



## M Commands

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# mac-addr

{ mac-addr <dstmac> <smac> [ dot1q <dot1q-id> ] }

## Syntax Description

mac-addr	Mac
<i>dstmac</i>	Destination mac address
<i>smac</i>	Source mac address
<i>dot1q</i>	(Optional) Encapsulation dot1q/bd
<i>dot1q-id</i>	(Optional) Encapsulation dot1q/bd on which the mac is learnt

## Command Mode

- /exec/configure/configngamccpayload

# 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)
<i>mac_address_val</i>	Static Router MAC address (1)

## Command Mode

- /exec/configure/if-ether-sub /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
<i>mac-addr</i>	MAC address

## Command Mode

- /exec/configure/if-vlan-common

# mac-address

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

## Syntax Description

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

## Command Mode

- /exec/configure/if-eth-any/hsrp\_ipv4 /exec/configure/if-eth-any/hsrp\_ipv6

# 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
<i>addr</i>	mac address

## Command Mode

- /exec/configure/configngoaamprofileflow

# 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-ether-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-list permit

# 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
<i>name</i>	Name of prefix list
seq	(Optional) Sequence number of an entry
<i>seq</i>	(Optional) Sequence number
permit	Specify routes to forward
deny	Specify routes to reject
<i>mac-addr</i>	MAC address
<i>mac-mask</i>	(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
<i>name</i>	List name
client	(Optional) set client type
<i>clienttype</i>	(Optional) CLI/ONEP
<i>clientID</i>	(Optional) client appID

## Command Mode

- /exec/configure

mac address-table multicast vlan interface

## 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
<i>mac-address</i>	mcast MAC Address, not in Unicast IP Range
vlan	VLAN
<i>vlan</i>	VLAN
bridge-domain	BD
<i>bdid</i>	BD
interface	Interface
vsi	(Optional) Specify if this interface is a VSI
<i>interface</i>	Interface name

### 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
<i>macaddr</i>	48-bit MAC address in HEX

## Command Mode

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

**mac address inherit**

# 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
<i>macint</i>	Advertisement Interval in seconds

## Command Mode

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

**mac packet-classify**

# 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
<i>name</i>	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
<i>keychain_name</i>	name of the keychain specified as a string
policy	(Optional) policy
<i>policy_name</i>	(Optional) name of the policy specified as a string

## Command Mode

- /exec/configure/if-ether-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
<i>policy_name</i>	Name of Policy

## Command Mode

- /exec/configure

# managed-config-flag

[no] managed-config-flag <state>

## Syntax Description

no	(Optional) Negate a command or set its defaults
<i>state</i>	

## Command Mode

- /exec/configure/config-ra-guard

# 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
<i>addr</i>	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
<i>ms</i>	Address of IPv4 map-server
key-type	(Optional) Authentication key type, either sha1 or sha2
sha1	(Optional) Use sha1 authentication in Map-Register messages
sha2	(Optional) Use sha2 authentication in Map-Register messages
key	Authentication key used with Map-Server
<i>key</i>	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

master ipv4

# master ipv4

[no] master ipv4 <ip>

## Syntax Description

no	(Optional) Negate a command or set its defaults
master	master
ipv4	ipv4
<i>ip</i>	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
<i>acl-name</i>	Access List name
cos	IEEE 802.1Q class of service
dscp	DSCP in IP(v4) and IPv6 packets
<i>dscp-list</i>	List of DSCP values
<i>dscp-enum</i>	
precedence	Precedence in IP(v4) and IPv6 packets
<i>precedence-list</i>	List of precedence values
<i>prec-enum</i>	
discard-class	Discard class
<i>discard-class-list</i>	List of discard-class values
qos-group	Qos-group
<i>qos-group-list</i>	List of qos-group values
class-map	Class map
<i>cmap-name-plc</i>	Match class-map name

protocol	Protocol
<i>protocol-enum</i>	
packet	Packet
length	Length of IP datagram
<i>len-list</i>	list of IP packet length
ip	IP
rtp	Real Time Protocol
<i>port-list</i>	UDP port list that are using RTP
mpls	Match on MPLS label
experimental	Match on MPLS Experimental label
topmost	Match on topmost MPLS label
<i>exp-list</i>	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

