Route-map based VRF import
<i>rmap-name</i>	Type: string pattern: [!~]* length: 63 Route-map name
Command Modes	<ul style="list-style-type: none"> • /exec/configure/vrf-af-ipv4 • /exec/configure/vrf-af-ipv6

in-order-guarantee

[no] in-order-guarantee

Syntax Description	no Negate a command or set its defaults
	in-order-guarantee Enable IOD
Command Modes	• /exec/configure/policy-map/type/uf/class

inherit peer

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

Syntax Description	no	Negate a command or set its defaults
	inherit	Inherit a template
	peer	Inherit a peer template
	<i>peer-template-name</i>	Type: string length: 80 Peer template name

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

inherit peer-policy

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

Syntax Description		
no		Negate a command or set its defaults
inherit		Inherit a template
peer-policy		Inherit a peer-policy template
<i>peer-policy-template-name</i>	Type: string length: 80 Template name	
<i>policy-preference</i>	Type: integer min: 1 max: 65535 Sequence number	

Command Modes

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-vpls

inherit peer-session

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

Syntax Description	no	Negate a command or set its defaults
	inherit	Inherit a template
	peer-session	Inherit a peer-session template
	<i>peer-session-template-name</i>	Type: string length: 80 Template name
Command Modes	• /exec/configure/router-bgp/router-bgp-neighbor-sess	

inject-map exist-map

[no] **inject-map** *inject-map-name* **exist-map** *exist-map-name* [**copy-attributes**]

Syntax Description

no	Negate a command or set its defaults
inject-map	Routemap which specifies prefixes to inject
<i>inject-map-name</i>	Type: string pattern: [!~]* length: 63 Route-map name
exist-map	Routemap which specifies exist condition
<i>exist-map-name</i>	Type: string pattern: [!~]* length: 63 Route-map name
copy-attributes	Copy attributes from aggregate

Command Modes

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

install

install {**all** [{**nxos** *uri*|**parallel**}]|**force-all** [{**nxos** *uri*|**parallel**}]|+}

Syntax Description

install	upgrade software
all	Upgrade the system
nxos	boot-variable name
<i>uri</i>	Type: uri Enter image uri
parallel	Parallel upgrade linecards in the system
force-all	Force upgrade the system

Command Modes

- /exec

install activate

install activate *{e-patchpatch}* [**forced**]

Syntax Description

install Install package

activate Activate package

e-patch Type: userdef

Package Name

patch Type: string

Package Name

forced No confirmation prompt in case of ISSU patch

Command Modes

• /exec

install add

install add *uri* [**activate**]

Syntax Description

install Install package

add Add package

uri Type: uri

Enter package
uri

activate Activate
package

Command Modes

• /exec

install commit

install commit [*e-patch*patch]

Syntax Description

install Install package

commit Commit software
patch

e-patch Type: userdef
Package Name

patch Type: string
Package Name

Command Modes

• /exec

install deactivate

`install deactivate {e-patchpatch}`

Syntax Description

install Install package

deactivate Deactivate
package

e-patch Type: userdef
Package Name

patch Type: string
Package Name

Command Modes

• /exec

install epld (cli_epld_upgrade)

```
install epld uri module all [force]
```

Syntax Description

install upgrade software

epld Install EPLD from EPLD image

uri Type: uri

Local URI containing EPLD Image

module Upgrade the modules

all Install all the modules

force Force Install EPLD from EPLD image

Command Modes

• /exec

install epld (cli_epld_upgrade)

```
install epld uri module module {primary|golden} [force]
```

Syntax Description

install	upgrade software
epld	Install EPLD from EPLD image
<i>uri</i>	Type: uri Local URI containing EPLD Image
module	Upgrade the modules <i>Available only in the 9500 series.</i>
<i>module</i>	Type: integer-range Enter the module number to be upgraded
primary	Upgrade primary fpga image
golden	Upgrade golden fpga image
force	Force Install EPLD from EPLD image

Command Modes

- /exec

install epld (cli_epld_upgrade)

```
install epld uri module all {primary|golden} [force]
```

Syntax Description

install upgrade software

epld Install EPLD from EPLD image

uri Type: uri

Local URI containing EPLD Image

module Upgrade the modules

all Install all the modules

primary Upgrade primary fpga image

golden Upgrade golden fpga image

force Force Install EPLD from EPLD image

Command Modes

• /exec

install epld (cli_epld_upgrade)

```
install epld uri module module [force]
```

Syntax Description

install upgrade software

epld Install EPLD from EPLD image

uri Type: uri
Local URI containing EPLD Image

module Upgrade the modules *Available only in the 9500 series.*

module Type: integer-range
Enter the module number to be upgraded

force Force Install EPLD from EPLD image

Command Modes

- /exec

install feature-set fex

[no] install feature-set fex

Syntax Description	no	Negate a command or set its defaults
	install	install a feature-set
	feature-set	install feature-set
	fex	FEX

Command Modes • /exec/configure

install license

```
install license uri0 [s0]
```

Syntax Description

install upgrade software

license install license

uri0 Type: uri
Specify URL for license file

s0 Type: string
length: 32
Specify a target name for the license file

Command Modes

- /exec

install module

```
install module module {bios [[system uri0] [forced2]]|bios [{primary|golden}] [forced]|image
[forced1|system1 uri1]}}
```

Syntax	Description
install	upgrade software
module	Upgrade for module
<i>module</i>	Type: integer Enter module index
bios	Upgrade module bios
system	System Image
<i>uri0</i>	Type: uri Local URI containing the system Image
forced2	Force install bios
primary	Upgrade the Primary bios
golden	Upgrade the Golden bios
forced	Force install bios
image	Upgrade module image
forced1	Bypass SRG check
system1	System Image
<i>uri1</i>	Type: uri Local URI containing the system Image
kickstart	kickstart image
<i>uri2</i>	Type: uri Local URI containing the master kickstart Image
ssi	Upgrade SSM/MSM/SSN module
<i>uri4</i>	Type: uri Local URI containing the ssi image

Command Modes

- /exec

install remove

install remove *{e-patchpatch|inactive}* [**forced**]

Syntax Description

install Install package

remove Remove package

e-patch Type: userdef

Package Name

patch Type: string

Package Name

inactive All inactive except non-committed packages

forced Remove package

Command Modes

• /exec

instance vlan

instance *instance-id* **vlan** *vlan-list*

Syntax Description

instance Map vlans to an MST instance

instance-id Type: uinteger

min: 0 max: 4094

MST instance id

vlan Range of vlans to add to the instance mapping

vlan-list Type: vlan-mrange

vlan range ex: 1-65, 72, 200 - 300

Command Modes

- /exec/configure/spanning-tree/mst/configuration

interface

interface *interface*

Syntax Description

interface Configure interfaces

interface Type:
interface-mrange
Interface Name

Command Modes

- /exec/configure

interface-vlan reset credits

`interface-vlan reset credits [count]`

Syntax Description

interface-vlan	Vlan Interface
reset	Reset SVI Credits
credits	SVI Credits
<i>count</i>	Type: uinteger Set SVI Credit Count

Command Modes

- /exec/configure

interface-vlan reset fsm

interface-vlan *vlan-id* **reset fsm**

Syntax	Description
interface-vlan	Vlan Interface
<i>vlan-id</i>	Type: uinteger VLAN Id
reset	Reset SVI Credits
fsm	SVI FSM

Command Modes • /exec/configure

interface breakout module

[no] interface breakout module *module*

Syntax Description

no Negate a command or set its defaults

interface Configure interfaces

breakout Configuring the breakout for a module

module High Bandwidth Module

module Type: integer

High Bandwidth Module number

Command Modes

• /exec/configure

interface breakout slot

[no] interface breakout slot *module*

Syntax Description	no Negate a command or set its defaults
	interface Configure interfaces
	breakout Configuring the breakout for a module
	slot High Bandwidth Module
	module Type: integer High Bandwidth Module number
Command Modes	• /exec/configure

interface policy deny

[no] interface policy deny

Syntax Description

no Negate a command or set its defaults

interface Configure the interface policy for this role

policy Configure the interface policy for this role

deny Deny access to a interface unless specifically permitted

Command Modes

• /exec/configure/role

ip (hsrp_engine)

ip *{ipv6address|autoconfig}* | **no ip** [*{ipv6address|autoconfig}*]

Syntax Description	no	ip
	Negate a command or set its defaults	Enable HSRP IPv6 and set the virtual IP address
		<i>ipv6address</i> Type: ipv6addr Virtual IPV6 address
	autoconfig	Obtain address using autoconfiguration
Command Modes	• /exec/configure/if-eth-any/hsrp_ipv6	

ip (glbp)

[no] ip [*ipaddress* [secondary]]

Syntax Description

no Negate a command or set its defaults

ip Set Virtual IP address

ipaddress Type: ipaddr
Virtual IP address

secondary Make this a secondary IP address

Command Modes

• /exec/configure/if-eth-any/glbp

ip (hsrp_engine)

ip [*ipaddress* [**secondary**]]|**no ip** [*ipaddress* [**secondary**]]

Syntax Description

no	Negate a command or set its defaults
ip	Enable HSRP IPv4 and set the virtual IP address
<i>ipaddress</i>	Type: ipaddr Virtual IP address
secondary	Make this IP address a secondary virtual IP address

Command Modes

- /exec/configure/if-eth-any/hsrp_ipv4

ip access-class

[no] ip access-class *name inout*

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
access-class	Specify IPv4 access control for packets
<i>name</i>	Type: string length: 64 List name
<i>inout</i>	Traffic direction in value: 0 Inbound packets out value: 1 Outbound packets
Command Modes	• /exec/configure/line

ip access-group

[no] ip access-group *name inout*

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
access-group	Specify access control for packets
<i>name</i>	Type: string length: 64 List name
<i>inout</i>	Traffic direction in value: 0 Inbound packets out value: 1 Outbound packets
Command Modes	• /exec/configure/if-set-acl-l3

ip access-list

[no] ip access-list *name*

Syntax Description	
no	Negate a command or set its defaults
ip	Configure IP features
access-list	Configure access list
<i>name</i>	Type: string length: 64 List name
Command Modes	• /exec/configure

ip adjacency cache disable

[no] ip adjacency cache disable

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	adjacency	Configure Adjmgr
	cache	Disable cache
	disable	Disable cache
Command Modes	• /exec/configure	

ip adjacency forcedownload

ip adjacency [**vrf** {*vrf-name**vrf-known-name*}] {*interface* {**ip-addr*}|*} **forcedownload**

Syntax Description

ip	Configure IP features
adjacency	Configure Adjmgr
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>interface</i>	Type: interface Display specific interface adjacencies only
<i>ip-addr</i>	Type: ipaddr IPv4 source address
*	for all adjacencies in this context
forcedownload	Create consistency in UFDM

Command Modes

- /exec/configure

ip adjacency notify interval

ip adjacency notify interval *time* | **no ip adjacency notify interval**

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
adjacency	Configure Adjmgr
notify	Notify URIB/FIB
interval	Time interval
<i>time</i>	Type: integer min: 100 max: 1000 default: 100 value in milli seconds
Command Modes	• /exec/configure

ip adjacency peer-gmac

[no] ip adjacency [vrf {*vrf-name*|*vrf-known-name*}] {*interface* {**ip-addr*}|*} peer-gmac

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
adjacency	Configure Adjmgr
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>interface</i>	Type: interface Display specific interface adjacencies only
<i>ip-addr</i>	Type: ipaddr IPV4 source address
*	for all adjacencies in this context
peer-gmac	Set/clear the peer-gmac bit

Command Modes

- /exec/configure

ip adjacency route distance

`ip adjacency route distance pref`
`no ip adjacency route distance`

Syntax	Description
<code>no</code>	Negate a command or set its defaults
<code>ip</code>	Configure IP features
<code>adjacency</code>	Configure Adjmgr
<code>route</code>	route
<code>distance</code>	admin-distance
<code><i>pref</i></code>	Type: uinteger min: 2 max: 250 default: 250 preference
Command Modes	• /exec/configure

ip adjacency statistics collect

ip adjacency statistics collect|no ip adjacency statistics collect

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	adjacency	Configure Adjmgr
	statistics	Statistics
	collect	Collection

Command Modes • /exec/configure

ip adjacency statistics interval

`ip adjacency statistics interval time|no ip adjacency statistics interval`

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
adjacency	Configure Adjmgr
statistics	Statistics
interval	Interval
<i>time</i>	Type: integer min: 120 max: 2400 default: 120 Timer timeout value
Command Modes	• /exec/configure

ip allow address-overlap

[no] ip allow address-overlap

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
allow	Allow interface IP address overlap
address-overlap	Allow interface IP address overlap

Command Modes • /exec/configure

ip arp

ip arp *ip-address mac-address* | **no ip arp** *ip-address* [*mac-address*]

Syntax Description

no Negate a command or set its defaults

ip Configure IP features

arp Configure ARP parameters

ip-address Type: ipaddr

IP address

mac-address Type: ethernet

MAC address

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-mgmt-ether
- /exec/configure/if-vlan-common

ip arp broadcast mac-mismatch

ip arp broadcast mac-mismatch|no ip arp broadcast mac-mismatch

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
broadcast	Enable/disable arp broadcast
mac-mismatch	when there is a smac mismatch

Command Modes • /exec/configure

ip arp cache disable

[no] ip arp cache disable

Syntax Description	no Negate a command or set its defaults
	ip Configure IP features
	arp ARP
	cache Disable cache
	disable Disable cache
Command Modes	• /exec/configure

ip arp cfs-queue

ip arp cfs-queue *size*|**no ip arp cfs-queue**

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	ARP
cfs-queue	cfs-queue
<i>size</i>	Type: integer Size for adjacencies to be sent in CFSOE payload

Command Modes

- /exec/configure

isis authentication-type cleartext md5 (isis)

`isis authentication-type {cleartext|md5} level|no isis authentication-type [{cleartext|md5}] level`

Syntax Description	
no	Negate a command or set its defaults
isis	IS-IS configuration commands
authentication-type	Set hello authentication type
cleartext	Cleartext
md5	HMAC-MD5
<i>level</i>	IS-IS level level-1 value: 1 Specify authentication type for level-1 IIHs level-2 value: 2 Specify authentication type for level-2 IIHs
Command Modes	• /exec/configure/if-ma

isis authentication-type cleartext md5 (isis)

isis authentication-type {cleartext|md5}|no isis authentication-type [{cleartext|md5}]

Syntax Description		
no		Negate a command or set its defaults
isis		IS-IS configuration commands
authentication-type		Set hello authentication type
cleartext		Cleartext
md5		HMAC-MD5

Command Modes • /exec/configure/if-p2p

isis authentication key-chain (isis)

isis authentication key-chain *auth-keychain level* | **no isis authentication key-chain** [*auth-keychain*]
level

Syntax Description	
no	Negate a command or set its defaults
isis	IS-IS configuration commands
authentication	Set hello authentication keychain
key-chain	Set hello authentication keychain
<i>auth-keychain</i>	Type: string length: 63 authentication keychain
<i>level</i>	IS-IS level level-1 value: 1 Specify authentication keychain for level-1 IIHs level-2 value: 2 Specify authentication keychain for level-2 IIHs
Command Modes	• /exec/configure/if-ma

isis authentication key-chain (isis)

isis authentication key-chain *auth-keychain* | **no isis authentication key-chain** [*auth-keychain*]

Syntax Description

no	Negate a command or set its defaults
isis	IS-IS configuration commands
authentication	Set hello authentication keychain
key-chain	Set hello authentication keychain
<i>auth-keychain</i>	Type: string length: 63 authentication keychain

Command Modes

- /exec/configure/if-p2p

isis bfd

[no] isis bfd [disable]

Syntax Description	no Negate a command or set its defaults
	isis IS-IS configuration commands
	bfd Interface BFD configuration
	disable Disable BFD on interface
Command Modes	• /exec/configure/if-igp

isis circuit-type

isis circuit-type *circuit-type* | **no isis circuit-type** [*circuit-type*]

Syntax Description

no Negate a command or set its defaults

isis IS-IS configuration commands

circuit-type Configure circuit type for interface

circuit-type IS-IS circuit type

level-1 value: 1

Level-1 only adjacencies are formed

level-2 value: 2

Level-2 only adjacencies are formed

level-1-2 value: 3

Level-1-2 adjacencies are formed

Command Modes

• /exec/configure/if-igp

isis csnp-interval

[no] isis csnp-interval *sec* {level-1|level-2}

Syntax Description	no	Negate a command or set its defaults
	isis	IS-IS configuration commands
	csnp-interval	Set CSNP interval in seconds
	<i>sec</i>	Type: integer min: 1 max: 65535 default: 10 CSNP interval value
	level-1	Specify interval for level-1 CSNPs
	level-2	Specify interval for level-2 CSNPs

Command Modes • /exec/configure/if-igp

isis event-history adjacency

[no] isis event-history adjacency size {*size_in_text* *size_in_kbytes*}

Syntax	Description
no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
adjacency	Adjacency events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure/router-isis/router-isis-vrf-common

isis event-history cli

[no] isis event-history cli size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
cli	CLI events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: large disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure/router-isis/router-isis-vrf-common

isis event-history csnp

[no] isis event-history csnp size {*size_in_text**size_in_kbytes*}

Syntax Description

no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
csnp	CSNP events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

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

isis event-history dis

[no] isis event-history dis size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
dis	Dis events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure/router-isis/router-isis-vrf-common

isis event-history events

[no] **isis event-history events size** {*size_in_text**size_in_kbytes*}

Syntax	Description
no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
events	Events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: large disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure/router-isis/router-isis-vrf-common

isis event-history graceful

[no] isis event-history graceful size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
graceful	Graceful Restart events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure/router-isis/router-isis-vrf-common

isis event-history ha

[no] isis event-history ha size {*size_in_text*size_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
ha	HA events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

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

isis event-history iih

[no] isis event-history iih size {size_in_textsize_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
iih	IIH events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: large disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

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

isis event-history lsp-flood

[no] isis event-history lsp-flood size {size_in_textsize_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
lsp-flood	LSP-flood events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: medium disabled value: 0 Disabled large value: 1048576 Large buffer small value: 8196 Small buffer medium value: 512000 Medium buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

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

isis event-history lsp-gen

[no] isis event-history lsp-gen size {*size_in_text**size_in_kbytes*}

Syntax	Description
no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
lsp-gen	LSP-Gen events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: medium disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure/router-isis/router-isis-vrf-common

isis event-history mtr

[no] isis event-history mtr size {*size_in_text*size_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
mtr	MTR events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer small value: 8196 Small buffer medium value: 512000 Medium buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

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

isis event-history psnp

[no] isis event-history psnp size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
psnp	PSNP events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure/router-isis/router-isis-vrf-common

isis event-history redist

[no] **isis event-history redist size** {*size_in_text**size_in_kbytes*}

Syntax	Description
no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
redist	Redist events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: medium disabled value: 0 Disabled large value: 1048576 Large buffer small value: 8196 Small buffer medium value: 512000 Medium buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure/router-isis/router-isis-vrf-common

isis event-history spf-leaf

[no] isis event-history spf-leaf size {*size_in_text*size_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
spf-leaf	Shortest path first events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: medium disabled value: 0 Disabled large value: 1048576 Large buffer small value: 8196 Small buffer medium value: 512000 Medium buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure/router-isis/router-isis-vrf-common

isis event-history spf-tree

[no] isis event-history spf-tree size {*size_in_text**size_in_kbytes*}

Syntax Description

no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
spf-tree	SPF-Tree events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: medium disabled value: 0 Disabled large value: 1048576 Large buffer small value: 8196 Small buffer medium value: 512000 Medium buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

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

isis event-history tlv

[no] isis event-history tlv size {size_in_textsize_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
tlv	TLV events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer small value: 8196 Small buffer medium value: 512000 Medium buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

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

isis event-history urib

[no] isis event-history urib size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
urib	URIB events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size default: medium disabled value: 0 Disabled large value: 1048576 Large buffer small value: 8196 Small buffer medium value: 512000 Medium buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure/router-isis/router-isis-vrf-common

isis hello-interval (isis)

[no] isis hello-interval *sec* {level-1|level-2}

Syntax	Description
no	Negate a command or set its defaults
isis	IS-IS configuration commands
hello-interval	Set Hello interval in seconds
<i>sec</i>	Type: integer min: 1 max: 65535 default: 10 Hello interval value
level-1	Specify hello-interval for level-1 IIHs
level-2	Specify hello-interval for level-2 IIHs

Command Modes • /exec/configure/if-ma

isis hello-interval (isis)

[no] isis hello-interval *sec*

Syntax Description		
	no	Negate a command or set its defaults
	isis	IS-IS configuration commands
	hello-interval	Set Hello interval in seconds
	<i>sec</i>	Type: integer min: 1 max: 65535 default: 10 Hello interval value

Command Modes • /exec/configure/if-p2p

isis hello-multiplier (isis)

[no] isis hello-multiplier *multi* {level-1|level-2}

Syntax	Description
no	Negate a command or set its defaults
isis	IS-IS configuration commands
hello-multiplier	Set multiplier for Hello holding time
<i>multi</i>	Type: integer min: 3 max: 1000 default: 3 Hello multiplier value
level-1	Specify hello multiplier for level-1 IIHs
level-2	Specify hello multiplier for level-2 IIHs

Command Modes • /exec/configure/if-ma

isis hello-multiplier (isis)

[no] isis hello-multiplier *multi*

Syntax Description		
no		Negate a command or set its defaults
isis		IS-IS configuration commands
hello-multiplier		Set multiplier for Hello holding time
<i>multi</i>		Type: integer min: 3 max: 1000 default: 3 Hello multiplier value

Command Modes • /exec/configure/if-p2p

isis hello-padding always (isis)

isis hello-padding always

Syntax Description	isis	IS-IS configuration commands
	hello-padding	Pad IS-IS hello PDUs to full MTU
	always	Pad every hello
Command Modes	• /exec/configure/if-igp	

isis hello-padding always (isis)

isis hello-padding|no isis hello-padding [always]

Syntax Description

no Negate a command or set its defaults

isis IS-IS configuration commands

hello-padding Pad IS-IS hello PDUs to full MTU

always Pad every hello

Command Modes

- /exec/configure/if-igp

isis ipv6 metric

[no] isis ipv6 metric metric level

Syntax Description

no Negate a command or set its defaults

isis IS-IS configuration commands

metric Configure metric for IPV6 topology

ipv6 Configure metric for IPV6 topology

metric Type: integer

min: 0 max: 0

Default metric

level IS-IS level

level-1 value: 1

Apply metric to level-1 links

level-2 value: 2

Apply metric to level-2 links

Command Modes

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

isis lsp-interval

[no] isis lsp-interval msec

Syntax Description

no	Negate a command or set its defaults
isis	IS-IS configuration commands
lsp-interval	Set LSP transmission interval
<i>msec</i>	Type: integer min: 10 max: 65535 default: 33 LSP transmission interval (milliseconds)

Command Modes

- /exec/configure/if-igp

isis mesh-group

isis mesh-group {**blocked***mesh-id*}|**no isis mesh-group** [{**blocked***mesh-id*}]

Syntax	Description
no	Negate a command or set its defaults
isis	IS-IS configuration commands
mesh-group	Set IS-IS mesh group
<i>mesh-id</i>	Type: uinteger min: 1 max: 0 Mesh group number
blocked	Block LSPs on this interface

Command Modes

- /exec/configure/if-igp

isis metric

[no] **isis metric** *metric level*

Syntax Description

no Negate a command or set its defaults

isis IS-IS configuration commands

metric Configure the metric for interface

metric Type: integer

min: 0 max: 0

Default metric

level IS-IS level

level-1 value: 1

Apply metric to level-1 links

level-2 value: 2

Apply metric to level-2 links

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-mpls-tunnel

isis network point-to-point

[no] isis network point-to-point

Syntax Description	no	Negate a command or set its defaults
	isis	IS-IS configuration commands
	network	Change interface medium to p2p
	point-to-point	Change interface medium to p2p

