M Commands

m2rib debug ftag

m2rib debug ftag { add | del | mod } <ftag-id> <topo-id> { [UCAST] [MCAST] [ACTIVE] [INACTIVE] } + [<proto>] [vampire-tap]

Syntax Description

m2rib	Configure m2rib
debug	Configure m2rib debug
ftag	Configure M2RIB's ftag db
add	Add an ftag
mod	Modify an ftag flags
del	Delete an ftag
ftag-id	ftag id
topo-id	topo id
proto	(Optional) Protocol owner id
UCAST	(Optional) Broadcast ftag
MCAST	(Optional) Multicast ftag
ACTIVE	(Optional) Active ftag
INACTIVE	(Optional) Inactive ftag
vampire-tap	(Optional) Send a copy of all M2RIB generated messages to CLI

Command Mode

- /exec

m2rib debug gr-route add nh

m2rib debug gr-route { add | del } <vlan> { { <v4-source> <v4-group> } | { <v6-source> <v6-group> } } { nh-if <if-name> | nh-sw <switch-id> } { [WC_SRC] [WC_GRP] [NH_EXCLUDE] [FLOOD_TO_VLAN] [LOCAL] [REMOTE] [IGNORE_STAR] } + [proto <proto>] [route-type <route-type>] [vampire-tap]

Syntax Description

m2rib	Configure m2rib
debug	Configure m2rib debug
gr-route	Perform group route operations on m2rib
add	Add a route next-hop
del	Delete a route next-hop
proto	(Optional) Protocol owning this next-hop
route-type	(Optional) Route type of this next-hop
nh-if	next-hop interface
nh-sw	next-hop switch
vlan	vlan key
v4-source	IPv4 Multicast traffic source
v4-group	IPv4 Multicast Group address
if-name	Specify the next hop interface
switch-id	Specify the next hop switch id
WC_SRC	(Optional) Source is wildcarded
WC_GRP	(Optional) Group is wildcarded
NH_EXCLUDE	(Optional) Next-hop excluded from ltl+1
FLOOD_TO_VLAN	(Optional) Broadcast (flood-to-vlan) special group
LOCAL	(Optional) Local members exist
REMOTE	(Optional) Remote members exist
IGNORE_STAR	(Optional) Do not combine with router-port oif list
proto	(Optional) Protocol owner id
route-type	(Optional) Route type

| vampire-tap | (Optional) Send a copy of all M2RIB generated messages to CLI |

Command Mode

- /exec

m2rib debug log-size event-history

m2rib debug log-size event-history { <size> | small | medium | large }

Syntax Description

m2rib	Configure m2rib
debug	Configure m2rib debug
log-size	Set log sizes
event-history	Set event-history size
size	Buffer size in KB
small	Set to default small log size
medium	Set to default medium log size
large	Set to default large log size

Command Mode

• /exec/configure

m2rib debug log-size transactions

m2rib debug log-size transactions { { received | u2rib | mfdm | pixm | eltm } [error-log] | announced } { <size> | small | medium | large } <size_bytes>

Syntax Description

m2rib	Configure m2rib
debug	Configure m2rib debug
log-size	Set log sizes
transactions	Set transaction log sizes
received	Set received transaction log size
announced	Set announced transaction log size
u2rib	Set U2RIB transaction log size
mfdm	Set MFDM transaction log size
pixm	Set PIXM transaction log size
eltm	Set ELTM transaction log size
error-log	(Optional) errors only log
size	Size in number of transactions
small	Set number of transactions default small log size (0 disables limits)
medium	Set numbser of transactions default medium log size
large	Set number of transactions default large log size
size_bytes	Max log size in number of bytes

Command Mode

- /exec/configure

m2rib debug omf enable

m2rib debug omf { enable | disable } <from-vlan> <to-vlan> [vampire-tap]

Syntax Description

m2rib	Configure m2rib
debug	Configure m2rib debug
omf	Enable or disable Optimized Multicast Flood (OMF)
enable	Enable OMF
disable	Disable OMF
from-vlan	from vlan
to-vlan	to vlan
vampire-tap	(Optional) Send a copy of all M2RIB generated messages to CLI

Command Mode

- /exec

m2rib debug pkt-recv enable

m2rib debug pkt-recv { enable | disable } <from-vlan> <to-vlan> <proto> [vampire-tap]

Syntax Description

m2rib	Configure m2rib
debug	Configure m2rib debug
pkt-recv	Enable or disable protocol packet reception
enable	Enable packet receive
disable	Disable packet receive
from-vlan	from vlan
to-vlan	to vlan
proto	Protocol id
vampire-tap	(Optional) Send a copy of all M2RIB generated messages to CLI

Command Mode

- /exec

m2rib debug swroute nh

m2rib debug swroute { add | mod | del } <ftag> <switch-id> nh <if-name> [proto <proto>] [route-type <route-type>] [vampire-tap]

Syntax Description

m2rib	Configure m2rib
debug	Configure m2rib debug
swroute	Perform route operations on m2rib
add	Add a route next-hop
mod	Modify a route's next-hop
del	Delete a route next-hop
nh	next-hop
proto	(Optional) Protocol owning this next-hop
route-type	(Optional) Route type of this next-hop
ftag	ftag key
switch-id	switch id
if-name	Specify the next hop interface
proto	(Optional) Protocol owner id
route-type	(Optional) Route type
vampire-tap	(Optional) Send a copy of all M2RIB generated messages to CLI

Command Mode

- /exec

m2rib debug topo

m2rib debug topo { create | del | add-vlans | del-vlans } <topo-id> <from-vlan> <to-vlan> [<proto>] [vampire-tap]

Syntax Description

m2rib	Configure m2rib
debug	Configure m2rib debug
topo	Configure M2RIB's topo db
create	Create a topo in m2rib
del	Delete a topo in m2rib
add-vlans	Add vlans to an existing topo
del-vlans	Delete vlans from an existing topo
topo-id	topo id
from-vlan	from vlan
to-vlan	to vlan
proto	(Optional) Protocol owner id
vampire-tap	(Optional) Send a copy of all M2RIB generated messages to CLI

Command Mode

- /exec

m2rib debug topo loop-flush-timeout

m2rib debug topo [<topo-id>] loop-flush-timeout <timeout>

Syntax Description

m2rib	Configure m2rib
debug	Configure m2rib debug
topo	configure M2RIB's topology db
topo-id	(Optional) topo id
loop-flush-timeout	configure the loop flush timer value
timeout	Loop flush timeout value in ms

Command Mode

- /exec/configure

m6rib mfdm-ack-delay

[no] m6rib mfdm-ack-delay <ms>

Syntax Description

no	(Optional) Negate a command or set its defaults
m6rib	Artificially slow MFDM down
mfdm-ack-delay	Set ack delay in MRIB's MFDM thread
ms	Delay MFDM acks, in milliseconds

Command Mode

- /exec

mac-address

mac-address <macaddress> | no mac-address [<macaddress>]

Syntax Description

no	Negate a command or set its defaults
mac-address	Virtual MAC address
macaddress	MAC address(FORMAT:xxxx.xxxx.xxxx)

Command Mode

- /exec/configure/if-eth-any/hsrp_ipv4 /exec/configure/if-eth-any/hsrp_ipv6

mac-address

mac-address <mac_address_val> | no mac-address [<mac_address_val>]

Syntax Description

no	Negate a command or set its defaults
mac-address	Configure interface mac address (1)
mac_address_val	Static Router MAC address (1)

Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-ether-sub /exec/configure/if-eth-non-member /exec/configure/if-remote-ethernet-sub /exec/configure/if-port-channel /exec/configure/if-port-channel-sub /exec/configure/if-ether-sub-p2p /exec/configure/if-ethernet-p2p

mac-address

mac-address <mac-addr> | no mac-address

Syntax Description

no	Negate a command or set its defaults
mac-address	Manually set interface MAC address
mac-addr	MAC address

Command Mode

- /exec/configure/if-vlan-common

mac-address destination

{ mac-address { destination | source } <addr> } | { no mac-address { destination | source } }

Syntax Description

no	Negate a command or set its defaults
mac-address	specify flow mac address
source	specify flow source mac address
destination	specify flow destination mac address
addr	mac address

Command Mode

- /exec/configure/configngoamprofileflow

mac-address ipv6-extract

mac-address ipv6-extract | no mac-address ipv6-extract

Syntax Description

no	Negate a command or set its defaults
mac-address	Configure interface mac address (3)
ipv6-extract	Extract mac-address (3) from the IPv6 address configured on the interface

Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-ether-sub /exec/configure/if-eth-non-member /exec/configure/if-remote-ethernet-sub /exec/configure/if-port-channel-sub /exec/configure/if-port-channel

mac-learn disable

mac-learn disable | no mac-learn disable

Syntax Description

no	Negate a command or set its defaults
mac-learn	Mac Learning disable/enable
disable	Mac Learning disable to use switch as a HUB. Do a clear mac address-table dynamic after disabling mac learning

Command Mode

- /exec/configure

mac-learn disable

mac-learn disable | no mac-learn disable

Syntax Description

no	Negate a command or set its defaults
mac-learn	Mac Learning disable/enable on vlan
disable	Mac Learning disable on vlan

Command Mode

- /exec/configure/vlan-config

mac-list permit

{ mac-list <name> [seq <seq>] { permit | deny } <mac-addr> [<mac-mask>] } | { no mac-list <name> [seq <seq>] [{ permit | deny } <mac-addr> [<mac-mask>]] }

Syntax Description

no	Negate a command or set its defaults
mac-list	Build a mac list
name	Name of prefix list
seq	(Optional) Sequence number of an entry
seq	(Optional) Sequence number
permit	Specify routes to forward
deny	Specify routes to reject
mac-addr	MAC address
mac-mask	(Optional) MAC Mask. Default Mask is ffff.ffff.ffff

Command Mode

- /exec/configure

mac access-list

[no] mac access-list <name> [client <clienttype> <clientID>]

Syntax Description

no	(Optional) Negate a command or set its defaults
mac	MAC configuration commands
access-list	Configure access list
name	List name
client	(Optional) set client type
clienttype	(Optional) CLI/ONEP
clientID	(Optional) client appID

Command Mode

• /exec/configure

mac address-table aging-time

mac address-table aging-time { <disable> | <seconds> } [__readonly__ <info_str>] | no mac address-table aging-time [[<disable> | <seconds>]]

Syntax Description

no	Negate a command or set its defaults
mac	MAC configuration commands
address-table	MAC Address Table
aging-time	Aging time
disable	0 disables aging
seconds	Aging time in seconds.
__readonly__	(Optional)
info_str	(Optional) Information

Command Mode

- /exec/configure

mac address-table core-port-learning

mac address-table core-port-learning [__readonly__ <info_str>] | no mac address-table core-port-learning

Syntax Description

no	Negate a command
mac	MAC configuration commands
address-table	MAC Address Table
core-port-learning	Trill Learning for F-PATH VLANS
__readonly__	(Optional)
info_str	(Optional) Information

Command Mode

- /exec/configure

mac address-table guard-vpc-peergw-mac

[no] mac address-table guard-vpc-peergw-mac

Syntax Description

no	(Optional) Negate a command or set its defaults
mac	MAC
address-table	MAC Address Table
guard-vpc-peergw-mac	Prevent vPC Peer gateway MAC Spoofing

Command Mode

- /exec/configure

mac address-table limit system

mac address-table limit { system | vlan <id> } [<limitcount>] [__readonly__ <info_str>] | no mac address-table limit { system | vlan <id> } [<limitcount>]

