

*Send document comments to [nexus7k-docfeedback@cisco.com](mailto:nexus7k-docfeedback@cisco.com).*



## E Commands

---

This chapter describes the Cisco NX-OS Multiprotocol Label Switching commands that begin with E.

[Send document comments to nexus7k-docfeedback@cisco.com.](mailto:nexus7k-docfeedback@cisco.com)

## exclude-address

To specify an IP address while configuring a traffic engineering (TE) explicit-path that TE should avoid using while calculating the label switched path (LSP), use the **exclude-address** command.

**exclude-address** *ip-address*

Syntax Description	<i>ip-address</i>	Link address or a node address (a node's TE router-ID).
--------------------	-------------------	---

Defaults	None
----------	------

Command Modes	Explicit-path configuration mode
---------------	----------------------------------

Supported User Roles	network-admin vdc-admin
----------------------	----------------------------

Command History	Release	Modification
	5.2(1)	This command was introduced.

**Usage Guidelines** Both primary and backup tunnel paths can be dynamic or explicit and they do not have to use the **exclude-address**. Because backup tunnels must avoid the protected link or node, you should use the **exclude-address** command.

When using the **exclude-address** command to specify the path for a backup tunnel, you must exclude an interface IP address to avoid a link (for creating a next-hop [NHOP] backup tunnel), or a router ID address to avoid a node (for creating an next-next-hop [NNHOP] backup tunnel).

This command requires the MPLS Services license.

**Examples** This example shows how to specify an address to exclude while configuring an explicit-path:

```
switch# configure terminal
switch(config)# mpls traffic-eng configuration
switch(config-te)# explicit-path name avoid-protected-link
switch(config-te-expl-path)# exclude-address 3.3.3.3
1: exclude-address 3.3.3.3
switch(config-te-expl-path)#
```

Related Commands	Command	Description
	<b>interface tunnel-te</b>	Configures the traffic engineering (TE) interface.

**Send document comments to [nexus7k-docfeedback@cisco.com](mailto:nexus7k-docfeedback@cisco.com).**

## exp

To configure the EXP bits that are forwarded over the member tunnel, use the **exp** command.

**exp** [*list-of-exp-values*] [**default**]

Syntax Description	<i>list-of-exp-values</i>	EXP bits allowed for the interface. Enter up to eight EXP values separated by spaces. Values range from 0 to 7. The default is the EXP values that were not configured or a specific member tunnel.
	<b>default</b>	(Optional) Specifies the default tunnel number.

**Defaults** The member tunnel will forward the packets with the EXP bits that are not being forwarded by other member tunnels that are part of the same bundle.

**Command Modes** cbts-member configuration mode

**Supported User Roles** network-admin  
vdc-admin

Command History	Release	Modification
	5.2(1)	This command was introduced.

**Usage Guidelines** You cannot configure the following traffic engineering (TE) commands on a class-based tunnel selection (CBTS) member tunnels (**auto-bw**; **autoroute**; **backup-bw**; **description**; **destination**; **fowarding-adjacency**; **inherit**; **source**).

This command requires the MPLS Services license.

**Examples** This example shows how to configure the EXP bits that are forwarded over the member tunnel:

```
switch# configure terminal
switch(config)# interface tunnel-te 1
switch(config-if-te)# cbts-member tunnel-te 251
switch(config-cbts-member)# exp 5
```

Related Commands	Command	Description
	<b>interface tunnel-te</b>	Configures the traffic engineering (TE) interface.

***Send document comments to [nexus7k-docfeedback@cisco.com](mailto:nexus7k-docfeedback@cisco.com).***

## explicit-null

To configure an advertised explicit null label in place of an implicit null label, use the **explicit-null** command. To return to the default setting, use the **no** form of this command.

**explicit-null** [**for** *prefix-list* | **to** *prefix-list* | **for** *prefix-list* **to** *prefix-list*]

**no explicit-null** [**for** *prefix-list* | **to** *prefix-list* | **for** *prefix-list* **to** *prefix-list*]

Syntax Description		
<b>for</b>	(Optional) Specifies the prefix list that specifies the controls on destination prefixes.	
<i>prefix-list</i>	(Optional) Prefix list.	
<b>to</b>	(Optional) Specifies the access list that specifies the controls on Label Distribution Protocol (LDP) peers.	

**Defaults** None

**Command Modes** LDP configuration mode

**SupportedUserRoles** network-admin  
vdc-admin

Command History	Release	Modification
	5.2(1)	This command was introduced.

**Usage Guidelines** This command requires the MPLS Services license.

**Examples** This example shows how to configure an explicit null label on an egress Label Switching Router (LSR), which causes that LSR to advertise the explicit null label to all adjacent MPLS routers:

```
switch(config-ldp)# explicit-null
switch(config-ldp)#
```

This example shows how to configure an explicit null label and specify the **for** keyword with a prefix list:

```
switch(config-ldp)# explicit-null for prefix-list
switch(config-ldp)#
```

This example shows how to configure an explicit null label and specify the **to** keyword with a prefix list:

```
switch(config-ldp)# explicit-null to prefix-list
switch(config-ldp)#
```

***Send document comments to [nexus7k-docfeedback@cisco.com](mailto:nexus7k-docfeedback@cisco.com).***

Related Commands	Command	Description
	<b>mpls ldp configuration</b>	Configures the Multiprotocol Label Switching (MPLS) Label Distribution Protocol (LDP).

[Send document comments to nexus7k-docfeedback@cisco.com.](mailto:nexus7k-docfeedback@cisco.com)

## explicit-path

To configure an IP explicit path to be used by tunnel-te label switched path (LSPs), or a path dynamically calculated from the TE topology database, use the **explicit-path** command. To restore the system to its default condition, use the **no** form of this command.

```
explicit-path { name path-name | identifier number }
```

```
no explicit-path { name path-name | identifier number }
```

### Syntax Description

<b>name</b>	Specifies the explicit path by name.
<i>path-name</i>	Path name. The maximum size is 63 alphanumeric characters.
<b>identifier</b>	Specifies the explicit path by number.
<i>number</i>	Identifier number. The range is from 1 to 65535.

### Defaults

None

### Command Modes

TE configuration mode

### Supported User Roles

network-admin  
vdc-admin

### Command History

Release	Modification
5.2(1)	This command was introduced.

### Usage Guidelines

This command requires the MPLS Services license.

### Examples

This example shows how to configure the tunnel to use a named IP explicit path or a path dynamically calculated from the TE topology database:

```
switch# configure terminal
switch(config)# mpls traffic-eng configuration
switch(config-te)# explicit-path name avoid-protected-link
switch(config-te-expl-path)#
```

### Related Commands

Command	Description
<b>mpls traffic-eng configuration</b>	Configures the Multiprotocol Label Switching (MPLS) Traffic Engineering Protocol (MPLS-TE).