Command Modes	<ul style="list-style-type: none">• /exec/configure/if-igp• /exec/configure/if-mpls-tunnel
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isis passive-interface

isis passive-interface *level* | **no isis passive-interface** [*level*] | **default isis passive-interface** [*level*]

Syntax Description

no	Negate a command or set its defaults
isis	IS-IS configuration commands
passive-interface	Suppress IS-IS PDU
default	Undo a command
<i>level</i>	Level to suppress
	level-1 value: 1 Suppress level-1 PDU
	level-2 value: 2 Suppress level-2 PDU
	level-1-2 value: 3 Suppress level-1 and level-2 PDU

Command Modes

- /exec/configure/if-igp

isis priority

[no] isis priority *priority* {**level-1**|**level-2**}

Syntax Description	no	Negate a command or set its defaults
	isis	IS-IS configuration commands
	priority	Set priority for DIS election
	<i>priority</i>	Type: integer min: 0 max: 127 default: 64 Priority value
	level-1	Specify priority for level-1 routing
	level-2	Specify priority for level-2 routing

Command Modes • /exec/configure/if-ma

isis retransmit-interval

[no] isis retransmit-interval *sec*

Syntax Description

no	Negate a command or set its defaults
isis	IS-IS configuration commands
retransmit-interval	Set per-LSP retransmission interval
<i>sec</i>	Type: integer min: 1 max: 65535 default: 5 Interval between retransmissions of the same LSP (seconds)

Command Modes

- /exec/configure/if-p2p

isis retransmit-throttle-interval

[no] isis retransmit-throttle-interval *msec*

Syntax Description	no	Negate a command or set its defaults
	isis	IS-IS configuration commands
	retransmit-throttle-interval	Set interface LSP retransmission interval
	<i>msec</i>	Type: integer min: 20 max: 65535 default: 66 Delay between retransmitted LSPs (milliseconds)
Command Modes	• /exec/configure/if-p2p	

isis shutdown

[no] isis shutdown

Syntax Description

no Negate a command or set its defaults

isis IS-IS configuration commands

shutdown Graceful shutdown IS-IS functionality on the interface

Command Modes

- /exec/configure/if-igp

ip arp event-history size

```
[no] ip arp event-history
{packet|event|sync-event|ip-sync-event|control|ha|errors|lcache|lcache-errors|client-event|client-errors|snmp|cli}
size {size_in_text|size_in_Kbytes}
```

Syntax	Description
no	Negate a command or set its defaults
ip	IP events
arp	Configure ARP parameters
event-history	log debug events into event history buffer
packet	inst packet logs
event	Internal event logs
sync-event	CFS and MCECM related event logs
ip-sync-event	L3 over vpc events
control	ARP control event logs
ha	HA and GR logs
errors	inst error logs
lcache	lcache logs
lcache-errors	lcache_error logs
client-event	Client_event logs
client-errors	Client_error logs
cli	cli logs
snmp	SNMP logs
size	Configure the size of the event-hist buffer
<i>size_in_text</i>	Buffer size default: small small value: 16384 Small buffer medium value: 65536 Medium buffer large value: 262144 Large buffer disabled value: 0 Disabled

size_in_Kbytes Type: uinteger

Size of the file in kbytes

Command Modes

- /exec/configure

ip arp gratuitous hsrp duplicate

ip arp gratuitous hsrp duplicate|no ip arp gratuitous hsrp duplicate

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	arp	Configure ARP parameters
	gratuitous	gratuitous
	hsrp	hsrp
	duplicate	duplicate address detection

Command Modes	<ul style="list-style-type: none">• /exec/configure/if-igp• /exec/configure/if-mgmt-ether• /exec/configure/if-vlan-common
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ip arp gratuitous request

ip arp gratuitous request|no ip arp gratuitous request

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
gratuitous	gratuitous
request	Enable/Disable sending grat. arp request when duplicate address detected

Command Modes

- /exec/configure/if-igmp
- /exec/configure/if-mgmt-ether
- /exec/configure/if-vlan-common

ip arp gratuitous update

ip arp gratuitous update|no ip arp gratuitous update

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
gratuitous	gratuitous
update	Enable/Disable arp cache updates for gratuitous arp

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-mgmt-ether
- /exec/configure/if-vlan-common

ip arp inspection filter vlan

[no] ip arp inspection filter *arp-acl-name* **vlan** *vlan-range*

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
arp		Configure ARP parameters
inspection		Arp Inspection configuration <i>Not available in this release.</i>
filter		Filter
<i>arp-acl-name</i>	Type: string	
	length: 64	
		Access list name
vlan		Vlan range
<i>vlan-range</i>	Type: vlan-mrange	
		VLAN ID 1-3967 or range(s): 1-5, 10 or 2-5,7-19

Command Modes • /exec/configure

ip arp inspection log-buffer

[no] ip arp inspection log-buffer entries *number1*

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	arp	Configure ARP parameters
	inspection	Arp Inspection configuration <i>Not available in this release.</i>
	log-buffer	Log Buffer Configuration
	entries	Number of entries for log buffer
	<i>number1</i>	Type: uinteger min: 1 max: 1024 Number of entries for log buffer
Command Modes		• /exec/configure

ip arp inspection trust

[no] ip arp inspection trust

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	arp	Configure ARP parameters
	inspection	Arp Inspection configuration
	trust	Configure trust state

Command Modes • /exec/configure/if-switching

ip arp inspection validate

[no] ip arp inspection validate {src-mac|dst-mac|ip1} +

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	arp	Configure ARP parameters
	inspection	Arp Inspection configuration <i>Not available in this release.</i>
	validate	Validate addresses
	src-mac	Validate source MAC address
	dst-mac	Validate destination MAC address
	ip1	Validate IP addresses

Command Modes • /exec/configure

ip arp inspection vlan

[no] ip arp inspection vlan *vlan-id* [logging dhcp-bindings {permit|all|inone}]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
inspection	Arp Inspection configuration <i>Not available in this release.</i>
vlan	Enable/Disable ARP Inspection on vlans
<i>vlan-id</i>	Type: vlan-mrange VLAN ID 1-3967 or range(s): 1-5, 10 or 2-5,7-19
logging	Configure type of packets to be logged
dhcp-bindings	Logging of packet that match DHCP bindings
permit	Log DHCP Binding Permitted packets
all	Log all packets that match DHCP bindings
inone	Do not log packets

Command Modes

- /exec/configure

ip arp mts-queue

`ip arp mts-queue size|no ip arp mts-queue`

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	arp	ARP
	mts-queue	mts-queue
	size	Type: integer Size for arp data sap qlimit
Command Modes	• /exec/configure	

ip arp request

ip arp request *ip-address*

Syntax Description

ip Configure IP features

arp Configure ARP parameters

request Trigger ARP request

ip-address Type: ipaddr
IP address

Command Modes

- /exec/configure/if-igp

ip arp synchronize (arp)

`ip arp synchronize [{pull|push}]`

Syntax Description		
	ip	Configure IP features
	arp	ARP
	synchronize	CFS synchronize
	pull	Initiate CFS pull request
	push	Initiate CFS push message
Command Modes		• /exec

ip arp synchronize (arp_mcec)

[no] ip arp synchronize

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	ARP
synchronize	CFS synchronize <i>Not available in this release.</i>

Command Modes

- /exec/configure/vpc-domain

ip arp timeout

ip arp timeout *time-out* | **no ip arp timeout**

Syntax Description

no Negate a command or set its defaults

ip Configure IP features

arp Configure ARP parameters

timeout ARP timeout

time-out Type: integer

min: 60 max: 28800 default: 1500

Time-out value in seconds

Command Modes

- /exec/configure
- /exec/configure/config-mgmt
- /exec/configure/if-igp

ip as-path access-list

ip as-path access-list *aspl-name* [**timeout** *sec*] {**deny**|**permit**} *line*|**no ip as-path access-list** *aspl-name* [**timeout** *sec*] [{**deny**|**permit**} *line*]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
as-path	BGP autonomous system path filter
access-list	Specify an access list name
<i>aspl-name</i>	Type: string pattern: [!~]* length: 63 AS path access list name
<i>aspl-name</i>	Type: string Known as-path access-list name
timeout	Timeout to be used for checking regex cpu hog
<i>sec</i>	Type: uinteger No. of seconds used as timeout
deny	Specify packets to reject
permit	Specify packets to forward

Command Modes

- /exec/configure

ip auto-discard

[no] ip auto-discard

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
auto-discard	Auto 0.0.0.0/0 discard route

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

ip cache disable

[no] ip cache disable

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	cache	Disable cache
	disable	Disable cache
Command Modes		• /exec/configure

ip community-list expanded

ip community-list expanded *name* [**timeout** *sec*] {deny|permit} *line*|no **ip community-list expanded** *name* [**timeout** *sec*] [{deny|permit} *line*]

Syntax Description	
no	Negate a command or set its defaults
ip	Configure IP features
community-list	Add a community list entry
expanded	Add an expanded community list entry
<i>name</i>	Type: string pattern: [!~]* length: 63 Name of expanded community list
timeout	Timeout to be used for checking regex cpu hog
<i>sec</i>	Type: uinteger No. of seconds used as timeout
deny	Specify community to reject
permit	Specify community to accept

Command Modes • /exec/configure

ip community-list standard

```
ip community-list standard name {permit|deny}
{internet|local-AS|no-advertise|no-export|aannnumberhex_num}+|no ip community-list standard name
[ {permit|deny} ] {internet|local-AS|no-advertise|no-export|aannnumberhex_num}+
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
community-list	Add a community list entry
standard	Add a standard Community list entry
<i>name</i>	Type: string pattern: [!~]* length: 63 Standard community list name
permit	Specify community to accept
deny	Specify community to reject
internet	Internet (well-known community)
local-AS	Do not send outside local AS (well-known community)
no-advertise	Do not advertise to any peer (well-known community)
no-export	Do not export to next AS (well-known community)
<i>aann</i>	Type: community Community number aa:nn format
<i>number</i>	Type: uinteger min: 1 max: 4294967295 Community number
<i>hex_num</i>	Type: hex Community number in hex

Command Modes

- /exec/configure

ip default-gateway

```
[no] ip default-gateway ip-addr [vrf {vrf-namevrf-known-name}]
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
default-gateway	Configure default gateway
<i>ip-addr</i>	Type: ipaddr IP prefix in format i.i.i.i
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/configure
- /exec/configure/config-mgmt
- /exec/configure/vrf

ip dhcp packet strict-validation

[no] ip dhcp packet strict-validation

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	dhcp	Configure DHCP snooping or relay
	packet	DHCP packet
	strict-validation	DHCP packet strict validation

Command Modes • /exec/configure/

ip dhcp relay

[no] ip dhcp relay

Syntax Description	no Negate a command or set its defaults
	ip Configure IP features
	dhcp Configure DHCP snooping or relay
	relay Enable DHCP relay agent
Command Modes	• /exec/configure

ip dhcp relay address

[no] ip dhcp relay address [*ip-addr-val* [use-vrf *vrf-name*]]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	Configure relay agent
address	Configure DHCP server to refer to
<i>ip-addr-val</i>	Type: ipaddr IP address
use-vrf	helper address VRF membership
<i>vrf-name</i>	Type: vrf pattern: [-a-zA-Z0-9_.;\$#@]* antipattern: vrf detail interface definition context forwarding member all l2-vrf length: 32 VRF name

Command Modes

- /exec/configure/if-igp

ip dhcp relay information option

[no] ip dhcp relay information option

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	dhcp	Configure DHCP snooping or relay
	relay	DHCP relay agent parameters
	information	Relay agent information option
	option	Insert relay information in BOOTREQUEST

Command Modes • /exec/configure

ip dhcp relay information option vpn

[no] ip dhcp relay information option vpn

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	dhcp	Configure DHCP snooping or relay
	relay	DHCP relay agent parameters
	information	Relay agent information option
	option	Insert relay information in BOOTREQUEST
	vpn	Enable relay support across VRFs

Command Modes • /exec/configure

ip dhcp relay sub-option type cisco

[no] ip dhcp relay sub-option type cisco

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	DHCP relay agent parameters
sub-option	Relay agent suboption
type	Relay agent suboption type
cisco	Use Cisco proprietary suboptions

Command Modes • /exec/configure

ip dhcp relay subnet-broadcast

[no] ip dhcp relay subnet-broadcast

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	Configure DHCP relay
subnet-broadcast	Configure DHCP relay subnet-broadcast on interface

Command Modes

- /exec/configure/if-igp

ip dhcp smart-relay

[no] ip dhcp smart-relay

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	dhcp	Configure DHCP snooping or relay
	smart-relay	Configure DHCP smart relay on interface
Command Modes	• /exec/configure/if-igp	

ip dhcp smart-relay global

[no] ip dhcp smart-relay global

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	dhcp	Configure DHCP snooping or relay
	smart-relay	Configure DHCP smart relay
	global	Configure DHCP smart relay globally

Command Modes • /exec/configure

ip dhcp snooping

[no] ip dhcp snooping

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	dhcp	Configure DHCP snooping or relay
	snooping	DHCP Snooping <i>Not available in this release.</i>
Command Modes	• /exec/configure/	

ip dhcp snooping information option

[no] ip dhcp snooping information option

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	dhcp	Configure DHCP snooping or relay
	snooping	DHCP Snooping
	information	DHCP Snooping information
	option	DHCP Snooping information option

Command Modes • /exec/configure/

ip dhcp snooping trust

[no] ip dhcp snooping trust

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	dhcp	Configure DHCP snooping or relay
	snooping	DHCP Snooping
	trust	DHCP Snooping trust config
Command Modes		• /exec/configure/if-switching

ip dhcp snooping verify mac-address

[no] ip dhcp snooping verify mac-address

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	dhcp	Configure DHCP snooping or relay
	snooping	DHCP Snooping
	verify	DHCP snooping verify
	mac-address	DHCP snooping verify mac-address

Command Modes

- /exec/configure/

ip dhcp snooping vlan

[no] ip dhcp snooping vlan *vlan-id10*

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	dhcp	Configure DHCP snooping or relay
	snooping	DHCP Snooping
	vlan	DHCP Snooping vlan
	<i>vlan-id10</i>	Type: vlan-mrange VLAN ID 1-3967 or range(s): 1-5, 10 or 2-5,7-19
Command Modes	• /exec/configure	

ip directed-broadcast

[no] ip directed-broadcast [*acl-name*]

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	directed-broadcast	IP directed-broadcast
	<i>acl-name</i>	Type: string length: 63 ACL policy name

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-mgmt-ether

ip dns source-interface

```
[no] ip dns source-interface ifnum [vrf {vrf-namevrf-known-name}]
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
dns	Configure dns client
source-interface	Configure source interface feature for domain-lookup
<i>ifnum</i>	Type: interface Source interface
vrf	Configure VRF
<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

ip domain-list

```
[no] ip domain-list {s0|s1 [use-vrf {vrf-namevrf-known-name}]}
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
domain-list	Add additional domain names
<i>s0</i>	Type: string length: 64 Enter a domain
<i>s1</i>	Type: string length: 64 Enter a domain
use-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: 64 VRF name
<i>vrf-known-name</i>	Type: vrf length: 64 Known VRF name

Command Modes

- /exec/configure
- /exec/configure/vrf

ip domain-lookup

[no] ip domain-lookup

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	domain-lookup	Enable/Disable DNS

Command Modes • /exec/configure

ip domain-name

```
[no] ip domain-name {s0|s1} [use-vrf {vrf-namevrf-known-name}]
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
domain-name	Specify default domain name
<i>s0</i>	Type: string length: 64 Enter the default domain
<i>s1</i>	Type: string length: 64 Enter the default domain
use-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: 64 VRF name
<i>vrf-known-name</i>	Type: vrf length: 64 Known VRF name

Command Modes

- /exec/configure
- /exec/configure/vrf

ip dscp

[no] ip dscp *dscp_value*

Syntax Description	no	Negate a command or set its defaults
	ip	Set ERSPAN IP options
	dscp	Set the IP DSCP value
	<i>dscp_value</i>	Type: integer min: 0 max: 63
Command Modes		• /exec/configure/config-monitor-erspan-src

ip eigrp bfd

[no] ip eigrp *eigrp-tag* bfd [disable]

Syntax Description

no Negate a command or set its defaults

ip Configure IP features

eigrp EIGRP interface configuration commands

eigrp-tag Type: string

pattern: [a-zA-Z0-9_][a-zA-Z0-9_-]*

antipattern: accounting | all | fsm | graceful-restart | interface | interfaces | internal | neighbor | neighbors | notifications | packets | prefix | route | route-map | shutdown | summary | topology | traffic | transmit | urib | vrf | vrf-events

length: 20

Process tag

bfd Enable BFD on this interface

disable Disable BFD on this interface

Command Modes

- /exec/configure/if-igp

ip eigrp event-history bfd size

[no] ip eigrp [*eigrp-ptag*] event-history bfd size {*size_in_text**size_in_Kbytes*}

Syntax Description

no	Negate a command or set its defaults
ip	Clear IP commands
eigrp	EIGRP clear commands
<i>eigrp-ptag</i>	Type: string pattern: [a-zA-Z0-9_][a-zA-Z0-9_-]* antipattern: accounting all fsm graceful-restart interface interfaces internal neighbor neighbors notifications packets prefix route route-map shutdown summary topology traffic transmit urib vrf vrf-events length: 20 Process tag
event-history	EIGRP event-history
bfd	Show bfd log of EIGRP
size	Configure the size of the event-hist buffer
<i>size_in_text</i>	Buffer size default: small small value: 16384 Small buffer medium value: 512000 Medium buffer large value: 1024000 Large buffer disabled value: 0 Disabled
<i>size_in_Kbytes</i>	Type: uinteger Size of the file in kbytes

Command Modes

- /exec/configure

ip extcommunity-list expanded

ip extcommunity-list expanded *name* {deny|permit} *line*|**no ip extcommunity-list expanded** *name* [{deny|permit} *line*]

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
extcommunity-list		Add a extcommunity list entry
expanded		Add an expanded extcommunity list entry
<i>name</i>	Type: string pattern: [!~]* length: 63	Name of expanded extcommunity list
deny		Specify extcommunity to reject
permit		Specify extcommunity to accept

Command Modes • /exec/configure

ip extcommunity-list standard

```
ip extcommunity-list standard name {permit|deny} {4byteas-generic {transitive
ext-comm-gen-trans|non-transitive ext-comm-gen-nontrans}|rt
{ext-comm-rt-aa2nn4ext-comm-rt-aa4nn2}|soo {ext-comm-soo-aa2nn4ext-comm-soo-aa4nn2}}+|no ip
extcommunity-list standard name [{permit|deny}] [{4byteas-generic {transitive
ext-comm-gen-trans|non-transitive ext-comm-gen-nontrans}|rt
{ext-comm-rt-aa2nn4ext-comm-rt-aa4nn2}|soo {ext-comm-soo-aa2nn4ext-comm-soo-aa4nn2}}]+
```

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
extcommunity-list		Add a extcommunity list entry
standard		Add a standard Extcommunity list entry
<i>name</i>	Type: string pattern: [!-~]* length: 63	Standard extcommunity list name
permit		Specify extcommunity to accept
deny		Specify extcommunity to reject
4byteas-generic		Generic extended community
transitive		Transitive extcommunity
non-transitive		Non-Transitive extcommunity
rt		Router-Target
soo		Site-Of-Origin
<i>ext-comm-gen-trans</i>	Type: community	Extcommunity number aa4:nn format
<i>ext-comm-gen-nontrans</i>	Type: community	Extcommunity number aa4:nn format
<i>ext-comm-rt-aa2nn4</i>	Type: community	Extcommunity number
<i>ext-comm-rt-aa4nn2</i>	Type: community	Extcommunity number

ext-comm-soo-aa2nn4 Type: community

Extcommunity number

ext-comm-soo-aa4nn2 Type: community

Extcommunity number

Command Modes

- /exec/configure

(aclmgr)