**match**

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

<i>ipv6-dscp-list</i>	List of IPV6 DSCP values
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**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

<i>dscp-list</i>	<dscp-enum>
<i>cos-list</i>	
<i>precedence-list</i>	<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
<i>acl-name</i>	Access List name
dscp	DSCP in IP(v4) and IPv6 packets
<i>dscp-enum</i>	
cos	IEEE 802.1Q Class of Service
qos-group	Qos-group
<i>qos-group-list</i>	List of qos-group values
precedence	Precedence in IP(v4) and IPv6 packets
<i>prec-enum</i>	
protocol	Protocol
<i>protocol-enum</i>	
packet	Packet
length	Length of IP datagram
<i>len-list</i>	List of IP packet length
ip	IP

rtp	Real Time Protocol
<i>port-list</i>	UDP port list that are using RTP
mpls	Match on MPLS label
experimental	Match on MPLS Experimental label
topmost	Match on topmost MPLS label
<i>exp-list</i>	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
<i>discard-class-list</i>	List of discard-class values
class-map	Class map
<i>cmap-name</i>	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
<i>acs-grp-name</i>	Match parameter for class-map

## Command Mode

- /exec/configure/cmap

**match address**

# 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
<i>ip_ipv6_mac</i>	IP/IPv6/MAC
address	Match an access list
<i>name</i>	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
<i>asnum</i>	(Optional) <AA4>,
<i>asnum_range</i>	(Optional) <AA4>-<AA4>,
<i>asnum_trail</i>	<AA4>,
<i>asnum_range_trail</i>	<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
<i>aspl-name</i>	AS path access list name
<i>aspl-name</i>	AS path access list name
<i>aspl-name</i>	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
<i>aspl-name</i>	AS path access list name
<i>aspl-name</i>	AS path access list name
<i>aspl-name</i>	Known as-path access-list name

## Command Mode

- /exec/configure/route-map

**match class-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
<i>cmap-name</i>	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
<i>name</i>	Community list name
exact-match	(Optional) Do exact matching of communities

## Command Mode

- /exec/configure/route-map

**match cos**

# match cos

[no] match cos <cos-list>

## Syntax Description

<i>cos-list</i>	
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
<i>cos-list</i>	List of class-of-service values

## Command Mode

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

**match datalink**

# 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> | <dscp-enum> } +

## Syntax Description

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

## Command Mode

- /exec/configure/color-cmap

**match dscp**

# 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
<i>dscp-list</i>	List of DSCP values

## Command Mode

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

# match exception

[no] match exception { { { ip | ipv6 } { option | { icmp { redirect | unreachable } } | municast } } | ttl-failure | glean | mtu-failure | nat-flow | { 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

## Command Mode

- /exec/configure/cmap

**match extcommunity**

# 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
<i>name</i>	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
<i>name</i>	Interface name

## Command Mode

- /exec/configure/route-map

**match ip address**

# 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
<i>name</i>	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
<i>ipv4-pfl-name</i>	Name of prefix-list
<i>ipv4-pfl-name</i>	Name of prefix-list
<i>ipv4-pfl-name</i>	Known prefix-list name

## Command Mode

- /exec/configure/route-map

match ip multicast rp

## 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
<i>iprp</i>	IPv4 rendezvous prefix
<i>rp-type</i>	(Optional) Multicast rendezvous point type
<i>iprtotype</i>	(Optional) IPv4 rendezvous point type
group	Multicast Group prefix
<i>gprefix</i>	IPv4 group prefix
group-range	Multicast Group address range
<i>gaddr_start</i>	First Group address
to	Range
<i>gaddr_end</i>	Last Group address
source	Multicast source address
<i>ipsrc</i>	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
<i>ipv4-pfl-name</i>	Name of prefix-list
<i>ipv4-pfl-name</i>	Name of prefix-list
<i>ipv4-pfl-name</i>	Known prefix-list name

