



F Commands

This chapter describes the Cisco NX-OS commands that begin with F that are used to manage a Cisco Nexus 2000 Series Fabric Extender from a Cisco Nexus 6000 switch.

fcoe

To associate a Cisco Nexus 2000 Series Fabric Extender (FEX) to a switch for pinning Fibre Channel over Ethernet (FCoE) Initialization Protocol (FIP) and FCoE traffic, use the **fcoe** command. To remove the association, use the **no** form of this command.

```
fcoe [vsan vsan-id]
```

```
no fcoe [vsan]
```

Syntax Description	vsan vsan-id Specifies the VSAN status. The VSAN ID range is from 1 to 4094.				
Command Default	None				
Command Modes	FEX configuration mode VLAN configuration mode				
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>6.0(2)N1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	6.0(2)N1(1)	This command was introduced.
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6.0(2)N1(1)	This command was introduced.				

Usage Guidelines

Before you use this command, make sure that you enable the Fabric Extender (FEX) features on the switch by using the **feature fex** command.

You can use this command only on Cisco Nexus 2232P and Cisco Nexus 2232PQ Fabric Extenders. When you bind an interface to a virtual Fibre Channel interface to enable FCoE traffic, you must use slot number 1. The port number can be from 1 to 32.

Examples This example shows how to configure a FEX as FCoE enabled:

```
switch# configure terminal
switch(config)# feature fex
switch(config)# fex 100
switch(config-fex)# fcoe
switch(config-fex)#
```

This example shows how to configure a pair of FEXs to carry FCoE traffic in a fabric virtual port channel (vPC) topology, with the host uplink ports in the FEXs configured to the same port channel:

```
switch# configure terminal
switch(config)# feature lacp
switch(config)# feature fex
switch(config)# feature fcoe
switch(config)# fex 100
switch(config-fex)# fcoe
switch(config-fex)# exit
switch(config)# interface vfc 1
switch(config-if)# bind interface eth101/1/1
```

```

switch(config)# interface eth101/1/1
switch(config-if)# channel-group 1
switch(config)# fex 102
switch(config-fex)# fcoe
switch(config)# interface vfc 1
switch(config-if)# bind interface eth102/1/1
switch(config)# interface eth102/1/1
switch(config-if)# channel-group 1
switch(config-if)#

```

This example shows how to configure FCoE traffic on a VLAN:

```

switch# configure terminal
switch(config)# vlan 5
switch(config-vlan)# fcoe vsan 1
switch(config-vlan)#

```

This example shows how to disable FCoE traffic on a FEX:

```

switch# configure terminal
switch(config)# fex 100
switch(config-fex)# no fcoe
switch(config-fex)#

```

Related Commands

Command	Description
feature fcoe	Enables the FCoE feature on the switch.
feature fex	Enables the FEX feature on the switch.
feature lacp	Enables the Link Aggregation Control Protocol (LACP).
show fex	Displays information about a specific FEX.

feature fex

To enable Fabric Extender (FEX) features on the switch, use the **feature fex** command. To disable FEX, use the **no** form of this command.

feature fex

no feature fex

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Global configuration mode

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

Examples This example shows how to enable FEX features on the switch:

```
switch(config)# feature fex
switch(config)#
```

Related Commands	Command	Description
	fex	Creates a Fabric Extender and enters fabric extender configuration mode.
	show feature	Displays the features enabled or disabled on the switch.

fex

To create a Fabric Extender and enter fabric extender configuration mode, use the **fex** command. To delete the Fabric Extender configuration, use the **no** form of this command.

```
fex chassis_ID
```

```
no fex chassis_ID
```

Syntax Description	<i>chassis_ID</i>	Fabric Extender chassis ID. The chassis ID range is from 100 to 199.
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Command Default	None
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Command Modes	Global configuration mode
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Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.