```
{[seqno]|no} {addr wildprefix|host hostaddr}
```

Syntax Description

<i>seqno</i>	Type: uinteger min: 1 max: 4294967295 Sequence number
no	Negate a command or set its defaults
<i>addr</i>	Type: ipaddr A.B.C.D Network address of object-group member
<i>wild</i>	Type: ipaddr A.B.C.D wildcard
<i>prefix</i>	Type: ipprefix A.B.C.D/nn Network prefix of the object-group member
host	Host address of the object-group member
<i>hostaddr</i>	Type: ipaddr A.B.C.D Host address

Command Modes

- /exec/configure/ipgroup

ip host

[no] ip host *s0 ipv4_0*

Syntax Description

no Negate a command or set its defaults

ip Configure IP features

host Add an entry to the ip hostname table

s0 Type: string
length: 64
Name of Host

ipv4_0 Type: ipaddr
Enter an IP address

Command Modes

- /exec/configure

ip igmp

[no] ip igmp {**static-group**|**static-oif**} {*group* [**source** *source*]}|**route-map** *route-map-name*}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
static-group	Configures static oif for a multicast forwarding entry
static-oif	Configures static oif for a multicast forwarding entry
<i>group</i>	Type: ipaddr Multicast group IP address
source	Configures source address for IGMPv3 (S,G) Channel
<i>source</i>	Type: ipaddr Source IP address
route-map	Static group policy
<i>route-map-name</i>	Type: string length: 63 route-map name

Command Modes

- /exec/configure/if-igmp

ip igmp allow-v3-asm

[no] ip igmp allow-v3-asm

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
allow-v3-asm	Accept IGMPv3 reports for non SSM groups

Command Modes

- /exec/configure/if-igp

ip igmp any-query-destination

[no] ip igmp any-query-destination

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP global configuration commands
	any-query-destination	Allow any destination-IP for General Queries
Command Modes	• /exec/configure	

ip igmp bootup-delay

no ip igmp bootup-delay [*delay*]|**ip igmp bootup-delay** *delay*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
bootup-delay	Configures bootup route add delay to RIB
<i>delay</i>	Type: integer min: 1 max: 0 default: 0 Delay downloading in seconds

Command Modes

- /exec/configure

ip igmp enforce-router-alert

[no] ip igmp enforce-router-alert

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP global configuration commands
	enforce-router-alert	Enforce Router Alert option check for IGMPv2 and IGMPv3 packets

Command Modes • /exec/configure

ip igmp event-history (igmp)

[no] ip igmp event-history {interface-debugsgroup-debugsg} size {size_in_textsize_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
interface-debugsg	Interface-debugsg for IGMP
group-debugsg	Group-debugsg for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size default: medium disabled value: 0 Disabled large value: 2048576 Large buffer small value: 8196 Small buffer medium value: 512000 Medium buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip igmp event-history (igmp)

[no] ip igmp event-history {interface-events|group-events} size {size_in_text|size_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
interface-events	Interface-events for IGMP
group-events	Group-events for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size default: medium disabled value: 0 Disabled large value: 2048576 Large buffer small value: 8196 Small buffer medium value: 512000 Medium buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip igmp event-history cli

[no] ip igmp event-history cli size {*size_in_text**size_in_kbytes*}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
cli	CLI events for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip igmp event-history ha

[no] ip igmp event-history ha size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
ha	HA events for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size default: medium disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes
Command Modes	• /exec/configure

ip igmp event-history igmp-internal

[no] ip igmp event-history igmp-internal size {*size_in_text*size_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
igmp-internal	Internal events for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip igmp event-history mtrace

[no] ip igmp event-history mtrace size {*size_in_text* *size_in_kbytes*}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
mtrace	Mtrace events for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip igmp event-history policy

[no] ip igmp event-history policy size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
policy	Policy events for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes
Command Modes	• /exec/configure

ip igmp event-history vrf

[no] ip igmp event-history vrf size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
vrf	VRF events for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes
Command Modes	• /exec/configure

ip igmp file-debug

[no] ip igmp file-debug

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP global configuration commands
	file-debug	Collect all debugs to a file

Command Modes • /exec/configure

ip igmp flush-routes

[no] ip igmp flush-routes

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP global configuration commands
	flush-routes	Remove routes when restarting IGMP
Command Modes		• /exec/configure

ip igmp group-specific-strict

[no] ip igmp group-specific-strict

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
group-specific-strict	Enable group specific consistency check

Command Modes

- /exec/configure

ip igmp group-timeout

no ip igmp group-timeout [*time*]**ip igmp group-timeout** *time*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
group-timeout	Configures group membership timeout for IGMPv2
<i>time</i>	Type: integer min: 3 max: 0 default: 260 Time in seconds

Command Modes

- /exec/configure/if-igp

ip igmp ha-stateful

[no] ip igmp ha-stateful

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP global configuration commands
	ha-stateful	Enable stateful IGMP HA

Command Modes • /exec/configure

ip igmp immediate-leave

[no] ip igmp immediate-leave

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP interface configuration commands
	immediate-leave	Enable/Disable immediate leave
Command Modes	• /exec/configure/if-igp	

ip igmp join-group

[no] ip igmp join-group {*group* [*source source*]|**route-map** *route-map-name*}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
join-group	Configures local group membership for router
<i>group</i>	Type: ipaddr Multicast group IP address
source	Configures source address for IGMPv3 (S,G) Channel
<i>source</i>	Type: ipaddr Source IP address
route-map	Join group policy
<i>route-map-name</i>	Type: string length: 63 route-map name

Command Modes

- /exec/configure/if-igp

ip igmp last-member-query-count

`no ip igmp last-member-query-count [count]` | `ip igmp last-member-query-count count`

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
last-member-query-count	Configures number of group-specific Queries sent
<i>count</i>	Type: integer min: 1 max: 5 Count value

Command Modes

- /exec/configure/if-igp

ip igmp last-member-query-response-time

no ip igmp last-member-query-response-time [*interval*]
ip igmp last-member-query-response-time *interval*

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP interface configuration commands
	last-member-query-response-time	Configures last member query response time
	<i>interval</i>	Type: integer min: 1 max: 25 default: 1 Interval in seconds

Command Modes • /exec/configure/if-igp

ip igmp querier-timeout query-timeout

no ip igmp {querier-timeout|query-timeout} [*time*] | **ip igmp {querier-timeout|query-timeout} *time***

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
querier-timeout	Configures querier timeout for IGMPv2
query-timeout	Configures querier timeout for IGMPv2
<i>time</i>	Type: integer min: 1 max: 0 default: 255 Time in seconds

Command Modes • /exec/configure/if-igp

ip igmp query-interval

no ip igmp query-interval [*interval*]|**ip igmp query-interval** *interval*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
query-interval	Configures interval between Query transmission
<i>interval</i>	Type: integer min: 1 max: 18000 default: 125 Interval in seconds

Command Modes

- /exec/configure/if-igp

ip igmp query-max-response-time

no ip igmp query-max-response-time [*time*]**ip igmp query-max-response-time** *time*

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP interface configuration commands
	query-max-response-time	Configures MRT for query messages
	<i>time</i>	Type: integer min: 1 max: 25 default: 10 Time in seconds

Command Modes • /exec/configure/if-igp

ip igmp report-link-local-groups

[no] ip igmp report-link-local-groups

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
report-link-local-groups	Send Reports for groups in 224.0.0.0/24

Command Modes

- /exec/configure/if-igp

ip igmp report-policy access-group

ip igmp {**report-policy**|**access-group**} {*route-map-name*|**prefix-list** *prefix-list-name*}|**no ip igmp** {**report-policy**|**access-group**} [*{route-map-name|prefix-list prefix-list-name}*]

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
igmp		IGMP interface configuration commands
report-policy		IGMP Report Policy
access-group		IGMP access-group
<i>route-map-name</i>	Type: string	
	length: 100	
		Route-map name
prefix-list		Prefix list policy
<i>prefix-list-name</i>	Type: string	
	length: 63	
		prefix-list name
Command Modes		• /exec/configure/if-igp

ip igmp robustness-variable

no ip igmp robustness-variable [*value*]**ip igmp robustness-variable** *value*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
robustness-variable	Configures RFC defined Robustness Variable
<i>value</i>	Type: integer min: 1 max: 7 default: 2 Count value

Command Modes

- /exec/configure/if-igmp

ip igmp snooping (igmp)

[no] ip igmp snooping {optimised-multicast-flood|optimise-multicast-flood}

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
igmp		IGMP configuration commands
snooping		Configures IGMP Snooping
optimised-multicast-flood		Configures Optimised Multicast Flood (OMF) on the VLAN
optimise-multicast-flood		Configures Optimised Multicast Flood (OMF) on the VLAN

Command Modes	
	<ul style="list-style-type: none"> • /exec/configure/vlan-config • /exec/configure/bdomain

ip igmp snooping (igmp)

no ip igmp snooping**ip igmp snooping**

Syntax Description

no Negate a command or set its defaults

ip Configure IP features

igmp IGMP configuration commands

snooping Configures IGMP Snooping

Command Modes

• /exec/configure/vlan

ip igmp snooping (igmp)

no ip igmp snooping|ip igmp snooping

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP global configuration commands
	snooping	Configures IGMP Snooping
Command Modes		• /exec/configure

ip igmp snooping (igmp)

[no] ip igmp snooping {ha-stateful|cc-mode|m2rib-max-omfs *omf-count*|m2rib-max-omf-routes *omf-route-count*|m2rib-max-routes *route-count*|m2rib-max-buffers *buf-count*}

Syntax Description		
ip		Configure IP features
igmp		IGMP global configuration commands
snooping		Configures IGMP Snooping
no		Negate a command or set its defaults
ha-stateful		Enable stateful IGMP-Snooping HA
cc-mode		Enter MFDM congestion-control mode
m2rib-max-omfs		Number of OMF entries in M2RIB buffer
m2rib-max-routes		Number of route entries in M2RIB buffer
m2rib-max-omf-routes		Number of omf route entries in M2RIB buffer
m2rib-max-buffers		Number of update buffers with M2RIB
<i>omf-count</i>	Type: uinteger	min: 50 max: 400 default: 400
<i>route-count</i>	Type: uinteger	min: 100 max: 400 default: 400
<i>buf-count</i>	Type: uinteger	min: 3 max: 4 default: 4
<i>omf-route-count</i>	Type: uinteger	min: 10 max: 50 default: 50

Command Modes

- /exec/configure

ip igmp snooping (igmp)

no ip igmp snooping|ip igmp snooping

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP configuration commands
	snooping	Configures IGMP Snooping
Command Modes		<ul style="list-style-type: none">• /exec/configure/vlan-config• /exec/configure/bdomain

ip igmp snooping event-history igmp-snoop-internal

[no] ip igmp snooping event-history igmp-snoop-internal size {*size_in_text*size_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
event-history	Configure event-history buffers
igmp-snoop-internal	Internal events for IGMP-snoop
size	Configure size
<i>size_in_text</i>	Buffer size default: large disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip igmp snooping event-history mfdm

[no] ip igmp snooping event-history mfdm size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
event-history	Configure event-history buffers
mfdm	MFDM events for IGMP-snoop
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip igmp snooping event-history mfdm-sum

[no] ip igmp snooping event-history mfdm-sum size {size_in_textsize_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
event-history	Configure event-history buffers
mfdm-sum	MFDM-SUM events for IGMP-snoop
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip igmp snooping event-history rib

[no] ip igmp snooping event-history rib size {*size_in_text*size_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
event-history	Configure event-history buffers
rib	RIB events for IGMP-snoop
size	Configure size
<i>size_in_text</i>	Buffer size default: large disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes
Command Modes	• /exec/configure

ip igmp snooping event-history vlan-events

[no] ip igmp snooping event-history vlan-events size {*size_in_text*size_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
event-history	Configure event-history buffers
vlan-events	VLAN/BD events for IGMP-snoop
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer small value: 8196 Small buffer medium value: 512000 Medium buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip igmp snooping event-history vlan

[no] ip igmp snooping event-history vlan size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
event-history	Configure event-history buffers
vlan	VLAN/BD events for IGMP-snoop
size	Configure size
<i>size_in_text</i>	Buffer size default: medium disabled value: 0 Disabled large value: 1048576 Large buffer small value: 8196 Small buffer medium value: 512000 Medium buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip igmp snooping event-history vpc

[no] ip igmp snooping event-history vpc size {*size_in_text*size_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
event-history	Configure event-history buffers
vpc	VPC events for IGMP-snoop
size	Configure size
<i>size_in_text</i>	Buffer size default: large disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip igmp snooping explicit-tracking (igmp)

no ip igmp snooping explicit-tracking | ip igmp snooping explicit-tracking

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
explicit-tracking	Configures Explicit Host tracking for VLAN/BD

Command Modes

- /exec/configure/vlan

ip igmp snooping explicit-tracking (igmp)

no ip igmp snooping explicit-tracking | ip igmp snooping explicit-tracking

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
explicit-tracking	Configures Explicit Host tracking for VLAN/BD

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping fast-leave (igmp)

no ip igmp snooping fast-leave | ip igmp snooping fast-leave

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
fast-leave	Configures Fast leave for the VLAN/BD

Command Modes

- /exec/configure/vlan

ip igmp snooping fast-leave (igmp)

`no ip igmp snooping fast-leave` | `ip igmp snooping fast-leave`

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
fast-leave	Configures Fast leave for the VLAN/BD

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping group-timeout (igmp)

[no] ip igmp snooping group-timeout {*timeout*|never}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
group-timeout	Configures group membership timeout in all VLAN/BDs
<i>timeout</i>	Type: uinteger min: 1 max: 10080 Timeout in minutes
never	Never expire ports from group membership
Command Modes	• /exec/configure

ip igmp snooping group-timeout (igmp)

[no] ip igmp snooping group-timeout {*timeout*|never}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
group-timeout	Configures group membership timeout in VLAN/BD
<i>timeout</i>	Type: uinteger min: 1 max: 10080 Timeout in minutes
never	Never expire ports from group membership

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping last-member-query-count (igmp)

no ip igmp snooping last-member-query-count [*count*]**ip igmp snooping last-member-query-count** *count*

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
last-member-query-count	Configures number of group-specific queries sent
<i>count</i>	Type: uinteger min: 1 max: 5 Count value

Command Modes • /exec/configure/vlan

ip igmp snooping last-member-query-count (igmp)

`no ip igmp snooping last-member-query-count [count]` | `ip igmp snooping last-member-query-count count`

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
igmp		IGMP configuration commands
snooping		Configures IGMP Snooping
last-member-query-count		Configures number of group-specific queries sent
<i>count</i>		Type: uinteger min: 1 max: 5 Count value

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping last-member-query-interval (igmp)

no ip igmp snooping last-member-query-interval [*interval*]**ip igmp snooping last-member-query-interval** *interval*

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP configuration commands
	snooping	Configures IGMP Snooping
	last-member-query-interval	Configures interval between group-specific Query transmissions
	<i>interval</i>	Type: integer min: 1 max: 25 default: 1 Interval in seconds

Command Modes • /exec/configure/vlan

ip igmp snooping last-member-query-interval (igmp)

no ip igmp snooping last-member-query-interval [*interval*]**ip igmp snooping last-member-query-interval** *interval*

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
igmp		IGMP configuration commands
snooping		Configures IGMP Snooping
last-member-query-interval		Configures interval between group-specific Query transmissions
<i>interval</i>		Type: integer min: 1 max: 25 default: 1 Interval in seconds

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping link-local-groups-suppression (igmp)

[no] ip igmp snooping link-local-groups-suppression

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP configuration commands
	snooping	Configures IGMP Snooping
	link-local-groups-suppression	Configures VLAN/BD link-local groups suppression
Command Modes		• /exec/configure/vlan

ip igmp snooping link-local-groups-suppression (igmp)

[no] ip igmp snooping link-local-groups-suppression

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP configuration commands
	snooping	Configures IGMP Snooping
	link-local-groups-suppression	Configures Global link-local groups suppression

Command Modes • /exec/configure

ip igmp snooping link-local-groups-suppression (igmp)

[no] ip igmp snooping link-local-groups-suppression

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP configuration commands
	snooping	Configures IGMP Snooping
	link-local-groups-suppression	Configures VLAN/BD link-local groups suppression

Command Modes	<ul style="list-style-type: none">• /exec/configure/vlan-config• /exec/configure/bdomain
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ip igmp snooping mrouter interface (igmp)

no ip igmp snooping mrouter interface *interface* | **ip igmp snooping mrouter interface** *interface*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
mrouter	Configures static multicast router interface
interface	Specify interface for static-mrouter
<i>interface</i>	Type: interface Interface name

Command Modes

- /exec/configure/vlan

ip igmp snooping mrouter interface (igmp)

no ip igmp snooping mrouter interface *interface* | **ip igmp snooping mrouter interface** *interface*

Syntax Description	
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
mrouter	Configures static multicast router interface
interface	Specify interface for static-mrouter
<i>interface</i>	Type: interface Interface name

Command Modes	
	<ul style="list-style-type: none"> • /exec/configure/vlan-config • /exec/configure/bdomain

ip igmp snooping optimise-multicast-flood (igmp)

[no] ip igmp snooping optimise-multicast-flood

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
optimise-multicast-flood	Configures Optimized Multicast Flood (OMF) on all VLAN/BDs

Command Modes

- /exec/configure

ip igmp snooping optimise-multicast-flood (igmp)

[no] ip igmp snooping optimise-multicast-flood

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP configuration commands
	snooping	Configures IGMP Snooping
	optimise-multicast-flood	Configures Optimised Multicast Flood (OMF) on the VLAN/BD
Command Modes		• /exec/configure/vlan

ip igmp snooping optimised-multicast-flood

[no] ip igmp snooping optimised-multicast-flood

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
optimised-multicast-flood	Configures Optimised Multicast Flood (OMF) on the VLAN/BD

Command Modes

- /exec/configure/vlan

ip igmp snooping proxy general-queries (igmp)

[no] ip igmp snooping proxy general-queries [mrt *mrt*]

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
proxy	Configures IGMP snooping proxy
general-queries	Configures proxy for general-queries
mrt	Configure max-response-time for the switch's proxy general-queries
<i>mrt</i>	Type: uinteger min: 1 max: 25 default: 5 MRT in seconds

Command Modes • /exec/configure

ip igmp snooping proxy general-queries (igmp)

[no] ip igmp snooping proxy general-queries [mrt *mrt*]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
proxy	Configures IGMP snooping proxy
general-queries	Configures proxy for general-queries
mrt	Configure max-response-time for the switch's proxy general-queries
<i>mrt</i>	Type: uinteger min: 1 max: 25 default: 5 MRT in seconds

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping querier (igmp)

no ip igmp snooping querier [*querier*]|**ip igmp snooping querier** *querier*

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP configuration commands
	snooping	Configures IGMP Snooping
	querier	Enables snooping querier
	<i>querier</i>	Type: ipaddr Querier IP address

Command Modes

- /exec/configure/vlan

ip igmp snooping querier (igmp)

no ip igmp snooping querier [*querier*]**ip igmp snooping querier** *querier*

Syntax Description

no Negate a command or set its defaults

ip Configure IP features

igmp IGMP configuration commands

snooping Configures IGMP Snooping

querier Enables snooping querier

querier Type: ipaddr

Querier IP address

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping querier-timeout (igmp)

no ip igmp snooping querier-timeout [*time*]|**ip igmp snooping querier-timeout** *time*

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP configuration commands
	snooping	Configures IGMP Snooping
	querier-timeout	Configures querier timeout for IGMPv2
	<i>time</i>	Type: uinteger min: 1 max: 0 default: 255 Time in seconds

Command Modes • /exec/configure/vlan

ip igmp snooping querier-timeout (igmp)

no ip igmp snooping querier-timeout [*time*]**ip igmp snooping querier-timeout** *time*

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
querier-timeout	Configures querier timeout for IGMPv2
<i>time</i>	Type: uinteger min: 1 max: 0 default: 255 Time in seconds

- Command Modes**
- /exec/configure/vlan-config
 - /exec/configure/bdomain

ip igmp snooping query-interval (igmp)

no ip igmp snooping query-interval [*interval*]**ip igmp snooping query-interval** *interval*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
query-interval	Configures interval between query transmission
<i>interval</i>	Type: uinteger min: 1 max: 18000 default: 125 Interval in seconds

Command Modes

- /exec/configure/vlan

ip igmp snooping query-interval (igmp)

no ip igmp snooping query-interval [*interval*]**ip igmp snooping query-interval** *interval*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
query-interval	Configures interval between query transmission
<i>interval</i>	Type: uinteger min: 1 max: 18000 default: 125 Interval in seconds

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping query-max-response-time (igmp)

`no ip igmp snooping query-max-response-time [time]`
`ip igmp snooping query-max-response-time time`

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
query-max-response-time	Configures MRT for query messages
<i>time</i>	Type: uinteger min: 1 max: 25 default: 10 Time in seconds

Command Modes • /exec/configure/vlan

ip igmp snooping query-max-response-time (igmp)

`no ip igmp snooping query-max-response-time [time]`
`ip igmp snooping query-max-response-time time`

Syntax	Description
<code>no</code>	Negate a command or set its defaults
<code>ip</code>	Configure IP features
<code>igmp</code>	IGMP configuration commands
<code>snooping</code>	Configures IGMP Snooping
<code>query-max-response-time</code>	Configures MRT for query messages
<code>time</code>	Type: uinteger min: 1 max: 25 default: 10 Time in seconds

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping report-policy access-group prefix-list route-map

[no] ip igmp snooping {report-policy|access-group} {prefix-list|route-map} *pname* interface
interface

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
igmp		IGMP configuration commands
snooping		Configures IGMP Snooping
report-policy		IGMP Report Policy
access-group		IGMP access-group
prefix-list		IPv4 Prefix-List Policy
route-map		Route-Map Policy
<i>pname</i>	Type: string length: 63 Policy Name Name	
interface		Specify interface for filtering
<i>interface</i>	Type: interface Interface name	

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping report-suppression (igmp)

no ip igmp snooping report-suppression|**ip igmp snooping report-suppression**

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
report-suppression	Configures IGMPv1/IGMPv2 Report Suppression for the VLAN/BD

Command Modes

- /exec/configure/vlan

ip igmp snooping report-suppression (igmp)

no ip igmp snooping report-suppression|ip igmp snooping report-suppression

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP configuration commands
	snooping	Configures IGMP Snooping
	report-suppression	Configures Global IGMPv1/IGMPv2 Report Suppression
Command Modes		• /exec/configure

ip igmp snooping report-suppression (igmp)

`no ip igmp snooping report-suppression|ip igmp snooping report-suppression`

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
report-suppression	Configures IGMPv1/IGMPv2 Report Suppression for the VLAN/BD

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping robustness-variable (igmp)

no ip igmp snooping robustness-variable [*value*]**ip igmp snooping robustness-variable** *value*

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
robustness-variable	Configures RFC defined Robustness Variable
<i>value</i>	Type: uinteger min: 1 max: 7 default: 2 Count value

Command Modes • /exec/configure/vlan

ip igmp snooping robustness-variable (igmp)

no ip igmp snooping robustness-variable [*value*]|**ip igmp snooping robustness-variable** *value*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
robustness-variable	Configures RFC defined Robustness Variable
<i>value</i>	Type: uinteger min: 1 max: 7 default: 2 Count value

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping self-mac-check

[no] ip igmp snooping self-mac-check

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP global configuration commands
	self-mac-check	enable loopback packet check and drop it
	snooping	Configures IGMP Snooping
Command Modes		• /exec/configure

ip igmp snooping startup-query-count (igmp)

no ip igmp snooping startup-query-count [*count*]**ip igmp snooping startup-query-count** *count*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
startup-query-count	Configures number of queries sent at startup
<i>count</i>	Type: uinteger min: 1 max: 10 Count value

Command Modes

- /exec/configure/vlan

ip igmp snooping startup-query-count (igmp)

no ip igmp snooping startup-query-count [*count*]|**ip igmp snooping startup-query-count** *count*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
startup-query-count	Configures number of queries sent at startup
<i>count</i>	Type: uinteger min: 1 max: 10 Count value

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping startup-query-interval (igmp)

no ip igmp snooping startup-query-interval [*interval*]**ip igmp snooping startup-query-interval** *interval*

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
startup-query-interval	Configures query interval at startup
<i>interval</i>	Type: uinteger min: 1 max: 18000 Interval in seconds

Command Modes • /exec/configure/vlan

ip igmp snooping startup-query-interval (igmp)

no ip igmp snooping startup-query-interval [*interval*]|**ip igmp snooping startup-query-interval** *interval*

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP configuration commands
	snooping	Configures IGMP Snooping
	startup-query-interval	Configures query interval at startup
	<i>interval</i>	Type: uinteger min: 1 max: 18000 Interval in seconds

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping static-group (igmp)

no ip igmp snooping static-group *group* [**source** *source*] **interface** *interface* | **ip igmp snooping static-group** *group* [**source** *source*] **interface** *interface*

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
igmp		IGMP configuration commands
snooping		Configures IGMP Snooping
static-group		Configures static group membership
<i>group</i>	Type: ipaddr	Group IP Address
source		Configures static (S,G) channel
<i>source</i>	Type: ipaddr	Source IP Address
interface		Specify interface for static-group
<i>interface</i>	Type: interface	Interface name

Command Modes • /exec/configure/vlan

ip igmp snooping static-group (igmp)

no ip igmp snooping static-group *group* [**source** *source*] **interface** *interface* | **ip igmp snooping static-group** *group* [**source** *source*] **interface** *interface*

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
static-group	Configures static group membership
<i>group</i>	Type: ipaddr Group IP Address
source	Configures static (S,G) channel
<i>source</i>	Type: ipaddr Source IP Address
interface	Specify interface for static-group
<i>interface</i>	Type: interface Interface name

Command Modes	
	<ul style="list-style-type: none"> • /exec/configure/vlan-config • /exec/configure/bdomain

ip igmp snooping v3-report-suppression (igmp)

`no ip igmp snooping v3-report-suppression` | `ip igmp snooping v3-report-suppression`

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
v3-report-suppression	Configures IGMPv3 Report Suppression and Proxy Reporting for the VLAN/BD

Command Modes

- /exec/configure/vlan

ip igmp snooping v3-report-suppression (igmp)

no ip igmp snooping v3-report-suppression|ip igmp snooping v3-report-suppression

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
v3-report-suppression	Configures Global IGMPv3 Report Suppression and Proxy Reporting

Command Modes

- /exec/configure

ip igmp snooping v3-report-suppression (igmp)

no ip igmp snooping v3-report-suppression | ip igmp snooping v3-report-suppression

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
v3-report-suppression	Configures IGMPv3 Report Suppression and Proxy Reporting for the VLAN/BD

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping version (igmp)

no ip igmp snooping version [*version*]|**ip igmp snooping version** *version*

Syntax Description	
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
version	Configures IGMP version number for VLAN/BD
<i>version</i>	Type: uinteger min: 2 max: 3 Version number value

Command Modes • /exec/configure/vlan

ip igmp snooping version (igmp)

no ip igmp snooping version [*version*]|**ip igmp snooping version** *version*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
version	Configures IGMP version number for VLAN/BD
<i>version</i>	Type: uinteger min: 2 max: 3 Version number value

Command Modes

- /exec/configure/vlan-config
- /exec/configure/bdomain

ip igmp snooping vpc (igmp)

ip igmp snooping vpc {clear-cfs-flag|clear-pending-flag|clear-native-flag}

Syntax Description		
	ip	Configure IP features
	igmp	IGMP global configuration commands
	snooping	Configures IGMP Snooping
	vpc	vPC related command
	clear-cfs-flag	clear cfs learnt flag from the routes / oifs
	clear-native-flag	clear native learnt flag from the routes / oifs
	clear-pending-flag	clear pending flag if set

Command Modes • /exec

ip igmp snooping vpc (igmp)

ip igmp snooping vpc [{vpc-incremental|vpc-sync-only}]

Syntax Description		
	ip	Configure IP features
	igmp	IGMP global configuration commands
	snooping	Configures IGMP Snooping
	vpc	vPC related events
	vpc-sync-only	default - no vpc-incremental with route proxy disabled
	vpc-incremental	vpc-incremental mode with route proxy enabled

Command Modes

- /exec/configure

ip igmp snooping vpc peer-link-exclude

[no] ip igmp snooping vpc peer-link-exclude

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
vpc	Configures vPC
peer-link-exclude	Exclude vPC Peer-link for Routed multicast traffic

Command Modes • /exec/configure

ip igmp snooping vpc peer-routes-download

ip igmp snooping vpc peer-routes-download [stale]

Syntax Description

ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
vpc	vPC related command
peer-routes-download	get peer-learned routes
stale	stale the cfs learnt entry, i.e. clear cfs_flag

Command Modes

- /exec

ip igmp ssm-translate

[no] ip igmp ssm-translate *group source*

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP global configuration commands
	ssm-translate	Translate IGMPv1/v2 reports to (S,G) route entries
	<i>group</i>	Type: ipprefix IP Multicast group range
	<i>source</i>	Type: ipaddr IP Multicast address source

Command Modes	• /exec/configure
	• /exec/configure/vrf

ip igmp startup-query-count

no ip igmp startup-query-count [*count*]|**ip igmp startup-query-count** *count*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
startup-query-count	Configures number of queries sent at startup
<i>count</i>	Type: integer min: 1 max: 10 Count value

Command Modes

- /exec/configure/if-igmp

ip igmp startup-query-interval

`no ip igmp startup-query-interval [interval]` | `ip igmp startup-query-interval interval`

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	igmp	IGMP interface configuration commands
	startup-query-interval	Configures query interval at startup
	<i>interval</i>	Type: integer min: 1 max: 18000 Interval in seconds

Command Modes • /exec/configure/if-igp

ip igmp state-limit

ip igmp state-limit *max-states* [**reserved** *route-map-name max-reserved*]|**no ip igmp state-limit** [*max-states* [**reserved** *route-map-name max-reserved*]]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
state-limit	Configures State limit
<i>max-states</i>	Type: uinteger min: 1 max: 4294967295 Maximum states allowed
reserved	Reserve the states using route-map
<i>route-map-name</i>	Type: string length: 100 Route-map name
<i>max-reserved</i>	Type: uinteger min: 1 max: 4294967295 Maximum (*,G)/(S,G) entires allowed on the interface

Command Modes

- /exec/configure/if-igp

ip igmp version

no ip igmp version [*version*]|**ip igmp version** *version*

Syntax Description

no Negate a command or set its defaults

ip Configure IP features

igmp IGMP interface configuration commands

version Configures IGMP version number for interface

version Type: integer

min: 2 max: 3

Version number value

Command Modes

- /exec/configure/if-igp

ip ipv6 bandwidth-percent eigrp

{ip|ipv6} bandwidth-percent eigrp eigrp-ptag percent|no {ip|ipv6} bandwidth-percent eigrp eigrp-ptag [percent]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
bandwidth-percent	Configures IP-EIGRP bandwidth limit
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Type: string pattern: [a-zA-Z0-9_][a-zA-Z0-9_-]* antipattern: accounting all fsm graceful-restart interface interfaces internal neighbor neighbors notifications packets prefix route route-map shutdown summary topology traffic transmit urib vrf vrf-events length: 20 Process tag
<i>percent</i>	Type: integer min: 1 max: 100 default: 50 Maximum bandwidth percentage that EIGRP may use

Command Modes

- /exec/configure/if-igp

ip ipv6 bandwidth eigrp

{ip|ipv6} **bandwidth eigrp eigrp-ptag bw**|no {ip|ipv6} **bandwidth eigrp eigrp-ptag** [*bw*]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
bandwidth	Set bandwidth for interface used in EIGRP metric calculation
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Type: string pattern: [a-zA-Z0-9_][a-zA-Z0-9_-]* antipattern: accounting all fsm graceful-restart interface interfaces internal neighbor neighbors notifications packets prefix route route-map shutdown summary topology traffic transmit urib vrf vrf-events length: 20 Process tag
<i>bw</i>	Type: uinteger min: 1 max: 2560000000 Bandwidth in kilobits

Command Modes

- /exec/configure/if-igp

ip ipv6 delay eigrp

{ip|ipv6} **delay eigrp** *eigrp-ptag delay [picoseconds]*|no {ip|ipv6} **delay eigrp** *eigrp-ptag [delay] [picoseconds]*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
delay	Set delay for interface used in EIGRP metric calculation
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Type: string pattern: [a-zA-Z0-9_][a-zA-Z0-9_-]* antipattern: accounting all fsm graceful-restart interface interfaces internal neighbor neighbors notifications packets prefix route route-map shutdown summary topology traffic transmit urib vrf vrf-events length: 20 Process tag
<i>delay</i>	Type: uinteger min: 1 max: 0 Throughput delay
picoseconds	Delay units in picoseconds

Command Modes

- /exec/configure/if-igp

ip ipv6 hello-interval eigrp

