Cisco Nexus 7000 Series NX-OS Fabric Extender Command Reference

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Cisco Nexus 7000 Series NX-OS Fabric Extender Command Reference

New and Changed Information

This chapter provides release-specific information for each new and changed feature in the *Cisco Nexus 7000 Series NX-OS Security Command Reference*. The latest version of this document is available at the following Cisco website:
http://www.cisco.com/c/en/us/support/switches/nexus-7000-series-switches/products-command-reference-list.html

To check for additional information about this Cisco NX-OS Release, see the Cisco NX-OS Release Notes available at the following Cisco website:
http://www.cisco.com/c/en/us/support/switches/nexus-7000-series-switches/products-release-notes-list.html

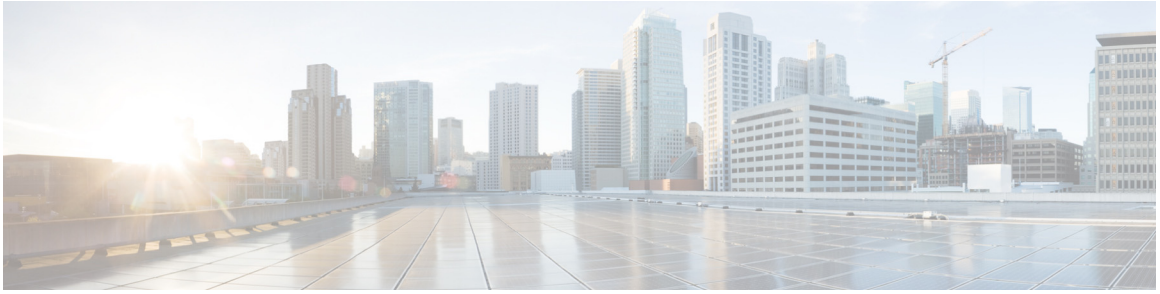
The following table summarizes the new and changed features for the *Cisco Nexus 7000 Series NX-OS Security Command Reference* and tells you where they are documented.

Table 1 New and Changed Information

Feature	Description	Changed in Release
FEX	Added the **hardware qos dscp-to-queue ingress module-type** command.	6.2(2)
	Added the **hardware queue-limit** command.	6.2(2)
	Added the **show hardware qos dscp-to-queue ingress** command.	6.2(2)
	Updated the **show queuing interface** command.	6.2(2)
	Updated the **type** command.	6.2(2)
	Added the **port-channel mink-links** command.	6.1(3)
	Changed the **show port-channel summary** command output.	6.1(3)
	Added the **port-channel min-links 3** to the **show running-config** output for the port channel.	6.1(3)
	Support for FEX **2232TM** and **2248TPE** was introduced.	6.1(1)
	Support for FEX **2224TP** and **2232P** was introduced.	5.2(1)
	Added the **attach fex** command.	5.1(1)

Table 1 New and Changed Information

Feature	Description	Changed in Release
	Added the **description** command.	5.1(1)
	Added the **feature-set fex** command.	5.1(1)
	Added the **fex** command.	5.1(1)
	Added the **fex associate** command.	5.1(1)
	Added the **install feature-set fex** command.	5.1(1)
	Added the **reload fex** command.	5.1(1)
	Added the **serial** command.	5.1(1)
	Added the **switchport mode fex-fabric** command.	5.1(1)
	Added the **show environment fex** command.	5.1(1)
	Added the **show fex** command.	5.1(1)
	Added the **show fex detail** command.	5.1(1)
	Added the **show fex transceiver** command.	5.1(1)
	Added the **show fex version** command.	5.1(1)
	Added the **show running-config fex** command.	5.1(1)
	Added the **show sprom fex** command.	5.1(1)
	Added the **show tech fex all** command.	5.1(1)
	Added the **show tech-support fex** command.	5.1(1)
	Added the **show inventory fex** command.	4.2(1)
	Added the **show version fex** command.	4.2(1)
	Added the **type** command.	4.2(1)
	Added the **show system reset-reason fex** command.	4.2(1)
	Added the **show interface transceiver fex-fabric** command.	4.0(1a)
	Added the **logging fex** command.	4.0(1a)
	Added the **pinning max-links** command.	4.0(1a)
	Added the **beacon** command.	4.0(1a)



Preface

This preface describes the audience, organization, and conventions of the *Cisco Nexus 7000 Series NX-OS Fabric Extender Command Reference* and how to obtain related documentation.

This chapter includes the following sections:

Audience

This publication is for experienced users who configure and maintain Cisco NX-OS devices.

Organization

This reference is organized as follows:

Chapter and Title	Description
FEX Commands	Describes the Cisco NX-OS Fabric Extender commands.

Document Conventions

Command descriptions use these conventions:

Convention	Description
boldface font	Commands and keywords are in boldface.
italic font	Arguments for which you supply values are in italics.

[ ]	Elements in square brackets are optional.
[x | y | z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.

Screen examples use these conventions:

`screen font`	Terminal sessions and information that the switch displays are in screen font.
`boldface screen font`	Information you must enter is in boldface screen font.
`italic screen font`	Arguments for which you supply values are in italic screen font.
< >	Nonprinting characters, such as passwords, are in angle brackets.
[ ]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

This document uses the following conventions:

Note Means reader *take note*. Notes contain helpful suggestions or references to material not covered in the manual.

Caution Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

Tip Means *the following information will help you solve a problem*.

Related Documentation

Cisco NX-OS includes the following documents:

Release Notes

Cisco Nexus 7000 Series NX-OS Release Notes, Release 6.x

NX-OS Configuration Guides

Cisco Nexus 2000 Series Fabric Extender Software Configuration Guide

Cisco Nexus 7000 Series NX-OS Configuration Examples

Cisco Nexus 7000 Series NX-OS FabricPath Configuration Guide

Configuring Feature Set for FabricPath

Cisco Nexus 7000 Series NX-OS Fundamentals Configuration Guide

Cisco Nexus 7000 Series NX-OS High Availability and Redundancy Guide

Cisco Nexus 7000 Series NX-OS Interfaces Configuration Guide

Cisco Nexus 7000 Series NX-OS IP SLAs Configuration Guide

Cisco Nexus 7000 Series NX-OS Layer 2 Switching Configuration Guide

Cisco Nexus 7000 Series NX-OS LISP Configuration Guide

Cisco Nexus 7000 Series NX-OS MPLS Configuration Guide

Cisco Nexus 7000 Series NX-OS Multicast Routing Configuration Guide

Cisco Nexus 7000 Series NX-OS OTV Configuration Guide

Cisco Nexus 7000 Series OTV Quick Start Guide

Cisco Nexus 7000 Series NX-OS Quality of Service Configuration Guide

Cisco Nexus 7000 Series NX-OS SAN Switching Configuration Guide

Cisco Nexus 7000 Series NX-OS Security Configuration Guide

Cisco Nexus 7000 Series NX-OS System Management Configuration Guide

Cisco Nexus 7000 Series NX-OS Unicast Routing Configuration Guide

Cisco Nexus 7000 Series NX-OS Virtual Device Context Configuration Guide

Cisco Nexus 7000 Series NX-OS Virtual Device Context Quick Start

Cisco NX-OS FCoE Configuration Guide for Cisco Nexus 7000 and Cisco MDS 9500

NX-OS Command References

Cisco Nexus 7000 Series NX-OS Command Reference Master Index

Cisco Nexus 7000 Series NX-OS FabricPath Command Reference

Cisco Nexus 7000 Series NX-OS Fundamentals Command Reference

Cisco Nexus 7000 Series NX-OS High Availability Command Reference

Cisco Nexus 7000 Series NX-OS Interfaces Command Reference

Cisco Nexus 7000 Series NX-OS IP SLAs Command reference

Cisco Nexus 7000 Series NX-OS Layer 2 Switching Command Reference

Cisco Nexus 7000 Series NX-OS LISP Command Reference

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Cisco Nexus 7000 Series NX-OS Unicast Routing Command Reference