## Command Mode

- /exec/configure/route-map

**match ip protocol**

# 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
<i>ipv4-pfl-name</i>	Name of prefix-list
<i>ipv4-pfl-name</i>	Name of prefix-list
<i>ipv4-pfl-name</i>	Known prefix-list name

## Command Mode

- /exec/configure/route-map

**match ipv4 source address**

# 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**

# 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
<i>name</i>	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
<i>ipv6-pfl-name</i>	Name of prefix-list
<i>ipv6-pfl-name</i>	Name of prefix-list
<i>ipv6-pfl-name</i>	Known prefix-list name

## Command Mode

- /exec/configure/route-map

**match ipv6 multicast rp**

## 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
<i>ipv6rptype</i>	(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
<i>ipv6-pfl-name</i>	Name of prefix-list
<i>ipv6-pfl-name</i>	Name of prefix-list
<i>ipv6-pfl-name</i>	Known prefix-list name

## Command Mode

- /exec/configure/route-map

match ipv6 route-source prefix-list

## 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> | <ip6-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
<i>ipv6-pfl-name</i>	Name of prefix-list
<i>ip6-pfl-name</i>	Name of prefix-list
<i>ip6-pfl-name</i>	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
<i>plus-minus</i>	(Optional) +-
<i>measure</i>	Metric value
<i>deviation</i>	(Optional) Deviation value

## Command Mode

- /exec/configure/route-map

**match ospf-area**

# 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
<i>area</i>	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
<i>exp_value</i>	(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
<i>qos-group-list</i>	List of qos-group values

## Command Mode

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

**match qos-group2**

## 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
<i>qos-group-list</i>	List of qos-group values

### Command Mode

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

# 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
<i>qos-group-list</i>	

## Command Mode

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

**match qos-group**

# 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
<i>qos-group-list</i>	List of qos-group values

## Command Mode

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

# 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
<i>opt_match_redirect</i>	Match criteria for redirected packets

## Command Mode

- /exec/configure/cmap

**match route-type**

## 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
<i>src_prot</i>	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
<i>tagid</i>	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-backoff

max-backoff <maxbackoff-val> | no max-backoff

## Syntax Description

no	Negate a command or set its defaults
max-backoff	OpenFlow controller maximum backoff timer (default is 8 seconds)
<i>maxbackoff-val</i>	max backoff timer value in secs

## Command Mode

- /exec/configure/openflow/switch

# max-backoff

max-backoff <maxbackoff-val> | no max-backoff

## Syntax Description

no	Negate a command or set its defaults
max-backoff	OpenFlow controller maximum backoff timer (default is 8 seconds)
<i>maxbackoff-val</i>	max backoff timer value in secs

## Command Mode

- /exec/configure/openflow/switch/sub-switch

# 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
<i>maximum-number</i>	Set maximum number of non self-generated LSAs
<i>threshold</i>	(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
<i>ignore-time-minutes</i>	(Optional) ignore-time in minutes
ignore-count	(Optional) Set count on how many times adjacencies can be suppressed
<i>ignore-count-number</i>	(Optional) ignore-count
reset-time	(Optional) Set number of minutes after which ignore-count is reset to zero
<i>reset-time-minutes</i>	(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
<i>maximum-number</i>	Set maximum number of non self-generated LSAs
<i>threshold</i>	(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
<i>ignore-time-minutes</i>	(Optional) ignore-time in minutes
ignore-count	(Optional) Set count on how many times adjacencies can be suppressed
<i>ignore-count-number</i>	(Optional) ignore-count
reset-time	(Optional) Set number of minutes after which ignore-count is reset to zero
<i>reset-time-minutes</i>	(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
<i>lifetime</i>	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
<i>lifetime</i>	Maximum LSP lifetime in seconds

