



M Commands

- [mac-address](#), on page 5
- [mac-address](#), on page 6
- [mac-address](#), on page 7
- [mac-address destination](#), on page 8
- [mac-address ipv6-extract](#), on page 9
- [mac-list permit](#), on page 10
- [mac access-list](#), on page 11
- [mac address](#), on page 12
- [mac address inherit](#), on page 13
- [mac advert interval](#), on page 14
- [mac packet-classify](#), on page 15
- [mac port access-group](#), on page 16
- [macsec-mka keychain](#), on page 17
- [macsec-policy](#), on page 18
- [management](#), on page 19
- [map-notify-group](#), on page 20
- [map-server key](#), on page 21
- [match-address](#), on page 22
- [match](#), on page 23
- [match](#), on page 27
- [match](#), on page 28
- [match access-group name](#), on page 29
- [match address](#), on page 30
- [match as-number](#), on page 31
- [match as-number as-path-list](#), on page 32
- [match as-path](#), on page 33
- [match class-map](#), on page 34
- [match community](#), on page 35
- [match cos](#), on page 36
- [match cos](#), on page 37
- [match datalink](#), on page 38
- [match dscp](#), on page 39
- [match dscp](#), on page 40

- [match exception](#), on page 41
- [match extcommunity](#), on page 42
- [match interface](#), on page 43
- [match ip address](#), on page 44
- [match ip address prefix-list](#), on page 45
- [match ip multicast rp](#), on page 46
- [match ip next-hop prefix-list](#), on page 47
- [match ip protocol](#), on page 48
- [match ip route-source prefix-list](#), on page 49
- [match ipv4 source address](#), on page 50
- [match ipv6](#), on page 51
- [match ipv6 address](#), on page 52
- [match ipv6 address prefix-list](#), on page 53
- [match ipv6 multicast rp](#), on page 54
- [match ipv6 next-hop prefix-list](#), on page 55
- [match ipv6 route-source prefix-list](#), on page 56
- [match metric](#), on page 57
- [match ospf-area](#), on page 58
- [match protocol](#), on page 59
- [match protocol arp](#), on page 60
- [match qos-group](#), on page 61
- [match qos-group2](#), on page 62
- [match qos-group2](#), on page 63
- [match qos-group](#), on page 64
- [match redirect](#), on page 65
- [match route-type](#), on page 66
- [match source-protocol](#), on page 67
- [match tag](#), on page 68
- [match transport destination](#), on page 69
- [max-backoff](#), on page 70
- [max-backoff](#), on page 71
- [max-lsa](#), on page 72
- [max-lsa](#), on page 73
- [max-lsp-lifetime](#), on page 74
- [max-lsp-lifetime](#), on page 75
- [max-metric router-lsa](#), on page 76
- [max-metric router-lsa](#), on page 77
- [max-ports](#), on page 78
- [max-ports](#), on page 79
- [maxas-limit](#), on page 80
- [maximum-paths](#), on page 81
- [maximum-paths](#), on page 82
- [maximum-paths](#), on page 83
- [maximum-paths](#), on page 84
- [maximum-paths](#), on page 85
- [maximum-paths](#), on page 86

- maximum-paths eibgp, on page 87
- maximum-peers, on page 88
- maximum-prefix, on page 89
- maximum-prefix, on page 90
- maximum-prefix, on page 91
- maximum routes, on page 92
- mcast-group, on page 93
- mdix auto, on page 94
- mdt asm-use-shared-tree, on page 95
- mdt data, on page 96
- mdt data bidir-enable, on page 97
- mdt data inhibit-reuse, on page 98
- mdt default, on page 99
- mdt enforce-bgp-mdt-safi, on page 100
- mdt mtu, on page 101
- mdt pim hello-interval, on page 102
- mdt pim jp-interval, on page 103
- mdt source, on page 104
- media-type auto, on page 105
- media-type rj45, on page 106
- media-type sfp, on page 107
- medium, on page 108
- medium broadcast, on page 109
- medium broadcast, on page 110
- medium p2p, on page 111
- medium p2p, on page 112
- member vni, on page 113
- member vni associate-vrf, on page 114
- member vni mcast-group, on page 115
- merge config, on page 116
- message-digest-key md5, on page 117
- message-digest-key md5, on page 118
- metric-style transition, on page 119
- metric direct 0, on page 120
- metric maximum-hops, on page 121
- metric rib-scale, on page 122
- metric version 64bit, on page 123
- metric weights, on page 124
- mgmt-policy, on page 125
- mkdir, on page 126
- mode, on page 127
- mode, on page 128
- mode every, on page 129
- mode openflow, on page 130
- mode out-of, on page 131
- mode tap-aggregation, on page 132