```
{ip|ipv6} hello-interval eigrp eigrp-ptag hello-interval|no {ip|ipv6} hello-interval eigrp eigrp-ptag
[hello-interval]
```

Syntax Description	
no	Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
hello-interval	Configures IP-EIGRP hello interval
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Type: string pattern: [a-zA-Z0-9_][a-zA-Z0-9_-]* antipattern: accounting all fsm graceful-restart interface interfaces internal neighbor neighbors notifications packets prefix route route-map shutdown summary topology traffic transmit urib vrf vrf-events length: 20 Process tag
<i>hello-interval</i>	Type: integer min: 1 max: 0 default: 5 Seconds between hello transmissions

Command Modes • /exec/configure/if-igp

ip ipv6 hold-time eigrp

{ip|ipv6} **hold-time eigrp** *eigrp-ptag holdtime*|**no** {ip|ipv6} **hold-time eigrp** *eigrp-ptag [holdtime]*

Syntax Description

no Negate a command or set its defaults

ip Configure IP features

ipv6 Configure IPv6 features

hold-time Configures IP-EIGRP hold time

eigrp EIGRP interface configuration commands

eigrp-ptag Type: string

pattern: [a-zA-Z0-9_][a-zA-Z0-9_-]*

antipattern: accounting | all | fsm | graceful-restart | interface | interfaces | internal | neighbor | neighbors | notifications | packets | prefix | route | route-map | shutdown | summary | topology | traffic | transmit | urib | vrf | vrf-events

length: 20

Process tag

holdtime Type: integer

min: 1 max: 0 default: 15

Seconds before neighbor is considered down

Command Modes

- /exec/configure/if-igp

ip ipv6 summary-address eigrp

[no] ip summary-address eigrp eigrp-ptag {address mask|prefix} [distance] [leak-map leak-map][no]

ipv6 summary-address eigrp eigrp-ptag ipv6-prefix [distance] [leak-map leak-map]

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
summary-address	Configures IP-EIGRP summary address on interface
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Type: string pattern: [a-zA-Z0-9_][a-zA-Z0-9_-]* antipattern: accounting all fsm graceful-restart interface interfaces internal neighbor neighbors notifications packets prefix route route-map shutdown summary topology traffic transmit urib vrf vrf-events length: 20 Process tag
<i>address</i>	Type: ipaddr IP address
<i>mask</i>	Type: ipaddr IP network mask
<i>prefix</i>	Type: ipprefix IP prefix in slash format
<i>ipv6-prefix</i>	Type: ipv6prefix IPv6 prefix <network>/<length>
<i>distance</i>	Type: integer min: 1 max: 0 default: 5 Administrative distance
leak-map	Allow dynamic prefixes based on the leak-map
<i>leak-map</i>	Type: string leak-map name

Command Modes

- /exec/configure/if-igp

ip load-sharing address

[no] ip load-sharing address {source-destination [{port source-destination2|gre}]|destination port2 destination2} {[rotate rotate]||[concatenation]}+ [universal-id random-seed]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
load-sharing	ECMP load-sharing
address	Configure source/destination addresses, port numbers and hash
source-destination	Use both source and destination values for address
port	Use source-destination value for port
gre	Use source-destination value for gre-key
source-destination2	Use both source and destination values for port
destination	Use destination address
port2	Use destination value for port
destination2	Use destination port
rotate	Offset to be used in the hash
<i>rotate</i>	Type: uinteger min: 1 max: 63 Value used for offset, default value is 32
concatenation	Enable/Disable concatenation
universal-id	Universal-id to randomize hash functions for load-balance
<i>random-seed</i>	Type: uinteger min: 1 max: 0 Value used to randomize hash

Command Modes

- /exec/configure

ip load-sharing per-packet

`ip load-sharing per-packet|no ip load-sharing [per-packet]`

Syntax Description

no Negate a command or set its defaults

ip Configure IP features

load-sharing Style of load sharing *Not available in this release.*

per-packet Enable per-packet load balancing on interface *Not available in this release.*

Command Modes

- /exec/configure/if-igp

ip local-proxy-arp

ip local-proxy-arp|no ip local-proxy-arp

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
local-proxy-arp	Configure local proxy ARP

Command Modes	
	<ul style="list-style-type: none">• /exec/configure/if-igp• /exec/configure/if-vlan-common

ip mfwd event-history cli

[no] ip mfwd event-history cli size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
mfwd	Configures Global IP Multicast Forwarding
event-history	Configure event-history buffers
cli	CLI events for MCASTFWD
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes
Command Modes	• /exec/configure

ip mfwd event-history l2

[no] ip mfwd event-history l2 size {*size_in_text*size_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
mfwd	Configures Global IP Multicast Forwarding
event-history	Configure event-history buffers
l2	Layer2 events for MCASTFWD
size	Configure size
<i>size_in_text</i>	Buffer size default: large disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip mfwd event-history packet

[no] ip mfwd event-history packet size {*size_in_text**size_in_kbytes*}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
mfwd	Configures Global IP Multicast Forwarding
event-history	Configure event-history buffers
packet	Packet events for Multicast forwarding
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip mfwd event-history vrf

[no] ip mfwd event-history vrf size {*size_in_text*size_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
mfwd	Configures Global IP Multicast Forwarding
event-history	Configure event-history buffers
vrf	VRF events for MCASTFWD
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip mroute

[no] ip mroute {*ip-addr ip-mask* *ip-prefix*} {{*next-hop* *nh-prefix*} *interface*} [*pref*] [**vrf** {*vrf-name* *vrf-known-name*}]

Syntax Description	
no	Negate a command or set its defaults
ip	Configure IP features
mroute	Configure multicast RPF static route
<i>ip-addr</i>	Type: ipaddr IP prefix in format i.i.i.i
<i>ip-mask</i>	Type: ipaddr IP network mask in format m.m.m.m
<i>ip-prefix</i>	Type: ipprefix IP prefix and network mask length in format x.x.x.x/m
<i>next-hop</i>	Type: ipaddr IP next-hop address in format i.i.i.i
<i>nh-prefix</i>	Type: ipprefix IP next-hop prefix in format i.i.i.i/m
<i>interface</i>	Type: interface Interface for interface static multicast routes
<i>pref</i>	Type: integer min: 1 max: 255 default: 1 Route preference
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/configure
- /exec/configure/vrf

ip msdp description

ip msdp description *peer-address text* | **no ip msdp description** *peer-address [text]*

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
description	Configure MSDP description for peer
<i>peer-address</i>	Type: ipaddr IP address of MSDP peer
<i>text</i>	Type: remainder Text description

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

ip msdp event-history cli

[no] ip msdp event-history cli size {*size_in_text* *size_in_kbytes*}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
event-history	Configure event-history buffer
cli	CLI logs for MSDP
size	Configure size
<i>size_in_text</i>	Buffer size default: medium disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip msdp event-history events

[no] ip msdp event-history events size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
event-history	Configure event-history buffer
events	Peer events for MSDP
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes
Command Modes	• /exec/configure

ip msdp event-history msdp-internal

[no] ip msdp event-history msdp-internal size {*size_in_text* *size_in_kbytes*}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
event-history	Configure event-history buffer
msdp-internal	Internal logs for MSDP
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip msdp event-history routes

[no] ip msdp event-history routes size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
event-history	Configure event-history buffer
routes	Route logs for MSDP
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes
Command Modes	• /exec/configure

ip msdp event-history tcp

[no] ip msdp event-history tcp size {*size_in_text**size_in_kbytes*}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
event-history	Configure event-history buffer
tcp	TCP logs for MSDP
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip msdp flush-routes

[no] ip msdp flush-routes

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	msdp	MSDP global configuration commands
	flush-routes	Remove routes when restarting MSDP

Command Modes	<ul style="list-style-type: none">• /exec/configure• /exec/configure/vrf
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ip msdp group-limit source

[no] ip msdp group-limit *limit* source *srefix*

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
group-limit	Limit the number of groups per source
<i>limit</i>	Type: uinteger Limit on number of groups
source	Sources to limit groups to
<i>srefix</i>	Type: ipprefix Prefix to match sources against

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

ip msdp keepalive

ip msdp keepalive *peer-address interval timeout* | **no ip msdp keepalive** *peer-address [interval timeout]*

Syntax Description	
no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
keepalive	Configure MSDP keepalive parameters for peer
<i>peer-address</i>	Type: ipaddr IP address of MSDP peer
<i>interval</i>	Type: integer min: 1 max: 60 default: 60 Keepalive interval in seconds
<i>timeout</i>	Type: integer min: 1 max: 90 default: 90 Keepalive timeout in seconds

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

ip msdp mesh-group

ip msdp mesh-group *peer-address name* | **no ip msdp mesh-group** *peer-address [name]*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
mesh-group	Configure member of mesh-group
<i>name</i>	Type: string Name of mesh-group
<i>peer-address</i>	Type: ipaddr IP address of MSDP peer in mesh-group

Command Modes

- /exec/configure
- /exec/configure/vrf

ip msdp no-sa-data

[no] ip msdp no-sa-data

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	msdp	MSDP global configuration commands
	no-sa-data	Don't send SA-encapsulated data
Command Modes		<ul style="list-style-type: none">• /exec/configure• /exec/configure/vrf

ip msdp originator-id

ip msdp originator-id *interface* | **no ip msdp originator-id** [*interface*]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
originator-id	Configure alternative router-id for MSDP
<i>interface</i>	Type: interface Use IP address of interface for originator-id

Command Modes

- /exec/configure
- /exec/configure/vrf

ip msdp password

ip msdp password *peer-address password* | **no ip msdp password** *peer-address* [*password*]

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
msdp		MSDP global configuration commands
password		Configure MD5 authentication password
<i>peer-address</i>	Type: ipaddr	IP address of MSDP peer
<i>password</i>	Type: password	MD5 password
Command Modes		<ul style="list-style-type: none"> • /exec/configure • /exec/configure/vrf

ip msdp peer

ip msdp peer *peer-address* **connect-source** *interface* [**remote-as** *asn*]|**no ip msdp peer** *peer-address* [**connect-source** *interface*] [**remote-as** *asn*]

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
msdp		MSDP global configuration commands
peer		Configure MSDP peer
<i>peer-address</i>	Type: ipaddr	IP address of MSDP peer
connect-source		Configure local IP address for TCP connection
<i>interface</i>	Type: interface	Use IP address of interface for peer address
remote-as		Configure remote Autonomous System Number
<i>asn</i>	Type: asn	AS number

Command Modes

- /exec/configure
- /exec/configure/vrf

ip msdp reconnect-interval

ip msdp reconnect-interval *interval* | **no ip msdp reconnect-interval** [*interval*]

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	msdp	MSDP global configuration commands
	reconnect-interval	Configure connection reconnect interval
	<i>interval</i>	Type: integer min: 1 max: 60 default: 10 Interval in seconds

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

ip msdp redistribute

[no] ip msdp redistribute [{route-map *route-map-name*|prefix-list *prefix-list-name*}]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
redistribute	Configure SA policy for all MSDP peer
route-map	route-map policy
<i>route-map-name</i>	Type: string length: 63 route-map policy name
prefix-list	Prefix list policy
<i>prefix-list-name</i>	Type: string length: 63 prefix-list name
<i>rtr_pol_name</i>	Type: string An existing routing-rules policy

Command Modes

- /exec/configure
- /exec/configure/vrf

ip msdp sa-interval

ip msdp sa-interval *interval* | **no ip msdp sa-interval** [*interval*]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
sa-interval	Configure Source-Active message transmission interval
<i>interval</i>	Type: integer min: 60 max: 65535 default: 60 Interval in seconds

Command Modes

- /exec/configure
- /exec/configure/vrf

ip msdp sa-limit

ip msdp sa-limit *peer-address limit*|**no ip msdp sa-limit** *peer-address* [*limit*]

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
sa-limit	Configure maximum (S,G) entries allowed
<i>limit</i>	Type: uinteger Number of (S,G) entries
<i>peer-address</i>	Type: ipaddr IP address of MSDP peer in mesh-group

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

ip msdp sa-policy in

[no] ip msdp sa-policy *peer-address* {*route-map-name*|**prefix-list** *prefix-list-name**rtr_pol_name*} **in**

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
sa-policy	Configure SA policy for MSDP peer
prefix-list	Prefix list policy
in	Input policy
<i>peer-address</i>	Type: ipaddr IP address of MSDP peer for SA policy
<i>route-map-name</i>	Type: string length: 63 route-map policy name
<i>prefix-list-name</i>	Type: string length: 63 prefix-list name
<i>rtr_pol_name</i>	Type: string An existing routing-rules policy

Command Modes

- /exec/configure
- /exec/configure/vrf

ip msdp sa-policy out

[no] ip msdp sa-policy *peer-address* {*route-map-name*|**prefix-list** *prefix-list-name**rtr_pol_name*} **out**

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
sa-policy	Configure SA policy for MSDP peer
prefix-list	Prefix list policy
out	Output policy
<i>peer-address</i>	Type: ipaddr IP address of MSDP peer for SA policy
<i>route-map-name</i>	Type: string length: 63 route-map policy name
<i>prefix-list-name</i>	Type: string length: 63 prefix-list name
<i>rtr_pol_name</i>	Type: string An existing routing-rules policy

Command Modes

- /exec/configure
- /exec/configure/vrf

ip msdp shutdown

`ip msdp shutdown peer-address|no ip msdp shutdown peer-address`

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	msdp	MSDP global configuration commands
	shutdown	Administratively shut down peer
	<i>peer-address</i>	Type: ipaddr IP address of MSDP peer

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

ip multicast last-hop-meter

ip multicast last-hop-meter *kbps* [*burst-size*][**no ip multicast last-hop-meter** [*kbps* [*burst-size*]]

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
multicast	Configure IP multicast global parameters
last-hop-meter	RPF-failed meter
<i>kbps</i>	Type: uinteger min: 8 max: 0 default: 100 Rate in kilobits/sec
<i>burst-size</i>	Type: uinteger min: 100 max: 0 default: 100 Burst size in kilobytes

Command Modes

- /exec/configure

ip multicast multipath

[no] ip multicast multipath {none|s-g-hash next-hop-based}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
multicast	Configure IP multicast global parameters
multipath	Configure ECMP multicast load splitting
none	Disable ECMP multicast load splitting
s-g-hash	Configure hash based on source and group address
next-hop-based	Configure hash based on source, group, next-hop address

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

ip multicast rpf-meter

ip multicast rpf-meter [*kpbs* [*burst-size*]]**hardware-drop-all** | **no ip multicast rpf-meter** [*kpbs* [*burst-size*]]**hardware-drop-all** }

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
multicast		Configure IP multicast global parameters
rpf-meter		RPF-failed meter
<i>kpbs</i>	Type: uinteger min: 8 max: 0 default: 100 Rate in kilobits/sec	
<i>burst-size</i>	Type: uinteger min: 100 max: 0 default: 100 Burst size in kilobytes	
hardware-drop-all		Drop all RPF-failed packets in hardware

Command Modes • /exec/configure

ip name-server

```
[no] ip name-server {{ipv4_0ipv6_1} [{ipv4_2ipv6_3} [{ipv4_4ipv6_5} [{ipv4_6ipv6_7}
[{ipv4_8ipv6_9} [{ipv4_10ipv6_11}]]]]|{ipv4_12ipv6_13} [use-vrf
{vrf-namevrf-known-name}]]|{ipv4_14ipv6_15} [{ipv4_16ipv6_17} [use-vrf
{vrf-namevrf-known-name}]]|{ipv4_18ipv6_19} [{ipv4_20ipv6_21} [{ipv4_22ipv6_23} [use-vrf
{vrf-namevrf-known-name}]]]]|{ipv4_24ipv6_25} [{ipv4_26ipv6_27} [{ipv4_28ipv6_29} [{ipv4_30ipv6_31}
[use-vrf {vrf-namevrf-known-name}]]]]|{ipv4_32ipv6_33} [{ipv4_34ipv6_35} [{ipv4_36ipv6_37}
[{ipv4_38ipv6_39} [{ipv4_40ipv6_41} [use-vrf {vrf-namevrf-known-name}]]]]|{ipv4_42ipv6_43}
[{ipv4_44ipv6_45} [{ipv4_46ipv6_47} [{ipv4_48ipv6_49} [{ipv4_50ipv6_51} [{ipv4_52ipv6_53}
[use-vrf {vrf-namevrf-known-name}]]]]]]]
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
name-server	Specify nameserver address
<i>ipv4_0</i>	Type: ipaddr Enter an IPv4 address
<i>ipv6_1</i>	Type: ipv6addr Enter an IPv6 address
<i>ipv4_2</i>	Type: ipaddr Enter an IPv4 address
<i>ipv6_3</i>	Type: ipv6addr Enter an IPv6 address
<i>ipv4_4</i>	Type: ipaddr Enter an IPv4 address
<i>ipv6_5</i>	Type: ipv6addr Enter an IPv6 address
<i>ipv4_6</i>	Type: ipaddr Enter an IPv4 address
<i>ipv6_7</i>	Type: ipv6addr Enter an IPv6 address
<i>ipv4_8</i>	Type: ipaddr Enter an IPv4 address

<i>ipv6_9</i>	Type: ipv6addr Enter an IPv6 address
<i>ipv4_10</i>	Type: ipaddr Enter an IPv4 address
<i>ipv6_11</i>	Type: ipv6addr Enter an IPv6 address
<i>ipv4_12</i>	Type: ipaddr Enter an IPv4 address
<i>ipv6_13</i>	Type: ipv6addr Enter an IPv6 address
use-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: 64 VRF name
<i>vrf-known-name</i>	Type: vrf length: 64 Known VRF name
<i>ipv4_14</i>	Type: ipaddr Enter an IPv4 address
<i>ipv6_15</i>	Type: ipv6addr Enter an IPv6 address
<i>ipv4_16</i>	Type: ipaddr Enter an IPv4 address
<i>ipv6_17</i>	Type: ipv6addr Enter an IPv6 address
<i>ipv4_18</i>	Type: ipaddr Enter an IPv4 address
<i>ipv6_19</i>	Type: ipv6addr Enter an IPv6 address

ipv4_20 Type: ipaddr
Enter an IPv4 address

ipv6_21 Type: ipv6addr
Enter an IPv6 address

ipv4_22 Type: ipaddr
Enter an IPv4 address

ipv6_23 Type: ipv6addr
Enter an IPv6 address

ipv4_24 Type: ipaddr
Enter an IPv4 address

ipv6_25 Type: ipv6addr
Enter an IPv6 address

ipv4_26 Type: ipaddr
Enter an IPv4 address

ipv6_27 Type: ipv6addr
Enter an IPv6 address

ipv4_28 Type: ipaddr
Enter an IPv4 address

ipv6_29 Type: ipv6addr
Enter an IPv6 address

ipv4_30 Type: ipaddr
Enter an IPv4 address

ipv6_31 Type: ipv6addr
Enter an IPv6 address

ipv4_32 Type: ipaddr
Enter an IPv4 address

ipv6_33 Type: ipv6addr
Enter an IPv6 address

ipv4_34 Type: ipaddr
Enter an IPv4 address

ipv6_35 Type: ipv6addr
Enter an IPv6 address

ipv4_36 Type: ipaddr
Enter an IPv4 address

ipv6_37 Type: ipv6addr
Enter an IPv6 address

ipv4_38 Type: ipaddr
Enter an IPv4 address

ipv6_39 Type: ipv6addr
Enter an IPv6 address

ipv4_40 Type: ipaddr
Enter an IPv4 address

ipv6_41 Type: ipv6addr
Enter an IPv6 address

ipv4_42 Type: ipaddr
Enter an IPv4 address

ipv6_43 Type: ipv6addr
Enter an IPv6 address

ipv4_44 Type: ipaddr
Enter an IPv4 address

ipv6_45 Type: ipv6addr
Enter an IPv6 address

ipv4_46 Type: ipaddr
Enter an IPv4 address

ipv6_47 Type: ipv6addr
Enter an IPv6 address

ipv4_48 Type: ipaddr
Enter an IPv4 address

ipv6_49 Type: ipv6addr
Enter an IPv6 address

ipv4_50 Type: ipaddr
Enter an IPv4 address

ipv6_51 Type: ipv6addr
Enter an IPv6 address

ipv4_52 Type: ipaddr
Enter an IPv4 address

ipv6_53 Type: ipv6addr
Enter an IPv6 address

Command Modes

- /exec/configure
- /exec/configure/vrf

ip ospf advertise-subnet

[no] ip ospf advertise-subnet

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
advertise-subnet	Advertise loopback interface IP subnet in router LSA