## Command Mode

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

max-metric router-lsa

## 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
<i>max-metric-extlsa</i>	(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
<i>timeout</i>	(Optional) Wait period in seconds after startup
wait-for	(Optional) Wait for an event to advertise normal metric
bgp	(Optional) BGP Convergence
<i>as</i>	(Optional) ASN of BGP to wait for
summary-lsa	(Optional) Summary LSAs
<i>max-metric-sumlsa</i>	(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
<i>max-metric-extlsa</i>	(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
<i>timeout</i>	(Optional) Wait period in seconds after startup
wait-for	(Optional) Wait for an event to advertise normal metric
bgp	(Optional) BGP Convergence
<i>as</i>	(Optional) ASN of BGP to wait for
inter-area-prefix-lsa	(Optional) Inter-area-prefix LSAs
<i>max-metric-sumlsa</i>	(Optional) Max metric value for summary LSAs

## Command Mode

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

# max-ports

[ vmware ] max-ports <i0>

## Syntax Description

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

## Command Mode

- /exec/configure/port-profile

# 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

**maxas-limit**

# 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
<i>as-limit</i>	Number of ASes in the AS-PATH attribute

## Command Mode

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

# 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
<i>mpath-count</i>	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

```
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
<i>max-paths</i>	Maximum paths per destination

## Command Mode

- /exec/configure/router-ospf

# 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
<i>num-paths</i>	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 <max-paths> | no maximum-paths [ <max-paths> ]

## Syntax Description

no	Negate a command or set its defaults
maximum-paths	Set maximum paths per destination
<i>max-paths</i>	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	RIP set maximum paths per route
<i>max-paths</i>	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	Maximum paths per destination
<i>max-paths</i>	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 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
<i>mpath-count</i>	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
<i>limit</i>	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
<i>limit</i>	Max. prefix limit
<i>percent</i>	(Optional) Threshold percentage at which to generate a warning
restart	(Optional) Restart bgp connection after limit is exceeded
<i>restart-time</i>	(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-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
<i>limit</i>	Max. prefix limit
<i>percent</i>	(Optional) Threshold percentage at which to generate a warning
restart	(Optional) Restart bgp connection after limit is exceeded
<i>restart-time</i>	(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> ] [ damped ] } | { no maximum-prefix [ <value>[ <threshold> ] [ warning-only ] [ restart <time1> ] [ restart-count <count> ] [ reset-time <time2> ] [ damped ] ] } }
```

## Syntax Description

no	Negate a command or set its defaults
maximum-prefix	Maximum number of IP prefixes acceptable in aggregate
<i>value</i>	Number of IP prefixes for maximum-prefix limit
<i>threshold</i>	(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
<i>time1</i>	(Optional) Restart interval in minutes
restart-count	(Optional) Number of times sessions are auto-restarted
<i>count</i>	(Optional) Number of times
reset-time	(Optional) Duration after which restart history is cleared
<i>time2</i>	(Optional) Reset time in minutes
damped	(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 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
<i>limit</i>	Maximum number of routes allowed
<i>warnlevel</i>	(Optional) Threshold value (%) at which to generate a warning msg
reinstall	(Optional) Reinstall previous rejected route due to over maximum route limit
<i>threshold</i>	(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
<i>maddr1</i>	Multicast IP Prefix
<i>maddr2</i>	(Optional) Multicast IP Prefix

## Command Mode

- /exec/configure/if-nve/vni

**mcast-routing override source-interface**

# mcast-routing override source-interface

[no] mcast-routing override source-interface <interface>

## Syntax Description

no	(Optional) Negate a command or set its defaults
mcast-routing	
override	Override source address of routed mcast packets
source-interface	Source address of routed mcast packets
<i>interface</i>	

## Command Mode

- /exec/configure/if-nve

# 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**

# 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
<i>prefix</i>	List of group range prefixes
threshold	(Optional) Data MDT switching threshold
immediate-switch	(Optional) Move to data mdt immediately if remote receiver exists
<i>value</i>	(Optional) Threshold in kilobits per sec
route-map	(Optional) Specify policy for creating Data MDTs
<i>policy-name</i>	(Optional) A route-map name