- monitor erspan granularity, on page 133
- monitor erspan origin ip-address, on page 134
- monitor erspan switch-id, on page 135
- mount slot0, on page 136
- move, on page 137
- mping, on page 138
- mpls ip, on page 139
- mpls ip default-route, on page 140
- mpls ip forwarding, on page 141
- mpls ip forwarding, on page 142
- mpls ip propagate-ttl, on page 143
- mpls ip static, on page 144
- mpls ip static, on page 145
- mpls ip ttl-expiration pop, on page 146
- mpls label-space, on page 147
- mpls label range, on page 148
- mpls static binding ipv4, on page 149
- mpls static binding ipv4 vrf per-vrf input output pop-and-lookup, on page 150
- mpls static configuration, on page 151
- mpls strip, on page 152
- mpls strip, on page 153
- mpls strip label, on page 154
- mpls traffic-eng, on page 155
- mpls traffic-eng administrative-weight, on page 156
- mpls traffic-eng area, on page 157
- mpls traffic-eng attribute-flags, on page 158
- mpls traffic-eng backup-path, on page 159
- mpls traffic-eng bandwidth, on page 160
- mpls traffic-eng configuration, on page 161
- mpls traffic-eng fast-reroute promote, on page 162
- mpls traffic-eng flooding thresholds up, on page 163
- mpls traffic-eng multicast-intact, on page 164
- mpls traffic-eng multicast-intact, on page 165
- mpls traffic-eng reoptimize, on page 166
- mpls traffic-eng router-id, on page 167
- mpls traffic-eng router-id, on page 168
- mpls traffic-eng tunnels, on page 169
- mst designated priority, on page 170
- mst root priority, on page 171
- mtu, on page 172
- mtu1, on page 173
- mtu, on page 174
- mtu, on page 175
- mtu, on page 176
- multi-topology, on page 177

mac-address

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

Syntax Description

Syntax Description

no Negate a command or set its defaults

mac-address Virtual MAC address

macaddress MAC address(FORMAT:xxxx.xxxx.xxxx)

Command Mode

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

mac-address

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

Syntax Description

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

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 destination

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

Syntax Description

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

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

Syntax Description

<code>no</code>	Negate a command or set its defaults
<code>mac-list</code>	Build a mac list
<i>name</i>	Name of prefix list
<code>seq</code>	(Optional) Sequence number of an entry
<i>seq</i>	(Optional) Sequence number
<code>permit</code>	Specify routes to forward
<code>deny</code>	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

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

[no] mac address { <macaddr> }

Syntax Description

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

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

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

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

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-mka keychain

macsec-mka keychain <keychain_name> [policy <policy_name>] | no macsec-mka

Syntax Description

Syntax Description		
macsec-mka	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-eth-port-channel /exec/configure/if-ethernet /exec/configure/if-switching

macsec-policy

[no] macsec-policy <policy_name>

Syntax Description

Syntax Description

macsec-policy Configure MACsec
policy

policy_name Name of Policy

Command Mode

- /exec/configure

management

[no] management

Syntax Description

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

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-oid /exec/configure/vrf/lisp-dynamic-oid

map-server key

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

Syntax Description

Syntax Description	
<code>no</code>	(Optional) Negate a command or set its defaults
<code>map-server</code>	To interact with Map-Server
<code>ms</code>	Address of IPv4 map-server
<code>key-type</code>	(Optional) Authentication key type, either sha1 or sha2
<code>sha1</code>	(Optional) Use sha1 authentication in Map-Register messages
<code>sha2</code>	(Optional) Use sha2 authentication in Map-Register messages
<code>key</code>	Authentication key used with Map-Server
<code>key</code>	SHA-1 password key
<code>proxy-reply</code>	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

match-address

[no] match-address

Syntax Description

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

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

ipv6-dscp-list List of IPV6 DSCP values

Command Mode

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

match

```
[no] match { { access-group name <acl-name> } | [ not ] { dscp { <dscp-list> | <dscp-enum> } + | { cos
<cos-list> } } | { qos-group <qos-group-list> } }
```

Syntax Description

Syntax Description	
<i>dscp-list</i>	<dscp-enum>
<i>cos-list</i>	
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
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

Command Mode

- /exec/configure/class-map

match

```
[no] match { [ not ] { { precedence { <precedence-list> | <prec-enum> } + } | { discard-class <discard-class-list> } | { class-map <cmap-name> } | { protocol <protocol-enum> } | { packet length <len-list> } | { ip rtp <port-list> } | { mpls experimental topmost <exp-list> } } }
```

Syntax Description

Syntax Description

<i>precedence-list</i>	<prec-enum>
no	(Optional) Negate a command or set its defaults
match	Classification criteria
not	(Optional) Negate this match result
precedence	Precedence in IP(v4) and IPv6 packets
<i>prec-enum</i>	
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
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 access-group name

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

Syntax Description

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

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

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

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

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 < cmap-name >

Syntax Description

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

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

Syntax Description

cos-list

no (Optional) Negate a command or set its defaults

match Classification criteria

cos IEEE 802.1Q Class of Service

Command Mode

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

match cos

[no] match cos <cos-list>

Syntax Description

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

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

Syntax Description

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

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

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 } } | muncast } } | 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