Cisco Nexus 7000 Series NX-OS Virtual Device Context Command Reference

Cisco NX-OS FCoE Command Reference for Cisco Nexus 7000 and Cisco MDS 9500

Other Software Documents

Cisco NX-OS Licensing Guide

Cisco Nexus 7000 Series NX-OS MIB Quick Reference

Cisco Nexus 7000 Series NX-OS Software Upgrade and Downgrade Guide

Cisco NX-OS System Messages Reference

Cisco Nexus 7000 Series NX-OS Troubleshooting Guide

Cisco NX-OS XML Interface User Guide

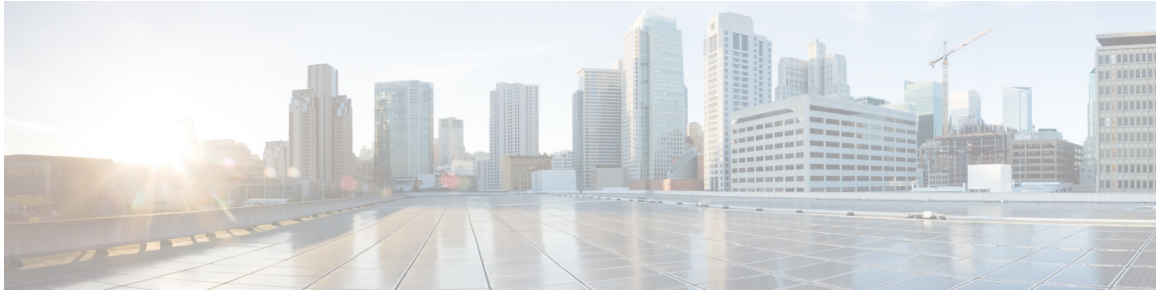
Documentation Feedback

To provide technical feedback on this document, or to report an error or omission, please send your comments to nexus7k-docfeedback@cisco.com. We appreciate your feedback.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation*.

To receive new and revised Cisco technical content directly to your desktop, you can subscribe to the What's New in Cisco Product Documentation RSS feed. The RSS feeds are a free service.



FEX Commands

This chapter describes the Cisco NX-OS Fabric Extender (FEX) commands for the Cisco Nexus 7000 Series devices.

attach fex

To access the command-line interface (CLI) of a connected Fabric Extender (FEX) to run diagnostic commands, use the **attach fex** command.

attach fex *chassis_id*

Syntax Description

chassis_id	Fabric Extender chassis ID. The chassis ID range is from 101 to 199.

Command Default

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines

Use the **attach fex** command to access the CLI on a connected Fabric Extender and perform diagnostic commands. We recommend that you use this command only by following the directions from Cisco technical support personnel.

This command does not require a license.

Examples

This example shows how to access the CLI of a connected Fabric Extender to run diagnostic commands:

```
switch# attach fex 101
Attaching to FEX 101 ...
To exit type 'exit', to abort type '$.'
Bad terminal type: "ansi". Will assume vt100.
fex-101#
```

Related Commands

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

beacon

To enable the beacon mode for an Fabric Extender (FEX) interface, use the **beacon** command. To disable the beacon mode for an interface, use the **no** form of this command.

beacon

no beacon

Syntax Description

This command has no arguments or keywords.

Command Default

Disabled

Command Modes

Interface configuration mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
4.0	This command was introduced.

Usage Guidelines

The beacon mode allows you to identify a physical port by flashing its link-state LED with a green light. To identify the physical port for an interface, you activate the beacon parameter for the interface.

This command does not require a license.

Examples

This example shows how to enable the beacon mode for the Ethernet port 3/1:

```
switch(config)# interface ethernet 3/1
switch(config-if)# beacon
switch(config-if)#
```

Related Commands

Command	Description
fex	Creates a Fabric Extender and enters fabric extender configuration mode.
show fex	Displays all configured Fabric Extender chassis connected to the switch.

description (fex)

To specify a description for a Fabric Extender (FEX), use the **description** command. To revert to the default description, use the **no** form of this command.

description *description*

no description

Syntax Description

description	Description of a Fabric Extender. The default is the string FEX*xxxx* where *xxxx* is the chassis ID. For example, if the chassis ID is 123, the default description is FEX0123. The maximum length is 20 alphanumeric characters.

Command Default

None

Command Modes

Fabric extender configuration mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to specify a description for a Fabric Extender:

```
switch# configure terminal
switch(config)# fex 101
switch(config-fex)# description Rack16_FEX101
```

This example shows how to revert to the default description for a Fabric Extender:

```
switch# configure terminal
switch(config)# fex 101
switch(config-fex)# no description
```

Related Commands

Command	Description
fex	Creates a Fabric Extender and enters fabric extender configuration mode.
show fex	Displays all configured Fabric Extender chassis connected to the switch.

feature-set fex

To enable the Fabric Extender (FEX) feature set, use the **feature-set fex** command.

feature-set fex

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Global configuration mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to enable a FEX feature set:

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

Related Commands

Command	Description
show fex	Displays all configured Fabric Extender chassis connected to 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

chassis_id	Fabric Extender chassis ID. The chassis ID range is from 101 to 199.

Command Default

None

Command Modes

Global configuration mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines

You must 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 that you created is transferred over to the Fabric Extender and applied.

Examples

This example shows how to enter fabric extender configuration mode:

```
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
show fex	Displays all configured Fabric Extender chassis connected to the switch.

fex associate

To associate a Fabric Extender (FEX) 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

chassis_id	Fabric Extender chassis ID. The chassis ID range is from 101 to 199.

Command Default

None

Command Modes

Interface configuration mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(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.

This command does not require a license.

Examples

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	Displays all configured Fabric Extender chassis connected to the switch.
switchport mode fex-fabric	Sets the interface to be an uplink port.

hardware qos dscp-to-queue ingress module-type

To enable the DSCP2Q mapping for the Fabric Extender (FEX) host interface and FEX fabric interface, use the **hardware qos dscp-to-queue ingress module-type** command. To disable DSCP2Q mapping for the FEX host interface and FEX fabric interface use the **no** form of this command.

hardware qos dscp-to-queue ingress module-type [all | f-series | m-series]

no hardware qos dscp-to-queue ingress

Syntax Description

all	(Optional) Enables the DSCP based queuing for all cards.
f-series	(Optional) Enables the DSCP based queuing for F Series modules.
m-series	(Optional) Enables the DSCP based queuing for M Series modules.

Command Default

None

Command Modes

FEX configuration mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
6.2(2)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to enable the DSCP2Q for all the FEX host interface:

```
switch# configure terminal
switch(config)# hardware qos dscp-to-queue ingress module-type all
switch(config)#
```

This example shows how to enable the DSCP2Q for the F Series module:

```
switch# configure terminal
switch(config)# hardware qos dscp-to-queue ingress module-type f-series
switch(config)#
```

This example shows how to disable the DSCP2Q for the FEX host interface:

```
switch# configure terminal
switch(config)# no hardware qos dscp-to-queue ingress
switch(config)#
```

Related Commands

Command	Description
show hardware qos dscp-to-queue ingress	Displays the DHCP-to-queue enable/disable status for various module types on a device.
show queuing interface	Displays the DHCP-to-queue enable/disable status and corresponding DHCP-to-queue mappings on a FEX.

hardware queue-limit

To configure the queue limit for a Fabric Extender (FEX), use the **hardware queue-limit** command. To disable the queue limit for a FEX, use the **no** form of this command.

hardware [*fex-type*] **queue-limit** [*queue-limit*]

no hardware [*fex-type*] **queue-limit** [*queue-limit*]

Syntax Description

fex-type	(Optional) Fabric Extender card type. The following Fabric Extender card types are supported: • B22HP Fabric Extender 16x10G SFP+ 8x10G SFP+ Module • N2224TP Fabric Extender 24x1G 2x10G SFP+ Module • N2232P Fabric Extender 32x10G SFP+ 8x10G SFP+ Module • N2232TM Fabric Extender 32x10GBASE-T 8x10G SFP+ Module • N2232TM-E Fabric Extender 32x10GBASE-T 8x10G SFP+ Module • N2248T Fabric Extender 48x1G 4x10G SFP+ Module • N2248TP-E Fabric Extender 48x1G 4x10G SFP+ Module
queue-limit	(Optional) Queue limit value for the interface. The range varies per FEX type. The FEX type range for N2248TP-E is from 32768 to 33538048, and the range for other FEX types is from5120 to 652800.

Command Default

None

Command Modes

FEX configuration mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
6.2(2)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to configure the default queue limit value (66560 bytes) for a FEX:

```
switch# configure terminal
switch(config)# fex 101
switch(config-fex)# hardware N2248T queue-limit
switch(config-fex)#
```

This example shows how to configure the queue limit for a FEX:

```
switch# configure terminal
switch(config)# fex 101
switch(config-fex)# hardware N2248T queue-limit 5120
switch(config-fex)#
```

This example shows how to enable a different queue limit on the rx and tx directions:

```
switch# configure terminal
switch(config)# fex 101
switch(config-fex)# hardware N2248TP-E queue-limit 40000 rx
switch(config-fex)# hardware N2248TP-E queue-limit 80000 tx
switch(config-fex)#
```

This example shows how to disable the queue limit:

```
switch# config t
switch(config)# fex 101
switch(config)# no hardware N2248T queue-limit
```

Related Commands

Command	Description
show queuing interface	Displays the queue limit that is enforced on a FEX.

install feature-set fex

To install a Fabric Extender (FEX) feature set, use the **install feature-set fex** command.

install feature-set fex

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Global configuration mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to install a FEX feature set:

```
switch(config)# install feature-set fex
switch(config)#
```

Related Commands

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

logging fex

To set the logging alert level for Fabric Extender (FEX) events, use the **logging fex** command. To reset the logging level, use the **no** form of this command.

logging fex [*severity-level*]

no logging fex [*severity-level*]

Syntax Description

severity-level	(Optional) Number of the desired severity level at which messages should be logged. Messages at or numerically lower than the specified level are logged. Severity levels are as follows: • 0—emergency: System unusable • 1—alert: Immediate action needed • 2—critical: Critical condition—default level • 3—error: Error condition • 4—warning: Warning condition • 5—notification: Normal but significant condition • 6—informational: Informational message only • 7—debugging: Appears during debugging only

Command Default

None

Command Modes

Global configuration mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
4.0(1a)N2(1)	This command was introduced.

Examples

This example shows how to set the logging alert level for Fabric Extender events:

```
switch(config)# logging fex 4
```

This example shows how to reset the logging level:

```
switch(config)# no logging fex
```

Related Commands

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

port-channel min-links

To configure the minimum number of links for a port channel, use the **port-channel min-links** command.To disable this feature, use the **no** form of this command.

port-channel min-links *min-link number*

no port-channel min-links *min-link number*

Syntax Description

min-link number	Minimum number of links. The range is from 1 to 16.

Command Default

The default min links is 1.

Command Modes

Interface configuration mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
6.1(3)	This command was introduced.

Usage Guidelines

The minimum number of links is configured on a fabric port channel to ensure the minimum bandwidth for the fabric port channel. When the minimum number of links criteria is not met, the host-facing interfaces of the FEX are brought down.

This command does not require a license.

Examples

This example shows how to configure the minimum number of links for a port channel:

```
switch# config t
Enter configuration commands, one per line.  End with CNTL/Z.switch# configure terminal
switch(config)# interface port-channel 100
switch(config)# switchport
switch(config-if)# switchport mode fex-fabric
switch(config-if)# port-channel min-links 3
```

This example shows how to remove the minimum number of links:

```
switch# config t
Enter configuration commands, one per line.  End with CNTL/Z.switch# configure terminal
switch(config)# interface port-channel 100
switch(config)# switchport
switch(config-if)# switchport mode fex-fabric
switch(config-if)# no port-channel min-links 3
```

Related Commands

Command	Description
show port-channel summary	Displays a summary of the port channels.

reload fex

To reload a Fabric Extender (FEX), use the **reload fex** command.

reload fex *chassis-id* **all**

Syntax Description

chassis-id	Fabric Extender chassis ID. The range is from 101 to 199.
all	Reloads all FEX modules.

Defaults

None

Command Modes

Global configuration mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to reload all FEX modules:

```
switch(config)# reload fex all
WARNING: This command will reboot all FEX modules
Do you want to continue? (y/n) [n] y
qadc3-ind30(config)# 2010 Sep  6 13:13:24 qadc3-ind30 %CALLHOME-2-EVENT: FEX_OFF
LINE
2010 Sep  6 13:13:25 qadc3-ind30 %FEX-2-NOHMS_ENV_FEX_OFFLINE: FEX-101 Off-line
(Serial Number JAF1407AANJ)
switch(config)#
```

This example shows how to reload a specific FEX:

```
switch(config)# reload fex 101
WARNING: This command will reboot FEX module 101
Do you want to continue? (y/n) [n] y
qadc3-ind30(config)# 2010 Sep  6 13:11:36 qadc3-ind30 %CALLHOME-2-EVENT: FEX_OFF
LINE
2010 Sep  6 13:11:37 qadc3-ind30 %VNTAG_MGR-2-VNTAG_SEQ_ERROR: Failed to send me
ssage to FEX slot(33) Chassis (101) - Error Connection timed out. Ignore if FEX
is going offline
2010 Sep  6 13:11:38 qadc3-ind30 %FEX-2-NOHMS_ENV_FEX_OFFLINE: FEX-101 Off-line
(Serial Number JAF1407AANJ)
switch(config)#
```

Related Commands

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

serial

To assign a serial number to a Fabric Extender (FEX), use the **serial** command. To remove the serial number, use the **no** form of this command.

serial *serial_string*

no serial

Syntax Description

serial_string	Serial number string for the Fabric Extender. The string is alphanumeric, case sensitive, and has a maximum length of 20 characters.

Command Default

None

Command Modes

Fabric extender configuration mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines

The serial number string that you define with the **serial** command must match the serial number of the Fabric Extender. If you configure a serial number and then you use the **fex associate** command to associate the corresponding chassis ID to the switch, the association succeeds only if the Fabric Extender reports a matching serial number string.

Caution Configuring a serial number other than that of the given Fabric Extender forces the Fabric Extender offline.

Examples

This example shows how to specify a serial number for a Fabric Extender:

```
switch# configure terminal
switch(config)# fex 101
switch(config-fex)# serial Rack16_FEX101
```

This example shows how to remove a serial number from a Fabric Extender:

```
switch# configure terminal
switch(config)# fex 101
switch(config-fex)# no serial
```

Related Commands

Command	Description
fex	Creates a Fabric Extender and enters fabric extender configuration mode.
fex associate	Associates a Fabric Extender to an Ethernet or EtherChannel interface.
show fex	Displays all configured Fabric Extender chassis connected to the switch.

switchport mode fex-fabric

To set the interface type to be an uplink port for a Fabric Extender (FEX), use the **switchport mode fex-fabric** command.

switchport mode fex-fabric

no switchport mode fex-fabric

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Interface configuration mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Examples

This example shows how to set an Ethernet interface to be an uplink port for a Fabric Extender:

```
switch# configure terminal
switch(config)# interface ethernet 1/40
switch(config-if)# switchport mode fex-fabric
```

This example shows how to set an EtherChannel interface to be an uplink port for a Fabric Extender:

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

Related Commands

Command	Description
fex associate	Associates a Fabric Extender to an Ethernet or EtherChannel interface.
show fex	Displays all configured Fabric Extender chassis connected to the switch.

show environment fex

To display the Fabric Extender (FEX) environment information, use the **show environment fex** command.

show environment fex {**all** | *chassis_ID*} [**fan** | **power** | **temperature**]

Syntax Description

all	Displays information for all Fabric Extender chassis.
chassis_ID	Fabric Extender chassis ID. The chassis ID range is from 101 to 199.
fan	(Optional) Displays fan information.
power	(Optional) Displays power capacity and power distribution information.
temperature	(Optional) Displays temperature sensor information.

Command Default

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Examples

This example shows how to display the environmental sensor status for a Fabric Extender:

```
switch# show environment fex 101

Temperature Fex 101:
----------------------------------------------------------------
Module   Sensor     MajorThresh   MinorThres   CurTemp     Status
                    (Celsius)     (Celsius)    (Celsius)
----------------------------------------------------------------
1        Outlet-1   85            75           50          ok
1        Inlet-1    100           90           37          ok