## Command Mode

- /exec/configure/vrf

**mdt data bidir-enable**

## 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 <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
<i>mdt-default</i>	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

## 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
<i>mtu-value</i>	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
<i>interval</i>	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
<i>interval</i>	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
<i>interface</i>	Use IP address of this interface

## Command Mode

- /exec/configure/vrf

**media-type auto**

# 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

media-type sfp

## Syntax Description

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

## Command Mode

- /exec/configure/if-mgmt-ether

# medium

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

## Syntax Description

no	Negate a command or set its defaults
medium	Configure Interface medium mode
<i>medium-type</i>	

## Command Mode

- /exec/configure/if-vlan-common

**medium broadcast**

# 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

{ 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 vni**

# 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
<i>vni-range</i>	vni range, Example: 5000 or 5001-5008

## Command Mode

- /exec/configure/if-nve

# 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
<i>vni-range</i>	vni range, Example: 5000 or 5001-5008
associate-vrf	Associate vni with a vrf

## Command Mode

- /exec/configure/if-nve

**member vni mcast-group**

## 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
<i>vni-range</i>	vni range, Example: 5000 or 5001-5008
mcast-group	NVE Multicast Group
<i>maddr1</i>	Multicast IP Prefix
<i>maddr2</i>	(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)
<i>from-file</i>	the file containing the destination configuration, a patch will be created and applied to the running-config's matching section (format according 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 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)
<i>keyid</i>	Key ID
md5	Use MD5 algorithm
<i>key</i>	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)
<i>keyid</i>	Key ID
md5	Use MD5 algorithm
<i>key</i>	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

{ { 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
<i>hops</i>	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
<i>ribscale</i>	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

{ { 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
<i>tos</i>	Type Of Service (Only TOS 0 supported)
<i>k1</i>	K1
<i>k2</i>	K2
<i>k3</i>	K3
<i>k4</i>	K4
<i>k5</i>	K5
<i>k6</i>	(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
<i>policy-name</i>	Name of the policy
permit	Permit access
deny	Deny access
ip	(Optional) IPV4 address
<i>ip-addr</i>	(Optional) IPV4 source address/subnet
<i>ip-mask</i>	(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
<i>srcport</i>	(Optional) Source port
<i>srcport-end</i>	(Optional) Source Port end
dest-port	(Optional) Destination port
<i>dstport</i>	(Optional) Destination port
<i>dstport-end</i>	(Optional) Destination Port end

## Command Mode

- /exec/configure

# mkdir

mkdir <uri0>

## Syntax Description

mkdir	Create new directory
<i>uri0</i>	Directory name

## Command Mode

- /exec

# mode

[no] mode <mode-id>

## Syntax Description

no	(Optional) Negate a command or set its defaults
mode	Hot-standby mode
<i>mode-id</i>	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	Configure Hot-standby mode for a node
<i>mode-id</i>	Mode of node

## Command Mode

- /exec/configure/plb-dg-node

**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 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

# monitor erspan granularity

[no] monitor erspan granularity { 100\_us | 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_us	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
<i>ip</i>	
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
<i>switch_id</i>	erspan-switch-id

**Command Mode**

- /exec/configure

# mount slot0

mount slot0:

## Syntax Description

mount	mount expansion flash or USB storage
slot0:	mount expansion flash

## Command Mode

- /exec

**move**

```
move <uri0> <uri1>
```

**Syntax Description**

move	Move files
<i>uri0</i>	Source file path
<i>uri1</i>	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
<i>i0</i>	(Optional)
sup	(Optional) mping supervisor
module	(Optional) slot information
<i>i1</i>	(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 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-gre-tunnel

**mpls ip propagate-ttl**

## **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
<i>labels</i>	(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
<i>min-label</i>	Minimum label value
<i>max-label</i>	Maximum label value
static	(Optional) Specify block of labels for static bindings
<i>min-static-label</i>	(Optional) Minimum static label value
<i>max-static-label</i>	(Optional) Maximum static label value

