



## M Commands

---

- [mac-addr](#), on page 6
- [mac-address](#), on page 7
- [mac-address](#), on page 8
- [mac-address](#), on page 9
- [mac-address bpd source version 2](#), on page 10
- [mac-address destination](#), on page 11
- [mac-address ipv6-extract](#), on page 12
- [mac-list permit](#), on page 13
- [mac access-list](#), on page 14
- [mac address-table multicast vlan interface](#), on page 15
- [mac address](#), on page 16
- [mac address inherit](#), on page 17
- [mac advert interval](#), on page 18
- [mac packet-classify](#), on page 19
- [mac port access-group](#), on page 20
- [macsec keychain macsec keychain](#), on page 21
- [macsec policy](#), on page 22
- [macsec shutdown](#), on page 23
- [managed-config-flag](#), on page 24
- [management](#), on page 25
- [map-notify-group](#), on page 26
- [map-server key](#), on page 27
- [master ipv4](#), on page 28
- [match-address](#), on page 29
- [match](#), on page 30
- [match](#), on page 34
- [match](#), on page 36
- [match access-group name](#), on page 37
- [match address](#), on page 38
- [match as-number](#), on page 39
- [match as-number as-path-list](#), on page 40
- [match as-path](#), on page 41
- [match class-map](#), on page 42

- [match community, on page 43](#)
- [match cos, on page 44](#)
- [match cos, on page 45](#)
- [match datalink, on page 46](#)
- [match datalink, on page 47](#)
- [match dscp, on page 48](#)
- [match dscp, on page 49](#)
- [match exception, on page 50](#)
- [match extcommunity, on page 51](#)
- [match interface, on page 52](#)
- [match ip address, on page 53](#)
- [match ip address prefix-list, on page 54](#)
- [match ip multicast rp, on page 55](#)
- [match ip next-hop prefix-list, on page 56](#)
- [match ip protocol, on page 57](#)
- [match ip protocol, on page 58](#)
- [match ip route-source prefix-list, on page 59](#)
- [match ipv4 source address, on page 60](#)
- [match ipv4 source address, on page 61](#)
- [match ipv6, on page 62](#)
- [match ipv6, on page 63](#)
- [match ipv6 address, on page 64](#)
- [match ipv6 address prefix-list, on page 65](#)
- [match ipv6 multicast rp, on page 66](#)
- [match ipv6 next-hop prefix-list, on page 67](#)
- [match ipv6 route-source prefix-list, on page 68](#)
- [match metric, on page 69](#)
- [match ospf-area, on page 70](#)
- [match protocol, on page 71](#)
- [match protocol arp, on page 72](#)
- [match qos-group, on page 73](#)
- [match qos-group2, on page 74](#)
- [match qos-group2, on page 75](#)
- [match qos-group, on page 76](#)
- [match redirect, on page 77](#)
- [match route-type, on page 78](#)
- [match source-protocol, on page 79](#)
- [match tag, on page 80](#)
- [match transport destination, on page 81](#)
- [match transport destination, on page 82](#)
- [max-backoff, on page 83](#)
- [max-backoff, on page 84](#)
- [max-lsa, on page 85](#)
- [max-lsa, on page 86](#)
- [max-lsp-lifetime, on page 87](#)
- [max-lsp-lifetime, on page 88](#)

- max-metric router-lsa, on page 89
- max-metric router-lsa, on page 90
- max-ports, on page 91
- max-ports, on page 92
- maxas-limit, on page 93
- maximum-paths, on page 94
- maximum-paths, on page 95
- maximum-paths, on page 96
- maximum-paths, on page 97
- maximum-paths, on page 98
- maximum-paths, on page 99
- maximum-paths eibgp, on page 100
- maximum-peers, on page 101
- maximum-prefix, on page 102
- maximum-prefix, on page 103
- maximum-prefix, on page 104
- maximum routes, on page 105
- mcast-group, on page 106
- mdix auto, on page 107
- mdt asm-use-shared-tree, on page 108
- mdt data, on page 109
- mdt data bidir-enable, on page 110
- mdt data inhibit-reuse, on page 111
- mdt default, on page 112
- mdt enforce-bgp-mdt-safi, on page 113
- mdt mtu, on page 114
- mdt pim hello-interval, on page 115
- mdt pim jp-interval, on page 116
- mdt source, on page 117
- media-type auto, on page 118
- media-type rj45, on page 119
- media-type sfp, on page 120
- medium, on page 121
- medium broadcast, on page 122
- medium broadcast, on page 123
- medium p2p, on page 124
- medium p2p, on page 125
- member vni, on page 126
- member vni associate-vrf, on page 127
- member vni mcast-group, on page 128
- merge config, on page 129
- message-digest-key md5, on page 130
- message-digest-key md5, on page 131
- metric-style transition, on page 132
- metric direct 0, on page 133
- metric maximum-hops, on page 134

