



## E Commands

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This chapter describes the Cisco NX-OS Ethernet and virtual Ethernet commands that begin with E.

# encapsulation dot1Q

To enable IEEE 802.1Q encapsulation of traffic on a specified subinterface, use the **encapsulation dot1q** command. To disable encapsulation, use the **no** form of this command.

**encapsulation dot1Q** *vlan-id*

**no encapsulation dot1Q** *vlan-id*

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | <i>vlan-id</i> | VLAN to set when the interface is in access mode; valid values are from 1 to 4093, except for the VLANs reserved for internal switch use. |
|---------------------------|----------------|---|

|                        |                  |
|------------------------|------------------|
| <b>Command Default</b> | No encapsulation |
|------------------------|------------------|

|                      |                                 |
|----------------------|---------------------------------|
| <b>Command Modes</b> | Subinterface configuration mode |
|----------------------|---------------------------------|

|                        |                |                             |
|------------------------|----------------|-----------------------------|
| <b>Command History</b> | <b>Release</b> | <b>Modification</b>         |
|                        | 6.0(2)N1(1)    | This command we introduced. |

**Usage Guidelines** IEEE 802.1Q encapsulation is configurable on Ethernet and EtherChannel interfaces. IEEE 802.1Q is a standard protocol for interconnecting multiple switches and routers and for defining VLAN topologies. Use the **encapsulation dot1q** command in subinterface range configuration mode to apply a VLAN ID to the subinterface.



**Note**

This command is not applicable to loopback interfaces.

This command does not require a license.

**Examples** This example shows how to enable dot1Q encapsulation on a subinterface for VLAN 30:

```
switch(config)# interface ethernet 1/5.1
switch(config-subif)# encapsulation dot1q 30
switch(config-subif)#
```

|                         |                        |  |
|-------------------------|------------------------|--|
| <b>Related Commands</b> | <b>Command</b>         | <b>Description</b>                                   |
|                         | <b>show vlan dot1Q</b> | Displays dot1Q encapsulation information for a VLAN. |

# errdisable detect cause

To enable error-disable (err-disabled) detection in an application, use the **errdisable detect cause** command. To disable error disable detection, use the **no** form of this command.

**errdisable detect cause {all | link-flap | loopback}**

**no errdisable detect cause {all | link-flap | loopback}**

## Syntax Description

|                  |  |
|------------------|--|
| <b>all</b>       | Enables error detection on all cases.                  |
| <b>link-flap</b> | Enables error disable detection on linkstate-flapping. |
| <b>loopback</b>  | Enables error disable detection on loopback.           |

## Command Default

Enabled

## Command Modes

Global configuration mode

## Command History

| Release     | Modification                |
|-------------|-----------------------------|
| 6.0(2)N1(1) | This command we introduced. |

## Usage Guidelines

When error-disable detection is enabled and a cause is detected on an interface, the interface is placed in an err-disabled state, which is an operational state that is similar to the link-down state.

## Examples

This example shows how to enable the err-disabled detection on linkstate-flapping:

```
switch(config)# errdisable detect cause link-flap
switch(config)#
```

## Related Commands

| Command                                   | Description                                      |
|---|--|
| <b>errdisable recovery</b>                | Configures recovery from the err-disabled state. |
| <b>show interface status err-disabled</b> | Displays the interface error disabled state.     |

## errdisable recovery cause

To configure the application to bring the interface out of the error-disabled (err-disabled) state and retry coming up, use the **errdisable recovery cause** command. To revert to the defaults, use the **no** form of this command.

```
errdisable recovery cause {all | bpduguard | failed-port-state | link-flap-recovery |
    pause-rate-limit | uddl}
```

```
no errdisable recovery cause {all | bpduguard | failed-port-state | link-flap-recovery |
    pause-rate-limit | uddl}
```

### Syntax Description

|                          |  |
|--------------------------|--|
| <b>all</b>               | Enables a timer to recover from all causes.  |
| <b>bpduguard</b>         | Enables a timer to recover from bridge protocol data unit (BPDU) Guard error disable state.    |
| <b>failed-port-state</b> | Enables a timer to recover from a Spanning Tree Protocol (STP) set port state failure.         |
| <b>link-flap</b>         | Enables a timer to recover from linkstate flapping.  |
| <b>pause-rate-limit</b>  | Enables a timer to recover from the pause rate limit error disabled state.                     |
| <b>uddl</b>              | Enables a timer to recover from the Unidirectional Link Detection (UDLD) error disabled state. |

### Command Default

None

### Command Modes

Global configuration mode

### Command History

| Release     | Modification                |
|-------------|-----------------------------|
| 6.0(2)N1(1) | This command we introduced. |

### Usage Guidelines

When error disable recovery is enabled, the interface automatically recovers from the err-disabled state, and the device retries bringing the interface up.

### Examples

This example shows how to enable error disable recovery from linkstate-flapping:

```
switch(config)# errdisable recovery cause link-flap
switch(config)#
```

**Related Commands**

| <b>Command</b>                                | <b>Description</b>                                   |
|---|--|
| <b>errdisable detect cause</b>                | Enables the error disabled (err-disabled) detection. |
| <b>show interface status<br/>err-disabled</b> | Displays the interface error disabled state.         |

# errdisable recovery interval

To configure the recovery time interval to bring the interface out of the error-disabled (err-disabled) state, use the **errdisable recovery interval** command. To revert to the defaults, use the **no** form of this command.