## Command Mode

- /exec/configure

# mpls oam

[no] mpls oam

## Syntax Description

no	(Optional) Negate a command or set its defaults
mpls	MPLS configuration commands
oam	OAM configuration

## 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
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name
<i>prefix</i>	Destination prefix
<i>mask</i>	Destination prefix mask
<i>prefix-mask</i>	Destination prefix/mask
input	(Optional) Incoming (local) label
<i>static-inlabel</i>	Label Value
output	Outgoing (remote) label
<i>next-hop</i>	Destination next hop
<i>static-outlabel</i>	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 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
<i>vrf-name</i>	VRF name
<i>vrf-known-name</i>	Known VRF name
per-vrf	Per-VRF information
input	Incoming (local) label
<i>static-inlabel</i>	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
<i>timeout</i>	Time in seconds to poll for stats
threshold	For when to delete aged labeld
<i>low</i>	Lower Threshold
<i>high</i>	Higher Threshold
label-age	label Age
<i>age</i>	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
<i>mac-addr</i>	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**

# **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
<i>value</i>	20 bit value for label
all	Delete all static labels
interface	(Optional) Interface
<i>interface-name</i>	(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)
<i>level</i>	IS-IS level

## Command Mode

- /exec/configure/router-isis

**mpls traffic-eng administrative-weight**

# 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
<i>num</i>	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
<i>area-id-ip</i>	Area Id as an integer or ip address

## Command Mode

- /exec/configure/router-ospf

**mpls traffic-eng attribute-flags**

## **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
<i>value</i>	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
<i>tunnel-num</i>	(Optional)

## Command Mode

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

**mpls traffic-eng bandwidth**

## **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
<i>percentage</i>	(Optional) Percentage of bandwidth
<i>bw-kbps</i>	(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
```

## **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**

## 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
<i>up_p</i>	increased bandwidth usage (percent)
down	Set the thresholds for decreased resource availability
<i>dn_p</i>	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**

# **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 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 reoptimize**

# **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
<i>tunnel-num</i>	(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	Configure MPLS parameters
traffic-eng	Routing protocol commands for MPLS Traffic Engineering (TE)
router-id	Routing protocol commands for MPLS Traffic Engineering (TE)
<i>interface</i>	IS-IS interface

## Command Mode

- /exec/configure/router-isis

**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
<i>interface</i>	Routable Interface

**Command Mode**

- /exec/configure/router-ospf

# 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

mst designated priority

# 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
<i>mst-id</i>	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
<i>prio</i>	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
<i>mst-id</i>	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
<i>prio</i>	bridge priority in increments of 4096

## Command Mode

- /exec/configure/spanning-tree/pseudo

## mtu

mtu <mtu\_val> | no mtu [ <mtu\_val> ]

### Syntax Description

no	Negate a command or set its defaults
mtu	Configure mtu for the port
<i>mtu_val</i>	

### 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

# mtu1

[no] mtu1 <value>

## Syntax Description

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

## Command Mode

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

## mtu

mtu <mtu\_val> | no mtu

### Syntax Description

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

### Command Mode

- /exec/configure/if-vlan-common

# mtu

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

## Syntax Description

no	Negate a command or set its defaults
mtu	Configure MTU
<i>mtu-val</i>	Bytes

## Command Mode

- /exec/configure/if-any-tunnel

# mtu

[no] mtu <value>

## Syntax Description

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

## Command Mode

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

# 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

# multisite border-gateway interface

[no] multisite border-gateway interface <interface>

## Syntax Description

no	(Optional) Negate a command or set its defaults
multisite	VxLAN Multisite
border-gateway	VxLAN Multisite Border-gateway
interface	NVE Multisite Border-gateway Interface
<i>interface</i>	

## Command Mode

- /exec/configure/if-nve

# multisite ingress-replication

[no] multisite ingress-replication

## Syntax Description

no	(Optional) Negate a command or set its defaults
multisite	multisite ingress replication
ingress-replication	Configure ingress replication

## Command Mode

- /exec/configure/if-nve/vni

multisite ingress-replication