E Commands

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*

Syntax Description

vlan-id	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.

Command Default

No encapsulation

Command Modes

Subinterface configuration mode

Command History

Release	Modification
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)#
```

Related Commands

Command	Description
show vlan dot1Q	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

all	Enables error detection on all cases.
link-flap	Enables error disable detection on linkstate-flapping.
loopback	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
errdisable recovery	Configures recovery from the err-disabled state.
show interface status err-disabled	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** | **udld**}

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

Syntax Description

all	Enables a timer to recover from all causes.
bpduguard	Enables a timer to recover from bridge protocol data unit (BPDU) Guard error disable state.
failed-port-state	Enables a timer to recover from a Spanning Tree Protocol (STP) set port state failure.
link-flap	Enables a timer to recover from linkstate flapping.
pause-rate-limit	Enables a timer to recover from the pause rate limit error disabled state.
udld	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

Command	Description
errdisable detect cause	Enables the error disabled (err-disabled) detection.
show interface status err-disabled	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

Syntax Description

time	Error disable recovery time interval. The range is from 30 to 65535 seconds.

Command Default

Disabled

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.

The device waits 300 seconds to retry.

Examples

This example shows how to enable error disable recovery time interval to 100 seconds:

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

Related Commands

Command	Description
errdisable recovery cause	Enables an error disabled recovery on an interface.
show interface status err-disabled	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*

Syntax Description

flow_id	ERSPAN flow ID. The range is from 1 to 1023.

Command Default

None

Command Modes

ERSPAN source session configuration mode (config-erspan-src)
ERSPAN destination session configuration mode (config-erspan-dst)
SPAN-on-Drop ERSPAN session configuration mode (config-span-on-drop-erspan)
SPAN-on-Latency ERSPAN session configuration mode (config-span-on-latency-erspan)

Command History

Release	Modification
7.0(0)N1(1)	This command was modified. This command was implemented in the following modes: ERSPAN destination session configuration mode, SPAN-on-Drop ERSPAN session configuration mode, and SPAN-on-Drop ERSPAN session configuration mode.
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

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

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

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

This example shows how to configure the flow ID for a SPAN-on-Drop ERSPAN session:

```
switch# configure terminal
switch(config)# monitor session 1 type span-on-drop-erspan
switch(config-span-on-drop-erspan)# erspan-id 100
switch(config-span-on-drop-erspan)#
```

This example shows how to configure the flow ID for a SPAN-on-Latency ERSPAN session:

```
switch# configure terminal
switch(config)# monitor session 1 type span-on-latency-erspan
switch(config-span-on-latency-erspan)# erspan-id 100
switch(config-span-on-latency-erspan)#
```

Related Commands

Command	Description
ip dscp	Configures the DSCP value of the packets in the ERSPAN traffic.
ip ttl	Configures the IP time-to-live (TTL) value of the ERSPAN traffic.
vrf	Configures the VRF for ERSPAN traffic forwarding.
monitor-session	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*

Syntax Description		
	extn-ID	Extension ID. The ID can be a maximum of 80 alphanumeric characters.

Command Default None

Command Modes SVS connection configuration mode

Command History	Release	Modification
	6.0(2)N1(1)	This command we introduced.

Usage Guidelines This command does not require a license.

Examples 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)#
```

Related Commands	Command	Description
	show svs connections	Displays SVS connection information.
	svs connection	Enables an SVS connection.