Syntax Description

no	Negate a command or set its defaults
mac	Mac configuration commands
address-table	MAC Address Table
limit	Restrict number of Mac addresses learnt
system	System-wide
vlan	VLAN
id	List of VLAN ids
limitcount	(Optional) Mac address limit count
__readonly__	(Optional)
info_str	(Optional) Information

Command Mode

- /exec/configure

mac address-table loop-detect port-down

mac address-table loop-detect port-down | no mac address-table loop-detect port-down

Syntax Description

no	Negate a command or set its defaults
mac	MAC
address-table	MAC Address Table
loop-detect	Action for Mac loop detection
port-down	Take port-down action for mac loop detection

Command Mode

- /exec/configure

mac address-table multicast vlan interface

[no] mac address-table multicast <mac-address> { vlan <vlan> | bridge-domain <bdid> } interface [vsi] <interface>

Syntax Description

no	(Optional) Negate a command or set its defaults
mac	MAC configuration commands
address-table	MAC Address Table
multicast	mcast mac OIF Static Entry
mac-address	mcast MAC Address, not in Unicast IP Range
vlan	VLAN
vlan	VLAN
bridge-domain	BD
bdid	BD
interface	Interface
vsi	(Optional) Specify if this interface is a VSI
interface	Interface name

Command Mode

- /exec/configure

mac address-table notification mac-move

mac address-table notification mac-move | no mac address-table notification mac-move

Syntax Description

no	Negate a command
mac	MAC configuration commands
address-table	MAC Address Table
notification	Notify of mac-move
mac-move	MAC move notification on syslog

Command Mode

- /exec/configure

mac address-table notification threshold

mac address-table notification threshold [limit <percentage> interval <seconds>] | no mac address-table notification threshold

Syntax Description

no	Negate a command
mac	MAC configuration commands
address-table	MAC Address Table
notification	Notify of mac-move
threshold	MAC Address Table threshold notification
limit	(Optional) Specify the percentage limit beyond which notifications are enabled
percentage	(Optional) Percentage of MAC Table Consumption
interval	(Optional) Minimum time in seconds between two notifications
seconds	(Optional) Interval time in seconds

Command Mode

- /exec/configure

mac address-table static vlan interface

mac address-table static <mac-address> vlan <vlan-id> { interface <interface-name> | drop } [auto-learn] [__readonly__ <info_str>] | no mac address-table static <mac-address> vlan <vlan-id>

Syntax Description

no	Negate a command or set its defaults
mac	MAC configuration commands
address-table	MAC Address Table
static	Static Entry
mac-address	MAC Address
vlan	VLAN
vlan-id	VLAN ID
interface	Interface
interface-name	Interface name
drop	Drop all traffic
auto-learn	(Optional) Allow moving this MAC address
__readonly__	(Optional)
info_str	(Optional) Information

Command Mode

- /exec/configure

mac address-table static vni

mac address-table static <mac-address> vni <vni-id>

Syntax Description

mac	MAC configuration commands
address-table	MAC Address Table
static	Static Entry
mac-address	MAC Address
vni	Virtual Network Identifier
vni-id	VNI ID

Command Mode

- /exec/configure

mac address

[no] mac address { <macaddr> }

Syntax Description

no	(Optional) Negate a command or set its defaults
mac	Configure vMAC address options for Pathway
address	Pathway will use a specified vMAC address
macaddr	48-bit MAC address in HEX

Command Mode

- /exec/configure/if-eth-any/vrrs

mac address inherit

mac address inherit

Syntax Description

mac	Configure vMAC address options for Pathway
address	Pathway will use a specified vMAC address
inherit	Pathway will inherit vMAC

Command Mode

- /exec/configure/if-eth-any/vrrs

mac advert interval

[no] mac advert interval | mac advert interval <macint>

Syntax Description

no	Negate a command or set its defaults
mac	Configure vMAC address options for Pathway
advert	Specify vMAC unsolicited advertisements
interval	Specify interval between vMAC unsolicited advertisements
macint	Advertisement Interval in seconds

Command Mode

- /exec/configure/if-eth-any/vrrs

mac packet-classify

[no] mac packet-classify

Syntax Description

no	(Optional) Negate a command or set its defaults
mac	MAC configuration commands
packet-classify	Force mac classification of packets

Command Mode

- /exec/configure/if-ethernet-switch /exec/configure/if-remote-ethernet-switch /exec/configure/if-eth-port-channel-switch /exec/configure/if-ethernet-all

mac port access-group

[no] mac port access-group <name>

Syntax Description

no	(Optional) Negate a command or set its defaults
mac	MAC configuration commands
port	Port policy
access-group	Specify access control for packets
name	List name

Command Mode

- /exec/configure/if-set-acl-l2

macsec keychain

[no] macsec keychain <keychain_name> [policy <policy_name>]

Syntax Description

macsec	Specify MKA keychain and MACsec policy
keychain	key chain
keychain_name	name of the keychain specified as a string
policy	(Optional) policy
policy_name	(Optional) name of the policy specified as a string

Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

macsec policy

[no] macsec policy <policy_name>

Syntax Description

macsec	Configure MACSEC
policy	Configure MACSEC policy
policy_name	Name of Policy

Command Mode

- /exec/configure

management

[no] management

Syntax Description

no	(Optional) Negate a command or set its defaults
management	Allow in-band management access to VLAN Interface IP address

Command Mode

- /exec/configure/if-vlan-common

map-notify-group

{ [no] map-notify-group { <addr> | <addr6> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
map-notify-group	Group address to send and receive site specific Map-Notify messages
addr	IPv4 group address

Command Mode

- /exec/configure/lisp-dynamic-eid /exec/configure/vrf/lisp-dynamic-eid

map-server key

{ { [no] map-server { <ms> | <ms6> } [key-type { sha1 | sha2 }] key <key> } | { [no] map-server { <ms> | <ms6> } proxy-reply } }

Syntax Description

no	(Optional) Negate a command or set its defaults
map-server	To interact with Map-Server
ms	Address of IPv4 map-server
key-type	(Optional) Authentication key type, either sha1 or sha2
sha1	(Optional) Use sha1 authenication in Map-Register messages
sha2	(Optional) Use sha2 authenication in Map-Register messages
key	Authentication key used with Map-Server
key	SHA-1 password key
proxy-reply	Request Map-Server to send Map-Replies on behalf of dynamic-EID

Command Mode

- /exec/configure/lisp-dynamic-eid /exec/configure/vrf/lisp-dynamic-eid

marker-packet

[no] marker-packet [<interval>]

Syntax Description

no	(Optional) Negate a command or set its defaults
marker-packet	Enable/Disable send marker packet
interval	(Optional) range between <100-1000> ms default 100 ms

Command Mode

- /exec/configure/config-monitor-erspan-src

master ipv4

[no] master ipv4 <ip>

Syntax Description

no	(Optional) Negate a command or set its defaults
master	master
ipv4	ipv4
ip	IPv4 address (A.B.C.D) of slave

Command Mode

- /exec/configure/ptp-ucast-slave

match-address

[no] match-address

Syntax Description

no	(Optional) Negate a command or set its defaults
match-address	Match addresses in advertisement packets

Command Mode

- /exec/configure/if-eth-any/vrrpv3

match

[no] match { { access-group name <acl-name> } | [not] { { cos <cos-value> } | any | { eth-src <mac_src> <mac_src_wild> } | { eth-dest <mac_dest> <mac_dest_wild> } | { eth-type <eth-value> } | { vlan <vlan-number> } | { ip-tos <tos-value> <tos-mask> } | { ip-protocol <ip-protocol-value> } | { ip-src-addr <ip-s-addr> <ip-s-mask> } | { ip-dst-addr <ip-d-addr> <ip-d-mask> } | { tcp-src-port <tcp-src-port-addr> } | { tcp-dst-port <tcp-dest-port-addr> } | { udp-src-port <udp-src-port-addr> } | { udp-dst-port <udp-dest-port-addr> } | { input-interface <ifnum> } | { ipv6-src-addr <ipv6-s-addr> <ipv6-s-mask> } | { ipv6-dst-addr <ipv6-d-addr> <ipv6-d-mask> } | { ipv6-protocol <ipv6-protocol-value> } | { ipv6-flowlabel <ipv6-flowlabel-value> } | { icmpv6-type <icmpv6-type-value> } | { icmpv6-code <icmpv6-code-value> } | { ipv4-dscp <ipv4-dscp-list> } | { ipv6-dscp <ipv6-dscp-list> } | { dscp { <dscp-list> | <dscp-enum> } + } | { precedence { <precedence-list> | <prec-enum> } + } | { discard-class <discard-class-list> } | { qos-group <qos-group-list> } | { class-map <cmap-name-plc> } | { protocol <protocol-enum> } | { packet length <len-list> } | { ip rtp <port-list> } | { mpls experimental topmost <exp-list> } } }

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Classification criteria
not	(Optional) Negate this match result
access-group	Access group
name	Named Access List
acl-name	Access List name
cos	IEEE 802.1Q class of service
dscp	DSCP in IP(v4) and IPv6 packets
dscp-list	List of DSCP values
dscp-enum	
precedence	Precedence in IP(v4) and IPv6 packets
precedence-list	List of precedence values
prec-enum	
discard-class	Discard class
discard-class-list	List of discard-class values
qos-group	Qos-group
qos-group-list	List of qos-group values
class-map	Class map
cmap-name-plc	Match class-map name

protocol	Protocol
protocol-enum	
packet	Packet
length	Length of IP datagram
len-list	list of IP packet length
ip	IP
rtp	Real Time Protocol
port-list	UDP port list that are using RTP
mpls	Match on MPLS label
experimental	Match on MPLS Experimental label
topmost	Match on topmost MPLS label
exp-list	List of MPLS exp values
any	Match on Any Filter
eth-dest	Match on Layer 2 destination MAC address
eth-src	Match on Layer 2 source MAC address
eth-type	Match on Ether type
vlan	Match on 802.1Q vlan
ip-tos	Match on IPv4 TOS
ip-protocol	Match on IP protocol
ip-src-addr	Match on IPv4 source address
ip-dst-addr	Match on IPv4 destination address
ipv6-src-addr	Match on IPv6 source address
ipv6-dst-addr	Match on IPv6 destination address
tcp-src-port	Match on TCP source port
tcp-dst-port	Match on TCP source port
udp-src-port	Match on UDP source port
udp-dst-port	Match on UDP source port
input-interface	Match on physical input interface
ipv6-protocol	Match on IPv6 Protocol Value

ipv6-flowlabel	Match on IPv6 Flowlabel
icmpv6-type	Match on ICMPv6 Message Type
icmpv6-code	Match on ICMPv6 Message Code
ipv4-dscp	Match on DSCP for IPV4 Packets
ipv6-dscp	Match on DSCP for IPV6 Packets
cos-value	class of service Value
mac_src	Source MAC address
mac_src_wild	Source MAC mask
mac_dest	Destination MAC address
mac_dest_wild	Destination MAC mask
eth-value	Ethernet type
vlan-number	Vlan number
tos-value	IPv4 TOS
tos-mask	IPV4 TOS Mask for DSCP
ip-protocol-value	IPV4 protocol
ip-s-addr	IPV4 address in format a.b.c.d
ip-d-addr	IPV4 address in format a.b.c.d
ip-s-mask	IPV4 address Mask in format a.b.c.d
ip-d-mask	IPV4 address Mask in format a.b.c.d
tcp-src-port-addr	Transport layer port number
tcp-dest-port-addr	Transport layer port number
udp-src-port-addr	Transport layer port number
udp-dest-port-addr	Transport layer port number
ifnum	Physical interface Name and Number
ipv6-protocol-value	IPv6 Protocol Value
ipv6-flowlabel-value	IPv6 Flowlabel
icmpv6-type-value	ICMPv6 Message Type
icmpv6-code-value	ICMPv6 Message Code
ipv4-dscp-list	List of IPV4 DSCP values

ipv6-dscp-list	List of IPV6 DSCP values

Command Mode

- /exec/configure/class-map/type/plc

match

[no] match { { access-group name <acl-name> } | [not] { dscp { <dscp-list> | { <dscp-enum> } + } | { { packet length <len-list> | ip rtp <port-list> } [replace] } | { cos <cos-list> } | { qos-group <qos-group-list> } | { precedence { <precedence-list> | { <prec-enum> } + } } | { protocol <protocol-enum> | { mpls experimental topmost <exp-list> } } } }