Command Modes

- /exec/configure/if-loopback

ip ospf authentication-key

ip ospf authentication-key *key*|**no ip ospf authentication-key** [*key*]

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
ospf		OSPF configuration commands
authentication-key		Configure the authentication key for the interface
<i>key</i>	Type: password	Authentication key

Command Modes	
	<ul style="list-style-type: none"> • /exec/configure/if-igp • /exec/configure/if-gre-tunnel • /exec/configure/if-mpls-tunnel • /exec/configure/if-mgmt-ether

ip ospf authentication

[no] ip ospf authentication [{message-digest|null}]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
authentication	Authentication on the interface
message-digest	Use message-digest authentication
null	Use null(disable) authentication

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-gre-tunnel
- /exec/configure/if-mpls-tunnel
- /exec/configure/if-mgmt-ether

ip ospf authentication key-chain

ip ospf authentication key-chain *keychain* | **no ip ospf authentication key-chain** [*keychain*]

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
authentication	Authentication on the interface
key-chain	Authentication password key-chain
<i>keychain</i>	Type: string length: 63 Key-chain name

Command Modes	
	<ul style="list-style-type: none"> • /exec/configure/if-igp • /exec/configure/if-gre-tunnel • /exec/configure/if-mpls-tunnel • /exec/configure/if-mgmt-ether

ip ospf bfd

[no] ip ospf bfd [disable]

Syntax Description

no Negate a command or set its defaults

ip Configure IP features

ospf OSPF configuration commands

bfd Enable BFD on this interface

disable Disable BFD on this interface

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-gre-tunnel
- /exec/configure/if-mgmt-ether

ip ospf cost

ip ospf cost *cost* | **no ip ospf cost** [*cost*]

Syntax Description

no Negate a command or set its defaults

ip Configure IP features

ospf OSPF configuration commands

cost Cost associated with interface

cost Type: integer

min: 1 max: 65535

Cost value

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-gre-tunnel
- /exec/configure/if-mpls-tunnel
- /exec/configure/if-mgmt-ether

ip ospf dead-interval

ip ospf dead-interval *interval* | **no ip ospf dead-interval** [*interval*]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
dead-interval	Dead interval
<i>interval</i>	Type: integer min: 1 max: 262140 default: 40 (seconds)

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-gre-tunnel
- /exec/configure/if-mpls-tunnel
- /exec/configure/if-mgmt-ether

ip ospf event-history cli size

ip ospf event-history cli size *{size_in_textsize_in_Kbytes}*

Syntax	Description
ip	IP events
ospf	Debug OSPF events
event-history	log debug events into event history buffer
cli	Cli logs
size	Configure the size of the event-hist buffer
<i>size_in_text</i>	Buffer size default: medium small value: 65536 Small buffer medium value: 512000 Medium buffer large value: 1024000 Large buffer disabled value: 0 Disabled
<i>size_in_Kbytes</i>	Type: uinteger Size of the file in kbytes
Command Modes	• /exec/configure/router-ospf

ip ospf event-history detail size

ip ospf event-history detail size *{size_in_textsize_in_Kbytes}*

Syntax Description

ip	IP events
ospf	Debug OSPF events
event-history	log debug events into event history buffer
detail	Detailed event history buffer
size	Configure the size of the verbose event-hist buffer
<i>size_in_text</i>	Buffer size default: small small value: 65536 Small buffer medium value: 512000 Medium buffer large value: 1024000 Large buffer
<i>size_in_Kbytes</i>	Type: uinteger Size of the file in kbytes

Command Modes

- /exec/configure/router-ospf

ip ospf event-history size

```
ip ospf event-history {adjacency|event|ha|flooding|lsa|spf|redistribution|ldp|te|rib|hello|spf-trigger}
size {size_in_textsize_in_Kbytes}
```

Syntax	Description
ip	IP events
ospf	Debug OSPF events
event-history	log debug events into event history buffer
adjacency	Adjacency formation logs
event	Internal event logs
ha	HA and GR logs
flooding	LSA flooding logs
lsa	LSA generation and database logs
spf	SPF calculation logs
redistribution	Redistribution logs
ldp	LDP related logs
te	MPLS TE related logs
rib	RIB related logs
hello	HELLO related logs
spf-trigger	SPF TRIGGER related logs
size	Configure the size of the event-hist buffer
<i>size_in_text</i>	Buffer size default: small small value: 65536 Small buffer medium value: 512000 Medium buffer large value: 1024000 Large buffer disabled value: 0 Disabled
<i>size_in_Kbytes</i>	Type: uinteger Size of the file in kbytes

Command Modes

- /exec/configure/router-ospf

ip ospf flood-bw-percentage

[no] ip ospf flood-bw-percentage *percentage*

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
ospf		OSPF configuration commands
flood-bw-percentage		Percentage of bandwidth used for flooding
<i>percentage</i>	Type: integer	
	min: 1 max: 25	
		Negate a command or set its defaults

Command Modes	
	<ul style="list-style-type: none"> • /exec/configure/if-igp • /exec/configure/if-gre-tunnel • /exec/configure/if-mpls-tunnel • /exec/configure/if-mgmt-ether

ip ospf hello-interval

ip ospf hello-interval *interval* | **no ip ospf hello-interval** [*interval*]

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
ospf		OSPF configuration commands
hello-interval		Hello interval
<i>interval</i>		Type: integer min: 1 max: 65535 default: 10 (seconds)

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-gre-tunnel
- /exec/configure/if-mpls-tunnel
- /exec/configure/if-mgmt-ether

ip ospf message-digest-key

ip ospf message-digest-key *keyid* **md5** *key* | **no ip ospf message-digest-key** *keyid* [**md5** *key*]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
message-digest-key	Message digest authentication password (key)
<i>keyid</i>	Type: integer min: 1 max: 255 Key ID
md5	Use MD5 algorithm
<i>key</i>	Type: password The OSPF password (key)

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-gre-tunnel
- /exec/configure/if-mpls-tunnel
- /exec/configure/if-mgmt-ether

ip ospf mtu-ignore

[no] ip ospf mtu-ignore

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	ospf	OSPF configuration commands
	mtu-ignore	Disable OSPF MTU mismatch detection

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-gre-tunnel
- /exec/configure/if-mpls-tunnel
- /exec/configure/if-mgmt-ether

ip ospf network broadcast point-to-point

ip ospf network {broadcast|point-to-point}|**no ip ospf network** [{broadcast|point-to-point}]

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	ospf	OSPF configuration commands
	network	Network type
	broadcast	Specify OSPF broadcast multi-access network
	point-to-point	Specify OSPF point-to-point network

Command Modes	<ul style="list-style-type: none">• /exec/configure/if-broadcast• /exec/configure/if-p2p• /exec/configure/if-mgmt-ether
----------------------	---

ip ospf network point-to-point

`ip ospf network point-to-point|no ip ospf network [point-to-point]`

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
network	Network type
point-to-point	Specify OSPF point-to-point network

Command Modes • /exec/configure/if-loopback

ip ospf passive-interface

[{default|no}] ip ospf passive-interface

Syntax Description		
	default	Undo a command
	no	Negate a command or set its defaults
	ip	Configure IP features
	ospf	OSPF configuration commands
	passive-interface	Suppress routing updates on the interface

Command Modes	
	<ul style="list-style-type: none">• /exec/configure/if-broadcast• /exec/configure/if-p2p• /exec/configure/if-mgmt-ether

ip ospf priority

ip ospf priority *prio* | **no ip ospf priority** [*prio*]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
priority	Router priority
<i>prio</i>	Type: integer min: 0 max: 255 default: 1 Router priority

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-gre-tunnel
- /exec/configure/if-mpls-tunnel
- /exec/configure/if-mgmt-ether

ip ospf retransmit-interval

ip ospf retransmit-interval *interval* | **no ip ospf retransmit-interval** [*interval*]

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	ospf	OSPF configuration commands
	retransmit-interval	Packet retransmission interval
	<i>interval</i>	Type: integer min: 1 max: 65535 default: 5 (seconds)

Command Modes	<ul style="list-style-type: none"> • /exec/configure/if-igp • /exec/configure/if-gre-tunnel • /exec/configure/if-mpls-tunnel • /exec/configure/if-mgmt-ether
----------------------	--

ip ospf shutdown

[no] ip ospf shutdown

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	ospf	OSPF configuration commands
	shutdown	shutdown ospf on this interface

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-gre-tunnel
- /exec/configure/if-mgmt-ether

ip ospf transmit-delay

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

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	ospf	OSPF configuration commands
	transmit-delay	Packet transmission delay
	<i>delay</i>	Type: integer min: 1 max: 450 default: 1 (seconds)

Command Modes	<ul style="list-style-type: none">• /exec/configure/if-igp• /exec/configure/if-gre-tunnel• /exec/configure/if-mpls-tunnel• /exec/configure/if-mgmt-ether
----------------------	---

ip pim anycast-rp

[no] ip pim anycast-rp *anycast-rp rp-addr*

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
pim		PIM global configuration commands
anycast-rp		Configure an RP in an Anycast-RP set (using PIM)
<i>anycast-rp</i>	Type: ipaddr	Address for the Anycast-RP address
<i>rp-addr</i>	Type: ipaddr	Address of RP in the Anycast-RP set

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim assert-rate-limit

ip pim assert-rate-limit *rate*|**no ip pim assert-rate-limit** [*rate*]

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
assert-rate-limit	Rate limit for PIM Asserts
<i>rate</i>	Type: uinteger min: 1 max: 65535 Packets per second

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

ip pim auto-rp listen forward

ip pim auto-rp {listen|forward}+|no ip pim auto-rp {listen|forward}+

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
auto-rp	Auto-RP protocol RP-distribution configuration
listen	Listen to Auto-RP messages
forward	Forward Auto-RP messages

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim auto-rp mapping-agent-policy

ip pim auto-rp mapping-agent-policy {*route-map-name**rtr_pol_name*}|**no ip pim auto-rp mapping-agent-policy** [{*route-map-name**rtr_pol_name*}]

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
pim		PIM global configuration commands
auto-rp		Auto-RP protocol RP-distribution configuration
mapping-agent-policy		Specify policy for filtering Mapping Agent messages
<i>route-map-name</i>	Type: string length: 63 A route-map name	
<i>rtr_pol_name</i>	Type: string An existing routing-rules policy	

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim auto-rp rp-candidate-policy

ip pim auto-rp rp-candidate-policy *{route-map-name rtr_pol_name}* | **no ip pim auto-rp rp-candidate-policy** [*{route-map-name rtr_pol_name}*]

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
auto-rp	Auto-RP protocol RP-distribution configuration
rp-candidate-policy	Specify policy for filtering RP candidate messages
<i>route-map-name</i>	Type: string length: 63 A route-map name
<i>rtr_pol_name</i>	Type: string An existing routing-rules policy

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim auto-rp send-rp-announce rp-candidate

```
ip pim {auto-rp rp-candidate|send-rp-announce} {interface ipaddr} {group-list prefix|route-map
route-map-name|prefix-list prefix-list-name} {[scope ttl][interval interval][bidir]}+|no ip pim
{auto-rp rp-candidate|send-rp-announce} [{interface ipaddr}] [{group-list prefix|route-map
route-map-name|prefix-list prefix-list-name}] {[scope ttl][interval interval][bidir]}
```

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
auto-rp	Auto-RP protocol RP-distribution configuration
send-rp-announce	Configures router to send Auto-RP Announce messages
rp-candidate	Configures router to be an Auto-RP candidate RP
<i>interface</i>	Type: interface Use IP address of interface for Auto-RP Announce messages
<i>ipaddr</i>	Type: ipaddr IP address of RP for group
group-list	Group range list
<i>prefix</i>	Type: ipprefix Prefix of group range
route-map	Group range policy for Auto-RP Candidate RP
<i>route-map-name</i>	Type: string length: 63 route-map name
prefix-list	Prefix List policy for Auto-RP Candidate RP
<i>prefix-list-name</i>	Type: string length: 63 prefix-list name
scope	Configure the scope of Auto-RP Announce messages
<i>ttl</i>	Type: integer min: 1 max: 255 default: 32 TTL value for scope

interval	Auto-RP Announce message transmission interval
-----------------	--

<i>interval</i>	Type: integer
	min: 1 max: 0 default: 60
	Interval in seconds

bidir	Group range advertised in PIM bidirectional mode
--------------	--

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim auto-rp send-rp-discovery mapping-agent

ip pim {**auto-rp mapping-agent**|**send-rp-discovery**} *interface* [**scope** *t1*]|**no ip pim** {**auto-rp mapping-agent**|**send-rp-discovery**} [*interface*] [**scope** *t1*]

Syntax Description	
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
auto-rp	Auto-RP protocol RP-distribution configuration
send-rp-discovery	Configures router to send Auto-RP Discovery messages
mapping-agent	Configures router as an Auto-RP RP-mapping agent
<i>interface</i>	Type: interface Use IP address of interface for Auto-RP Announce messages
scope	Configure the scope of Auto-RP Discovery messages
<i>t1</i>	Type: integer min: 1 max: 255 default: 32 TTL value for scope

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

ip pim bfd-instance

[no] ip pim bfd-instance [disable]

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	pim	PIM interface configuration commands
	bfd-instance	Configures BFD on interface
	disable	Disable BFD on interface

Command Modes • /exec/configure/if-igp

ip pim bfd

[no] ip pim bfd

Syntax Description

no Negate a command or set its defaults

ip Configure IP features

pim PIM global configuration commands

bfd Enable / Disable BFD for all PIM interfaces in the VRF

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim border

[no] ip pim border

Syntax Description

no Negate a command or set its defaults

ip Configure IP features

pim PIM interface configuration commands

border Configures interface to be a boundary of a PIM domain

Command Modes

- /exec/configure/if-igp

ip pim bsr bsr-candidate

ip pim [bsr] bsr-candidate *interface* [**hash-len** *hash-len*] [**priority** *priority*]|**no ip pim [bsr] bsr-candidate** [*interface*] [**hash-len** *hash-len*] [**priority** *priority*]

Syntax Description	
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
bsr	Bootstrap protocol RP-distribution configuration
bsr-candidate	Configure router as a Bootstrap Router candidate
<i>interface</i>	Type: interface Use IP address of interface for Bootstrap messages
hash-len	Hash mask length used in Bootstrap messages
<i>hash-len</i>	Type: integer min: 0 max: 32 default: 30 Hash mask length value
priority	BSR priority used in Bootstrap messages
<i>priority</i>	Type: integer min: 64 max: 0 BSR priority value
Command Modes	<ul style="list-style-type: none"> • /exec/configure • /exec/configure/vrf

ip pim bsr bsr-policy

ip pim bsr bsr-policy *{route-map-namertr_pol_name}* | **no ip pim bsr bsr-policy** [*{route-map-namertr_pol_name}*]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
bsr	Bootstrap protocol RP-distribution configuration
bsr-policy	Specify policy for filtering BSR messages
<i>route-map-name</i>	Type: string length: 63 A route-map name
<i>rtr_pol_name</i>	Type: string An existing routing-rules policy

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim bsr listen forward

ip pim bsr {listen|forward}+|no ip pim bsr {listen|forward}+

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	pim	PIM global configuration commands
	bsr	Bootstrap protocol RP-distribution configuration
	listen	Listen to Bootstrap/Candidate-RP messages
	forward	Forward Bootstrap/Candidate-RP messages

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

ip pim bsr rp-candidate

```
ip pim [bsr] rp-candidate interface {group-list prefix|route-map route-map-name|prefix-list
prefix-list-name} [priority priority] [interval interval] [bidir]|no ip pim [bsr] rp-candidate [interface]
[group-list prefix] [route-map route-map-name] [prefix-list prefix-list-name] [priority priority]
[interval interval] [bidir]
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
bsr	Bootstrap protocol RP-distribution configuration
rp-candidate	Configure router as a Rendezvous Point (RP) candidate
<i>interface</i>	Type: interface Use IP address of interface for Candidate-RP messages
group-list	Group range list
<i>prefix</i>	Type: ipprefix Prefix of group range
route-map	Group range policy for Candidate RP
<i>route-map-name</i>	Type: string length: 63 route-map name
prefix-list	Prefix List policy for Candidate RP
<i>prefix-list-name</i>	Type: string length: 63 prefix-list name
priority	RP priority used in Candidate-RP messages
<i>priority</i>	Type: integer min: 0 max: 0 default: 192 RP priority value
interval	Bootstrap message transmission interval

<i>interval</i>	Type: integer min: 1 max: 0 default: 60 Interval in seconds
bidir	Group range advertised in PIM bidirectional mode

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim bsr rp-candidate-policy

ip pim bsr rp-candidate-policy {*route-map-name**rtr_pol_name*}|**no ip pim bsr rp-candidate-policy** [*{route-map-name**rtr_pol_name}*]

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
bsr	Bootstrap protocol RP-distribution configuration
rp-candidate-policy	Specify policy for filtering RP candidate messages
<i>route-map-name</i>	Type: string length: 63 A route-map name
<i>rtr_pol_name</i>	Type: string An existing routing-rules policy

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim df-offer-burst-interval

[no] ip pim df-offer-burst-interval *burst-interval*

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	pim	PIM global configuration commands
	df-offer-burst-interval	Interval between DF offer bursts
	<i>burst-interval</i>	Type: uinteger min: 1 max: 10000 default: 20 Interval in milliseconds

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

ip pim dr-priority

ip pim dr-priority *priority* | **no ip pim dr-priority** [*priority*]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM interface configuration commands
dr-priority	Configures priority for PIM DR election on interface
<i>priority</i>	Type: uinteger min: 1 max: 0 default: 1 Priority value

Command Modes

- /exec/configure/if-igp

ip pim event-history assert-receive

[no] ip pim event-history assert-receive size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
assert-receive	Assert receive events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2097152 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip pim event-history cli

[no] ip pim event-history cli size {size_in_textsize_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
cli	CLI events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size default: medium disabled value: 0 Disabled large value: 2097152 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip pim event-history hello

[no] ip pim event-history hello size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
hello	Hello events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2097152 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip pim event-history join-prune

[no] ip pim event-history join-prune size {*size_in_text* *size_in_kbytes*}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
join-prune	Join Prune events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2097152 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip pim event-history join-prune-summary

[no] ip pim event-history join-prune-summary size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
join-prune-summary	JoinPrune-Summary for PIM
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2097152 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip pim event-history mvpn

[no] ip pim event-history mvpn size {size_in_textsize_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	Configure PIM event history
event-history	Configure event-history buffer
mvpn	MVPN events for PIM <i>Not available in this release.</i>
size	Configure size
<i>size_in_text</i>	Buffer size default: medium disabled value: 0 Disabled large value: 2097152 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip pim event-history null-register

[no] ip pim event-history null-register size {*size_in_text**size_in_kbytes*}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
null-register	Null register events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2097152 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip pim event-history packet

[no] ip pim event-history packet size {*size_in_text* *size_in_kbytes*}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
packet	Packet events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2097152 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip pim event-history pim-internal

[no] ip pim event-history pim-internal size {*size_in_text*size_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
pim-internal	Internal events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2097152 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip pim event-history rp

[no] ip pim event-history rp size {*size_in_text**size_in_kbytes*}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
rp	RP events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2097152 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip pim event-history vpc

[no] ip pim event-history vpc size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
pim	Configure PIM event history
event-history	Configure event-history buffer
vpc	vPC events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size default: medium disabled value: 0 Disabled large value: 2097152 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip pim event-history vrf

[no] ip pim event-history vrf size {*size_in_text*size_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
vrf	VRF events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2097152 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip pim file-debug

[no] ip pim file-debug

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	pim	PIM global configuration commands
	file-debug	Collect all debugs to a file
Command Modes		• /exec/configure

ip pim flush-routes

[no] ip pim flush-routes

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
flush-routes	Remove routes when restarting PIM

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim hello-authentication ah-md5

ip pim hello-authentication ah-md5 *auth-key* | **no ip pim hello-authentication ah-md5** [*auth-key*]

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
pim		PIM interface configuration commands
hello-authentication		Add AH header option to Hellos
ah-md5		Use MD5 HMAC
<i>auth-key</i>		Type: password MD5 authentication key

Command Modes • /exec/configure/if-igp

ip pim hello-interval

ip pim hello-interval *interval* | **no ip pim hello-interval** [*interval*]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM interface configuration commands
hello-interval	Configures the Hello interval for interface
<i>interval</i>	Type: uinteger min: 1 max: 18724286 default: 30000 Interval in milliseconds

Command Modes

- /exec/configure/if-igp

ip pim jp-delay

ip pim jp-delay *delay*|**no ip pim jp-delay** [*delay*]

Syntax Description

no Negate a command or set its defaults

ip Configure IP features

pim PIM global configuration commands

jp-delay Join-Prune message inter-packet delay

delay Type: uinteger

min: 1 max: 0 default: 100

Delay value in microseconds

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim jp-interval

[no] ip pim jp-interval *interval*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM interface configuration commands
jp-interval	Join-Prune interval used between peers
<i>interval</i>	Type: uinteger min: 60 max: 65520 default: 60 Interval in seconds

Command Modes

- /exec/configure/if-igp

ip pim jp-policy

ip pim jp-policy {*route-map-name*|**prefix-list** *prefix-list-name*} [{**in**|**out**}]|**no ip pim jp-policy** {*route-map-name*|**prefix-list** *prefix-list-name*} [{**in**|**out**}]

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
pim		PIM interface configuration commands
jp-policy		Specify policy for receiving Join-Prune messages
<i>route-map-name</i>	Type: string length: 63 route-map name	
prefix-list		Prefix List policy for static RP
<i>prefix-list-name</i>	Type: string length: 63 prefix-list name	
in		Inbound
out		Outbound

Command Modes • /exec/configure/if-igp

ip pim log-neighbor-changes

[no] ip pim log-neighbor-changes

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
log-neighbor-changes	Log up/down PIM neighbor transitions

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim mtu

[no] ip pim mtu *size*

Syntax Description	no Negate a command or set its defaults
	ip Configure IP features
	pim PIM global configuration commands
	mtu MTU for IP PIM packet
	<i>size</i> Type: uinteger min: 1500 max: 65536 default: 1500 MTU
Command Modes	• /exec/configure

ip pim neighbor-policy

ip pim neighbor-policy {*route-map-name*|**prefix-list** *prefix-list-name*}|**no ip pim neighbor-policy** [*route-map-name*|**prefix-list** *prefix-list-name*]

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
pim		PIM interface configuration commands
neighbor-policy		Configures a neighbor policy for filtering adjacencies
<i>route-map-name</i>	Type: string length: 63	route-map name
prefix-list		Prefix List policy for neighbor
<i>prefix-list-name</i>	Type: string length: 63	prefix-list name

Command Modes

- /exec/configure/if-igp

ip pim null-reg-delay

ip pim null-reg-delay *delay* | **no ip pim null-reg-delay** [*delay*]

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
null-reg-delay	Null registers inter-batch delay
<i>delay</i>	Type: uinteger min: 1 max: 50000 Delay value in microseconds

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

ip pim null-reg-routes

ip pim null-reg-routes *num*|**no ip pim null-reg-routes** [*num*]

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
null-reg-routes	Null registers number of routes
<i>num</i>	Type: uinteger min: 1 max: 32000 Numerical value

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

ip pim pre-build-spt

ip pim pre-build-spt|no ip pim pre-build-spt

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	pim	PIM global configuration commands
	pre-build-spt	Pre construct PIM trees for all known (S,G)s
Command Modes		<ul style="list-style-type: none">• /exec/configure• /exec/configure/vrf

ip pim register-policy

ip pim register-policy {*route-map-name*|**prefix-list** *prefix-list-name*}|**no ip pim register-policy** [{*route-map-name*|**prefix-list** *prefix-list-name*}]

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
pim		PIM global configuration commands
register-policy		Specify policy for receiving Register messages
<i>route-map-name</i>	Type: string length: 63	A route-map name
prefix-list		Prefix List policy for Registers
<i>prefix-list-name</i>	Type: string length: 63	prefix-list name

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

ip pim register-rate-limit

`ip pim register-rate-limit rate|no ip pim register-rate-limit [rate]`

Syntax	Description
<code>no</code>	Negate a command or set its defaults
<code>ip</code>	Configure IP features
<code>pim</code>	PIM global configuration commands
<code>register-rate-limit</code>	Rate limit for PIM data registers
<code>rate</code>	Type: uinteger min: 1 max: 65535 Packets per second

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

ip pim register-replicate

[no] ip pim register-replicate

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
register-replicate	Enable software replication of decapsulated PIM Register packets

Command Modes

- /exec/configure

ip pim register-source

ip pim register-source *src-interface* | **no ip pim register-source** [*src-interface*]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
register-source	Configure source address for Register messages
<i>src-interface</i>	Type: interface Use IP address of this interface for Register messages

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim register-until-stop

[no] ip pim register-until-stop

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
register-until-stop	Send Data Registers till Register Stop is received

Command Modes

- /exec/configure

ip pim rp-address

ip pim rp-address *rp-address* [{**group-list** *prefix*|**route-map** *route-map-name*|**prefix-list** *prefix-list-name*}] [**bidir**] [**override**]|**no ip pim rp-address** *rp-address* [{**group-list** *prefix*|**route-map** *route-map-name*|**prefix-list** *prefix-list-name*}] [**bidir**] [**override**]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
rp-address	Configure static RP for group range
<i>rp-address</i>	Type: ipaddr IP address of router which is RP for group range
group-list	Group range for static RP
<i>prefix</i>	Type: ipprefix Group range prefix
route-map	Route Map policy for static RP
<i>route-map-name</i>	Type: string length: 63 route-map name
prefix-list	Prefix List policy for static RP
<i>prefix-list-name</i>	Type: string length: 63 prefix-list name
bidir	Group range is treated in PIM bidirectional mode
override	RP address will override the dynamically learnt RPs

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim sparse-mode

ip pim sparse-mode|no ip pim [sparse-mode]

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM interface configuration commands
sparse-mode	Configures sparse-mode PIM on interface

Command Modes • /exec/configure/if-igp

ip pim sparse sg-expiry-timer