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
muncast	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

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

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

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

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 <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

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

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

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

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

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

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

Command Mode

- /exec/configure/nfm-record

match ipv6 address

[no] match ipv6 address <name>

Syntax Description

Syntax Description

no (Optional) Negate a command or set its defaults

match Match values from routing table

ipv6 Configure IPv6 features

address Match address of route or match packet

name IPv6 access-list name (for use in route-maps for PBR only)

Command Mode

- /exec/configure/route-map

match ipv6 address prefix-list

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

Syntax Description

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

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

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

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

Syntax Description	
<i>no</i>	(Optional) Negate a command or set its defaults
<i>match</i>	Match values from routing table
<i>metric</i>	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

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

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

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

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

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

Syntax Description		
no	(Optional) Negate a command or set its defaults	
match	Classification criteria	
qos-group2	QoS Group	
<i>qos-group-list</i>	Qos-group value	

Command Mode

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

match qos-group

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

Syntax Description

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

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

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

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

Syntax Description	<i>no</i> (Optional) Negate a command or set its defaults
	<i>match</i> Match values from routing table
	<i>tag</i> 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

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

Syntax Description

no Negate a command or set its defaults

max-backoff OpenFlow controller maximum backoff timer (default is 8 seconds)

maxbackoff-val max backoff timer value in secs

Command Mode

- /exec/configure/openflow/switch

max-backoff

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

Syntax Description

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

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

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

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

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> ] ] [ include-stub ] [ on-startup [ <timeout> ]
[ wait-for bgp <as> ] ] [ summary-lsa [ <max-metric-sumlsa> ] ]
```

Syntax Description

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

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

Syntax Description

vmware (Optional) VMware configuration

max-ports Max ports on which this profile can be inherited

i0 Enter the max-number of ports

Command Mode

- /exec/configure/port-profile

max-ports

[no] [vmware] max-ports

Syntax Description

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

Syntax Description

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

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

maximum-paths

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

Syntax Description

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

Syntax Description

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

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

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

Syntax Description

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

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

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

maximum-peers

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

Syntax Description

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

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

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

Syntax Description

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

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

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

Syntax Description	no	Negate a command or set its defaults
---------------------------	----	--------------------------------------

	no	Negate a command or set its defaults
--	----	--------------------------------------

	no	Negate a command or set its defaults
	no	Negate a command or set its defaults

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

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>] [route-map <policy-name>]

Syntax Description

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
<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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Syntax Description

merge merge

config merge configuration (to running-config)

from-file the file containing the destination configuration, a patch will be created and applied to the running-config's matching section (format 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

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

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

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

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

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

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

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

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

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

Syntax Description

mkdir Create new directory

uri0 Directory name

Command Mode

- /exec

mode

[no] mode <mode-id>

Syntax Description

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

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 every

[no] mode <numsample> every <period>

Syntax Description

Syntax Description

mode Define the Sampler mode

numsample Number of samples per sampling - 64 max

every Time-based sampling

period Sampling Time Period in milliseconds - 64000 max

Command Mode

- /exec/configure/nfm-sampler

mode openflow

[no] mode openflow

Syntax Description

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-ethernet /exec/configure/if-ethernet-switch /exec/configure/if-eth-non-member

mode out-of

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

Syntax Description

Syntax Description

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

Command Mode

- /exec/configure/nfm-sampler

mode tap-aggregation

[no] mode tap-aggregation

Syntax Description

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

Command Mode

- /exec/configure/if-switching

monitor erspan granularity

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

Syntax Description

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

Command Mode

- /exec/configure

monitor erspan origin ip-address

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

Syntax Description

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

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

Syntax Description

mount mount expansion flash or USB storage

slot0: mount expansion flash

Command Mode

- /exec

move

move <uri0> <uri1>

Syntax Description

Syntax Description

move Move files

uri0 Source file path

uri1 Destination file
path

Command Mode

- /exec

mping

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

Syntax Description

Syntax Description	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

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

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

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

mpls ip forwarding

[no] mpls ip forwarding

Syntax Description

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

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

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 static

[no] mpls ip static

Syntax Description

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 ttl-expiration pop

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

Syntax Description

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

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

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 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

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

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

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 submenu

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

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

Command Mode

- /exec/configure

mpls strip

[no] mpls strip

Syntax Description

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

Command Mode

- /exec/configure

mpls strip label

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

Syntax Description

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

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

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

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

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

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

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

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

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 multicast-intact

[no] mpls traffic-eng multicast-intact

Syntax Description

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

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

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

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

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

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

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

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

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

Syntax Description

no (Optional) Negate a command or set its defaults

mtu1 MTU for the CoS

value MTU value

Command Mode

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

mtu

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

Syntax Description

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

[no] mtu <value>

Syntax Description

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

mtu

mtu <mtu_val> | no mtu

Syntax Description

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

multi-topology

[no] multi-topology [transition]

Syntax Description

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