Syntax Description

dscp-list	<dscp-enum>
cos-list	
precedence-list	<prec-enum>
no	(Optional) Negate a command or set its defaults
replace	(Optional) Replace current ip rtp / packet length configuration
match	Classification criteria
not	(Optional) Negate this match result
access-group	Access group
name	Named Access List
acl-name	Access List name
dscp	DSCP in IP(v4) and IPv6 packets
dscp-enum	
cos	IEEE 802.1Q Class of Service
qos-group	Qos-group
qos-group-list	List of qos-group values
precedence	Precedence in IP(v4) and IPv6 packets
prec-enum	
protocol	Protocol
protocol-enum	
packet	Packet
length	Length of IP datagram
len-list	List of IP packet length
ip	IP

rtp	Real Time Protocol
port-list	UDP port list that are using RTP
mpls	Match on MPLS label
experimental	Match on MPLS Experimental label
topmost	Match on topmost MPLS label
exp-list	List of MPLS exp values

Command Mode

- /exec/configure/class-map

match

[no] match { [not] { { discard-class <discard-class-list> } | { class-map <cmap-name> } } }

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Classification criteria
not	(Optional) Negate this match result
discard-class	Discard class
discard-class-list	List of discard-class values
class-map	Class map
cmap-name	Match class-map name

Command Mode

- /exec/configure/class-map

match access-group name

[no] match access-group name <acs-grp-name>

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Classification criteria
access-group	Match with given access group
name	Name of the access group
acs-grp-name	Match parameter for class-map

Command Mode

- /exec/configure/cmap

match address

[no] match <ip_ipv6_mac> address <name>

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Specify the match clause
ip_ipv6_mac	IP/IPv6/MAC
address	Match an access list
name	List name

Command Mode

- /exec/configure/vacl

match as-number

[no] match as-number [{ <asnum> | <asnum_range> } +] { <asnum_trail> | <asnum_range_trail> }

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Match values from routing table
as-number	Match BGP peer AS number
asnum	(Optional) <AA4>,
asnum_range	(Optional) <AA4>-<AA4>,
asnum_trail	<AA4>,
asnum_range_trail	<AA4>-<AA4>,

Command Mode

- /exec/configure/route-map

match as-number as-path-list

match as-number as-path-list <aspl-name> + | no match as-number as-path-list { <aspl-name> | <aspl-name> } +

Syntax Description

no	Negate a command or set its defaults
match	Match values from routing table
as-number	Match BGP peer AS number
as-path-list	AS-path access-list
aspl-name	AS path access list name
aspl-name	AS path access list name
aspl-name	Known as-path access-list name

Command Mode

- /exec/configure/route-map

match as-path

match as-path <aspl-name> + | no match as-path { <aspl-name> | <aspl-name> } +

Syntax Description

no	Negate a command or set its defaults
match	Match values from routing table
as-path	Match BGP AS path list
aspl-name	AS path access list name
aspl-name	AS path access list name
aspl-name	Known as-path access-list name

Command Mode

- /exec/configure/route-map

match class-map

[no] match class-map <cmap-name>

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Classification criteria
class-map	Class map
cmap-name	class map name

Command Mode

- /exec/configure/class-map/type/queuing

match community

[no] match community <name> + [exact-match]

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Match values from routing table
community	Match BGP community list
name	Community list name
exact-match	(Optional) Do exact matching of communities

Command Mode

- /exec/configure/route-map

match cos

[no] match cos <cos-list>

Syntax Description

cos-list	
no	(Optional) Negate a command or set its defaults
match	Classification criteria
cos	IEEE 802.1Q Class of Service

Command Mode

- /exec/configure/class-map/type/queuing

match cos

[no] match cos <cos-list>

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Classification criteria
cos	IEEE 802.1Q class of service
cos-list	List of class-of-service values

Command Mode

- /exec/configure/class-map/type/uf

match datalink

[no] match datalink { mac source-address | mac destination-address | ethertype | vlan }

Syntax Description

match	Specify a key field
datalink	datalink (Layer 2) attributes
mac	MAC Address
source-address	Source MAC Address
destination-address	Destination MAC Address
ethertype	Ethertype
vlan	VLAN ID

Command Mode

- /exec/configure/nfm-record

match dscp

[no] match dscp { <dscp-list> } +

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Classification criteria
dscp	DSCP in IP(v4) packets
dscp-list	List of DSCP values

Command Mode

- /exec/configure/class-map/type/queuing

match dscp

[no] match dscp { <dscp-list> | <dscp-enum> } +

Syntax Description

dscp-list	<dscp-enum>
no	(Optional) Negate a command or set its defaults
match	Classification criteria
dscp	DSCP in IP(v4) and IPv6 packets
dscp-enum	

Command Mode

- /exec/configure/color-cmap

match exception

[no] match exception { { { ip | ipv6 } { option | { icmp { redirect | unreachable } } | municast } } | ttl-failure | glean | mtu-failure | nat-flow | sflow | { multicast { rpf-failure | sg-rpf-failure | dest-miss | ipv6-rpf-failure | ipv6-sg-rpf-failure | ipv6-dest-miss } } } }

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Classification criteria
exception	Match exception packets
ip	ipv4 match criteria
ipv6	ipv6 match criteria
option	Match ip/ipv6 option exception packets
icmp	Icmp redirect packets
redirect	Send redirected packets back to sender
unreachable	Send unreachable packets back to sender
municast	IP unicast packets with multicast MAC
ttl-failure	Failed in ttl
mtu-failure	mtu-failure
glean	Glean packets
multicast	multicast packets
rpf-failure	multicast rpf check failure
sg-rpf-failure	multicast sg rpf check failure
dest-miss	L3 multicast destination lookup failure
ipv6-rpf-failure	IPv6 multicast rpf check failure
ipv6-sg-rpf-failure	IPv6 multicast sg rpf check failure
ipv6-dest-miss	IPv6 L3 multicast destination lookup failure
nat-flow	ipv4 software nat flow packets
sflow	sflow packets

Command Mode

• /exec/configure/cmap

match extcommunity

[no] match extcommunity <name> + [exact-match]

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Match values from routing table
extcommunity	Match BGP community list
name	Extended Community list name
exact-match	(Optional) Do exact matching of extended communities

Command Mode

- /exec/configure/route-map

match interface

[no] match interface <name> +

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Match values from routing table
interface	Match first hop interface of route
name	Interface name

Command Mode

- /exec/configure/route-map

match ip address

[no] match ip address <name> +

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Match values from routing table
ip	Configure IP features
address	Match address of route or match packet
name	IP access-list name (for use in route-maps for PBR only)

Command Mode

- /exec/configure/route-map

match ip address prefix-list

match ip address prefix-list <ipv4-pfl-name> + | no match ip address prefix-list { <ipv4-pfl-name> | <ipv4-pfl-name> } +

Syntax Description

no	Negate a command or set its defaults
match	Match values from routing table
ip	Configure IP features
address	Match address of route or match packet
prefix-list	Match entries of prefix-lists
ipv4-pfl-name	Name of prefix-list
ipv4-pfl-name	Name of prefix-list
ipv4-pfl-name	Known prefix-list name

Command Mode

- /exec/configure/route-map

match ip multicast rp

{ match ip multicast { { rp <iprp> [rp-type <iprptype>] } | { group <gprefix> } | { source <ipsrc> } } + } |
{ match ip multicast { { rp <iprp> [rp-type <iprptype>] } | { group-range <gaddr_start> to <gaddr_end> }
| { source <ipsrc> } } + } | { no match ip multicast }

Syntax Description

no	Negate a command or set its defaults
match	Match values from routing table
ip	Configure IP features
multicast	Match multicast attributes
rp	Rendezvous point
iprp	IPv4 rendezvous prefix
rp-type	(Optional) Multicast rendezvous point type
iprptype	(Optional) IPv4 rendezvous point type
group	Multicast Group prefix
gprefix	IPv4 group prefix
group-range	Multicast Group address range
gaddr_start	First Group address
to	Range
gaddr_end	Last Group address
source	Multicast source address
ipsrc	IPv4 source prefix

Command Mode

- /exec/configure/route-map

match ip next-hop prefix-list

match ip next-hop prefix-list <ipv4-pfl-name> + | no match ip next-hop prefix-list { <ipv4-pfl-name> | <ipv4-pfl-name> } +

Syntax Description

no	Negate a command or set its defaults
match	Match values from routing table
ip	Configure IP features
next-hop	Match next-hop address of route
prefix-list	Match entries of prefix-lists
ipv4-pfl-name	Name of prefix-list
ipv4-pfl-name	Name of prefix-list
ipv4-pfl-name	Known prefix-list name

Command Mode

- /exec/configure/route-map

match ip protocol

[no] match ip { protocol | tos }

Syntax Description

match	Specify a key field
ip	IP attributes
protocol	Protocol
tos	TOS

Command Mode

- /exec/configure/nfm-record

match ip route-source prefix-list

match ip route-source prefix-list <ipv4-pfl-name> + | no match ip route-source prefix-list { <ipv4-pfl-name> | <ipv4-pfl-name> } +

Syntax Description

no	Negate a command or set its defaults
match	Match values from routing table
ip	Configure IP features
route-source	Match advertising source address of route
prefix-list	Match entries of prefix-lists
ipv4-pfl-name	Name of prefix-list
ipv4-pfl-name	Name of prefix-list
ipv4-pfl-name	Known prefix-list name

Command Mode

- /exec/configure/route-map

match ipv4 source address

[no] match ipv4 { source | destination } address

Syntax Description

match	Specify a key field
ipv4	IPv4 attributes
source	Source Address
destination	Destination Address
address	Address

Command Mode

- /exec/configure/nfm-record

match ipv6

[no] match ipv6 { { { source | destination } address } | { flow-label | options } }

Syntax Description

match	Specify a key field
ipv6	IPv6 attributes
source	Source Address
destination	Destination Address
address	Address
flow-label	Flow label
options	Options

Command Mode

- /exec/configure/nfm-record

match ipv6 address

[no] match ipv6 address <name>

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Match values from routing table
ipv6	Configure IPv6 features
address	Match address of route or match packet
name	IPv6 access-list name (for use in route-maps for PBR only)

Command Mode

- /exec/configure/route-map

match ipv6 address prefix-list

match ipv6 address prefix-list <ipv6-pfl-name> + | no match ipv6 address prefix-list { <ipv6-pfl-name> | <ipv6-pfl-name> } +

Syntax Description

no	Negate a command or set its defaults
match	Match values from routing table
ipv6	Configure IPv6 features
address	Match address of route or match packet
prefix-list	Match entries of prefix-lists
ipv6-pfl-name	Name of prefix-list
ipv6-pfl-name	Name of prefix-list
ipv6-pfl-name	Known prefix-list name

Command Mode

- /exec/configure/route-map

match ipv6 multicast rp

{ match ipv6 multicast { { rp <ipv6rp> [rp-type <ipv6rptype>] } | { group <gprefix> } | { source <ipv6src> } } + } | { match ipv6 multicast { { rp <ipv6rp> [rp-type <ipv6rptype>] } | { group-range <gaddr_start> to <gaddr_end> } | { source <ipv6src> } } + } | { no match ipv6 multicast }