Usage Guidelines	You can create and configure the Fabric Extender before you connect and associate it to an interface on the parent switch. Once you associate the Fabric Extender to the switch, the configuration you created is transferred over to the Fabric Extender and applied.
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Examples	This example shows how to enter Fabric Extender configuration mode:
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```
switch# configure terminal
switch(config)# fex 101
switch(config-fex)#
```

This example shows how to delete the Fabric Extender configuration:

```
switch(config-fex)# no fex 101
switch(config)#
```

Related Commands	Command	Description
		beacon
	description (fex)	Specifies a description for a Fabric Extender.
	fex associate	Associates a Fabric Extender to an Ethernet or EtherChannel interface.
	pinning max-links	Specifies the number of statically pinned uplinks connected to a Fabric Extender.
	serial	Assigns a serial number to a Fabric Extender.

Command	Description
show fex	Displays all configured Fabric Extender chassis connected to the switch.
type	Specifies the Fabric Extender card.

fex associate

To associate a Fabric Extender to a fabric interface, use the **fex associate** command. To disassociate the Fabric Extender, use the **no** form of this command.

```
fex associate chassis_ID
```

```
no fex associate [chassis_ID]
```

Syntax Description	<i>chassis_ID</i>	Fabric Extender chassis ID. The chassis ID range is from 100 to 199.
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Command Default	None
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Command Modes	Interface configuration mode
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Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.

Usage Guidelines	Before you can associate an interface on the parent switch to the Fabric Extender, you must first make the interface into a fabric interface by entering the switchport mode fex-fabric command.
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Examples	This example shows how to associate the Fabric Extender to an Ethernet interface:
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```
switch# configure terminal
switch(config)# interface ethernet 1/40
switch(config-if)# switchport mode fex-fabric
switch(config-if)# fex associate 101
```

This example shows how to associate the Fabric Extender to an EtherChannel interface:

```
switch# configure terminal
switch(config)# interface port-channel 4
switch(config-if)# switchport mode fex-fabric
switch(config-if)# fex associate 101
```

Related Commands	Command	Description
	show fex	
switchport mode fex-fabric		Sets the interface to be an uplink port.

fex pinning redistribute

To redistribute the host interfaces on a Fabric Extender, use the **fex pinning redistribute** command.

fex pinning redistribute *chassis_ID*

Syntax Description	<i>chassis_ID</i>	Fabric Extender chassis ID. The chassis ID range is from 100 to 199.
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Command Default	None	
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Command Modes	EXEC mode	
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Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.

Usage Guidelines	<p>When you provision the Fabric Extender using the statically pinned mode (see the <i>Cisco Nexus 2000 Series Fabric Extender Software Configuration Guide</i>), the host interfaces on the Fabric Extender are pinned to the fabric interfaces in the order that they were initially configured. The next time that you reboot the Fabric Extender, the configured fabric interfaces are pinned to the host interfaces in an ascending order by the port number of the fabric interface.</p>
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Use the **fex pinning redistribute** command if you want to configure the same fixed distribution of host interfaces without restarting the Fabric Extender after your initial configuration.



Caution

This command disrupts all the host interface ports of the Fabric Extender. However, the disruption is shorter than would be the case if you reboot the Fabric Extender.

Examples	<p>This example shows how to redistribute the host interfaces on a Fabric Extender:</p> <pre>switch# fex pinning redistribute 101 switch#</pre>
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Related Commands	Command	Description
		pinning max-links
	show fex	Displays all configured Fabric Extender chassis connected to the switch.
	show interface fex-intf	Displays the Fabric Extender ports pinned to a specific switch interface.

fex queue-limit

To limit the amount of input buffer space (in bytes) allocated to each Fabric Extender port, use the **fex queue-limit** command. To disable the drop threshold and allow a Fabric Extender port to use all available buffer space, use the **no** form of this command.

fex queue-limit

no fex queue-limit

Syntax Description This command has no arguments or keywords.

Command Default Fabric Extender queue limit is available in the default configuration and is set on.

Command Modes System QoS configuration mode

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

Usage Guidelines By default, the drop threshold applies to each Fabric Extender port to limit the amount of buffer being allocated for each port. To restore the default queue limit of each Fabric Extender port, use the **fex queue-limit** command.

Examples This example shows how to set the queue limit for the input buffer for each Fabric Extender port:

```
switch(config)# system qos
switch(config-sys-qos)# fex queue-limit
switch(config-sys-qos)#
```

This example shows how to restore the default queue limit for each Fabric Extender port:

```
switch(config)# system qos
switch(config-sys-qos)# no fex queue-limit
switch(config-sys-qos)#
```

Related Commands	Command	Description
	show fex	Displays all configured Fabric Extender chassis connected to the switch.