Fan Fex: 100:
-----------------------------------------------------
Fan             Model                Hw         Status
-----------------------------------------------------
Chassis         N2K-C2148-FAN        --         ok
PS-1            N5K-PAC-200W         --         ok
PS-2            --                   --         absent
```

```
Power Supply Fex 100:
----------------------------------------------------------------------------
Voltage: 12 Volts
----------------------------------------------------
PS  Model                Power       Power     Status
                         (Watts)     (Amp)
----------------------------------------------------
1   N5K-PAC-200W            0.00      0.00     ok
2   --                        --        --     --


Mod Model                Power     Power       Power     Power       Status
                         Requested Requested   Allocated Allocated
                         (Watts)   (Amp)       (Watts)   (Amp)
--- -------------------  -------   ----------  --------- ----------  ----------
1    N5K-C5110T-BF-1GE   24.00     2.00        24.00     2.00        powered-up


Power Usage Summary:
--------------------
Power Supply redundancy mode:                 redundant

Total Power Capacity                                0.00 W

Power reserved for Supervisor(s)                   24.00 W
Power currently used by Modules                     0.00 W

                                                -------------
Total Power Available                             -24.00 W
                                                -------------
switch#
```

Related Commands

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

show fex

To display information about a specific Fabric Extender or all attached chassis, use the **show fex** command.

show fex [*chassis_id* [**detail**]]

Syntax Description

chassis_id	(Optional) Fabric Extender chassis ID. The chassis ID range is from 101 to 199.
detail	(Optional) Displays a detailed listing.

Command Default

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines

This command does not require a license

Examples

This example shows how to display information about all attached Fabric Extender chassis:

```
switch# show fex
FEX         FEX           FEX                        FEX
Number    Description      State            Model            Serial
----------------------------------------------------------------------
100        FEX0100                Online   N5K-C5110T-BF-1GE   JAF1237ABSE
101        FEX0101                Online     N2K-C2248TP-1GE   JAF11223333
102        FEX0102                Online   N5K-C5110T-BF-1GE   JAF1241BLHQ
105        FEX0105                Online     N2K-C2232P-10GE   JAF1331AKBM
switch#
```

This example shows how to display information about a specific Fabric Extender chassis:

```
switch# show fex 101
FEX: 101 Description: FEX0101   state: Online
  FEX version: 4.2(1)N1(1) [Switch version: 4.2(1)N1(1)]
  Extender Model: N2K-C2248TP-1GE,  Extender Serial: JAF11223333
  Part No: 73-12748-01
 pinning-mode: static    Max-links: 1
  Fabric port for control traffic: Eth3/5
  Fabric interface state:
```

```
    Po5 - Interface Up. State: Active
    Eth3/5 - Interface Up. State: Active
    Eth3/6 - Interface Up. State: Active
switch#
```

This example shows how to display the detailed information about all attached Fabric Extender chassis:

```
switch# show fex detail
FEX: 100 Description: FEX0100   state: Online
  FEX version: 4.2(1)N1(1) [Switch version: 4.2(1)N1(1)]
  FEX Interim version: 4.2(1)N1(0.309)
  Switch Interim version: 4.2(1)N1(0.309)
  Extender Model: N5K-C5110T-BF-1GE,  Extender Serial: JAF1237ABSE
  Part No: 73-12009-02
  Card Id: 70, Mac Addr: 00:0d:ec:b1:13:02, Num Macs: 64
  Module Sw Gen: 12594  [Switch Sw Gen: 21]
  post level: complete
 pinning-mode: static    Max-links: 1
  Fabric port for control traffic: Eth3/3
  Fabric interface state:
    Po12 - Interface Up. State: Active
    Eth3/3 - Interface Up. State: Active
    Eth3/4 - Interface Up. State: Active
  Fex Port        State  Fabric Port  Primary Fabric
       Eth100/1/1    Up        Po12        Po12
       Eth100/1/2    Up        Po12        Po12
       Eth100/1/3    Up        Po12        Po12
       Eth100/1/4    Up        Po12        Po12
       Eth100/1/5    Up        Po12        Po12
       Eth100/1/6    Up        Po12        Po12
       Eth100/1/7    Up        Po12        Po12
       Eth100/1/8    Up        Po12        Po12
       Eth100/1/9    Up        Po12        Po12
      Eth100/1/10    Up        Po12        Po12
      Eth100/1/11    Up        Po12        Po12
      Eth100/1/12    Up        Po12        Po12
      Eth100/1/13    Up        Po12        Po12
      Eth100/1/14    Up        Po12        Po12
      Eth100/1/15    Up        Po12        Po12
      Eth100/1/16    Up        Po12        Po12
      Eth100/1/17    Up        Po12        Po12
      Eth100/1/18    Up        Po12        Po12
      Eth100/1/19    Up        Po12        Po12
      Eth100/1/20    Up        Po12        Po12
      Eth100/1/21    Up        Po12        Po12
      Eth100/1/22    Up        Po12        Po12
      Eth100/1/23    Up        Po12        Po12
--More--
switch#
```

Related Commands

Command	Description
fex	Creates a Fabric Extender and enters fabric extender configuration mode.

show fex detail

To display detailed information about a specific Fabric Extender (FEX) or all attached chassis, use the **show fex detail** command.

show fex detail

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines

This command does not require a license

Examples

This example shows how to display detailed information about a specific or all attached Fabric Extender chassis:

```
switch# show fex detail
FEX: 100 Description: FEX0100   state: Online
  FEX version: 4.2(1)N1(1) [Switch version: 4.2(1)N1(1)]
  FEX Interim version: 4.2(1)N1(0.326)
  Switch Interim version: 4.2(1)N1(0.326)
  Extender Model: N5K-C5110T-BF-1GE,  Extender Serial: JAF1237ABSE
  Part No: 73-12009-02
  Card Id: 70, Mac Addr: 00:0d:ec:b1:13:02, Num Macs: 64
  Module Sw Gen: 12594  [Switch Sw Gen: 21]
  post level: complete
 pinning-mode: static    Max-links: 1
  Fabric port for control traffic: Eth3/4
  Fabric interface state:
    Po12 - Interface Up. State: Active
    Eth3/3 - Interface Up. State: Active
    Eth3/4 - Interface Up. State: Active
  Fex Port        State  Fabric Port  Primary Fabric
       Eth100/1/1    Up        Po12        Po12
       Eth100/1/2    Up        Po12        Po12
       Eth100/1/3    Up        Po12        Po12
       Eth100/1/4    Up        Po12        Po12
```

```
        Eth100/1/5    Up        Po12        Po12
        Eth100/1/6    Up        Po12        Po12
        Eth100/1/7    Up        Po12        Po12
        Eth100/1/8    Up        Po12        Po12
        Eth100/1/9    Up        Po12        Po12
       Eth100/1/10    Up        Po12        Po12
       Eth100/1/11    Up        Po12        Po12
       Eth100/1/12    Up        Po12        Po12
       Eth100/1/13    Up        Po12        Po12
       Eth100/1/14    Up        Po12        Po12
       Eth100/1/15    Up        Po12        Po12
       Eth100/1/16    Up        Po12        Po12
       Eth100/1/17    Up        Po12        Po12
       Eth100/1/18    Up        Po12        Po12
       Eth100/1/19    Up        Po12        Po12
       Eth100/1/20    Up        Po12        Po12
       Eth100/1/21    Up        Po12        Po12
       Eth100/1/22    Up        Po12        Po12
       Eth100/1/23    Up        Po12        Po12
       Eth100/1/24    Up        Po12        Po12
       Eth100/1/25    Up        Po12        Po12
       Eth100/1/26    Up        Po12        Po12
       Eth100/1/27    Up        Po12        Po12
       Eth100/1/28    Up        Po12        Po12
       Eth100/1/29    Up        Po12        Po12
       Eth100/1/30    Up        Po12        Po12
       Eth100/1/31    Up        Po12        Po12
       Eth100/1/32    Up        Po12        Po12
       Eth100/1/33  Down        Po12        Po12
       Eth100/1/34  Down        Po12        Po12
       Eth100/1/35  Down        Po12        Po12
       Eth100/1/36  Down        Po12        Po12
       Eth100/1/37  Down        Po12        Po12
       Eth100/1/38  Down        Po12        Po12
       Eth100/1/39  Down        Po12        Po12
       Eth100/1/40    Up        Po12        Po12
       Eth100/1/41    Up        Po12        Po12
       Eth100/1/42    Up        Po12        Po12
       Eth100/1/43    Up        Po12        Po12
       Eth100/1/44    Up        Po12        Po12
       Eth100/1/45    Up        Po12        Po12
       Eth100/1/46    Up        Po12        Po12
       Eth100/1/47    Up        Po12        Po12
       Eth100/1/48    Up        Po12        Po12
Logs:
04/16/2010 05:05:23.441707: Module register received
04/16/2010 05:05:23.442886: Registration response sent
04/16/2010 05:05:23.551846: Module Online Sequence
04/16/2010 05:05:56.520856: Module Online
04/16/2010 05:29:38.526605: Deleting route to FEX
04/16/2010 05:29:38.536055: Module disconnected
04/16/2010 05:29:38.537686: Offlining Module
04/16/2010 05:29:38.538260: Module Offline Sequence
04/16/2010 05:29:53.646254: Module Offline
04/16/2010 05:29:54.178401: Deleting route to FEX
04/16/2010 05:29:54.184092: Module disconnected
04/16/2010 05:29:54.186230: Offlining Module
04/16/2010 05:31:13.784346: Module register received
04/16/2010 05:31:13.785410: Registration response sent
04/16/2010 05:31:15.676906: Module Online Sequence
04/16/2010 05:31:50.492714: Module Online
04/16/2010 05:32:18.388033: Deleting route to FEX
04/16/2010 05:32:18.393579: Module disconnected
04/16/2010 05:32:18.394845: Offlining Module
```