Syntax Description

no	Negate a command or set its defaults
match	Match values from routing table
ipv6	Configure IPv6 features
multicast	Match multicast attributes
rp	Rendezvous point
rp-type	(Optional) Multicast rendezvous point type
ipv6rptype	(Optional) IPv6 rendezvous point type
group	Multicast group address
group-range	Multicast Group address range
to	Range
source	Multicast source address

Command Mode

- /exec/configure/route-map

match ipv6 next-hop prefix-list

match ipv6 next-hop prefix-list <ipv6-pfl-name> + | no match ipv6 next-hop prefix-list { <ipv6-pfl-name> | <ipv6-pfl-name> } +

Syntax Description

no	Negate a command or set its defaults
match	Match values from routing table
ipv6	Configure IPv6 features
next-hop	Match next-hop address of route
prefix-list	Match entries of prefix-lists
ipv6-pfl-name	Name of prefix-list
ipv6-pfl-name	Name of prefix-list
ipv6-pfl-name	Known prefix-list name

Command Mode

- /exec/configure/route-map

match ipv6 route-source prefix-list

match ipv6 route-source prefix-list <ipv6-pfl-name> + | no match ipv6 route-source prefix-list { <ipv6-pfl-name> | <ipv6-pfl-name> } +

Syntax Description

no	Negate a command or set its defaults
match	Match values from routing table
ipv6	Configure IPv6 features
route-source	Match advertising source address of route
prefix-list	Match entries of prefix-lists
ipv6-pfl-name	Name of prefix-list
ipv6-pfl-name	Name of prefix-list
ipv6-pfl-name	Known prefix-list name

Command Mode

- /exec/configure/route-map

match metric

[no] match metric { <measure> [<plus-minus> <deviation>] } +

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Match values from routing table
metric	Match metric of route
plus-minus	(Optional) +-
measure	Metric value
deviation	(Optional) Deviation value

Command Mode

- /exec/configure/route-map

match ospf-area

[no] match ospf-area <area> +

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Match values from routing table
ospf-area	Match ospf area
area	area id

Command Mode

• /exec/configure/route-map

match protocol

[no] match protocol { fcoe | iscsi | tcp }

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Classification criteria
protocol	Protocol
fcoe	FCoE
iscsi	ISCSI
tcp	TCP

Command Mode

- /exec/configure/class-map/type/uf

match protocol arp

[no] match protocol { arp | mpls [router-alert | exp <exp_value>] }

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Classification criteria
protocol	Protocol
arp	IP ARP
mpls	Multi-protocol Label Switching
router-alert	(Optional) Match packets with router-alert label set to 1 for OTV Overlay frames
exp	(Optional) Match packets on MPLS exp bits
exp_value	(Optional) Exp bits value

Command Mode

- /exec/configure/cmap

match qos-group

[no] match qos-group <qos-group-list>

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Classification criteria
qos-group	QoS Group
qos-group-list	List of qos-group values

Command Mode

- /exec/configure/class-map/type/uf

match qos-group2

[no] match qos-group2 <qos-group-list>

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Classification criteria
qos-group2	QoS Group
qos-group-list	Qos-group value

Command Mode

- /exec/configure/class-map/type/uf

match qos-group2

[no] match qos-group2 { <qos-group-list> }

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Classification criteria
qos-group2	QoS Group
qos-group-list	List of qos-group values

Command Mode

- /exec/configure/class-map/type/queuing

match qos-group

[no] match qos-group { <qos-group-list> } +

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Classification criteria
qos-group	QoS Group
qos-group-list	List of qos-group values

Command Mode

- /exec/configure/class-map/type/queuing

match redirect

[no] match redirect <opt_match_redirect>

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Classification criteria
redirect	Match redirected packets
opt_match_redirect	Match criteria for redirected packets

Command Mode

- /exec/configure/cmap

match route-type

[no] match route-type { external | internal | level-1 | level-2 | local | nssa-external | type-1 | type-2 | inter-area | intra-area } +

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Match values from routing table
route-type	Match route-type of route
external	external route (BGP, EIGRP and OSPF type 1/2)
internal	internal route (including OSPF intra/inter area)
level-1	IS-IS level-1 route
level-2	IS-IS level-2 route
local	locally generated route
nssa-external	nssa-external route (OSPF type 1/2)
type-1	OSPF external type 1 route
type-2	OSPF external type 2 route
inter-area	OSPF inter area route
intra-area	OSPF intra area route

Command Mode

- /exec/configure/route-map

match source-protocol

[no] match source-protocol <src_prot> +

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Match values from routing table
source-protocol	Match source protocol
src_prot	Protocol instance name

Command Mode

- /exec/configure/route-map

match tag

[no] match tag <tagid> +

Syntax Description

no	(Optional) Negate a command or set its defaults
match	Match values from routing table
tag	Match tag of route
tagid	Tag value

Command Mode

- /exec/configure/route-map

match transport destination

[no] match transport { destination-port | source-port }

Syntax Description

match	Specify a key field
transport	Transport layer fields
destination-port	Transport destination port
source-port	Transport source port

Command Mode

- /exec/configure/nfm-record

max-lsa

[no] max-lsa <maximum-number> [<threshold>] [warning-only | [ignore-time <ignore-time-minutes>] [ignore-count <ignore-count-number>] [reset-time <reset-time-minutes>]]

Syntax Description

no	(Optional) Negate a command or set its defaults
max-lsa	Feature to limit the number of non-self-originated LSAs
maximum-number	Set maximum number of non self-generated LSAs
threshold	(Optional) Threshold value (%) at which to generate a warning message
warning-only	(Optional) Log a warning message when limit is exceeded
ignore-time	(Optional) Set time during which all adjacencies are suppressed
ignore-time-minutes	(Optional) ignore-time in minutes
ignore-count	(Optional) Set count on how many times adjacencies can be suppressed
ignore-count-number	(Optional) ignore-count
reset-time	(Optional) Set number of minutes after which ignore-count is reset to zero
reset-time-minutes	(Optional) reset-time in minutes

Command Mode

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

max-lsa

[no] max-lsa <maximum-number> [<threshold>] [warning-only | [ignore-time <ignore-time-minutes>] [ignore-count <ignore-count-number>] [reset-time <reset-time-minutes>]]

Syntax Description

no	(Optional) Negate a command or set its defaults
max-lsa	Feature to limit the number of non-self-originated LSAs
maximum-number	Set maximum number of non self-generated LSAs
threshold	(Optional) Threshold value (%) at which to generate a warning message
warning-only	(Optional) Log a warning message when limit is exceeded
ignore-time	(Optional) Set time during which all adjacencies are suppressed
ignore-time-minutes	(Optional) ignore-time in minutes
ignore-count	(Optional) Set count on how many times adjacencies can be suppressed
ignore-count-number	(Optional) ignore-count
reset-time	(Optional) Set number of minutes after which ignore-count is reset to zero
reset-time-minutes	(Optional) reset-time in minutes

Command Mode

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

max-lsp-lifetime

max-lsp-lifetime <lifetime> | no max-lsp-lifetime [<lifetime>]

Syntax Description

no	Negate a command or set its defaults
max-lsp-lifetime	Set maximum LSP lifetime
lifetime	Maximum LSP lifetime in seconds

Command Mode

- /exec/configure/otv-isis/otv-isis-vrf-common

max-lsp-lifetime

max-lsp-lifetime <lifetime> | no max-lsp-lifetime [<lifetime>]

Syntax Description

no	Negate a command or set its defaults
max-lsp-lifetime	Set maximum LSP lifetime
lifetime	Maximum LSP lifetime in seconds

Command Mode

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

max-lsp-lifetime

max-lsp-lifetime <lifetime> | no max-lsp-lifetime [<lifetime>]

Syntax Description

no	Negate a command or set its defaults
max-lsp-lifetime	Set maximum LSP lifetime
lifetime	Maximum LSP lifetime in seconds

Command Mode

- /exec/configure/l2mp-isis/l2mp-isis-vrf-common

max-metric router-lsa

[no] max-metric router-lsa [external-lsa [<max-metric-extlsa>]] [include-stub] [on-startup [<timeout>] [wait-for bgp <as>]] [summary-lsa [<max-metric-sumlsa>]]

Syntax Description

no	(Optional) Negate a command or set its defaults
max-metric	Maximize the cost metric
router-lsa	Router LSA
external-lsa	(Optional) External LSAs
max-metric-extlsa	(Optional) Max metric value for external LSAs
include-stub	(Optional) Advertise Max metric for Stub links as well
on-startup	(Optional) Effective only at startup
timeout	(Optional) Wait period in seconds after startup
wait-for	(Optional) Wait for an event to advertise normal metric
bgp	(Optional) BGP Convergence
as	(Optional) ASN of BGP to wait for
summary-lsa	(Optional) Summary LSAs
max-metric-sumlsa	(Optional) Max metric value for summary LSAs

Command Mode

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

max-metric router-lsa

[no] max-metric router-lsa [external-lsa [<max-metric-extlsa>]] [stub-prefix-lsa] [on-startup [<timeout>] [wait-for bgp <as>]] [inter-area-prefix-lsa [<max-metric-sumlsa>]]

Syntax Description

no	(Optional) Negate a command or set its defaults
max-metric	Maximize the cost metric
router-lsa	Router LSA
external-lsa	(Optional) External LSAs
max-metric-extlsa	(Optional) Max metric value for external LSAs
stub-prefix-lsa	(Optional) Advertise Max metric for Stub links as well
on-startup	(Optional) Effective only at startup
timeout	(Optional) Wait period in seconds after startup
wait-for	(Optional) Wait for an event to advertise normal metric
bgp	(Optional) BGP Convergence
as	(Optional) ASN of BGP to wait for
inter-area-prefix-lsa	(Optional) Inter-area-prefix LSAs
max-metric-sumlsa	(Optional) Max metric value for summary LSAs

Command Mode

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

max-ports

[no] [vmware] max-ports

Syntax Description

no	Negate a command or set its defaults
vmware	(Optional) VMware configuration
max-ports	Max ports on which this profile can be inherited

Command Mode

- /exec/configure/port-profile

max-ports

[vmware] max-ports <i0>

Syntax Description

vmware	(Optional) VMware configuration
max-ports	Max ports on which this profile can be inherited
i0	Enter the max-number of ports

Command Mode

- /exec/configure/port-profile

maxas-limit

maxas-limit <as-limit> | no maxas-limit [<as-limit>]

Syntax Description

no	Negate a command or set its defaults
maxas-limit	Allow AS-PATH attribute from EBGP neighbor imposing a limit on number of ASes
as-limit	Number of ASes in the AS-PATH attribute

Command Mode

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

maximum-paths

maximum-paths <max-paths> | no maximum-paths [<max-paths>]

Syntax Description

no	Negate a command or set its defaults
maximum-paths	Maximum paths per destination
max-paths	Maximum paths per destination

Command Mode

- /exec/configure/router-ospf

maximum-paths

maximum-paths <max-paths> | no maximum-paths [<max-paths>]

Syntax Description

no	Negate a command or set its defaults
maximum-paths	RIP set maximum paths per route
max-paths	Maximum paths per prefix

Command Mode

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

maximum-paths

maximum-paths <max-paths> | no maximum-paths [<max-paths>]

Syntax Description

no	Negate a command or set its defaults
maximum-paths	Set maximum paths per destination
max-paths	Maximum paths per destination

Command Mode

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

maximum-paths

maximum-paths <max-paths> | no maximum-paths [<max-paths>]