- metric rib-scale, on page 135
- metric version 64bit, on page 136
- metric weights, on page 137
- mgmt-policy, on page 138
- mkdir, on page 139
- mode, on page 140
- mode, on page 141
- mode openflow, on page 142
- mode tap-aggregation, on page 143
- monitor erspan origin ip-address, on page 144
- monitor erspan switch-id, on page 145
- mount slot0, on page 146
- move, on page 147
- mping, on page 148
- mpls ip, on page 149
- mpls ip default-route, on page 150
- mpls ip forwarding, on page 151
- mpls ip forwarding, on page 152
- mpls ip propagate-ttl, on page 153
- mpls ip static, on page 154
- mpls ip static, on page 155
- mpls ip ttl-expiration pop, on page 156
- mpls label-space, on page 157
- mpls label range, on page 158
- mpls oam, on page 159
- mpls static binding ipv4, on page 160
- mpls static binding ipv4 vrf per-vrf input output pop-and-lookup, on page 161
- mpls static configuration, on page 162
- mpls strip, on page 163
- mpls strip, on page 164
- mpls strip label, on page 165
- mpls traffic-eng, on page 166
- mpls traffic-eng administrative-weight, on page 167
- mpls traffic-eng area, on page 168
- mpls traffic-eng attribute-flags, on page 169
- mpls traffic-eng backup-path, on page 170
- mpls traffic-eng bandwidth, on page 171
- mpls traffic-eng configuration, on page 172
- mpls traffic-eng fast-reroute promote, on page 173
- mpls traffic-eng flooding thresholds up, on page 174
- mpls traffic-eng multicast-intact, on page 175
- mpls traffic-eng multicast-intact, on page 176
- mpls traffic-eng reoptimize, on page 177
- mpls traffic-eng router-id, on page 178
- mpls traffic-eng router-id, on page 179
- mpls traffic-eng tunnels, on page 180

- mst designated priority, on page 181
- mst root priority, on page 182
- mtu, on page 183
- mtu1, on page 184
- mtu, on page 185
- mtu, on page 186
- mtu, on page 187
- mtu, on page 188
- multi-topology, on page 189
- multisite border-gateway interface, on page 190
- multisite ingress-replication, on page 191

# 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
dot1q	(Optional) Encapsulation dot1q/bd
<i>dot1q-id</i>	(Optional) Encapsulation dot1q/bd on which the mac is learnt

## Command Mode

- /exec/configure/configngoamccpayload

# 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

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-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
<i>mac-addr</i>	MAC address

## Command Mode

- /exec/configure/if-vlan-common

## mac-address bpdu source version 2

[no] mac-address bpdu source version 2

### Syntax Description

no	(Optional) Negate a command or set its defaults
mac-address	change vpc mac address
bpdu	bpdu
source	source
version	version
2	use version 2 bpdu source mac-address

### Command Mode

- /exec/configure/vpc-domain

## 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/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-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

[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

## 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

[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 macsec keychain

```
[no] macsec keychain <keychain_name> [ policy <policy_name> ] [ fallback-keychain <fallback_kc_name>
] | [ no ] macsec keychain <keychain_name> [ fallback-keychain <fallback_kc_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
fallback-keychain	(Optional) fallback keychain
<i>fallback_kc_name</i>	(Optional) Name of fallback keychain 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
<i>policy_name</i>	Name of Policy

## Command Mode

- /exec/configure

# macsec shutdown

[no] macsec shutdown

## Syntax Description

macsec	Configure MACSEC
shutdown	shutdown / restart macsec

## 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

[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-dst-port-addr> } | { udp-src-port <udp-src-port-addr> } | { udp-dst-port
<udp-dst-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

<i>ipv6-flowlabel</i>	Match on IPv6 Flowlabel
<i>icmpv6-type</i>	Match on ICMPv6 Message Type
<i>icmpv6-code</i>	Match on ICMPv6 Message Code
<i>ipv4-dscp</i>	Match on DSCP for IPV4 Packets
<i>ipv6-dscp</i>	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
-----------------------	--------------------------

**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> } | { ip roce <port-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
ip	IP
roce	Roce protocol. port to be used 3804
<i>port-list</i>	UDP port list that are using RoCE
<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 <cmmap-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>cmmap-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

[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

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

## Syntax Description

no	(Optional) Negate a command or set its defaults
match	Classification criteria
class-map	Class map
<i>imap-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

[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 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 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 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/config-fte-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

[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 } } | multicast } } | 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

[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

[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 <i>iprp</i> [ rp-type <i>iprptype</i> ] } | { group <gprefix> } | { source <ipsrc> } } + } |
{ match ip multicast { { rp <i>iprp</i> [ rp-type <i>iprptype</i> ] } | { 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
rp-type	(Optional) Multicast rendezvous point type
<i>iprptype</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

[no] match ip { protocol | tos }

## Syntax Description

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

## Command Mode

- /exec/configure/config-fte-record

# 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

[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/config-fte-record

# 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

```
[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/config-fte-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
<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 <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 <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
<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 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

[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

[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-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/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
<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

[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/config-fte-record

# 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/sub-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

# 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

```
[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-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-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
<i>i0</i>	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
<i>as-limit</i>	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
<i>max-paths</i>	Maximum paths per destination

## Command Mode

- /exec/configure/router-ospf

# 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 <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

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 <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-egrp/router-egrp-vrf-common /exec/configure/router-egrp/router-egrp-af-common

## 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-vpn4 /exec/configure/router-bgp/router-bgp-af-vpn6

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

## 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 <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
<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
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 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

# 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
<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

[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
<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

[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

## 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



# 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 | 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 /exec/configure/if-ethernet-all

# 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 /exec/configure/if-ethernet-all

# 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

[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

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

## Syntax Description

no	Negate a command or set its defaults
metric	Modify EIGRP routing metrics and parameters
rib-scale	Defines RIB scaling value
<i>rib-scale</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 } | { 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 [ { vlan <vlan\_id> } ]

## 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
<i>vlan_id</i>	(Optional) Vlan ID

## Command Mode

- /exec/configure/if-switching

# 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 | 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 { <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

[no] mpls strip [ { mode dot1q } ]

## 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

```
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 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 <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 <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

[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

[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> [ <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> [ <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
<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

[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

[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	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 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 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 <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
<i>mtu-val</i>	Bytes

## Command Mode

- /exec/configure/if-any-tunnel

# 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 [ <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

# 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

[no] mtu <mtu>

## Syntax Description

mtu	MTU
<i>mtu</i>	MTU port to be configured

## Command Mode

- /exec/configure/config-ssx-collector

# 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 multitopology 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