```
ip pim [sparse] sg-expiry-timer {expiry-time|infinity} [{sg-list route-map-name|prefix-list
prefix-list-name}]|no ip pim [sparse] sg-expiry-timer {expiry-time|infinity} [{sg-list
route-map-name|prefix-list prefix-list-name}]
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
sparse	PIM ASM
sg-expiry-timer	Adjust expiry time for PIM ASM (S,G) routes
<i>expiry-time</i>	Type: uinteger min: 181 max: 604800 default: 180 Expiry timer interval in seconds
infinity	Never expire (S,G) route due to data inactivity
sg-list	Specifies route-map for (S,G)s to apply the expiry timer
<i>route-map-name</i>	Type: string length: 100 Route-map name
prefix-list	Specifies prefix-list for (S,G)s to apply the expiry timer
<i>prefix-list-name</i>	Type: string length: 63 prefix-list name

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim ssm range

ip pim ssm {**range** {*group*+|**none**}|**route-map** *route-map-name*|**prefix-list** *prefix-list-name*}|**no ip pim ssm** {**range** {*group*+|**none**}|**route-map** *route-map-name*|**prefix-list** *prefix-list-name*}

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
pim		PIM global configuration commands
ssm		Source Specific Multicast (SSM) groups
range		Configure explicit group ranges
<i>group</i>	Type: ipprefix	List of group range prefixes
route-map		Group range route-map policy for SSM range
<i>route-map-name</i>	Type: string	length: 63 A route-map name
prefix-list		Group range prefix-list policy for SSM range
<i>prefix-list-name</i>	Type: string	length: 63 A prefix-list name
none		Remove all SSM group ranges

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim state-limit

ip pim state-limit *max-states* [**reserved** *route-map-name* *max-reserved*]|**no ip pim state-limit** [*max-states* [**reserved** *route-map-name* *max-reserved*]]

Syntax Description	
no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
state-limit	Configures State limit
<i>max-states</i>	Type: uinteger min: 1 max: 4294967295 Maximum (*,G)/(S,G) entries allowed in this VRF
reserved	Configures Reserved limit
<i>route-map-name</i>	Type: string length: 100 Route-map name
<i>max-reserved</i>	Type: uinteger min: 1 max: 4294967295 Maximum reserved (*,G)/(S,G) entries allowed in this VRF

Command Modes

- /exec/configure
- /exec/configure/vrf

ip pim use-shared-tree-only spt-threshold infinity group-list

ip pim {*use-shared-tree-only*|*spt-threshold* *infinity*} **group-list** {*route-map-name*|**prefix-list** *prefix-list-name*}|**no ip pim** {*use-shared-tree-only*|*spt-threshold* *infinity*} **group-list** *route-map-name*|**prefix-list** *prefix-list-name*}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
use-shared-tree-only	Use (*,G) only state, no source state is created
spt-threshold	Source-tree switching threshold
infinity	Never switch to source-tree
group-list	Specify group ranges through policy
<i>route-map-name</i>	Type: string length: 63 route-map name
prefix-list	Prefix List policy
<i>prefix-list-name</i>	Type: string length: 63 prefix-list name
<i>route-map-name</i>	Type: string length: 100 Route-map name

Command Modes

- /exec/configure
- /exec/configure/vrf

ip port-unreachable

[no] ip port-unreachable

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	port-unreachable	Enable sending ICMP port-unreachable

Command Modes	<ul style="list-style-type: none">• /exec/configure/if-igp• /exec/configure/if-mgmt-ether
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ip port access-group

[no] ip port access-group *name inout*

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
port	Port policy
access-group	Specify access control for packets
<i>name</i>	Type: string length: 64 List name
<i>inout</i>	Traffic direction in value: 0 Inbound packets

Command Modes • /exec/configure/if-set-acl-l2

ip prefix-list (rpm)

ip prefix-list *ipv4-pfl-name* **description** *line*|**no ip prefix-list** *ipv4-pfl-name* **description**

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
prefix-list	Build a prefix list
<i>ipv4-pfl-name</i>	Type: string pattern: [!~]* length: 63 Name of prefix-list
<i>ipv4-pfl-name</i>	Type: string Known prefix-list name
description	Description of the IP prefix list
<i>line</i>	Type: remainder IP prefix-list description string
Command Modes	• /exec/configure

ip prefix-list (rpm)

```
ip prefix-list ipv4-pfl-name [seq seq] {permit|deny} prefix {[eq equal]|[ge greater] [le lesser]}|no
ip prefix-list {ipv4-pfl-nameipv4-pfl-name} [seq seq] [{permit|deny} prefix {[eq equal]|[ge greater]
[le lesser]}]
```

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
prefix-list		Build a prefix list
<i>ipv4-pfl-name</i>	Type: string pattern: [!~]* length: 63	Name of prefix-list
<i>ipv4-pfl-name</i>	Type: string pattern: [!~]* length: 63	Name of prefix-list
<i>ipv4-pfl-name</i>	Type: string	Known prefix-list name
seq		Sequence number of an entry
<i>seq</i>	Type: uinteger min: 1 max: 4294967294	Sequence number
permit		Specify routes to forward
deny		Specify routes to reject
<i>prefix</i>	Type: ipprefix	IP prefix network/length, e.g., 35.0.0.0/8
eq		Exact prefix length to be matched
<i>equal</i>	Type: integer min: 1 max: 32	Exact prefix length
ge		Minimum prefix length to be matched

<i>greater</i>	Type: integer min: 1 max: 32 Minimum prefix length
le	Maximum prefix length to be matched
<i>lesser</i>	Type: integer min: 1 max: 32 Maximum prefix length

Command Modes

- /exec/configure

ip proxy-arp

ip proxy-arp|no ip proxy-arp

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
proxy-arp	Configure proxy ARP

Command Modes	
	<ul style="list-style-type: none">• /exec/configure/if-igp• /exec/configure/if-vlan-common

ip redirects

ip redirects|**no ip redirects**

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	redirects	Send ICMP Redirect messages

Command Modes	<ul style="list-style-type: none">• /exec/configure/if-igp• /exec/configure/if-mgmt-ether
----------------------	--

ip rip authentication key-chain

ip rip authentication key-chain *keychain* | **no ip rip authentication key-chain** [*keychain*]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
rip	RIP configuration commands
authentication	Authentication control
key-chain	Set authentication key-chain
<i>keychain</i>	Type: string Name of key-chain

Command Modes

- /exec/configure/if-igp

ip rip authentication mode text md5

ip rip authentication mode {text|md5}|**no ip rip authentication mode** [{text|md5}]

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	rip	RIP configuration commands
	authentication	RIP authentication control
	mode	Set authentication mode
	text	Clear text authentication
	md5	Keyed message digest

Command Modes • /exec/configure/if-igp

ip rip summary-address

[no] ip rip summary-address *ip-prefix*|no ipv6 rip summary-address *ipv6-prefix*|ipv6 rip summary-address *ipv6-prefix*

Syntax Description		
no		Negate a command or set its defaults
ip		Configure IP features
ipv6		Configure IPv6 features
rip		RIP configuration commands
summary-address		RIP summarization address
<i>ipv6-prefix</i>	Type: ipv6prefix	Exact prefix
<i>ip-prefix</i>	Type: ipprefix	Exact prefix

Command Modes • /exec/configure/if-igp

ip route

[no] ip route {*ip-addr ip-maskip-prefix*} {*interface*|{*pin-interface*
next-hop|{*next-hopnh-prefix*}|*vlan-interface*} [**vrf** {*vrf-namevrf-known-name*}] [**name** *rt-name*] [{**tag**
tag-valuepref}]⁺

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
route	Route information
<i>ip-addr</i>	Type: ipaddr IP prefix in format i.i.i.i
<i>ip-mask</i>	Type: ipaddr IP network mask in format m.m.m.m
<i>ip-prefix</i>	Type: ipprefix IP prefix and network mask length in format x.x.x.x/m
<i>pin-interface</i>	Type: interface Pin interface
<i>next-hop</i>	Type: ipaddr IP next-hop address in format i.i.i.i
<i>nh-prefix</i>	Type: ipprefix IP next-hop prefix in format i.i.i.i/m
<i>interface</i>	Type: interface Interface for interface static routes
<i>vlan-interface</i>	Type: interface vlan interface
name	Specify name of the next hop
<i>rt-name</i>	Type: string length: 50 Name of next hop
<i>pref</i>	Type: integer min: 1 max: 255 default: 1 Route preference

tag	Supply tag value with static route
<i>tag-value</i>	Type: uinteger min: 0 max: 0 default: 0 32-bit value for tag
vrf	VRF for next-hop if different from this vrf
<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
- /exec/configure/config-mgmt
- /exec/configure/vrf

ip route static bfd

[no] ip route static bfd *pin-interface* *next-hop*

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
route	Route information
static	Static route based configuration
bfd	Enable bfd detection on static route
<i>pin-interface</i>	Type: interface Interface on which bfd has to be enabled
<i>next-hop</i>	Type: ipaddr IP next-hop address in format i.i.i.i

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

ip router isis

[no] ip router isis *tag*

Syntax Description

no Negate a command or set its defaults

ip Configure IP features

router Enable a routing process

isis Intermediate System to Intermediate System (IS-IS)

tag Type: string

pattern: [a-zA-Z0-9_-][a-zA-Z0-9_-]*

length: 20

Process tag

Command Modes

- /exec/configure/if-igp

ip router ospf area

[no] ip router ospf tag area {area-id-iparea-id-int} [secondaries none]

Syntax Description	
no	Negate a command or set its defaults
ip	Configure IP features
router	Enable a routing process
ospf	OSPF configuration commands
tag	Type: string pattern: [a-zA-Z0-9_][a-zA-Z0-9_-]* antipattern: adjacency all border-routers database database-timers events flooding graceful-restart hello interface internal lsa-content-changed-list lsa-generation memory mpls neighbor neighbors packets policy redistrib request-list retransmission retransmission-list route spf spf-trigger statistics summary-address traffic virtual-links vrf length: 20 Process tag
area	Area associated with interface
<i>area-id-ip</i>	Type: ipaddr OSPF area ID in IP address format
<i>area-id-int</i>	Type: uinteger min: 0 max: 4294967295 OSPF area ID as a decimal format
secondaries	Do not include secondary IP addresses
none	Do not include secondary IP addresses

- Command Modes**
- /exec/configure/if-igp
 - /exec/configure/if-gre-tunnel
 - /exec/configure/if-mpls-tunnel
 - /exec/configure/if-mgmt-ether

ip router ospf multi-area

[no] ip router ospf tag multi-area area-id-ip

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
router	Enable a routing process
ospf	OSPF configuration commands
tag	Type: string pattern: [a-zA-Z0-9_][a-zA-Z0-9_-]* antipattern: adjacency all border-routers database database-timers events flooding graceful-restart hello interface internal lsa-content-changed-list lsa-generation memory mpls neighbor neighbors packets policy redistrib request-list retransmission retransmission-list route spf spf-trigger statistics summary-address traffic virtual-links vrf length: 20 Process tag
multi-area	Multi area associated with interface
area-id-ip	Type: ipaddr Area Id as an integer or ip address

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-gre-tunnel
- /exec/configure/if-mpls-tunnel
- /exec/configure/if-mgmt-ether

ip routing event-history size

[no] ip routing event-history {urib-event-histurib-event-hist-hid} size {size_in_textsize_in_bytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
event-history	Configure routing event log
<i>urib-event-hist</i>	Type: string Configure routing event log
<i>urib-event-hist-hid</i>	Type: string Configure routing event log
size	Size of buffer
<i>size_in_text</i>	Buffer size default: medium small value: 8196 Small buffer medium value: 512000 Medium buffer large value: 1048576 Large buffer disabled value: 0 Disabled
<i>size_in_bytes</i>	Type: uinteger min: 0 max: 1048576 Enter an integer value for the event history buffer

Command Modes • /exec/configure

ip routing multicast enforce-rpf

[no] ip routing multicast enforce-rpf

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
routing	Configure routing information
multicast	Configure multicast
enforce-rpf	Enforce RPF Check

Command Modes • /exec/configure

ip routing multicast event-history cli

[no] ip routing multicast event-history cli size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
cli	CLI events for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size default: medium disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip routing multicast event-history mdt

[no] ip routing multicast event-history mdt size {size_in_textsize_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
mdt	MDT events for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip routing multicast event-history mfdm-debug

[no] ip routing multicast event-history mfdm-debug size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
mfdm-debug	MFDM debugs for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip routing multicast event-history mfdm-events

[no] ip routing multicast event-history mfdm-events size {*size_in_text**size_in_kbytes*}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure mfdm-stats event-history buffer
event-history	Configure event history buffers
mfdm-events	Non-periodic MFDM events in MRIB
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip routing multicast event-history mfdm-stats

[no] ip routing multicast event-history mfdm-stats size {*size_in_text*size_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
mfdm-stats	MFDM-Stats events for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ip routing multicast event-history rib

[no] ip routing multicast event-history rib size {size_in_textsize_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure multicast
event-history	Configure event-history buffers
rib	RIB events for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size default: large disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip routing multicast event-history rib-summary

[no] ip routing multicast event-history rib-summary size {*size_in_text*size_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure multicast
event-history	Configure event-history buffers
rib-summary	RIB events for MRIB-summary
size	Configure size
<i>size_in_text</i>	Buffer size default: large disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes
Command Modes	• /exec/configure

ip routing multicast event-history vrf

[no] ip routing multicast event-history vrf size {size_in_textsize_in_kbytes}

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
vrf	VRF events for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 2048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes

- /exec/configure

ip routing multicast software-replicate

[no] ip routing multicast software-replicate

Syntax Description		
	no	Negate a command or set its defaults
	ip	Configure IP features
	routing	Routing information
	multicast	Configure multicast
	software-replicate	Enable software replication of PIM ASM leak packets

Command Modes	
	• /exec/configure

ip rsvp

[no] ip rsvp

Syntax Description

'no' Negate a command or set its defaults

ip Configure IP features

rsvp RSVP configuration commands

Command Modes

- /exec/configure

ip rsvp authentication challenge

[no] ip rsvp authentication challenge

Syntax Description		
	'no'	Negate a command or set its defaults
	ip	Configure IP features
	rsvp	RSVP configuration commands
	authentication	Configure RSVP neighbor cryptographic authentication
	challenge	Perform challenge/response handshake with new RSVP neighbors
Command Modes		• /exec/configure/if-igp

ip rsvp authentication key-chain

ip rsvp authentication key-chain *key-chain-name* | **no ip rsvp authentication key-chain**

Syntax Description

'no'	Negate a command or set its defaults
ip	Configure IP features
rsvp	RSVP configuration commands
authentication	Configure RSVP neighbor cryptographic authentication
key-chain	Authentication password key-chain
<i>key-chain-name</i>	Type: string Key-chain name

Command Modes

- /exec/configure/if-igp

ip rsvp authentication lifetime

[no] ip rsvp authentication lifetime *time*

Syntax Description		
'no'	Negate a command or set its defaults	
ip	Configure IP features	
rsvp	RSVP configuration commands	
authentication	Configure RSVP neighbor cryptographic authentication	
lifetime	Maximum lifetime of neighbor authentication state	
<i>time</i>	Type: integer min: 30 max: 86400 default: 1800 Lifetime value(in seconds)	

Command Modes • /exec/configure/if-igp

ip rsvp authentication type

```
[no] ip rsvp authentication type {md5|sha-1}
```

Syntax Description

'no'	Negate a command or set its defaults
ip	Configure IP features
rsvp	RSVP configuration commands
authentication	Configure RSVP neighbor cryptographic authentication
type	Type of authentication algorithm
md5	RSA Message Digest 5 hash algorithm (default)
sha-1	NIST Secure Hash Algorithm 1

Command Modes

- /exec/configure/if-igmp

ip rsvp authentication window-size

[no] ip rsvp authentication window-size *value*

Syntax Description	'no'	Negate a command or set its defaults
	ip	Configure IP features
	rsvp	RSVP configuration commands
	authentication	Configure RSVP neighbor cryptographic authentication
	window-size	Receive window size for authenticated messages
	<i>value</i>	Type: integer min: 1 max: 64 default: 1 Maximum number of messages allowed in receive window

Command Modes • /exec/configure/if-igp

ip rsvp signalling dscp

[no] ip rsvp signalling dscp *value*

Syntax Description		
	'no'	Negate a command or set its defaults
	ip	Configure IP features
	rsvp	RSVP configuration commands
	signalling	Configure RSVP Signalling information
	dscp	Set DSCP for RSVP signalling messages
	<i>value</i>	Type: uinteger min: 0 max: 63 default: 48 DSCP value

Command Modes • /exec/configure/if-igp

ip rsvp signalling hello dscp

[no] ip rsvp signalling hello dscp *value*

Syntax Description	'no'	Negate a command or set its defaults
	ip	Configure IP features
	rsvp	RSVP configuration commands
	signalling	Configure RSVP Signalling information
	hello	RSVP Hello configuration commands
	dscp	Set DSCP for RSVP hello messages
	<i>value</i>	Type: uinteger min: 0 max: 63 default: 48 DSCP value
Command Modes		• /exec/configure/if-igp

ip rsvp signalling hello reroute

[no] ip rsvp signalling hello reroute [override-graceful]

Syntax Description

'no'	Negate a command or set its defaults
ip	Configure IP features
rsvp	RSVP configuration commands
signalling	Configure RSVP Signalling information
hello	RSVP Hello configuration commands
reroute	RSVP Reroute commands
override-graceful	Ignore existence of GR node neighbor for pure HST behavior

Command Modes

- /exec/configure/if-igp

ip rsvp signalling hello reroute state-timeout refresh interval

[no] ip rsvp signalling hello reroute state-timeout refresh interval *value*

Syntax	Description
'no'	Negate a command or set its defaults
ip	Configure IP features
rsvp	RSVP configuration commands
signalling	Configure RSVP Signalling information
hello	RSVP Hello configuration commands
reroute	RSVP Reroute commands
state-timeout	RSVP Hello State timeout configuration
refresh	Configure RSVP Hello refresh behavior for Reroute
interval	Time between sending Hello Requests for Reroute
<i>value</i>	Type: integer min: 2000 max: 30000 default: 2000 Hello interval in msec

Command Modes • /exec/configure/if-igp

ip rsvp signalling hello reroute state-timeout refresh misses

[no] ip rsvp signalling hello reroute state-timeout refresh misses *value*

Syntax Description

'no'	Negate a command or set its defaults
ip	Configure IP features
rsvp	RSVP configuration commands
signalling	Configure RSVP Signalling information
hello	RSVP Hello configuration commands
reroute	RSVP Reroute commands
state-timeout	RSVP Hello State timeout configuration
refresh	Configure RSVP Hello refresh behavior for Reroute
misses	Number of Hello misses for Reroute
<i>value</i>	Type: uinteger min: 4 max: 10 default: 4 Number of missed Hello Acks which triggers neighbor down

Command Modes

- /exec/configure/if-igp

ip source-route

[no] ip source-route

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	source-route	IP source routing option

Command Modes • /exec/configure

ip source binding vlan interface

[no] ip source binding *ipaddr1 macaddr* vlan *vlanid* interface *interface1*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
source	IP source
binding	Static binding
<i>ipaddr1</i>	Type: ipaddr IP address
<i>macaddr</i>	Type: ethernet MAC address
vlan	VLAN
<i>vlanid</i>	Type: vlan VLAN id
interface	interface
<i>interface1</i>	Type: interface interface

Command Modes

- /exec/configure

ip source icmp-errors

[no] ip source *interface* icmp-errors

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	source	Configure source-address for applications
	<i>interface</i>	Type: interface Interface to pick source-address from
	icmp-errors	ICMP unreachable/TTL-exceeded/param-prob messages

Command Modes	<ul style="list-style-type: none">• /exec/configure• /exec/configure/vrf
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ip tcp path-mtu-discovery

ip tcp path-mtu-discovery|no ip tcp path-mtu-discovery

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	tcp	Global TCP parameters
	path-mtu-discovery	Enable path-MTU discovery on TCP

Command Modes	<ul style="list-style-type: none">• /exec/configure• /exec/configure/config-mgmt
----------------------	---

ip tcp synwait-time

no ip tcp synwait-time|**ip tcp synwait-time** *time*

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
tcp	Global TCP parameters
synwait-time	Set time to wait on new TCP connections
<i>time</i>	Type: uinteger min: 5 max: 300 default: 30 Wait time