Syntax Description

no	Negate a command or set its defaults
maximum-paths	Maximum paths per destination
max-paths	Maximum paths per destination

Command Mode

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

maximum-paths

{ { maximum-paths <num-paths> } | { no maximum-paths [<num-paths>] } }

Syntax Description

no	Negate a command or set its defaults
maximum-paths	Forward packets over multiple paths
num-paths	Number of paths

Command Mode

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

maximum-paths

maximum-paths [ibgp] <mpath-count> | no maximum-paths [ibgp] [<mpath-count>]

Syntax Description

no	Negate a command or set its defaults
maximum-paths	Forward packets over multipath paths
ibgp	(Optional) Configure multipath for IBGP paths
mpath-count	Number of parallel paths

Command Mode

- /exec/configure/router-bgp/router-bgp-af /exec/configure/router-bgp/router-bgp-af-l2vpn-evpn

maximum-paths

maximum-paths <max-paths> | no maximum-paths [<max-paths>]

Syntax Description

no	Negate a command or set its defaults
maximum-paths	Set maximum paths per destination
max-paths	Maximum paths per destination

Command Mode

- /exec/configure/l2mp-isis/l2mp-isis-vrf-common /exec/configure/l2mp-isis/l2mp-isis-l2-topo

maximum-paths eibgp

maximum-paths eibgp <mpath-count> | no maximum-paths eibgp [<mpath-count>]

Syntax Description

no	Negate a command or set its defaults
maximum-paths	Forward packets over multipath paths
eibgp	Configure multipath for both EBGP and IBGP paths
mpath-count	Number of parallel paths

Command Mode

- /exec/configure/router-bgp/router-bgp-vrf-af-ipv4 /exec/configure/router-bgp/router-bgp-vrf-af-ipv6 /exec/configure/router-bgp/router-bgp-af-vpnv4 /exec/configure/router-bgp/router-bgp-af-vpnv6

maximum-peers

{ maximum-peers <limit> | no maximum-peers [<limit>] }

Syntax Description

no	Negate a command or set its defaults
maximum-peers	Maximum number of peers for this prefix
limit	Max. peers limit

Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-prefix

maximum-prefix

maximum-prefix <limit> [<percent>] [restart <restart-time> | warning-only] | { no | default } maximum-prefix [<limit> [<percent>] [restart <restart-time> | warning-only]]

Syntax Description

no	Negate a command or set its defaults
default	Inherit values from a peer template
maximum-prefix	Maximum number of prefixes from this neighbor
limit	Max. prefix limit
percent	(Optional) Threshold percentage at which to generate a warning
restart	(Optional) Restart bgp connection after limit is exceeded
restart-time	(Optional) Restart interval in minutes
warning-only	(Optional) Only give a warning message when limit is exceeded

Command Mode

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

maximum-prefix

{ { maximum-prefix <value> [<threshold>] [warning-only] [restart <time1>] [restart-count <count>] [reset-time <time2>] [dampened] } | { no maximum-prefix [<value> [<threshold>] [warning-only] [restart <time1>] [restart-count <count>] [reset-time <time2>] [dampened]] } }

Syntax Description

no	Negate a command or set its defaults
maximum-prefix	Maximum number of IP prefixes acceptable in aggregate
value	Number of IP prefixes for maximum-prefix limit
threshold	(Optional) Threshold value (%) at which to generate a warning message
warning-only	(Optional) Only give warning message when limit is exceeded
restart	(Optional) Duration for which a prefix source is ignored
time1	(Optional) Restart interval in minutes
restart-count	(Optional) Number of times sessions are auto-restarted
count	(Optional) Number of times
reset-time	(Optional) Duration after which restart history is cleared
time2	(Optional) Reset time in minutes
dampened	(Optional) Exponentially increase restart time interval

Command Mode

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

maximum-prefix

maximum-prefix <limit> [<percent>] [restart <restart-time> | warning-only] | { no | default } maximum-prefix [<limit> [<percent>] [restart <restart-time> | warning-only]]

Syntax Description

no	Negate a command or set its defaults
default	Inherit values from a peer template
maximum-prefix	Maximum number of prefixes from this neighbor
limit	Max. prefix limit
percent	(Optional) Threshold percentage at which to generate a warning
restart	(Optional) Restart bgp connection after limit is exceeded
restart-time	(Optional) Restart interval in minutes
warning-only	(Optional) Only give a warning message when limit is exceeded

Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af
  /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-evpn
  /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4
  /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6
  /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mvpn
  /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-mvpn
  /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-link-state
  /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-label
  /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-label

maximum routes

[no] maximum routes <limit> [{ <warnlevel> [reinstall <threshold>] } | warning-only]

Syntax Description

no	(Optional) Negate a command or set its defaults
maximum	Set a limit
routes	Maximum number of routes allowed in this routing table
limit	Maximum number of routes allowed
warnlevel	(Optional) Threshold value (%) at which to generate a warning msg
reinstall	(Optional) Reinstall previous rejected route due to over maximum route limit
threshold	(Optional) Threshold value (%) at which to reinstall routes back to VRF
warning-only	(Optional) Only give a warning message if limit is exceeded

Command Mode

- /exec/configure/vrf-af-ipv4 /exec/configure/vrf-af-ipv6

mcast-group

mcast-group <maddr1> [<maddr2>] | no mcast-group

Syntax Description

no	Negate a command or set its defaults
mcast-group	NVE Multicast Group
maddr1	Multicast IP Prefix
maddr2	(Optional) Multicast IP Prefix

Command Mode

- /exec/configure/if-nve/vni

mcectest source

[no] mcectest source { <intf> | <ip-addr> }

Syntax Description

no	(Optional) Negate a command or set its defaults
mcectest	mcectest configuration commands
source	source of oob packets
intf	interface
ip-addr	IPv4 address (A.B.C.D)

Command Mode

- /exec/configure

mdix auto

{ mdix auto | no mdix [auto] }

Syntax Description

no	Negate a command or set its defaults
mdix	Enable auto mdix mode
auto	Enable auto mdix mode

Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base

mdt asm-use-shared-tree

[no] mdt asm-use-shared-tree

Syntax Description

no	(Optional) Negate a command or set its defaults
mdt	Backbone Multicast Distribution Tree
asm-use-shared-tree	Use (*,G) only state, no remote source state is created

Command Mode

- /exec/configure/vrf

mdt data

[no] mdt data <prefix> [threshold <value> | immediate-switch] [route-map <policy-name>]

Syntax Description

no	(Optional) Negate a command or set its defaults
mdt	Backbone Multicast Distribution Tree
data	Configure settings for Data MDT
prefix	List of group range prefixes
threshold	(Optional) Data MDT switching threshold
immediate-switch	(Optional) Move to data mdt immediately if remote receiver exists
value	(Optional) Threshold in kilobits per sec
route-map	(Optional) Specify policy for creating Data MDTs
policy-name	(Optional) A route-map name

Command Mode

- /exec/configure/vrf

mdt data bidir-enable

[no] mdt data bidir-enable

Syntax Description

no	(Optional) Negate a command or set its defaults
mdt	Backbone Multicast Distribution Tree
data	Configure settings for Data MDT
bidir-enable	Allow creation of data mdts for bidir customers

Command Mode

- /exec/configure/vrf

mdt data inhibit-reuse

[no] mdt data inhibit-reuse

Syntax Description

no	(Optional) Negate a command or set its defaults
mdt	Backbone Multicast Distribution Tree
data	Configure settings for Data MDT
inhibit-reuse	No reusing data mdts in the backbone network

Command Mode

- /exec/configure/vrf

mdt default

mdt default <mdt-default> | no mdt default [<mdt-default>]

Syntax Description

no	Negate a command or set its defaults
mdt	Backbone Multicast Distribution Tree
default	The default group
mdt-default	IP multicast group address

Command Mode

- /exec/configure/vrf

mdt enforce-bgp-mdt-safi

[no] mdt enforce-bgp-mdt-safi

Syntax Description

no	(Optional) Negate a command or set its defaults
mdt	Backbone Multicast Distribution Tree
enforce-bgp-mdt-safi	Depend on BGP MDT SAFI for auto-discovery

Command Mode

- /exec/configure/vrf

mdt mtu

[no] mdt mtu <mtu-value>

Syntax Description

no	(Optional) Negate a command or set its defaults
mdt	Backbone Multicast Distribution Tree
mtu	The MTU
mtu-value	MTU value

Command Mode

- /exec/configure/vrf

mdt pim hello-interval

[no] mdt pim hello-interval <interval>

Syntax Description

no	(Optional) Negate a command or set its defaults
mdt	Backbone Multicast Distribution Tree
pim	PIM protocol related parameters
hello-interval	Hello interval used between peers
interval	Interval in milliseconds

Command Mode

- /exec/configure/vrf

mdt pim jp-interval

[no] mdt pim jp-interval <interval>

Syntax Description

no	(Optional) Negate a command or set its defaults
mdt	Backbone Multicast Distribution Tree
pim	PIM protocol related parameters
jp-interval	Join-Prune interval used between peers
interval	Interval in seconds

Command Mode

- /exec/configure/vrf

mdt source

[no] mdt source <interface>

Syntax Description

no	(Optional) Negate a command or set its defaults
mdt	Backbone Multicast Distribution Tree
source	Source interface to be used in the backbone network
interface	Use IP address of this interface

Command Mode

- /exec/configure/vrf

media-type auto

media-type auto

Syntax Description

media-type	Select the media-type link
auto	Select mgmt port as auto

Command Mode

- /exec/configure/if-mgmt-ether

media-type rj45

media-type rj45

Syntax Description

media-type	Select the media-type link
rj45	Select mgmt port rj45

Command Mode

- /exec/configure/if-mgmt-ether

media-type sfp

media-type sfp

Syntax Description

media-type	Select the media-type link
sfp	Select mgmt port sfp

Command Mode

- /exec/configure/if-mgmt-ether

media

media <vlanshowinfo-media-type> | no media

Syntax Description

no	Negate a command or set its defaults
media	Media type of the VLAN
vlanshowinfo-media-type	Select media type

Command Mode

- /exec/configure/vlan

medium

medium <medium-type> | no medium <medium-type>

Syntax Description

no	Negate a command or set its defaults
medium	Configure Interface medium mode
medium-type	

Command Mode

- /exec/configure/if-vlan-common

medium broadcast

{ medium broadcast | no medium broadcast }

Syntax Description

no	Negate a command or set its defaults
medium	Configure Interface medium mode
broadcast	Broadcast medium

Command Mode

- /exec/configure/ppm-ethernet-switch /exec/configure/if-ether-sub /exec/configure/if-ether-sub-p2p

medium broadcast

{ medium broadcast | no medium broadcast }

Syntax Description

no	Negate a command or set its defaults
medium	Configure Interface medium mode
broadcast	Broadcast medium

Command Mode

- /exec/configure/if-ethernet-p2p-switch /exec/configure/if-ethernet-p2p /exec/configure/if-ethernet-all /exec/configure/if-eth-l3-non-member /exec/configure/if-port-channel /exec/configure/if-remote-ethernet-sub /exec/configure/if-eth-port-channel-p2p /exec/configure/if-ethernet-p2p-m

medium p2p

{ medium p2p | no medium p2p }

Syntax Description

no	Negate a command or set its defaults
medium	Configure Interface medium mode
p2p	Point-to-Point medium

Command Mode

- /exec/configure/ppm-ethernet-switch /exec/configure/if-ether-sub /exec/configure/if-ether-sub-p2p /exec/configure/if-port-channel-sub

medium p2p

{ medium p2p | no medium p2p }

Syntax Description

no	Negate a command or set its defaults
medium	Configure Interface medium mode
p2p	Point-to-Point medium