**errdisable recovery interval** *time*

**no errdisable recovery interval**

|                           |             |  |
|---------------------------|-------------|--|
| <b>Syntax Description</b> | <i>time</i> | Error disable recovery time interval. The range is from 30 to 65535 seconds. |
|---------------------------|-------------|--|

|                        |          |
|------------------------|----------|
| <b>Command Default</b> | Disabled |
|------------------------|----------|

|                      |                           |
|----------------------|---------------------------|
| <b>Command Modes</b> | Global configuration mode |
|----------------------|---------------------------|

| <b>Command History</b> | <b>Release</b> | <b>Modification</b>         |
|------------------------|----------------|-----------------------------|
|                        | 6.0(2)N1(1)    | This command we introduced. |

|                         |  |
|-------------------------|--|
| <b>Usage Guidelines</b> | <p>When error disable recovery is enabled, the interface automatically recovers from the err-disabled state, and the device retries bringing the interface up.</p> <p>The device waits 300 seconds to retry.</p> |
|-------------------------|--|

|                 |  |
|-----------------|--|
| <b>Examples</b> | <p>This example shows how to enable error disable recovery time interval to 100 seconds:</p> |
|-----------------|--|

```
switch(config)# errdisable recovery interval 100
switch(config)#
```

| <b>Related Commands</b> | <b>Command</b>                            | <b>Description</b>                           |
|-------------------------|---|--|
|                         |   | <b>errdisable recovery cause</b>             |
|                         | <b>show interface status err-disabled</b> | Displays the interface error disabled state. |

# erspan-id

To configure the flow ID for an Encapsulated Remote Switched Port Analyzer (ERSPAN)) session, use the **erspan-id** command. To remove the flow ID, use the **no** form of this command.

```
erspan-id flow_id
```

|                           |                |  |
|---------------------------|----------------|--|
| <b>Syntax Description</b> | <i>flow_id</i> | ERSPAN flow ID. The range is from 1 to 1023. |
|---------------------------|----------------|--|

|                        |      |
|------------------------|------|
| <b>Command Default</b> | None |
|------------------------|------|

|                      |                                   |
|----------------------|-----------------------------------|
| <b>Command Modes</b> | ERSPAN session configuration mode |
|----------------------|-----------------------------------|

| <b>Command History</b> | <b>Release</b> | <b>Modification</b>         |
|------------------------|----------------|-----------------------------|
|                        | 6.0(2)N1(1)    | This command we introduced. |

|                         |  |
|-------------------------|--|
| <b>Usage Guidelines</b> | This command does not require a license. |
|-------------------------|--|

**Examples** This example shows how to configure the flow ID for an ERSPAN session:

```
switch# configure terminal
switch(config)# monitor session 1 type erspan-source
switch(config-erspan-src)# erspan-id 100
switch(config-erspan-src)#
```

| <b>Related Commands</b> | <b>Command</b>   | <b>Description</b>  |
|-------------------------|--|---|
|                         | <b>ip dscp</b>   | Configures the DSCP value of the packets in the ERSPAN traffic. |
| <b>ip ttl</b>           | Configures the IP time-to-live (TTL) value of the ERSPAN traffic.  |   |
| <b>mtu</b>              | Sets the maximum transmission unit (MTU) size for SPAN packet.   |   |
| <b>vrf</b>              | Configures the VRF for ERSPAN traffic forwarding.  |   |
| <b>monitor-session</b>  | Enters the monitor configuration mode for configuring an ERSPAN or SPAN session for analyzing traffic between ports. |   |

# extension-key

To configure the extension key to be used to connect to the vCenter Server, use the **extension-key** command.

**extension-key** *extn-ID*

|                           |                |  |
|---------------------------|----------------|--|
| <b>Syntax Description</b> | <i>extn-ID</i> | Extension ID. The ID can be a maximum of 80 alphanumeric characters. |
|---------------------------|----------------|--|

|                        |      |
|------------------------|------|
| <b>Command Default</b> | None |
|------------------------|------|

|                      |                                   |
|----------------------|-----------------------------------|
| <b>Command Modes</b> | SVS connection configuration mode |
|----------------------|-----------------------------------|

| <b>Command History</b> | <b>Release</b> | <b>Modification</b>         |
|------------------------|----------------|-----------------------------|
|                        | 6.0(2)N1(1)    | This command we introduced. |

|                         |  |
|-------------------------|--|
| <b>Usage Guidelines</b> | This command does not require a license. |
|-------------------------|--|

|                 |   |
|-----------------|---|
| <b>Examples</b> | This example shows how to configure the extension key for a vCenter Server: |
|-----------------|---|

```
switch# configure terminal
switch(config)# svs connection SVSConn
switch(config-svs-conn)# extension-key vckey
switch(config-svs-conn)#
```

| <b>Related Commands</b> | <b>Command</b>              | <b>Description</b>                   |
|-------------------------|-----------------------------|--------------------------------------|
|                         | <b>show svs connections</b> | Displays SVS connection information. |
| <b>svs connection</b>   | Enables an SVS connection.  |                                      |