```
04/16/2010 05:32:18.395412: Module Offline Sequence
04/16/2010 05:32:30.336790: Module Offline
04/16/2010 05:32:30.683558: Deleting route to FEX
04/16/2010 05:32:30.690042: Module disconnected
04/16/2010 05:32:30.692101: Offlining Module
04/16/2010 05:33:42.781911: Module register received
04/16/2010 05:33:42.783432: Registration response sent
04/16/2010 05:33:52.542824: Module Online Sequence
04/16/2010 05:34:33.483417: Module Online
<---output truncated--->
switch#
```

Related Commands

Command	Description
fex	Creates a Fabric Extender and enters fabric extender configuration mode.
show fex	Displays all configured Fabric Extender chassis connected to the switch.

show fex transceiver

To display information about all the transceivers that connect a Fabric Extender (FEX) to a Cisco Nexus 7000 Series device, use the **show fex transceiver** command.

show fex *chassis_id* **transceiver** [**calibration** | **detail**]

Syntax Description

chassis_id	Fabric Extender chassis ID. The chassis ID range is from 101 to 199.
calibration	(Optional) Displays detailed calibration information about the transceiver.
detail	(Optional) Displays detailed diagnostic information about the transceiver.

Command Default

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display information about the transceiver that connects a Fabric Extender to a Cisco Nexus 7000 Series device:

```
switch# show fex 101 transceiver

Fex Uplink: 1
Fabric Port: Ethernet3/5
    sfp is present
    name is CISCO-AVAGO
    part number is SFBR-7700SDZ
    revision is B4
    serial number is AGD113921ZR
    nominal bitrate is 10300 MBits/sec
    Link length supported for 50/125mm fiber is 82 m(s)
    Link length supported for 62.5/125mm fiber is 26 m(s)
    cisco id is --
    cisco extended id number is 4


Fex Uplink: 2
Fabric Port: Ethernet3/6
```

```
    sfp is present
    name is CISCO-AVAGO
    part number is SFBR-7700SDZ
    revision is B4
    serial number is AGD113422LS
    nominal bitrate is 10300 MBits/sec
    Link length supported for 50/125mm fiber is 82 m(s)
    Link length supported for 62.5/125mm fiber is 26 m(s)
    cisco id is --
    cisco extended id number is 4


Fex Uplink: 3
Fabric Port: --
    sfp is present
    name is CISCO-AVAGO
    part number is SFBR-7700SDZ
    revision is B4
    serial number is AGD11392258
    nominal bitrate is 10300 MBits/sec
    Link length supported for 50/125mm fiber is 82 m(s)
    Link length supported for 62.5/125mm fiber is 26 m(s)
--More--
switch#
```

Related Commands

Command	Description
fex	Creates a Fabric Extender and enters fabric extender configuration mode.

show fex version

To display the software version information about a Fabric Extender (FEX), use the **show fex version** command.

show fex *chassis_id* **version**

Syntax Description

chassis_id	Fabric Extender chassis ID. The chassis ID range is from 101 to 199.

Command Default

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the software version of a Fabric Extender:

```
switch# show fex 101 version
Software
  Bootloader version:           0.2
  System boot mode:             primary
  System image version:         4.2(1)N1(1) [build 4.2(1)N1(0.309)]

Hardware
  Module:                       Fabric Extender 48x1GE + 4x10G Module
  CPU:                          Motorola, e300c4
  Serial number:                JAF11223333
  Bootflash:                    locked

Kernel uptime is 0 day(s), 3 hour(s), 53 minutes(s), 43 second(s)

Last reset at Wed Mar 31 06:28:41 2010
  Reason: Kernel Reboot
  Service: Reload new image
switch#
```

Related Commands

Command	Description
fex	Creates a Fabric Extender and enters fabric extender configuration mode.

show hardware qos dscp-to-queue ingress

To display the status of DSCP2Q mapping for the Fabric Extender (FEX) host interface and FEX fabric interface, use the **show hardware qos dscp-to-queue ingress** command.

show hardware qos dscp-to-queue ingress

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Interface configuration mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
6.2(2)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the status of DSCP-based queuing for all enabled modules:

```
switch# config t
switch(config) # show hardware qos dscp-to-queue ingress
status: Enabled
module_type : all
```

This example shows how to display the status of DSCP-based queuing for all disabled modules:

```
switch# config t
switch(config) # show hardware qos dscp-to-queue ingress
status: Disabled
module_type : all
```

Related Commands

Command	Description
hardware qos dscp-to-queue ingress module-type	Enables the DSCP2Q mapping for the FEX host interface and FEX fabric interface.

show port-channel summary

To display a summary of the Fabric Extender (FEX) port channel summary, use the **show port-channel summary** command.

show port-channel summary

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
6.1(3)	Changed the command output.
5.1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display a summary of fabric port channels that do not meet the minimum link criteria:

```
switch# show port-channel summary
Flags:  D - Down        P - Up in port-channel (members)
        I - Individual  H - Hot-standby (LACP only)
        s - Suspended   r - Module-removed
        S - Switched    R - Routed
        U - Up (port-channel)
        M - Not in use. Min-links not met
--------------------------------------------------------------------------------
Group Port-       Type     Protocol  Member Ports
      Channel
--------------------------------------------------------------------------------
1     Po1(SU)     Eth      LACP      Eth4/5(P)    Eth4/15(P)   Eth7/11(P)
2     Po2(SU)     Eth      LACP      Eth4/9(P)    Eth4/13(s)   Eth7/9(P) Eth7/13(P)
4     Po4(RU)     Eth      LACP      Eth4/22(P)   Eth7/22(P)
102   Po102(SM)   Eth      NONE      Eth4/11(D)   Eth4/23(P)   Eth7/35(P)
switch#
```

Related Commands

Command	Description
show port-channel database	Displays the port channel database.

show interface fex-fabric

To display all Fabric Extender fabric (FEX) interfaces, use the **show interface fex-fabric** command.

show interface fex-fabric

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
4.0(1a)N2(1)	This command was introduced.

Examples

This example shows how to display all Fabric Extender fabric interfaces:

```
switch# show interface fex-fabric
Fabric      Fabric       Fex                FEX
Fex  Port      Port State    Uplink    Model         Serial
---------------------------------------------------------------
105    Eth1/5        Active     5    N2K-C2232P-10GE  JAF1331AKBM
105    Eth1/6        Active     6    N2K-C2232P-10GE  JAF1331AKBM
105    Eth1/7        Active     8    N2K-C2232P-10GE  JAF1331AKBM
105    Eth1/8        Active     7    N2K-C2232P-10GE  JAF1331AKBM
102   Eth1/17        Active     1    N5K-C5110T-BF-1GE  JAF1241BLHQ
102   Eth1/18    Configured     0
102   Eth1/19        Active     3    N5K-C5110T-BF-1GE  JAF1241BLHQ
102   Eth1/20        Active     4    N5K-C5110T-BF-1GE  JAF1241BLHQ
100    Eth3/3        Active     1    N5K-C5110T-BF-1GE  JAF1237ABSE
100    Eth3/4        Active     2    N5K-C5110T-BF-1GE  JAF1237ABSE
101    Eth3/5        Active     1    N2K-C2248TP-1GE  JAF11223333
101    Eth3/6        Active     2    N2K-C2248TP-1GE  JAF11223333
switch#
```

Related Commands

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

show logging level fex

To display the Fabric Extender (FEX) logging configuration, use the **show logging level fex** command.

show logging level fex

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the FEX logging configuration:

```
switch# show logging level fex
Facility        Default Severity        Current Session Severity
--------        ----------------        ------------------------
fex                     5                       5

0(emergencies)          1(alerts)       2(critical)
3(errors)               4(warnings)     5(notifications)
6(information)          7(debugging)

switch#
```

Related Commands

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

show interface fex-intf

To display the host interfaces that are pinned to a fabric interface, use the **show interface fex-intf** command.

show interface *interface* **fex-intf**

Syntax Description

interface	Ethernet or EtherChannel interface.

Command Default

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
4.0(1a)N2(1)	This command was introduced.

Examples

This example shows how to display the host interfaces that are pinned to an Ethernet fabric interface on the parent switch:

```
switch# show interface ethernet 1/1 fex-intf
```

This example shows how to display the host interfaces that are pinned to an EtherChannel fabric interface on the parent switch:

```
switch# show interface port-channel 1 fex-intf
```

Related Commands

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

show interface transceiver fex-fabric

To display information about all transceivers that are connected to fabric interfaces, use the **show interface transceiver fex-fabric** command.

show interface transceiver fex-fabric [**calibration** | **detail**]

Syntax Description

calibration	(Optional) Displays detailed calibration information about the transceiver.
detail	(Optional) Displays detailed diagnostic information about the transceiver.

Command Default

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
4.0(1a)N2(1)	This command was introduced.

Examples

This example shows how to display information about all transceivers that connect to fabric interfaces:

```
switch# show interface transceiver fex-fabric
Ethernet1/5
    sfp is present
    name is CISCO-MOLEX INC
    part number is 74752-9025
    revision is A
    serial number is MOC12302468
    nominal bitrate is 12000 MBits/sec
    Link length supported for 50/125mm fiber is 0 m(s)
    Link length supported for 62.5/125mm fiber is 0 m(s)
    cisco id is --
    cisco extended id number is 4

Ethernet1/6
    sfp is present
    name is CISCO-MOLEX INC
    part number is 74752-9025
    revision is A
    serial number is MOC12260214
    nominal bitrate is 12000 MBits/sec
    Link length supported for 50/125mm fiber is 0 m(s)
    Link length supported for 62.5/125mm fiber is 0 m(s)
    cisco id is --
    cisco extended id number is 4
```

```
Ethernet1/7
    sfp is present
    name is CISCO-MOLEX INC
    part number is 74752-9025
    revision is A
    serial number is MOC12301888
    nominal bitrate is 12000 MBits/sec
    Link length supported for 50/125mm fiber is 0 m(s)
    Link length supported for 62.5/125mm fiber is 0 m(s)
    cisco id is --
    cisco extended id number is 4

Ethernet1/8
    sfp is present
    name is CISCO-MOLEX INC
--More--
switch#
```

Related Commands

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

show inventory fex

To display the physical inventory of a Fabric Extender (FEX), such as the name, description, and volume ID, use the **show inventory fex** command.

show inventory fex *chassis_ID*

Syntax Description

chassis_ID	Fabric Extender chassis ID. The chassis ID range is from 101 to 199.

Command Default

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
4.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the physical inventory of a specific Fabric Extender chassis:

```
switch# show inventory fex 101
NAME: "FEX 100 CHASSIS", DESCR: "N5K-C5110T-BF-1GE  CHASSIS"
PID: N5K-C5110T-BF-1GE , VID: V01 , SN: JAF1237ABSE

NAME: "FEX 100 Module 1", DESCR: "Fabric Extender Module: 48x1GE, 4X10GE Supervi
sor"
PID: N5K-C5110T-BF-1GE , VID: V00 , SN: JAF1237ABSE

NAME: "FEX 100 Fan 1", DESCR: "Fabric Extender Fan module"
PID: N2K-C2148-FAN     , VID: N/A , SN: N/A

NAME: "FEX 100 Power Supply 1", DESCR: "Fabric Extender AC power supply"
PID: N5K-PAC-200W      , VID: 00V0, SN: PAC12473L17

switch#
```

Related Commands

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

show module fex

To display information about a Fabric Extender (FEX) module, use the **show module fex** command.

show module fex [**all** | *chassis_ID*]

Syntax Description

all	(Optional) Displays information about all Fabric Extender modules.
chassis_ID	Fabric Extender chassis ID. The chassis ID range is from 101 to 199.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
4.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display information about all Fabric Extender's modules:

```
switch# show module fex all
FEX Mod Ports Card Type                          Model              Status.
--- --- ----- ---------------------------------- ------------------ -----------
100 1   48    Fabric Extender 48x1GE Module      N5K-C5110T-BF-1GE  present
101 1   48    Fabric Extender 48x1GE + 4x10G Mod N2K-C2248TP-1GE    present
102 1   48    Fabric Extender 48x1GE Module      N5K-C5110T-BF-1GE  present
105 1   32    Fabric Extender 32x10GE + 8x10G Mo N2K-C2232P-10GE    present

FEX Mod Sw              Hw      World-Wide-Name(s) (WWN)
--- --- --------------  ------  ---------------------------------------------
100 1   4.2(1)N1(1)     0.0     --
101 1   4.2(1)N1(1)     0.103   --
102 1   4.2(1)N1(1)     0.2     --
105 1   4.2(1)N1(1)     1.0     --

FEX Mod  MAC-Address(es)                         Serial-Num
--- ---  --------------------------------------  ----------
100 1    000d.ecb1.1300 to 000d.ecb1.132f        JAF1237ABSE
101 1    0022.bdd1.3cc0 to 0022.bdd1.3cef        JAF11223333
102 1    000d.ecb1.25c0 to 000d.ecb1.25ef        JAF1241BLHQ
105 1    000d.ecca.6f40 to 000d.ecca.6f5f        JAF1331AKBM
switch#
```

This example shows how to display information about a specific Fabric Extender module:

```
switch# show module fex 101
FEX Mod Ports Card Type                          Model              Status.
--- --- ----- ---------------------------------- ------------------ -----------
100 1   48    Fabric Extender 48x1GE Module      N5K-C5110T-BF-1GE  present

FEX Mod Sw              Hw      World-Wide-Name(s) (WWN)
--- --- --------------  ------  ---------------------------------------------
```

```
100 1   4.2(1)N1(1)     0.0     --

FEX Mod  MAC-Address(es)                          Serial-Num
--- ---  -------------------------------------  ----------
100 1    000d.ecb1.1300 to 000d.ecb1.132f        JAF1237ABSE
switch#
```

Related Commands

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

show queuing interface

To display information about a queuing interface, use the **show queuing interface** command.

show queuing interface [**ethernet** {*fex_host_interface*}

Syntax Description

ethernet	(Optional) Specifies that queuing information be displayed for an Ethernet interface or a Fabric Extender host interface.
fex_host_interface	Host interface on a Fabric Extender (FEX)

Command Default

Displays the queuing information for all interfaces.

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
6.2(2)	This command was introduced.

Examples

This example shows how to display the FEX host interfaces, including the number of queues used, the mapping for each queue, the corresponding queue maximum transmission unit (MTU), the enforced hardware queue limit, and the ingress and egress queue statistics:

```
switch# show queuing interface ethernet 199/1/2
slot 1
=======
Interface is not in this module.
slot 2
=======
Interface is not in this module.
slot 4
=======
Interface is not in this module.
slot 6
=======
Interface is not in this module.
slot 9
=======
Ethernet199/1/2 queuing information:
Input buffer allocation:
Qos-group: ctrl
frh: 0
drop-type: drop
cos: 7
xon xoff buffer-size
---------+---------+-----------
```

```
2560 7680 10240
Qos-group: 0 2 (shared)
frh: 2
drop-type: drop
cos: 0 1 2 3 4 5 6
xon xoff buffer-size
---------+---------+-----------
34560 39680 48640
Queueing:
queue qos-group cos priority bandwidth mtu
--------+------------+--------------+---------+---------+----
ctrl-hi n/a 7 PRI 0 2400
ctrl-lo n/a 7 PRI 0 2400
2 0 0 1 2 3 4 WRR 80 1600
4 2 5 6 WRR 20 1600
Queue limit: 66560 bytes
Queue Statistics:
queue rx tx flags
------+---------------+---------------+-----
0 0 0 ctrl
1 0 0 ctrl
2 0 0 data
4 0 0 data
Port Statistics:
rx drop rx mcast drop rx error tx drop mux ovflow
---------------+---------------+---------------+---------------+--------------
0 0 0 0 InActive
Priority-flow-control enabled: no
Flow-control status: rx 0x0, tx 0x0, rx_mask 0x0
cos qos-group rx pause tx pause masked rx pause
-------+-----------+---------+---------+---------------
0 0 xon xon xon
1 0 xon xon xon
2 0 xon xon xon
3 0 xon xon xon
4 0 xon xon xon
5 2 xon xon xon
6 2 xon xon xon
7 n/a xon xon xon
DSCP to Queue mapping on FEX
----+--+-----+-------+--+---
FEX TCAM programmed successfully
queue DSCPs
----- -----
02 0-39,
04 40-63,
03 **EMPTY**
05 **EMPTY**
slot 10
=======
slot 11
=======
Interface is not in this module.
slot 15
=======
Interface is not in this module.
slot 16
=======
Interface is not in this module.
slot 17
=======
Interface is not in this module.
slot 18
=======
```

```
Interface is not in this module.
```

This example shows how to display Fabric Extender (FEX) host interface after an in-service software upgrade (ISSU):

```
switch# show queuing interface ethernet 133/1/32 module 9
Ethernet133/1/32 queuing information:
Input buffer allocation:
Qos-group: ctrl
frh: 0
drop-type: drop
cos: 7
xon xoff buffer-size
---------+---------+-----------
2560 7680 10240
Qos-group: 0
frh: 8
drop-type: drop
cos: 0 1 2 3 4 5 6
xon xoff buffer-size
---------+---------+-----------
0 126720 151040
Queueing:
queue qos-group cos priority bandwidth mtu
--------+------------+--------------+---------+---------+----
ctrl-hi n/a 7 PRI 0 2400
ctrl-lo n/a 7 PRI 0 2400
2 0 0 1 2 3 4 5 6 WRR 100 9440
Queue limit: 66560 bytes
Queue Statistics:
queue rx tx flags
------+---------------+---------------+-----
0 0 0 ctrl
1 0 0 ctrl
2 0 0 data
Port Statistics:
rx drop rx mcast drop rx error tx drop mux ovflow
---------------+---------------+---------------+---------------+--------------
0 0 0 0 InActive
Priority-flow-control enabled: no
Flow-control status: rx 0x0, tx 0x0, rx_mask 0x0
cos qos-group rx pause tx pause masked rx pause
-------+-----------+---------+---------+---------------
0 0 xon xon xon
1 0 xon xon xon
2 0 xon xon xon
3 0 xon xon xon
4 0 xon xon xon
6 0 xon xon xon
7 n/a xon xon xon
***FEX queuing disabled on fex 133. Reload the fex to enable queuing.<======
```

This example shows that the FEX queuing is not supported for the Cisco Nexus 2248PQ10-Gigabit Ethernet Fabric Extender (FEX2248PQ):

```
switch# show queuing interface ethernet 143/1/1 module 5
Ethernet143/1/1 queuing information:
Network-QOS is disabled for N2248PQ <=======
Displaying the default configurations
Input buffer allocation:
Qos-group: ctrl
frh: 0
drop-type: drop
```

```
cos: 7
xon xoff buffer-size
---------+---------+-----------
2560 7680 10240
Qos-group: 0
frh: 8
drop-type: drop
cos: 0 1 2 3 4 5 6
xon xoff buffer-size
---------+---------+-----------
0 126720 151040
Queueing:
queue qos-group cos priority bandwidth mtu
--------+------------+--------------+---------+---------+----
ctrl-hi n/a 7 PRI 0 2400
ctrl-lo n/a 7 PRI 0 2400
2 0 0 1 2 3 4 5 6 WRR 100 9440
Queue limit: 0 bytes
Queue Statistics:
queue rx tx flags
------+---------------+---------------+-----
0 0 0 ctrl
1 0 0 ctrl
2 0 0 data
Port Statistics:
rx drop rx mcast drop rx error tx drop mux ovflow
---------------+---------------+---------------+---------------+--------------
0 0 0 0 InActive
Priority-flow-control enabled: no
Flow-control status: rx 0x0, tx 0x0, rx_mask 0x0
cos qos-group rx pause tx pause masked rx pause
-------+-----------+---------+---------+---------------
0 0 xon xon xon
1 0 xon xon xon
2 0 xon xon xon
3 0 xon xon xon
4 0 xon xon xon
5 0 xon xon xon
6 0
7 n/a xon xon xon
```

Related Commands

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

show running-config fex

To display information about the Fabric Extenders (FEX) running configuration, use the **show running-config fex** command.

show running-config fex

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Examples

This example shows how to display information about the running FEX running configuration, including the buffer threshold value and queue limit:

```
switch# show running-config fex
!Command: show running-config fex
!Time: Mon Jul 19 07:56:21 2010
version 4.2(1)N2(1)
feature fex
fex 100
pinning max-links 1
description "RedwoodFex100"
fex 101
pinning max-links 1
description "FEX0101"
fex 150
pinning max-links 1
description "PortolaFex150"
fex 151
pinning max-links 1
description "PortolaFex151"
fex 160
pinning max-links 1
description "FEX0160"
fex 198
hardware N2232P queue-limit 50000
pinning max-links 1
description "WoodsideFex198"
fex 199
hardware N2232P queue-limit 20000
```

```
no hardware N2248TP queue-limit
hardware N2248TP buffer-threshold 163840
pinning max-links 1
description "WoodsideFex199"
interface port-channel100
fex associate 100
interface port-channel150
--More--
switch#
```

Related Commands

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

show sprom fex

To display information about the Fabric Extender (FEX) Serial PROM (SPROM), use the **show sprom fex** command.

show sprom fex {**all** | *chassis_ID* {**all** | **backplane** | **powersupply** *module_number*}}

Syntax Description

all	Displays all SPROM content for a specific Fabric Extender.
chassis_ID	Fabric Extender chassis ID. The chassis ID range is from 101 to 199.
backplane	Displays the backplane SPROM content for a specific Fabric Extender.
powersupply	Displays the power supply SPROM content for a specific Fabric Extender.
module_number	Power supply module number for a specific Fabric Extender. The range is from 1 to 2.

Command Default

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Examples

This example shows how to display all SPROM content for a specific Fabric Extender:

```
switch# show sprom fex 101 all
DISPLAY FEX 101 SUP sprom contents
Common block:
 Block Signature : 0xabab
 Block Version   : 3
 Block Length    : 160
 Block Checksum  : 0x18c9
 EEPROM Size     : 65535
 Block Count     : 3
 FRU Major Type  : 0x6003
 FRU Minor Type  : 0x0
 OEM String      : Cisco Systems, Inc.
 Product Number  : N5K-C5110T-BF-1GE
 Serial Number   : JAF1237ABSE
 Part Number     : 73-12009-02
 Part Revision   : 00
 Mfg Deviation   : 0
 H/W Version     : 0.0
 Mfg Bits        : 0
```