Command Mode

- /exec/configure/if-ethernet-p2p-switch /exec/configure/if-ethernet-p2p /exec/configure/if-ethernet-all /exec/configure/if-eth-l3-non-member /exec/configure/if-port-channel /exec/configure/if-remote-ethernet-sub /exec/configure/if-eth-port-channel-p2p /exec/configure/if-ethernet-p2p-m

member vlan

{ member vlan <vlan-range> } | { no member vlan [<vlan-range>] }

Syntax Description

no	Negate a command or set its defaults
member	Set fabricpath topology VLAN membership
vlan	Configure VLANs for Fabricpath Topology
vlan-range	VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19

Command Mode

- /exec/configure/fp-topology

member vni

[no] member vni <vni-range>

Syntax Description

no	(Optional) Negate a command or set its defaults
member	NVE VN-Segment Membership
vni	Virtual Network Identifier
vni-range	vni range, Example: 5000 or 5001-5008

Command Mode

- /exec/configure/if-nve

member vni

{ member vni <vni-range> } | { no member vni [<vni-range>] }

Syntax Description

no	Negate a command or set its defaults
member	Set fabricpath topology VNI membership
vni	Configure VNIs for L2MP Topology
vni-range	vni range, Example: 4096, 4099-5013, 5019

Command Mode

- /exec/configure/fp-topology

member vni associate-vrf

[no] member vni <vni-range> associate-vrf

Syntax Description

no	(Optional) Negate a command or set its defaults
member	NVE VN-Segment Membership
vni	Virtual Network Identifier
vni-range	vni range, Example: 5000 or 5001-5008
associate-vrf	Associate vni with a vrf

Command Mode

- /exec/configure/if-nve

member vni mcast-group

[no] member vni <vni-range> mcast-group <maddr1> [<maddr2>]

Syntax Description

no	(Optional) Negate a command or set its defaults
member	NVE VN-Segment Membership
vni	Virtual Network Identifier
vni-range	vni range, Example: 5000 or 5001-5008
mcast-group	NVE Multicast Group
maddr1	Multicast IP Prefix
maddr2	(Optional) Multicast IP Prefix

Command Mode

- /exec/configure/if-nve

merge config

merge config <from-file> [show-only]

Syntax Description

merge	merge
config	merge configuration (to running-config)
from-file	the file containing the destination configuration, a patch will be created and applied to the running-config's matching section (format accordning to 'show run section' command output)
show-only	(Optional) only show the patch, don't execute it

Command Mode

- /exec

message-digest-key md5

{ { message-digest-key <keyid> md5 <key> } | { no message-digest-key [<keyid> md5 <key>] } }

Syntax Description

no	Negate a command or set its defaults
message-digest-key	Message digest authentication password (key)
keyid	Key ID
md5	Use MD5 algorithm
key	The OSPF password (key)

Command Mode

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

message-digest-key md5

{ { message-digest-key <keyid> md5 <key> } | { no message-digest-key [<keyid> md5 <key>] } }

Syntax Description

no	Negate a command or set its defaults
message-digest-key	Message digest authentication password (key)
keyid	Key ID
md5	Use MD5 algorithm
key	OSPF password (key)

Command Mode

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

metric-style transition

[no] metric-style { transition }

Syntax Description

no	(Optional) Negate a command or set its defaults
metric-style	Configure metric style used in advertised LSPs
transition	Use both narrow and wide metric style

Command Mode

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

metric direct 0

[no] metric direct 0

Syntax Description

no	(Optional) Negate a command or set its defaults
metric	Cost of direct routes
direct	Cost of direct routes
0	direct route cost is zero to be compatible with IOS

Command Mode

- /exec/configure/router-rip

metric maximum-hops

{ { metric maximum-hops <hops> } | { no metric maximum-hops [<hops>] } }

Syntax Description

no	Negate a command or set its defaults
metric	Modify EIGRP routing metrics and parameters
maximum-hops	Advertise EIGRP routes greater than <hops> as unreachable
hops	Hop count

Command Mode

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

metric rib-scale

{ { metric rib-scale <ribscale> } | { no metric rib-scale [<ribscale>] } }

Syntax Description

no	Negate a command or set its defaults
metric	Modify EIGRP routing metrics and parameters
rib-scale	Defines RIB scaling value
ribscale	Rib scale

Command Mode

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

metric version 64bit

{ { metric version 64bit } | { no metric version [64bit] } }

Syntax Description

no	Negate a command or set its defaults
metric	Modify EIGRP routing metrics and parameters
version	Modify EIGRP metric version
64bit	64 bit metric version

Command Mode

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

metric weights

{ { metric weights <tos> <k1> <k2> <k3> <k4> <k5> [<k6>] } | { no metric weights [<tos> <k1> <k2> <k3> <k4> <k5> [<k6>]] } }

Syntax Description

no	Negate a command or set its defaults
metric	Modify EIGRP routing metrics and parameters
weights	Modify EIGRP metric coefficients
tos	Type Of Service (Only TOS 0 supported)
k1	K1
k2	K2
k3	K3
k4	K4
k5	K5
k6	(Optional) K6

Command Mode

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

mgmt-policy

{ no mgmt-policy <policy-name> } | { mgmt-policy <policy-name> { permit | deny } [[ip { <ip-addr> [<ip-mask>] }] | [ip6 <ipv6-prefix>]] [protocol { tcp | udp | icmp }] [src-port <srcport> [<srcport-end>]] [dest-port <dstport> [<dstport-end>]] }

Syntax Description

no	Negate a command or set its defaults
mgmt-policy	PM Management Policy
policy-name	Name of the policy
permit	Permit access
deny	Deny access
ip	(Optional) IPV4 address
ip-addr	(Optional) IPV4 source address/subnet
ip-mask	(Optional) IPV4 mask
ip6	(Optional) IPV6 Address
protocol	(Optional) Protocol
tcp	(Optional) TCP protocol
udp	(Optional) UDP protocol
icmp	(Optional) ICMP protocol
src-port	(Optional) Source port
srcport	(Optional) Source port
srcport-end	(Optional) Source Port end
dest-port	(Optional) Destination port
dstport	(Optional) Destination port
dstport-end	(Optional) Destination Port end

Command Mode

- /exec/configure

mkdir

mkdir <uri0>

Syntax Description

mkdir	Create new directory
uri0	Directory name

Command Mode

- /exec

mod-serial

mod-serial <mod-serial> | no mod-serial

Syntax Description

no	Negate the command
mod-serial	Module serial number
mod-serial	Serial number

Command Mode

- /exec/configure/fex

mode

[no] mode <mode-id>

Syntax Description

no	(Optional) Negate a command or set its defaults
mode	Hot-standby mode
mode-id	Node Mode

Command Mode

- /exec/configure/itd-dg-node

mode

[no] mode <mode-id>

Syntax Description

no	(Optional) Negate a command or set its defaults
mode	Hot-standby mode
mode-id	Node Mode

Command Mode

- /exec/configure/itd-dg-node

mode

[no] mode <vmode>

Syntax Description

no	(Optional) Negate a command or set its defaults
mode	Operational mode of the VLAN
vmode	

Command Mode

- /exec/configure/vlan

mode auto

mode auto | no mode auto

Syntax Description

no	Negate a command or set its defaults
mode	Multiple commands in back-end server
auto	Enable peer-gateway, auto-recovery, fabricpath multicast load balance (if available), IP ARP Sync and IPv6 nd Sync

Command Mode

- /exec/configure/vpc-domain

mode every

[no] mode <numsample> every <period>

Syntax Description

mode	Define the Sampler mode
numsample	Number of samples per sampling - 64 max
every	Time-based sampling
period	Sampling Time Period in millseconds - 64000 max

Command Mode

- /exec/configure/nfm-sampler

mode openflow

[no] mode openflow

Syntax Description

no	(Optional) Negate a command or set its defaults
mode	Configure the interface operational mode
openflow	Disable/Enable openflow on the interface

Command Mode

- /exec/configure/if-port-channel /exec/configure/if-ethernet-all /exec/configure/if-eth-base /exec/configure/if-ethernet-switch

mode out-of

[no] mode <numsample> out-of <samples> | no mode

Syntax Description

mode	Define the Sampler mode
numsample	Number of samples per sampling - 63 max
out-of	M out of N packets
samples	Number of packets in each sampling - 8191 max

Command Mode

- /exec/configure/nfm-sampler

mode tap-aggregation

[no] mode tap-aggregation

Syntax Description

no	(Optional) Negate a command or set its defaults
mode	Configure the interface operational mode
tap-aggregation	Disable/Enable tap aggregation on the interface

Command Mode

- /exec/configure/if-switching

monitor erspan granularity

[no] monitor erspan granularity { 100_ms | 100_ns | 1588 | ns }

Syntax Description

no	(Optional) Negate a command or set its defaults
monitor	Configure Ethernet SPAN sessions
erspan	Configure Ethernet ERSPAN sessions
granularity	Configure granularity for ERSPAN Type III sessions
100_ms	100 microseconds
100_ns	100 nanoseconds
1588	1588 in seconds/nanoseconds
ns	nanoseconds

Command Mode

- /exec/configure

monitor erspan origin ip-address

[no] monitor erspan origin ip-address <ip> [global]

Syntax Description

no	(Optional) Negate a command or set its defaults
monitor	Configure Ethernet SPAN sessions
erspan	Configure Ethernet ERSPAN sessions
origin	Configure the erspan origin ip address
ip-address	Configure global origin IP address
ip	
global	(Optional) Configure in default VDC across all VDCs

Command Mode

- /exec/configure

monitor erspan switch-id

[no] monitor erspan switch-id <switch_id>

Syntax Description

no	(Optional) Negate a command or set its defaults
monitor	Configure Ethernet SPAN sessions
erspan	Configure Ethernet ERSPAN sessions
switch-id	Configure the erspan switch-id
switch_id	erspan-switch-id

Command Mode

- /exec/configure

monitor session

monitor session <session_number> [type local]

Syntax Description

monitor	Configure Ethernet SPAN sessions
session	Configure session preferences
session_number	
type	(Optional) Specify a session type
local	(Optional) Create a local session

Command Mode

- /exec/configure

monitor session shut

[no] monitor session { all | <session_range> } [shut] | monitor session { all | <session_range> } shut

Syntax Description

no	Negate a command or set its defaults
monitor	Configure Ethernet SPAN sessions
session	Configure session preferences
all	All sessions
session_range	
shut	(Optional) Shut the selected session

Command Mode

- /exec/configure

monitor session type acl-capture

monitor session <session_number> type acl-capture

Syntax Description

monitor	Configure Ethernet SPAN sessions
session	Configure session preferences
session_number	
type	Specify a session type
acl-capture	Create an acl-capture session

Command Mode

- /exec/configure

monitor session type erspan-destination

monitor session <session_number> type erspan-destination

Syntax Description

monitor	Configure Ethernet SPAN sessions
session	Configure session preferences
session_number	
type	Specify a session type
erspan-destination	Create an erspan destination session

Command Mode

- /exec/configure

monitor session type erspan-source

monitor session <session_number> type erspan-source

Syntax Description

monitor	Configure Ethernet SPAN sessions
session	Configure session preferences
session_number	
type	Specify a session type
erspan-source	Create an erspan source session

Command Mode

- /exec/configure

move

move <uri0> <uri1>

Syntax Description

move	Move files
uri0	Source file path
uri1	Destination file path

Command Mode

- /exec

mping

mping [{ broadcast | lc module <i0> | sup module <i1> }]