Command Modes

- /exec/configure
- /exec/configure/config-mgmt

ip telnet source-interface

[no] ip telnet source-interface *ifnum* [vrf {*vrf-name**vrf-known-name*}]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
telnet	Configure telnet
source-interface	Configure source interface feature for domain-lookup
<i>ifnum</i>	Type: interface Source interface
vrf	Configure VRF
<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

ip tftp source-interface

```
[no] ip tftp source-interface ifnum [vrf {vrf-namevrf-known-name}]
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
tftp	Configure TFTP client
source-interface	Configure source interface feature for TFTP client
<i>ifnum</i>	Type: interface Source interface
vrf	Configure VRF
<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

ip ttl

[no] ip ttl *ttl_value*

Syntax Description

no Negate a command or set its defaults

ip Set ERSPAN IP options

ttl Set the IP time-to-live value

ttl_value Type: integer

min: 1 max: 255

Command Modes

- /exec/configure/config-monitor-erspan-src

ip unnumbered

ip unnumbered *interface*|**no ip unnumbered** [*interface*]

Syntax Description	no	Negate a command or set its defaults
	ip	Configure IP features
	unnumbered	Configure interface as unnumbered
	<i>interface</i>	Type: interface Interface with IP address

Command Modes	<ul style="list-style-type: none">• /exec/configure/if-p2p• /exec/configure/if-te
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ip unreachable

[no] ip unreachable

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
unreachables	Enable sending ICMP unreachable (other than port-unreachable)

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-mgmt-ether

ip verify

[no] {platform|hardware} ip verify {address {source {broadcast|multicast}|class-e|destination zero|identical|reserved}|checksum|protocol|fragment|length {minimum|consistent|maximum {max-frag|udp|max-tcp}}|tcp tiny-frag|version|syslog}

Syntax Description

no	Negate a command or set its defaults
platform	Platform configuration commands
hardware	Hardware Internal Information
ip	IP
verify	Enable IPv4 and some IPv6 packet validation checks in hardware <i>Not available in this release.</i>
address	IPv4 Source and destination address validation
source	Check source address <i>Not available in this release.</i>
broadcast	Source address is 255.255.255.255 <i>Not available in this release.</i>
multicast	Source address is 224.x.x.x <i>Not available in this release.</i>
destination	Check destination address <i>Not available in this release.</i>
zero	Destination address is 0.0.0.0 <i>Not available in this release.</i>
class-e	Class E IDS check <i>Not available in this release.</i>
identical	Same IP SA and DA
reserved	Source address is 127.x.x.x <i>Not available in this release.</i>
checksum	Verify IPv4 and IPv6 packet checksum <i>Not available in this release.</i>
protocol	Verify IP protocol <i>Not available in this release.</i>
fragment	Check IPv4 and IPv6 fragment with non-zero offset and DF bit active <i>Not available in this release.</i>
length	Validate IPv4 packet header and payload length
minimum	Minimum IPv4 header length <i>Not available in this release.</i>
consistent	Actual frame size is equal to or more than IPv4 length plus ethernet header
maximum	Check max fragment offset and payload length <i>Not available in this release.</i>
max-frag	Fragment offset field value <i>Not available in this release.</i>
udp	Maximum UDP length has to be less than IPv4 payload length <i>Not available in this release.</i>
max-tcp	Maximum TCP length has to be less than IPv4 payload length <i>Not available in this release.</i>

tcp	Validate TCP packet header
tiny-frag	Check TCP tiny fragment
version	Must be 4 for an ethertype of IPv4 (0x0800) <i>Not available in this release.</i>
syslog	Syslog Messages logging configuration for IDS check drops <i>Not available in this release.</i>

Command Modes

- /exec/configure

ip verify source dhcp-snooping-vlan

[no] ip verify source dhcp-snooping-vlan

Syntax	Description
no	Negate a command or set its defaults
ip	Configure IP features
verify	Configure Unicast Reverse Path Forwarding or IP Source Guard
source	IP Source Guard related commands
dhcp-snooping-vlan	Vlans on which snooping is enabled

Command Modes • /exec/configure/if-switching

ipv6 access-class

[no] **ipv6 access-class** *name inout*

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
access-class	Specify IPv6 access control for packets
<i>name</i>	Type: string length: 64 List name
<i>inout</i>	Traffic direction in value: 0 Inbound packets out value: 1 Outbound packets
Command Modes	• /exec/configure/line

ipv6 access-list

[no] **ipv6 access-list** *name*

Syntax Description	
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
access-list	Configure access list
<i>name</i>	Type: string length: 64 List name
Command Modes	• /exec/configure

ipv6 adjacency forcedownload

ipv6 adjacency [*vrf* {*vrf-name**vrf-known-name*}] [*interface* {**ipv6-addr*}|*] **forcedownload**

Syntax Description

ipv6	Configure IPv6 features
adjacency	Configure Adjmgr
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>interface</i>	Type: interface Display specific interface adjacencies only
<i>ipv6-addr</i>	Type: ipv6addr IPv6 source address
*	for all adjacencies in this context
forcedownload	Create consistency in UFDm

Command Modes

- /exec/configure

ipv6 adjacency peer-gmac

[no] ipv6 adjacency [vrf {vrf-namevrf-known-name}] {interface {*ipv6-addr} *} peer-gmac

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
adjacency	Configure Adjmgr
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>interface</i>	Type: interface Display specific interface adjacencies only
<i>ipv6-addr</i>	Type: ipv6addr IPv6 source address
*	for all adjacencies in this context
peer-gmac	Set/clear the peer-gmac bit

Command Modes

- /exec/configure

ipv6 adjacency route distance

ipv6 adjacency route distance *pref*no ipv6 adjacency route distance

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
adjacency	Configure Adjmgr
route	route
distance	admin-distance
<i>pref</i>	Type: uinteger min: 2 max: 250 default: 250 preference

Command Modes

- /exec/configure

ipv6 auto-rp pim send-rp-discovery mapping-agent

ipv6 pim {auto-rp mapping-agent|send-rp-discovery} interface [scope ttl]|no ipv6 pim {auto-rp mapping-agent|send-rp-discovery} [interface] [scope ttl]

Syntax Description	
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
auto-rp	Auto-RP protocol RP-distribution configuration
pim	PIM6 global configuration commands
send-rp-discovery	Configures router to send Auto-RP Discovery messages
mapping-agent	Configures router as an Auto-RP RP-mapping agent
<i>interface</i>	Type: interface IPV6 address of interface for Auto-RP Announce messages
scope	Configure the scope of Auto-RP Discovery messages
<i>ttl</i>	Type: integer min: 1 max: 255 default: 32 TTL value for scope

- Command Modes**
- /exec/configure
 - /exec/configure/vrf

ipv6 cache disable

[no] ipv6 cache disable

Syntax Description	no Negate a command or set its defaults
	ipv6 Configure IPv6 features
	cache Disable cache
	disable Disable cache
Command Modes	• /exec/configure

ipv6 dhcp relay

[no] ipv6 dhcp relay

Syntax Description	no Negate a command or set its defaults
	ipv6 Configure IPv6 features
	dhcp Configure DHCPv6 relay
	relay Configure DHCPv6 relay agent
Command Modes	• /exec/configure

ipv6 dhcp relay address ipv6 dhcp relay address

ipv6 dhcp relay address *ip-addr-val* [**use-vrf** *vrf-name*] [**interface** *interface-name*]|**ipv6 dhcp relay address** *ip-addr-val* [**interface** *interface-name*] [**use-vrf** *vrf-name*]

Syntax Description		
	ipv6	Configure IPv6 features
	dhcp	Configure DHCPv6 relay
	relay	Configure DHCPv6 relay agent
	address	Configure DHCPv6 server relay address
	<i>ip-addr-val</i>	Type: ipv6addr IPv6 server address
	use-vrf	server address VRF membership
	<i>vrf-name</i>	Type: vrf pattern: [-a-zA-Z0-9_.;\$#@]* antipattern: vrf detail interface definition context forwarding member all l2-vrf length: 32 VRF name
	interface	Destination interface for the relay address
	<i>interface-name</i>	Type: interface Destination interface

Command Modes • /exec/configure/if-igp

ipv6 dhcp relay option type cisco

[no] ipv6 dhcp relay option type cisco

Syntax Description	no Negate a command or set its defaults
	ipv6 Configure IPv6 features
	dhcp Configure DHCPv6 relay
	relay DHCPv6 relay agent parameters
	option Relay agent option
	type Relay agent option type
	cisco Use Cisco proprietary options

Command Modes • /exec/configure

ipv6 dhcp relay option vpn

[no] ipv6 dhcp relay option vpn

Syntax Description

no Negate a command or set its defaults

ipv6 Configure IPv6 features

dhcp Configure DHCPv6 relay

relay DHCPv6 relay agent parameters

option Insert DHCPv6 relay information in Relay forward

vpn Enable DHCPv6 relay support across VRFs

Command Modes

• /exec/configure

ipv6 dhcp relay source-interface

`ipv6 dhcp relay source-interface interface-name`

Syntax Description		
	ipv6	Configure IPv6 features
	dhcp	Configure DHCPv6 relay
	relay	Configure DHCPv6 relay agent
	source-interface	Configure source interface for DHCPv6 relay
	<i>interface-name</i>	Type: interface Source interface

Command Modes	
	<ul style="list-style-type: none">• /exec/configure• /exec/configure/if-igp

(aclmgr)

```
{[seqno]|no} {addr wildprefix|host hostaddr}
```

Syntax Description

<i>seqno</i>	Type: uinteger min: 1 max: 4294967295 Sequence number
no	Negate a command or set its defaults
<i>addr</i>	Type: ipv6addr IPv6 Network address of object-group member
<i>wild</i>	Type: ipv6addr IPv6 wildcard
<i>prefix</i>	Type: ipv6prefix IPv6 Network prefix of the object-group member
host	Host address of the object-group member
<i>hostaddr</i>	Type: ipv6addr IPv6 Host address

Command Modes

- /exec/configure/ipv6group

ipv6 host

[no] **ipv6 host** *s0* *ipv6_0*

Syntax Description

no Negate a command or set its defaults

ipv6 Configure IPv6 features

host Add an entry to the ip hostname table

s0 Type: string

length: 64

Name of Host

ipv6_0 Type: ipv6addr

Enter an IPv6 address

Command Modes

- /exec/configure

ipv6 icmp adjacency-stale-timer

ipv6 [icmp] adjacency-stale-timer *stale-time*|no ipv6 [icmp] adjacency-stale-timer [*stale-time*]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
icmp	Configure icmp parameters
adjacency-stale-timer	When probing for an adjacency begins
<i>stale-time</i>	Type: uinteger min: 1380 max: 0 Seconds after adjacency uptime

Command Modes

- /exec/configure

ipv6 icmp vip vmac protocol group

[no] **ipv6 icmp vip** *ipv6-addr* **vmac** *mac-addr* **protocol** *prot* **group** *id*

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
icmp	ICMPv6 commands
vip	Virtual IPv6 address
<i>ipv6-addr</i>	Type: ipv6addr IPv6 address format: aaaa:bbbb:cccc:dddd:eeee:ffff:gggg:hhhh, aaaa::bbbb
vmac	Virtual MAC address
<i>mac-addr</i>	Type: ethernet Layer-2 MAC address
protocol	FHRP protocol
<i>prot</i>	Type: string HSRP VRRP GLBP
group	Group id
<i>id</i>	Type: uinteger Group id

Command Modes

- /exec/configure/if-igmp

ipv6 mroute

[no] ipv6 mroute *ipv6-prefix* *{next-hopnh-prefix}* *interface* [*pref*] [**vrf** *{vrf-namevrf-known-name}*]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
mroute	Configure multicast RPF static route
<i>ipv6-prefix</i>	Type: ipv6prefix IPv6 prefix in format x.x.x.x/m
<i>next-hop</i>	Type: ipv6addr IPv6 next-hop address in format i.i.i.i
<i>nh-prefix</i>	Type: ipv6prefix IPv6 next-hop prefix in format i.i.i.i/m
<i>interface</i>	Type: interface Interface for interface static multicast routes
<i>pref</i>	Type: integer min: 1 max: 255 default: 1 Route preference
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/configure
- /exec/configure/vrf

ipv6 nd hop-limit

ipv6 nd hop-limit *hop-limit*|**no ipv6 nd hop-limit** [*hop-limit*]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
hop-limit	Sent in RA messages, tells hosts what hop-limit to use when originating IPv6 packets
<i>hop-limit</i>	Type: uinteger min: 0 max: 255 default: 64 Hop limit in IPv6 header

Command Modes

- /exec/configure/if-igp

ipv6 nd limit-incomplete-adjacency

`ipv6 nd limit-incomplete-adjacency count`|`no ipv6 nd limit-incomplete-adjacency [count]`

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
limit-incomplete-adjacency	Number of incomplete adjacencies
<i>count</i>	Type: uinteger min: 0 max: 65536 default: 32767 Count

Command Modes

- /exec/configure

ipv6 nd limit_threshold_am_queue

ipv6 nd limit_threshold_am_queue *count*|no ipv6 nd limit_threshold_am_queue [*count*]

Syntax Description		
	no	Negate a command or set its defaults
	ipv6	Configure IPv6 features
	nd	ICMPv6 Neighbor Discovery commands
	limit_threshold_am_queue	Threshold AM queue
	<i>count</i>	Type: uinteger min: 20000 max: 50000 default: 20000 Count

Command Modes • /exec/configure

ipv6 nd managed-config-flag

[no] ipv6 nd managed-config-flag

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
managed-config-flag	Sent in RA messages, tells hosts to use stateful address auto-configuration to obtain address information

Command Modes

- /exec/configure/if-igp

ipv6 nd mtu

ipv6 nd mtu *mtu*|**no ipv6 nd mtu** [*mtu*]

Syntax Description

no Negate a command or set its defaults

ipv6 Configure IPv6 features

nd ICMPv6 Neighbor Discovery commands

mtu Sent in RA messages, tells hosts what MTU to use on this link

mtu Type: uinteger

min: 1280 max: 0 default: 1500

MTU in bytes

Command Modes

- /exec/configure/if-igp

ipv6 nd ns-interval

ipv6 nd ns-interval *interval* [*retry-count*]|**no ipv6 nd ns-interval** [*interval*]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
ns-interval	Retransmission interval between sending Neighbor-Solicitation messages
<i>interval</i>	Type: uinteger min: 1000 max: 3600000 default: 1000 Interval in milliseconds
<i>retry-count</i>	Type: uinteger min: 1 max: 100 default: 3 NS Retry count

Command Modes

- /exec/configure/if-igp

ipv6 nd other-config-flag

[no] ipv6 nd other-config-flag

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
other-config-flag	Sent in RA messages, tells hosts to use stateful auto-configuration to obtain non-address related information

Command Modes

- /exec/configure/if-igp

ipv6 nd prefix

ipv6 nd prefix {default*prefix*} [{{*val-life*|infinite} {*perf-life*|infinite} [[no-autoconfig] [no-onlink] [no-rtr-address] [off-link]]no-advertise}}]no **ipv6 nd prefix** {default*prefix*}

Syntax Description		
no		Negate a command or set its defaults
ipv6		Configure IPv6 features
nd		ICMPv6 Neighbor Discovery commands
prefix		IPv6 Prefix to advertise in RA
<i>prefix</i>	Type: ipv6prefix	IPv6 prefix x:x::y/<z>
default		Specify prefix default parameters
<i>val-life</i>	Type: uinteger	Valid Lifetime (secs)
infinite		Infinite Valid Lifetime
no-advertise		Do not advertise prefix
<i>perf-life</i>	Type: uinteger	Preferred Lifetime (secs)
infinite		Infinite Preferred Lifetime
no-autoconfig		Do not use prefix for autoconfiguration
no-onlink		Do not use prefix for onlink determination
no-rtr-address		Do not send full router address in prefix advert
off-link		Prefix is offlink

Command Modes

- /exec/configure/if-igp

ipv6 nd process adjacency statistics

[no] ipv6 nd process adjacency statistics

Syntax Description	no	Negate a command or set its defaults
	ipv6	Configure IPv6 features
	nd	ICMPv6 Neighbor Discovery commands
	process	Process Adjacency Statistics
	adjacency	Adjacency
	statistics	Statistics

Command Modes • /exec/configure

ipv6 nd ra-interval

ipv6 nd ra-interval *interval* [**min** *min-interval*]|**no ipv6 nd ra-interval** [*interval*] [**min** *min-interval*]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
ra-interval	Interval between sending Router-Advertisement messages
<i>interval</i>	Type: uinteger min: 4 max: 1800 default: 600 Interval in seconds
min	Minimum interval between sending RA messages
<i>min-interval</i>	Type: uinteger min: 0 max: 1800 Interval in seconds

Command Modes

- /exec/configure/if-igp

ipv6 nd ra-lifetime

`ipv6 nd ra-lifetime lifetime|no ipv6 nd ra-lifetime [lifetime]`

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
ra-lifetime	Sent in RA messages, Router Lifetime of a default router, 0 means this router will not be the default router
<i>lifetime</i>	Type: uinteger min: 0 max: 9000 Lifetime in seconds

Command Modes

- /exec/configure/if-igp

ipv6 nd reachable-time

ipv6 nd reachable-time *time*|no **ipv6 nd reachable-time** [*time*]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
reachable-time	Sent in RA messages, advertised time when a node considers a neighbor up after receiving a reachability confirmation
<i>time</i>	Type: uinteger min: 0 max: 3600000 default: 0 Time in milliseconds

Command Modes

- /exec/configure/if-igp

ipv6 nd retrans-timer

ipv6 nd retrans-timer *time*|**no ipv6 nd retrans-timer** [*time*]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
retrans-timer	Sent in RA messages, advertised time between NS messages
<i>time</i>	Type: uinteger min: 0 max: 0 default: 0 Time in milliseconds

Command Modes

- /exec/configure/if-igp

ipv6 nd suppress-ra

[no] ipv6 nd suppress-ra [mtu]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
suppress-ra	Disable sending Router-Advertisement messages
mtu	Disable sending MTU in Router-Advertisement messages

Command Modes

- /exec/configure/if-igp

ipv6 nd synchronize (icmpv6)

`ipv6 nd synchronize [{pull|push}]`

Syntax Description		
	ipv6	Configure IPv6 features
	nd	Display Neighbor Discovery interface information
	synchronize	CFS synchronize
	pull	Initiate CFS pull request
	push	Initiate CFS push message
Command Modes		• /exec

ipv6 nd synchronize (icmpv6_mcec)

[no] ipv6 nd synchronize

Syntax Description	no	Negate a command or set its defaults
	ipv6	Configure IPv6 features
	nd	Display Neighbor Discovery interface information
	synchronize	CFS synchronize <i>Not available in this release.</i>

Command Modes

- /exec/configure/vpc-domain

ipv6 pim anycast-rp

[no] **ipv6 pim anycast-rp** *anycast-rp rp-addr*

Syntax Description	
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
anycast-rp	Configure an RP in an Anycast-RP set (using PIM6)
<i>anycast-rp</i>	Type: ipv6addr Address for the Anycast-RP address
<i>rp-addr</i>	Type: ipv6addr Address of RP in the Anycast-RP set
Command Modes	<ul style="list-style-type: none"> • /exec/configure • /exec/configure/vrf

ipv6 pim auto-rp listen forward

`ipv6 pim auto-rp {listen|forward}+|no ipv6 pim auto-rp {listen|forward}+`

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
auto-rp	Enable listening or forwarding of Auto-RP messages
listen	Listen to Auto-RP messages
forward	Forward Auto-RP messages

Command Modes

- /exec/configure
- /exec/configure/vrf

ipv6 pim auto-rp mapping-agent-policy

ipv6 pim auto-rp mapping-agent-policy {*route-map-name**rtr_pol_name*} | **no ipv6 pim auto-rp mapping-agent-policy** [{*route-map-name**rtr_pol_name*}]

Syntax Description		
no		Negate a command or set its defaults
ipv6		Configure IPv6 features
pim		PIM6 global configuration commands
auto-rp		Auto-RP protocol RP-distribution configuration
mapping-agent-policy		Specify policy for filtering Mapping Agent messages
<i>route-map-name</i>	Type: string length: 63 A route-map name	
<i>rtr_pol_name</i>	Type: string An existing routing-rules policy	

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

ipv6 pim auto-rp rp-candidate-policy

ipv6 pim auto-rp rp-candidate-policy {*route-map-name**rtr_pol_name*}|**no ipv6 pim auto-rp rp-candidate-policy** [{*route-map-name**rtr_pol_name*}]

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
auto-rp	Auto-RP protocol RP-distribution configuration
rp-candidate-policy	Specify policy for filtering RP candidate messages
<i>route-map-name</i>	Type: string length: 63 A route-map name
<i>rtr_pol_name</i>	Type: string An existing routing-rules policy

Command Modes

- /exec/configure
- /exec/configure/vrf

ipv6 pim auto-rp send-rp-announce rp-candidate

```
ipv6 pim {auto-rp rp-candidate|send-rp-announce} interface {group-list prefix|route-map
route-map-name} {[scope ttl][interval interval][bidir]}+|no ipv6 pim {auto-rp
rp-candidate|send-rp-announce} [interface] [group-list prefix] [route-map route-map-name] {[scope
ttl][interval interval][bidir]}
```

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
auto-rp	Auto-RP protocol RP-distribution configuration
send-rp-announce	Configures router to send Auto-RP Announce messages
rp-candidate	Configures router to be an Auto-RP candidate RP
<i>interface</i>	Type: interface IPv6 address of interface for nounce messages
group-list	Group range list
<i>prefix</i>	Type: ipv6prefix Prefix of group range
route-map	Group range policy for Auto-RP Candidate RP
<i>route-map-name</i>	Type: string length: 63 route-map name
scope	Configure the scope of Auto-RP Announce messages
<i>ttl</i>	Type: integer min: 1 max: 255 default: 32 TTL value for scope
interval	Auto-RP Announce message transmission interval
<i>interval</i>	Type: integer min: 1 max: 0 default: 60 Interval in seconds
bidir	Group range advertised in PIM6 bidirectional mode

Command Modes

- /exec/configure
- /exec/configure/vrf

ipv6 pim bidir-rp-limit

[no] ipv6 pim bidir-rp-limit *limit*

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
bidir-rp-limit	Configures maximum Bidir RPs for IPv6 PIM in this VRF
<i>limit</i>	Type: integer min: 0 max: 8 default: 2 Set limit for Bidir RPs permitted in IPv6 PIM

Command Modes

- /exec/configure
- /exec/configure/vrf

ipv6 pim border

[no] ipv6 pim border

Syntax Description

no Negate a command or set its defaults

ipv6 Configure IPv6 features

pim PIM6 interface configuration commands

border Configures interface to be a boundary of a PIM6 domain

Command Modes

• /exec/configure/if-igp

ipv6 pim bsr bsr-candidate

ipv6 pim [bsr] bsr-candidate *interface* [**hash-len** *hash-len*] [**priority** *priority*]**no ipv6 pim [bsr] bsr-candidate** [*interface*] [**hash-len** *hash-len*] [**priority** *priority*]

Syntax Description	
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
bsr	Bootstrap protocol RP-distribution configuration
bsr-candidate	Configure router as a Bootstrap Router candidate
<i>interface</i>	Type: interface Use IPV6 address of interface for Bootstrap messages
hash-len	Hash mask length used in Bootstrap messages
<i>hash-len</i>	Type: integer min: 0 max: 128 default: 126 Hash mask length value
priority	BSR priority used in Bootstrap messages
<i>priority</i>	Type: integer min: 0 max: 0 default: 64 BSR priority value
Command Modes	<ul style="list-style-type: none"> • /exec/configure • /exec/configure/vrf

ipv6 pim bsr bsr-policy

ipv6 pim bsr bsr-policy {*route-map-name**rtr_pol_name*}|**no** **ipv6 pim bsr bsr-policy** [*route-map-name**rtr_pol_name*]

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
bsr	Bootstrap protocol RP-distribution configuration
bsr-policy	Specify policy for filtering BSR messages
<i>route-map-name</i>	Type: string length: 63 A route-map name
<i>rtr_pol_name</i>	Type: string An existing routing-rules policy

Command Modes

- /exec/configure
- /exec/configure/vrf

ipv6 pim bsr listen forward

`ipv6 pim bsr {listen|forward}+|no ipv6 pim bsr {listen|forward}+`

Syntax Description	no	Negate a command or set its defaults
	ipv6	Configure IPv6 features
	pim	PIM6 global configuration commands
	bsr	Bootstrap protocol RP-distribution configuration
	listen	Listen to Bootstrap/Candidate-RP messages
	forward	Forward Bootstrap/Candidate-RP messages

Command Modes	<ul style="list-style-type: none">• /exec/configure• /exec/configure/vrf
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ipv6 pim bsr rp-candidate

ipv6 pim [bsr] rp-candidate *interface* {**group-list** *prefix*|**route-map** *route-map-name*} [**priority** *priority*] [**interval** *interval*] [**bidir**]|**no ipv6 pim [bsr] rp-candidate** [*interface*] [**group-list** *prefix*] [**route-map** *route-map-name*] [**priority** *priority*] [**interval** *interval*] [**bidir**]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
bsr	Bootstrap protocol RP-distribution configuration
rp-candidate	Configure router as a Rendezvous Point (RP) candidate
<i>interface</i>	Type: interface IPv6 address of interface for Candidate-RP messages
group-list	Group range list
<i>prefix</i>	Type: ipv6prefix Prefix of group range
route-map	Group range policy for Candidate RP
<i>route-map-name</i>	Type: string length: 63 route-map name
priority	RP priority used in Candidate-RP messages
<i>priority</i>	Type: integer min: 0 max: 0 default: 192 RP priority value
interval	Bootstrap message transmission interval
<i>interval</i>	Type: integer min: 1 max: 0 default: 60 Interval in seconds
bidir	Group range advertised in PIM6 bidirectional mode

Command Modes

- /exec/configure
- /exec/configure/vrf

ipv6 pim bsr rp-candidate-policy

ipv6 pim bsr rp-candidate-policy {*route-map-name**rtr_pol_name*}|**no ipv6 pim bsr rp-candidate-policy** [{*route-map-name**rtr_pol_name*}]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
bsr	Bootstrap protocol RP-distribution configuration
rp-candidate-policy	Specify policy for filtering RP candidate messages
<i>route-map-name</i>	Type: string length: 63 A route-map name
<i>rtr_pol_name</i>	Type: string An existing routing-rules policy

Command Modes

- /exec/configure
- /exec/configure/vrf

ipv6 pim dr-priority

ipv6 pim dr-priority *priority* | **no ipv6 pim dr-priority** [*priority*]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 interface configuration commands
dr-priority	Configures priority for PIM6 DR election on interface
<i>priority</i>	Type: uinteger min: 1 max: 0 default: 1 Priority value

Command Modes

- /exec/configure/if-igp

ipv6 pim event-history assert-receive

[no] ipv6 pim event-history assert-receive size {*size_in_text* *size_in_kbytes*}

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
assert-receive	Assert-receive events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ipv6 pim event-history bidir

[no] ipv6 pim event-history bidir size {*size_in_text* *size_in_kbytes*}

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
bidir	Bidir events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ipv6 pim event-history hello

[no] ipv6 pim event-history hello size {*size_in_text*size_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
hello	Hello events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ipv6 pim event-history join-prune

[no] ipv6 pim event-history join-prune size {*size_in_text**size_in_kbytes*}

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
join-prune	Join/Prune events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ipv6 pim event-history join-prune-summary

[no] ipv6 pim event-history join-prune-summary size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
join-prune-summary	Join/Prune-Summary events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ipv6 pim event-history null-register

[no] ipv6 pim event-history null-register size {*size_in_text*size_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
null-register	Reg events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ipv6 pim event-history packet

[no] ipv6 pim event-history packet size {*size_in_text**size_in_kbytes*}

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
packet	Packet events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ipv6 pim event-history pim6-internal

[no] ipv6 pim event-history pim6-internal size {*size_in_text*size_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
pim6-internal	Internal events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ipv6 pim event-history rp

[no] ipv6 pim event-history rp size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
rp	RP events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ipv6 pim event-history vrf

[no] ipv6 pim event-history vrf size {size_in_textsize_in_kbytes}

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
vrf	VRF events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size default: small disabled value: 0 Disabled large value: 1048576 Large buffer medium value: 512000 Medium buffer small value: 8196 Small buffer
<i>size_in_kbytes</i>	Type: integer Size in kbytes

Command Modes • /exec/configure

ipv6 pim flush-routes

[no] ipv6 pim flush-routes

Syntax Description	no	Negate a command or set its defaults
	ipv6	Configure IPv6 features
	pim	PIM6 global configuration commands
	flush-routes	Remove routes when restarting PIM6
Command Modes		<ul style="list-style-type: none">• /exec/configure• /exec/configure/vrf

ipv6 pim hello-authentication ah-md5

ipv6 pim hello-authentication ah-md5 *auth-key* | **no ipv6 pim hello-authentication ah-md5** [*auth-key*]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 interface configuration commands
hello-authentication	Add AH header option to Hellos
ah-md5	Use MD5 HMAC
<i>auth-key</i>	Type: password MD5 authentication key

Command Modes

- /exec/configure/if-igp

ipv6 pim hello-interval

ipv6 pim hello-interval {*interval-mininterval-max*}|**no ipv6 pim hello-interval** [*interval-mininterval-max*]

Syntax Description	no	Negate a command or set its defaults
	ipv6	Configure IPv6 features
	pim	PIM6 interface configuration commands
	hello-interval	Configures the Hello interval for interface
	<i>interval-min</i>	Type: uinteger min: 1 max: 1000 Interval in milliseconds
	<i>interval-max</i>	Type: uinteger min: 1000 max: 18724286 default: 30000 Interval in milliseconds

Command Modes

- /exec/configure/if-igp

ipv6 pim jp-delay

ipv6 pim jp-delay *delay* | **no ipv6 pim jp-delay** [*delay*]

Syntax Description

no Negate a command or set its defaults

ipv6 Configure IPv6 features

pim PIM6 global configuration commands

jp-delay Join-Prune message inter-packet delay

delay Type: uinteger

min: 1 max: 0 default: 100

Delay value in microseconds

Command Modes

- /exec/configure
- /exec/configure/vrf

ipv6 pim jp-policy

```
ipv6 pim jp-policy {route-map-name rtr_pol_name} [{in|out}] | no ipv6 pim jp-policy
[{route-map-name rtr_pol_name}] [{in|out}]
```

Syntax Description		
no		Negate a command or set its defaults
ipv6		Configure IPv6 features
pim		PIM6 interface configuration commands
jp-policy		Specify policy for receiving Join-Prune messages
<i>route-map-name</i>	Type: string length: 63	A route-map name
<i>rtr_pol_name</i>	Type: string	An existing routing-rules policy
in		Inbound
out		Outbound
Command Modes		• /exec/configure/if-igp

ipv6 pim log-neighbor-changes

[no] ipv6 pim log-neighbor-changes

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
log-neighbor-changes	Log up/down PIM6 neighbor transitions

Command Modes

- /exec/configure
- /exec/configure/vrf

ipv6 pim neighbor-policy

ipv6 pim neighbor-policy *route-map-name* | **no ipv6 pim neighbor-policy** [*route-map-name*]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 interface configuration commands
neighbor-policy	Configures a neighbor policy for filtering adjacencies
<i>route-map-name</i>	Type: string length: 63 A route-map name

Command Modes

- /exec/configure/if-igp

ipv6 pim register-policy

ipv6 pim register-policy {*route-map-name**rtr_pol_name*}|**no ipv6 pim register-policy** [*{route-map-name**rtr_pol_name}*]

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
register-policy	Specify policy for receiving Register messages
<i>route-map-name</i>	Type: string length: 63 A route-map name
<i>rtr_pol_name</i>	Type: string An existing routing-rules policy

Command Modes

- /exec/configure
- /exec/configure/vrf

ipv6 pim register-rate-limit

`ipv6 pim register-rate-limit rate|no ipv6 pim register-rate-limit [rate]`

Syntax	Description
<code>no</code>	Negate a command or set its defaults
<code>ipv6</code>	Configure IPv6 features
<code>pim</code>	PIM6 global configuration commands
<code>register-rate-limit</code>	Rate limit for PIM data registers
<code>rate</code>	Type: uinteger min: 1 max: 65535 Packets per second

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

ipv6 pim rp-address

ipv6 pim rp-address *rp-address* [{**group-list** *prefix*|**route-map** *route-map-name*|**prefix-list** *prefix-list-name*}] [**bidir**] [**override**]|**no** **ipv6 pim rp-address** *rp-address* [{**group-list** *prefix*|**route-map** *route-map-name*|**prefix-list** *prefix-list-name*}] [**bidir**] [**override**]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
rp-address	Configure static RP for group range
<i>rp-address</i>	Type: ipv6addr IPv6 address of RP for group range
group-list	Group range for static RP
<i>prefix</i>	Type: ipv6prefix Prefix of group range
route-map	Route Map policy for static RP
<i>route-map-name</i>	Type: string length: 63 route-map name
prefix-list	Prefix List policy for static RP
<i>prefix-list-name</i>	Type: string length: 63 prefix-list name
bidir	Group range is treated in PIM6 bidirectional mode
override	Overrides the dynamically learnt RPs

Command Modes

- /exec/configure
- /exec/configure/vrf

ipv6 pim sparse-mode

ipv6 pim sparse-mode|no ipv6 pim [sparse-mode]

Syntax Description	no	Negate a command or set its defaults
	ipv6	Configure IPv6 features
	pim	PIM6 interface configuration commands
	sparse-mode	Configures sparse-mode PIMv6 on interface
Command Modes	• /exec/configure/if-igp	

ipv6 pim ssm range

ipv6 pim ssm {**range** {*group*+|**none**}|**route-map** *route-map-name*}|**no ipv6 pim ssm** {**range** {*group*+|**none**}|**route-map** *route-map-name*}

Syntax Description		
no		Negate a command or set its defaults
ipv6		Configure IPv6 features
pim		PIM6 global configuration commands
ssm		Source Specific Multicast (SSM) groups
range		Configure explicit group ranges
<i>group</i>	Type: ipv6prefix	List of group range prefixes
none		Remove all SSM group ranges
route-map		Group range policy for SSM range
<i>route-map-name</i>	Type: string	A route-map name
	length: 63	

Command Modes

- /exec/configure
- /exec/configure/vrf

ipv6 pim state-limit

ipv6 pim state-limit *max-states* [**reserved** *route-map-name max-reserved*]|**no ipv6 pim state-limit** [*max-states* [**reserved** *route-map-name max-reserved*]]

Syntax Description	
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
state-limit	Configures State limit
<i>max-states</i>	Type: uinteger min: 1 max: 4294967295 Maximum (*,G)/(S,G) entries allowed in this VRF
reserved	Configures Reserved limit
<i>route-map-name</i>	Type: string length: 100 Route-map name
<i>max-reserved</i>	Type: uinteger min: 1 max: 4294967295 Maximum reserved (*,G)/(S,G) entries allowed in this VRF

Command Modes

- /exec/configure
- /exec/configure/vrf

ipv6 pim use-shared-tree-only spt-threshold infinity group-list

ipv6 pim {*use-shared-tree-only*|*spt-threshold* *infinity*} **group-list** *route-map-name*|**no** **ipv6 pim** {*use-shared-tree-only*|*spt-threshold* *infinity*} [**group-list** *route-map-name*]

Syntax Description		
no		Negate a command or set its defaults
ipv6		Configure IPv6 features
pim		PIM6 global configuration commands
use-shared-tree-only		Use (*,G) only state, no source state is created
spt-threshold		Source-tree switching threshold
infinity		Never switch to source-tree
group-list		Specify group ranges through policy
<i>route-map-name</i>	Type: string	
	length: 100	
		Route-map name

Command Modes

- /exec/configure
- /exec/configure/vrf

ipv6 port traffic-filter

[no] **ipv6 port traffic-filter** *name inout*

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
port	Port policy
traffic-filter	Specify access control for packets
<i>name</i>	Type: string length: 64 List name
<i>inout</i>	Traffic direction in value: 0 Inbound packets
Command Modes	• /exec/configure/if-set-acl-l2

ipv6 prefix-list (rpm)

ipv6 prefix-list *ipv6-pfl-name* **description** *line*|**no ipv6 prefix-list** *ipv6-pfl-name* **description**

Syntax Description

no Negate a command or set its defaults

ipv6 Configure IPv6 features

prefix-list Build a prefix list

ipv6-pfl-name Type: string
 pattern: [!~]*
 length: 63
 Name of prefix-list

ipv6-pfl-name Type: string
 Known prefix-list name

description Description of the IPv6 prefix list

line Type: remainder
 IPv6 prefix-list description string

Command Modes

- /exec/configure

ipv6 prefix-list (rpm)

```

ipv6 prefix-list ipv6-pfl-name [seq seq] {permit|deny} prefix {[eq equal]|[ge greater] [le lesser]}|no
ipv6 prefix-list {ipv6-pfl-name|ipv6-pfl-name} [seq seq] [{permit|deny} prefix {[eq equal]|[ge
greater] [le lesser]}]

```

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
prefix-list	Build a prefix list
<i>ipv6-pfl-name</i>	Type: string pattern: [!~]* length: 63 Name of prefix-list
<i>ipv6-pfl-name</i>	Type: string pattern: [!~]* length: 63 Name of prefix-list
<i>ipv6-pfl-name</i>	Type: string Known prefix-list name
seq	Sequence number of an entry
<i>seq</i>	Type: uinteger min: 1 max: 4294967294 Sequence number
permit	Specify routes to forward
deny	Specify routes to reject
<i>prefix</i>	Type: ipv6prefix IPv6 prefix network/length
eq	Exact prefix length to be matched
<i>equal</i>	Type: integer min: 1 max: 128 Exact prefix length
ge	Minimum prefix length to be matched

<i>greater</i>	Type: integer min: 1 max: 128 Minimum prefix length
le	Maximum prefix length to be matched
<i>lesser</i>	Type: integer min: 1 max: 128 Maximum prefix length

Command Modes

- /exec/configure

ipv6 queue-packets

[no] ipv6 queue-packets

Syntax Description	no	Negate a command or set its defaults
	ipv6	Configure IPv6 features
	queue-packets	Queue 1 packet when triggered NS is sent
Command Modes	• /exec/configure	

ipv6 queue-packets-limit

[no] ipv6 queue-packets-limit [*limit*]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
queue-packets-limit	Maximum number of queue packets for unresolved NDS
<i>limit</i>	Type: uinteger min: 5 max: 50 default: 10 Unresolved ND queue packet limit

Command Modes

- /exec/configure

ipv6 redirects

`ipv6 [nd] redirects|no ipv6 [nd] redirects`

Syntax Description	no	Negate a command or set its defaults
	ipv6	Configure IPv6 features
	nd	ICMPv6 Neighbor Discovery commands
	redirects	Enable sending ICMPv6 Redirect messages
Command Modes		<ul style="list-style-type: none">• /exec/configure/if-igp• /exec/configure/if-mgmt-ether

ipv6 route

[no] ipv6 route *ipv6-prefix* [*interface* | *link-local interface-link-local* | *pin-interface next-hop* | *next-hopnh-prefix* | *vlan-interface*] [**vrf** {*vrf-name* | *vrf-known-name*}] [**name** *rt-name*] [{*pref* | *tag* | *value*}] +

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
route	Configure IPv6 unicast static route
<i>ipv6-prefix</i>	Type: ipv6prefix IPv6 prefix format: xxxx:xxxx/ml, xxxx:xxxx::/ml, xxxx::xx/128
<i>next-hop</i>	Type: ipv6addr IPv6 address format: aaaa:bbbb:cccc:dddd:eeee:ffff:gggg:hhhh, aaaa::bbbb
<i>nh-prefix</i>	Type: ipv6prefix IPv6 prefix format: xxxx:xxxx/ml, xxxx:xxxx::/ml, xxxx::xx/128
<i>interface</i>	Type: interface Interface for interface static routes
name	Specify name of the next hop
<i>rt-name</i>	Type: string length: 50 Name of next hop
<i>pin-interface</i>	Type: interface Pin interface
<i>link-local</i>	Type: ipv6addr Link-local next-hop requires interface also
<i>interface-link-local</i>	Type: interface Interface for interface static routes
<i>vlan-interface</i>	Type: interface vlan interface
vrf	VRF for next-hop if different from this vrf

<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>pref</i>	Type: integer min: 1 max: 255 default: 1 Route preference
tag	Supply tag value with static route
<i>tag-value</i>	Type: uinteger min: 0 max: 0 default: 0 32-bit value for tag

Command Modes

- /exec/configure
- /exec/configure/vrf

ipv6 router isis

[no] **ipv6 router isis** *tag*

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
router	Enable a routing process
isis	Intermediate System to Intermediate System (IS-IS)
<i>tag</i>	Type: string pattern: [a-zA-Z0-9_-][a-zA-Z0-9_-]* length: 20 Process tag

Command Modes

- /exec/configure/if-igp

ipv6 router ospfv3 area

[no] **ipv6 router ospfv3 tag area** {*area-id-ip**area-id-int*} [**secondaries none**]

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
router	Enable a routing process
ospfv3	OSPFv3 configuration commands
<i>tag</i>	Type: string pattern: [a-zA-Z0-9_][a-zA-Z0-9_-]* antipattern: adjacency all border-routers database database-timers events flooding graceful-restart hello interface internal lsa-content-changed-list lsa-generation memory mpls neighbor neighbors packets policy redist request-list retransmission retransmission-list route spf spf-trigger statistics summary-address traffic virtual-links vrf length: 20 Process tag
area	Area associated with interface
<i>area-id-ip</i>	Type: ipaddr OSPFv3 area ID in IP address format
<i>area-id-int</i>	Type: uinteger min: 0 max: 4294967295 OSPFv3 area ID as a decimal format
secondaries	Do not include secondary IPv6 addresses
none	Do not include secondary IPv6 addresses

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-gre-tunnel
- /exec/configure/if-mpls-tunnel
- /exec/configure/if-mgmt-ether

ipv6 router ospfv3 multi-area

[no] ipv6 router ospfv3 tag multi-area area-id-ip

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
router	Enable a routing process
ospfv3	OSPFv3 configuration commands
<i>tag</i>	Type: string pattern: [a-zA-Z0-9_][a-zA-Z0-9_-]* antipattern: adjacency all border-routers database database-timers events flooding graceful-restart hello interface internal lsa-content-changed-list lsa-generation memory mpls neighbor neighbors packets policy redistrib request-list retransmission retransmission-list route spf spf-trigger statistics summary-address traffic virtual-links vrf length: 20 Process tag
multi-area	Multi-Area associated with interface
<i>area-id-ip</i>	Type: ipaddr Area Id as an integer or ip address

Command Modes

- /exec/configure/if-igp
- /exec/configure/if-gre-tunnel
- /exec/configure/if-mpls-tunnel
- /exec/configure/if-mgmt-ether

ipv6 routing event-history size

[no] **ipv6 routing event-history** {*u6rib-event-hist**u6rib-event-hist-hid*} **size** {*size_in_text**size_in_bytes*}

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
routing	Routing information
event-history	Configure routing event log
<i>u6rib-event-hist</i>	Type: string Configure routing event log
<i>u6rib-event-hist-hid</i>	Type: string Configure routing event log
size	Size of buffer
<i>size_in_text</i>	Buffer size default: medium small value: 8196 Small buffer medium value: 512000 Medium buffer large value: 1048576 Large buffer disabled value: 0 Disabled
<i>size_in_bytes</i>	Type: uinteger min: 0 max: 1048576 Enter an integer value for the event history buffer

Command Modes • /exec/configure

ipv6 routing multicast software-replication

[no] ipv6 routing multicast software-replication

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
routing	Routing information
multicast	Configure multicast
software-replication	Enable software replication of PIM ASM leak packets

Command Modes

- /exec/configure

ipv6 source-route

[no] ipv6 source-route [rh0]

Syntax Description	no	Negate a command or set its defaults
	ipv6	Configure IPv6 features
	source-route	Process IPv6 Routing Header
	rh0	Process IPv6 Routing Header - Type 0 (RH0)
Command Modes		• /exec/configure

ipv6 traffic-filter

[no] **ipv6 traffic-filter** *name inout*

Syntax	Description
no	Negate a command or set its defaults
ipv6	Configure IPv6 features
traffic-filter	Specify access control for packets
<i>name</i>	Type: string length: 64 List name
<i>inout</i>	Traffic direction in value: 0 Inbound packets out value: 1 Outbound packets

Command Modes • /exec/configure/if-set-acl-l3

ipv6 unreachable

[no] ipv6 [icmp] unreachable

Syntax Description		
	no	Negate a command or set its defaults
	ipv6	Configure IPv6 features
	icmp	ICMPv6 commands
	unreachables	Enable sending ICMPv6 Unreachable messages (port-unreachables are always rate-limit enabled)
Command Modes		<ul style="list-style-type: none">• /exec/configure/if-igp

ipv6 verify

[no] {platform|hardware} ipv6 verify {length {consistent|maximum {max-frag|udp|max-tcp}}|tcp tiny-frag|version}

Syntax Description

no	Negate a command or set its defaults
platform	Platform configuration commands
hardware	Hardware Internal Information
ipv6	IPv6
verify	Enable IPv6 packet validation checks in hardware <i>Not available in this release.</i>
length	Validate IPv6 packet header and payload length
consistent	Actual frame size is equal to or more than IPv6 length plus ethernet header
maximum	Check max fragment offset and payload length
max-frag	Fragment offset field value
udp	Maximum UDP length has to be less than IPv6 payload length
max-tcp	Maximum TCP length has to be less than IPv6 payload length
tcp	Validate TCP packet header
tiny-frag	Check TCP tiny fragment
version	Must be 6 for an ethertype of IPv6 (0x86DD) <i>Not available in this release.</i>

Command Modes

- /exec/configure

ipv6 vip

[no] **ipv6 vip** *ipv6-addr*

Syntax Description

no Negate a command or set its defaults

ipv6 Configure IPv6 features

vip Virtual IPv6 address

ipv6-addr Type: ipv6addr

IPv6 address format: aaaa:bbb:ccc:ddd:eee:fff:ggg:hhh, aaaa::bbb

Command Modes

- /exec/configure/if-igp

is-type

is-type *is-type* | **no is-type** [*is-type*]

Syntax Description

no Negate a command or set its defaults

is-type IS type for this IS-IS process

is-type IS-IS IS type

level-1 value: 1

Act as L1 router only

level-2 value: 2

Act as L2 router only

level-1-2 value: 3

Act as both L1 and L2 router

Command Modes

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

ishow cli find nodes

`ishow cli find nodes [component] [recurse]`

Syntax Description

ishow Show internal information

cli Show CLI information

find

Command Modes

• /exec

ishow cli modes

ishow cli modes

Syntax Description

ishow Show internal information

cli Show CLI information

Command Modes

- /exec

ishow cli nodes

ishow cli nodes [*mode*]

Syntax Description	show Show internal information
	cli Show CLI information
Command Modes	• /exec

ishow cli paths

ishow cli paths *component* [*type*]

Syntax Description

ishow Show internal information

cli Show CLI information

type default: 0

cli value: 0
paths used by cli

xml value: 1
paths used by
xmlagent

xml-yes value: 2
just the yes
commands

xml-no value: 3
just the no
commands

Command Modes

- /exec

ishow cli tags

ishow cli tags

Syntax Description	ishow Show internal information
	cli Show CLI information
Command Modes	• /exec

ishow core backtrace

ishow *core* *pid* **backtrace**

Syntax Description

ishow Show internal information

core display info from core file

pid Type: integer

PID from 'show cores'

backtrace display backtrace -- needs enough space to unzip the core file!

Command Modes

• /exec

isis authentication-check

[no] isis authentication-check

Syntax Description	no	Negate a command or set its defaults
	isis	IS-IS configuration commands
	authentication-check	Check authentication on received hellos
Command Modes	• /exec/configure/if-p2p	

isis authentication-check level-1

[no] isis authentication-check level-1

Syntax Description

no	Negate a command or set its defaults
isis	IS-IS configuration commands
authentication-check	Check authentication on received hellos
level-1	Configure authentication check for level-1 IIHs

Command Modes

- /exec/configure/if-ma

isis authentication-check level-2

[no] isis authentication-check level-2

Syntax Description	no	Negate a command or set its defaults
	isis	IS-IS configuration commands
	authentication-check	Check authentication on received hellos
	level-2	Configure authentication check for level-2 IIHs
Command Modes	• /exec/configure/if-ma	