Syntax Description

mping	run mping
broadcast	(Optional) mping broadcast
lc	(Optional) mping line-cards
module	(Optional) slot information
i0	(Optional)
sup	(Optional) mping supervisor
module	(Optional) slot information
i1	(Optional)

Command Mode

- /exec

mpls ip

[no] mpls ip

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	MPLS configuration commands
ip	Enable IP over MPLS

Command Mode

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

mpls ip default-route

[no] mpls ip default-route

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	MPLS configuration commands
ip	Dynamic MPLS forwarding for IP
default-route	Allow MPLS forwarding for ip default route

Command Mode

- /exec/configure/ldp

mpls ip forwarding

[no] mpls ip forwarding

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	MPLS configuration commands
ip	Enable IP over MPLS
forwarding	Enable MPLS forwarding on the interface

Command Mode

- /exec/configure/if-ethernet /exec/configure/if-ethernet-all /exec/configure/if-ether-sub /exec/configure/if-eth-port-channel /exec/configure/if-port-channel-sub /exec/configure/if-port-channel-range /exec/configure/if-vlan-common /exec/configure/if-mvpn /exec/configure/if-p2p exec/configure/ppm-ethernet-switch

mpls ip propagate-ttl

mpls ip propagate-ttl | no mpls ip propagate-ttl [forwarded | local]

Syntax Description

no	Negate a command or set its defaults
mpls	MPLS configuration commands
ip	Configure IP features
propagate-ttl	Configure IP ttl propagation over mpls
forwarded	(Optional) Prevent traceroute from showing the hops for forwarded packets
local	(Optional) Prevent traceroute from showing the hops only for local packets

Command Mode

- /exec/configure

mpls ip static

[no] mpls ip static

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	MPLS configuration commands
ip	Enable IP over MPLS
static	Enable IP over MPLS statically

Command Mode

- /exec/configure/if-gre-tunnel

mpls ip static

[no] mpls ip static

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	MPLS configuration commands
ip	Enable IP over MPLS
static	Enable IP over MPLS statically

Command Mode

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

mpls ip ttl-expiration pop

[no] mpls ip ttl-expiration pop [<labels>]

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	MPLS configuration commands
ip	Configure IP features
ttl-expiration	Configure ttl-expiration
pop	Pop
labels	(Optional) Number of labels

Command Mode

- /exec/configure

mpls label-space

[no] mpls label-space

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	MPLS configuration commands
label-space	create label space

Command Mode

- /exec/configure

mpls label range

[no] mpls label range <min-label> <max-label> [static <min-static-label> <max-static-label>]

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	MPLS configuration commands
label	Label properties
range	Label range
min-label	Minimum label value
max-label	Maximum label value
static	(Optional) Specify block of labels for static bindings
min-static-label	(Optional) Minimum static label value
max-static-label	(Optional) Maximum static label value

Command Mode

- /exec/configure

mpls static binding ipv4

mpls static binding ipv4 { [vrf { <vrf-name> | <vrf-known-name> }] { <prefix> <mask> | <prefix-mask> } [input] <static-inlabel> | { <prefix> <mask> | <prefix-mask> } output <next-hop> { <static-outlabel> | explicit-null | implicit-null } } | no mpls static binding ipv4 { [[vrf { <vrf-name> | <vrf-known-name> }] [{ <prefix> <mask> | <prefix-mask> } { [input [<static-inlabel>]] | [<static-inlabel>] }]] | [{ <prefix> <mask> | <prefix-mask> } [output [<next-hop> [{ <static-outlabel> | explicit-null | implicit-null }]]]] } }

Syntax Description

no	Negate a command or set its defaults
mpls	MPLS configuration commands
static	MPLS static application
binding	Establish static label bindings
ipv4	Bind IPv4 destination with label
vrf	(Optional) VPN Routing/Forwarding instance name
vrf-name	(Optional) VRF name
vrf-known-name	(Optional) Known VRF name
prefix	Destination prefix
mask	Destination prefix mask
prefix-mask	Destination prefix/mask
input	(Optional) Incoming (local) label
static-inlabel	Label Value
output	Outgoing (remote) label
next-hop	Destination next hop
static-outlabel	Label Value
explicit-null	IETF MPLS IPv4 explicit null label (0)
implicit-null	IETF MPLS implicit null label (3)

Command Mode

- /exec/configure/ldp

mpls static binding ipv4 vrf per-vrf input output pop-and-lookup

mpls static binding ipv4 vrf { <vrf-name> | <vrf-known-name> } per-vrf input <static-inlabel> output pop-and-lookup | no mpls static binding ipv4 vrf { <vrf-name> | <vrf-known-name> } per-vrf input <static-inlabel> output pop-and-lookup

Syntax Description

no	Negate a command or set its defaults
mpls	MPLS configuration commands
static	MPLS static application
binding	Establish static label bindings
ipv4	Bind IPv4 destination with label
vrf	VPN Routing/Forwarding instance name
vrf-name	VRF name
vrf-known-name	Known VRF name
per-vrf	Per-VRF information
input	Incoming (local) label
static-inlabel	Label Value
output	Outgoing information
pop-and-lookup	Pop label and perform a lookup

Command Mode

- /exec/configure/ldp

mpls static configuration

[no] mpls static configuration

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	MPLS configuration commands
static	Configure Static Label Bindings
configuration	Enter MPLS Static global configuration submode

Command Mode

- /exec/configure

mpls strip

mpls strip { { poll-timer <timeout> } | { dest-mac <mac-addr> } | { threshold <low> <high> } | { label-age <age> [sec | min | hrs | days] } } | no mpls strip { poll-timer | dest-mac | threshold | label-age }

Syntax Description

no	Negate a command or set its defaults
mpls	Configure MPLS settings
strip	Stripping of MPLS headers
poll-timer	Timer to poll for stats
timeout	Time in seconds to poll for stats
threshold	For when to delete aged labeld
low	Lower Threshold
high	Higher Threshold
label-age	label Age
age	Label age
sec	(Optional) Time in Seconds - default
min	(Optional) Time in Minutes
hrs	(Optional) Time in Hours
days	(Optional) Time in Days
dest-mac	Destination MAC address for egress frames
mac-addr	MAC Address

Command Mode

- /exec/configure

mpls strip

[no] mpls strip

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	Configure MPLS settings
strip	Stripping of MPLS headers

Command Mode

- /exec/configure

mpls strip label

[no] mpls strip label { <value> } [interface <interface-name>] | no mpls strip label all

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	Configure MPLS settings
strip	Stripping of MPLS headers
label	Add a static label in database
value	20 bit value for label
all	Delete all static labels
interface	(Optional) Interface
interface-name	(Optional) Interface name

Command Mode

- /exec/configure

mpls traffic-eng

[no] mpls traffic-eng <level>

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	Configure MPLS parameters
traffic-eng	Routing protocol commands for MPLS Traffic Engineering (TE)
level	IS-IS level

Command Mode

- /exec/configure/router-isis

mpls traffic-eng administrative-weight

mpls traffic-eng administrative-weight <num> | no mpls traffic-eng administrative-weight

Syntax Description

no	Negate a command or set its defaults
mpls	MPLS configuration commands
traffic-eng	Configure Traffic Engineering parameters
administrative-weight	Set the administrative weight for the interface
num	Weight

Command Mode

- /exec/configure/if-igp /exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

mpls traffic-eng area

[no] mpls traffic-eng area <area-id-ip>

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	OSPF MPLS configuration commands
traffic-eng	OSPF MPLS Traffic Engineering commands
area	Configure area properties
area-id-ip	Area Id as an integer or ip address

Command Mode

- /exec/configure/router-ospf

mpls traffic-eng attribute-flags

mpls traffic-eng attribute-flags <value> | no mpls traffic-eng attribute-flags

Syntax Description

no	Negate a command or set its defaults
mpls	MPLS configuration commands
traffic-eng	Configure Traffic Engineering parameters
attribute-flags	Set user-defined interface attribute flags
value	Attribute flags

Command Mode

- /exec/configure/if-igp /exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

mpls traffic-eng backup-path

[no] mpls traffic-eng backup-path [<tunnel-num>] | mpls traffic-eng backup-path <tunnel-num>

Syntax Description

no	Negate a command or set its defaults
mpls	MPLS configuration commands
traffic-eng	Configure Traffic Engineering parameters
backup-path	Configure an MPLS TE backup for this interface
tunnel-num	(Optional)

Command Mode

- /exec/configure/if-igp /exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

mpls traffic-eng bandwidth

[no] mpls traffic-eng bandwidth | mpls traffic-eng bandwidth [percent <percentage> | <bw-kbps>]

Syntax Description

no	Negate a command or set its defaults
mpls	MPLS configuration commands
traffic-eng	Configure Traffic Engineering parameters
bandwidth	RSVP Reservable Bandwidth (kbps)
percent	(Optional) Specify a percentage of interface bandwidth
percentage	(Optional) Percentage of bandwidth
bw-kbps	(Optional) Reservable Bandwidth (kbps)

Command Mode

- /exec/configure/if-igp /exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

mpls traffic-eng configuration

mpls traffic-eng configuration

Syntax Description

mpls	MPLS configuration commands
traffic-eng	Traffic engineering commands
configuration	Enter Traffic Engineering global configuration submode

Command Mode

- /exec/configure

mpls traffic-eng fast-reroute promote

[no] mpls traffic-eng fast-reroute promote

Syntax Description

no	(Optional) Negate a command or set its defaults
fast-reroute	fast-reroute command
promote	promote to a better backup tunnel
mpls	MPLS configuration commands
traffic-eng	Traffic engineering commands

Command Mode

- /exec

mpls traffic-eng flooding thresholds up

mpls traffic-eng flooding thresholds { up <up_p> [<up_p> [<up_p> [<up_p> [<up_p> [<up_p> [<up_p> [<up_p> [<up_p> [<up_p> [<up_p> [<up_p> [<up_p> [<up_p> [<up_p> [<up_p>]]]]]]]]]]]]]] | down <dn_p> [<dn_p> [<dn_p> [<dn_p> [<dn_p> [<dn_p> [<dn_p> [<dn_p> [<dn_p> [<dn_p> [<dn_p> [<dn_p> [<dn_p> [<dn_p> [<dn_p>]]]]]]]]]]]]]]] } | no mpls traffic-eng flooding thresholds { up | down }

Syntax Description

no	Negate a command or set its defaults
mpls	MPLS configuration commands
traffic-eng	Configure Traffic Engineering parameters
flooding	Set flooding parameters
thresholds	Set flooding thresholds
up	Set the thresholds for increased resource availability
up_p	increased bandwidth usage (percent)
down	Set the thresholds for decreased resource availability
dn_p	decreased bandwidth usage (percent)

Command Mode

- /exec/configure/if-igp /exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

mpls traffic-eng multicast-intact

[no] mpls traffic-eng multicast-intact

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	OSPF MPLS configuration commands
traffic-eng	OSPF MPLS Traffic Engineering commands
multicast-intact	MPLS TE multicast support

Command Mode

- /exec/configure/router-ospf

mpls traffic-eng multicast-intact

[no] mpls traffic-eng multicast-intact

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	Configure MPLS parameters
traffic-eng	Routing protocol commands for MPLS Traffic Engineering (TE)
multicast-intact	Configure MPLS-TE multicast interaction

Command Mode

- /exec/configure/router-isis

mpls traffic-eng reoptimize

[no] mpls traffic-eng reoptimize [<tunnel-num>]

Syntax Description

no	(Optional) Negate a command or set its defaults
reoptimize	reoptimize traffeng tunnels
tunnel-num	(Optional)
mpls	MPLS configuration commands
traffic-eng	Traffic engineering commands

Command Mode

- /exec

mpls traffic-eng router-id

[no] mpls traffic-eng router-id <interface>

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	OSPF MPLS configuration commands
traffic-eng	OSPF MPLS Traffic Engineering commands
router-id	Router ID associated with TE
interface	Routable Interface

Command Mode

- /exec/configure/router-ospf

mpls traffic-eng router-id

[no] mpls traffic-eng router-id <interface>

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	Configure MPLS parameters
traffic-eng	Routing protocol commands for MPLS Traffic Engineering (TE)
router-id	Routing protocol commands for MPLS Traffic Engineering (TE)
interface	IS-IS interface

Command Mode

- /exec/configure/router-isis

mpls traffic-eng tunnels

[no] mpls traffic-eng tunnels

Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	MPLS configuration commands
traffic-eng	Configure Traffic Engineering parameters
tunnels	enable MPLS Traffic Engineering tunnels

Command Mode

- /exec/configure/if-igp /exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

mrib mdt

[no] mrib mdt <context-id> <encap-index> <mdt-group> <mdt-source> <src-if> <mdt-if>

Syntax Description

no	(Optional) Negate a command or set its defaults
mrib	MRIB config command
mdt	MDT config command
context-id	Context ID
encap-index	Encap Index
mdt-group	MDT Group
mdt-source	MDT source
src-if	Source Interface Name
mdt-if	MDT Interface Name

Command Mode

- /exec/configure

mrib mfdm-ack-delay

[no] mrib mfdm-ack-delay <ms>

Syntax Description

no	(Optional) Negate a command or set its defaults
mrib	Artificially slow MFDM down
mfdm-ack-delay	Set ack delay in MRIB's MFDM thread
ms	Delay MFDM acks, in milliseconds

Command Mode

- /exec

mst designated priority

mst <mst-id> designated priority <prio> | no mst <mst-id> designated priority [<prio>]

Syntax Description

no	Negate a command or set its defaults
mst	Multiple spanning tree configuration
mst-id	MST instance range, example: 0-3,5,7-9
designated	Set the designated bridge priority for the spanning tree
priority	Set the bridge priority for the spanning tree
prio	bridge priority in increments of 4096

Command Mode

- /exec/configure/spanning-tree/pseudo

mst root priority

mst <mst-id> root priority <prio> | no mst <mst-id> root priority [<prio>]

Syntax Description

no	Negate a command or set its defaults
mst	Multiple spanning tree configuration
mst-id	MST instance range, example: 0-3,5,7-9
root	Set the root bridge priority for the spanning tree
priority	Set the bridge priority for the spanning tree
prio	bridge priority in increments of 4096

Command Mode

- /exec/configure/spanning-tree/pseudo

mtrace

mtrace <source> [<receiver>] [<group>] [vrf <vrf-known-name>]

Syntax Description

mtrace	Trace
source	IP
receiver	(Optional) IP
group	(Optional) IP
vrf	(Optional) VRF
vrf-known-name	(Optional) Known VRF name

Command Mode

- /exec

mtu

[no] mtu <value>

Syntax Description

no	(Optional) Negate a command or set its defaults
mtu	MTU for the CoS
value	MTU value

Command Mode

- /exec/configure/policy-map/type/uf/class

mtu1

[no] mtu1 <value>

Syntax Description

no	(Optional) Negate a command or set its defaults
mtu1	MTU for the CoS
value	MTU value

Command Mode

- /exec/configure/policy-map/type/uf/class

mtu

mtu <mtu_val> | no mtu [<mtu_val>]

Syntax Description

no	Negate a command or set its defaults
mtu	Configure mtu for the port
mtu_val	

Command Mode

- /exec/configure/if-ether-sub /exec/configure/if-ether-sub-p2p /exec/configure/if-port-channel-sub /exec/configure/if-sub /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

mtu

mtu <mtu-val> | no mtu [<mtu-val>]

Syntax Description

no	Negate a command or set its defaults
mtu	Configure MTU
mtu-val	Bytes

Command Mode

- /exec/configure/if-any-tunnel

mtu

mtu <mtu_value> | no mtu

Syntax Description

no	Negate a command or set its defaults
mtu	Set the MTU size for SPAN packets
mtu_value	Enter the value of MTU truncation size for SPAN packets

Command Mode

- /exec/configure/monitor-local-src

mtu

mtu <mtu_value> | no mtu

Syntax Description

no	Negate a command or set its defaults
mtu	Set the MTU size for ERSPAN packets
mtu_value	Enter the value of MTU truncation size for ERSPAN packets (erspan header + truncated original packet)

Command Mode

- /exec/configure/monitor-erspan-src

mtu

mtu <mtu_val> | no mtu

Syntax Description

no	Negate a command or set its defaults
mtu	Set the interface Maximum Transmission Unit (MTU)
mtu_val	MTU size in bytes

Command Mode

- /exec/configure/if-vlan-common

multi-destination trees

multi-destination trees <num-trees> | no multi-destination trees [<num-trees>]

Syntax Description

no	Negate a command or set its defaults
multi-destination	Multi destination config for a topology
trees	Trees config for a topology
num-trees	Number of multicast destination trees for a topology. Only topology ID 0 to 7 are configurable

Command Mode

- /exec/configure/l2mp-isis/l2mp-isis-vrf-common /exec/configure/l2mp-isis/l2mp-isis-l2-topo

multi-topology

[no] multi-topology [transition]

Syntax Description

no	(Optional) Negate a command or set its defaults
multi-topology	Enable multitopoloy for IPV6
transition	(Optional) Configure multitopology transition mode

Command Mode

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

multicast

[no] multicast <mode_enum>

Syntax Description

no	(Optional) Negate a command or set its defaults
multicast	Enable multicast best-effort
mode_enum	

Command Mode

- /exec/configure/monitor-local-src /exec/configure/config-monitor
  /exec/configure/config-monitor-erspan-src

mvr-config

[no] mvr-config

Syntax Description

no	(Optional) Negate a command or set its defaults
mvr-config	Enable IGMP MVR

Command Mode

- /exec/configure

mvr-group

[no] mvr-group { { <ip-addr> } [{ vlan <vlan-id> }] }

Syntax Description

no	(Optional) Negate a command or set its defaults
mvr-group	MVR interface config
ip-addr	Group IP Address
vlan	(Optional) Global default MVR vlan
vlan-id	(Optional) Enter MVR Vlan

Command Mode

- /exec/configure/if-ethernet-switch /exec/configure/if-ethernet-all /exec/configure/if-eth-port-channel-switch /exec/configure/if-ethernet-p2p-switch /exec/configure/if-remote-ethernet-switch

mvr-group

[no] mvr-group { { <ip-addr> } [{ vlan <vlan-id> }] }

Syntax Description

no	(Optional) Negate a command or set its defaults
mvr-group	MVR Group
ip-addr	Group IP Address
vlan	(Optional) Global default MVR vlan
vlan-id	(Optional) Enter MVR Vlan

Command Mode

- /exec/configure/igmp-mvr-global

mvr-group

[no] mvr-group { { <ip-addr> count <count> } [{ vlan <vlan-id> }] }

Syntax Description

no	(Optional) Negate a command or set its defaults
mvr-group	MVR Group
ip-addr	Group IP Address
count	Number of contiguous groups
count	Number of contiguos groups
vlan	(Optional) Global default MVR vlan
vlan-id	(Optional) Enter MVR Vlan

Command Mode

- /exec/configure/igmp-mvr-global

mvr-group

[no] mvr-group { { <ip-addr> <ip-mask> } [{ vlan <vlan-id> }] }

Syntax Description

no	(Optional) Negate a command or set its defaults
mvr-group	MVR Group
ip-addr	Group IP Address
ip-mask	IP network mask in format m.m.m.m
vlan	(Optional) Global default MVR vlan
vlan-id	(Optional) Enter MVR Vlan

Command Mode

- /exec/configure/igmp-mvr-global

mvr-group

[no] mvr-group { { <ip-prefix> } [{ vlan <vlan-id> }] }

Syntax Description

no	(Optional) Negate a command or set its defaults
mvr-group	MVR Group
ip-prefix	IP prefix and network mask length in format x.x.x.x/m
vlan	(Optional) Global default MVR vlan
vlan-id	(Optional) Enter MVR Vlan

Command Mode

- /exec/configure/igmp-mvr-global

mvr-group

[no] mvr-group { { <ip-addr> count <count> } [{ vlan <vlan-id> }] }

Syntax Description

no	(Optional) Negate a command or set its defaults
mvr-group	MVR interface config
ip-addr	Group IP Address
count	Number of contiguous groups
count	Number of contiguos groups
vlan	(Optional) Global default MVR vlan
vlan-id	(Optional) Enter MVR Vlan

Command Mode

- /exec/configure/if-ethernet-switch /exec/configure/if-ethernet-all /exec/configure/if-eth-port-channel-switch /exec/configure/if-ethernet-p2p-switch /exec/configure/if-remote-ethernet-switch

mvr-group

[no] mvr-group { { <ip-addr> <ip-mask> } [{ vlan <vlan-id> }] }

Syntax Description

no	(Optional) Negate a command or set its defaults
mvr-group	MVR interface config
ip-addr	Group IP Address
ip-mask	IP network mask in format m.m.m.m
vlan	(Optional) Global default MVR vlan
vlan-id	(Optional) Enter MVR Vlan

Command Mode

- /exec/configure/if-ethernet-switch /exec/configure/if-ethernet-all /exec/configure/if-eth-port-channel-switch /exec/configure/if-ethernet-p2p-switch /exec/configure/if-remote-ethernet-switch

mvr-group

[no] mvr-group { { <ip-prefix> } [{ vlan <vlan-id> }] }

Syntax Description

no	(Optional) Negate a command or set its defaults
mvr-group	MVR interface config
ip-prefix	IP prefix and network mask length in format x.x.x.x/m
vlan	(Optional) Global default MVR vlan
vlan-id	(Optional) Enter MVR Vlan

Command Mode

- /exec/configure/if-ethernet-switch /exec/configure/if-ethernet-all /exec/configure/if-eth-port-channel-switch /exec/configure/if-ethernet-p2p-switch /exec/configure/if-remote-ethernet-switch

mvr-type receiver

[no] mvr-type receiver

Syntax Description

no	(Optional) Negate a command or set its defaults
mvr-type	MVR interface config
receiver	Mvr receiver port

Command Mode

- /exec/configure/if-ethernet-switch /exec/configure/if-ethernet-all /exec/configure/if-eth-port-channel-switch /exec/configure/if-ethernet-p2p-switch /exec/configure/if-remote-ethernet-switch

mvr-type source

[no] mvr-type source

Syntax Description

no	(Optional) Negate a command or set its defaults
mvr-type	MVR interface config
source	Mvr source port

Command Mode

- /exec/configure/if-ethernet-switch /exec/configure/if-ethernet-all /exec/configure/if-eth-port-channel-switch /exec/configure/if-ethernet-p2p-switch /exec/configure/if-remote-ethernet-switch

mvr-vlan

{ { no mvr-vlan <vlan-id> } | { mvr-vlan <vlan-id> } }

Syntax Description

no	Negate a command or set its defaults
mvr-vlan	Interface MVR Config
vlan-id	Enter MVR Vlan

Command Mode

- /exec/configure/if-ethernet-switch /exec/configure/if-ethernet-all /exec/configure/if-eth-port-channel-switch /exec/configure/if-ethernet-p2p-switch /exec/configure/if-remote-ethernet-switch

mvr-vlan

[no] mvr-vlan <vlan-id>

Syntax Description

no	(Optional) Negate a command or set its defaults
mvr-vlan	Global default MVR vlan
vlan-id	Enter MVR Vlan

Command Mode

- /exec/configure/igmp-mvr-global