```
 Engineer Use    : 0
 snmpOID         : 9.12.3.1.9.72.5.0
 Power Consump   : -200
 RMA Code        : 0-0-0-0
 CLEI Code       : 00000000000
 VID             : V00
Supervisor Module specific block:
 Block Signature : 0x6002
 Block Version   : 2
 Block Length    : 103
 Block Checksum  : 0x2648
 Feature Bits    : 0x0
 HW Changes Bits : 0x2
Card Index      : 11011
 MAC Addresses   : 00-00-00-00-00-00
 Number of MACs  : 0
 Number of EPLD  : 0
 Port Type-Num   : 2-52
 Sensor #1       : 85,75
 Sensor #2       : 100,90
 Sensor #3       : 100,90
 Sensor #4       : 100,90
 Sensor #5       : 100,90
 Sensor #6       : 100,90
 Sensor #7       : 100,90
 Sensor #8       : 100,90
 Max Connector Power: 1000
 Cooling Requirement: 300
 Ambient Temperature: 40

DISPLAY FEX 100 backplane sprom contents:
Common block:
 Block Signature : 0xabab
 Block Version   : 3
 Block Length    : 160
 Block Checksum  : 0x195d
 EEPROM Size     : 65535
 Block Count     : 5
 FRU Major Type  : 0x6001
 FRU Minor Type  : 0x0
 OEM String      : Cisco Systems, Inc.
 Product Number  : N5K-C5110T-BF-1GE
Serial Number   : JAF1237ABSE
 Part Number     : 73-12009-02
 Part Revision   : 00
 Mfg Deviation   : 0
 H/W Version     : 0.0
 Mfg Bits        : 0
 Engineer Use    : 0
 snmpOID         : 9.12.3.1.3.719.0.0
 Power Consump   : -800
 RMA Code        : 0-0-0-0
 CLEI Code       : 00000000
 VID             : V01
Chassis specific block:
 Block Signature : 0x6001
 Block Version   : 3
 Block Length    : 39
 Block Checksum  : 0x28a
 Feature Bits    : 0x0
 HW Changes Bits : 0x2
 Stackmib OID    : 0
 MAC Addresses   : 00-0d-ec-b1-13-00
 Number of MACs  : 64
```

```
 OEM Enterprise  : 0
 OEM MIB Offset  : 0
 MAX Connector Power: 0
WWN software-module specific block:
 Block Signature : 0x6005
 Block Version   : 1
 Block Length    : 0
 Block Checksum  : 0x66
wwn usage bits:
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
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 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00
License software-module specific block:
 Block Signature : 0x6006
 Block Version   : 1
 Block Length    : 16
 Block Checksum  : 0x77
lic usage bits:
 00 00 00 00 00 00 00 00

DISPLAY FEX 100 power-supply 1 sprom contents:
Common block:
 Block Signature : 0xabab
 Block Version   : 3
 Block Length    : 124
 Block Checksum  : 0x15fc
 EEPROM Size     : 124
 Block Count     : 1
 FRU Major Type  : 0xab01
 FRU Minor Type  : 0x1
 OEM String      : Cisco Systems, Inc.
 Product Number  : N5K-PAC-200W
 Serial Number   : PAC12473L17
 Part Number     : 341-0335-01
 Part Revision   : 01
 CLEI Code       : COUPADSBAA
 VID             : 00V0
```

```
 snmpOID          : 0.0.0.0.0.0.0.0
 H/W Version      : 0.1
 Current          : 1667
RMA Code         : 0-0-0-0
switch#
```

This example shows how to display the power supply SPROM contents for a specific Fabric Extender:

```
switch# show sprom fex 101 powersupply 1
DISPLAY FEX 101 power-supply 1 sprom contents:
Common block:
 Block Signature : 0xabab
 Block Version   : 3
 Block Length    : 124
 Block Checksum  : 0x15fc
 EEPROM Size     : 124
 Block Count     : 1
 FRU Major Type  : 0xab01
 FRU Minor Type  : 0x1
 OEM String      : Cisco Systems, Inc.
 Product Number  : N5K-PAC-200W
 Serial Number   : PAC12473L17
 Part Number     : 341-0335-01
 Part Revision   : 01
 CLEI Code       : COUPADSBAA
 VID             : 00V0
 snmpOID         : 0.0.0.0.0.0.0.0
 H/W Version     : 0.1
 Current         : 1667
 RMA Code        : 0-0-0-0
switch#
```

Related Commands

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

show system reset-reason fex

To display the reason for the last reset of the Fabric Extender (FEX), use the **show system reset-reason fex** command.

show system reset-reason fex *chassis_ID*

Syntax Description

chassis_ID	Fabric Extender chassis ID. The chassis ID range is from 101 to 199.

Command Default

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
4.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the last reset reason for a specific Fabric Extender:

```
switch# show system reset-reason fex 101
----- reset reason for FEX 101 ---

1) At 430815 usecs after Fri Apr 16 04:27:04 2010
    Reset Reason: Reset Requested by CLI command reload (9)
    Service (Additional Info): Reload requested by supervisor
    Image Version: 4.2(1)N1(1)

2) At 505550 usecs after Fri Apr 16 03:39:50 2010
    Reset Reason: Reset due to upgrade (88)
    Service (Additional Info): Reset due to upgrade
    Image Version: 4.2(1u)N1(1u)

3) At 607267 usecs after Fri Apr 16 02:50:10 2010
    Reset Reason: Reset due to upgrade (88)
    Service (Additional Info): Reset due to upgrade
    Image Version: 4.2(1)N1(1)

4) At 857790 usecs after Fri Apr 16 02:00:22 2010
    Reset Reason: Reset due to upgrade (88)
    Service (Additional Info): Reset due to upgrade
    Image Version: 4.2(1u)N1(1u)

switch#
```

Related Commands

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

show tech fex all

To gather detailed information for all Fabric Extender (FEX) troubleshooting information, use the **show tech fex all** command.

show tech fex all

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display detailed FEX information:

```
switch# show tech fex all
02/25/2008 03:38:18.22739: ***************************************************
02/25/2008 03:38:18.23019: Satctrl Built at Thu Aug  5 19:12:00 PDT 2010 on rami
neni-lnx in directory /ws/mhau-sjc/deewhy_june_2/build by mhau
02/25/2008 03:38:18.23040: Version: 2102/25/2008 03:38:18.23055: ***************
***********************************
02/25/2008 03:38:18.34242: satellite_init: initializing modules
02/25/2008 03:38:18.34466: satctrl_get_cardid: Platform card ID 99
02/25/2008 03:38:18.34771: Platform info: cardid=99, num_slots=1
02/25/2008 03:38:18.461803: satctrl_get_cardid: Platform card ID 99
02/25/2008 03:38:18.461849: satellite_init: swcardid=99
02/25/2008 03:38:18.461995: get fru: chas ser:SSI14061500 chas model:N2K-C2248TP
-1GE chas part: 68-3601-04
02/25/2008 03:38:18.462022: get fru: mod ser:JAF1407AANJ mod model:N2K-C2248TP-1
GE mod part: 73-12748-04
02/25/2008 03:38:18.462046: satellite_init: initializing inband
02/25/2008 03:38:18.475965: satellite_init: inband initialized
02/25/2008 03:38:18.476153: satellite_module_cfg_init: initializing modue (0)
02/25/2008 03:38:18.477439: satctrl_module_fsm_init: Fsm initialized for fabric
module no (0, 0)
02/25/2008 03:38:18.477533: satctrl_module_fsm_init: Fsm initialized for fabric
module no (1, 0)
02/25/2008 03:38:18.477855: satellite_init: done initializing satctrl module
```

```
02/25/2008 03:38:18.477897: satctrl_set_mts_addr: dummy_addr: 0xff02
02/25/2008 03:38:18.478139: My addr is changed to 0xff
--More--
```

Related Commands

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

show tech-support fex

To display detailed troubleshooting information for a Fabric Extender (FEX), use the **show tech-support fex** command.

show tech-support fex all *chassis-ID*

Syntax Description

all	Specifies detailed information for all FEXes.
chassis-ID	Fabric Extender chassis ID. The range is from 100 to 199.

Defaults

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display detailed troubleshooting information for a FEX:

```
switch# show tech-support fex 101
09/06/2010 07:44:12.26863: Satctrl Built at Thu Aug  5 19:12:00 PDT 2010 on rami
neni-lnx in directory /ws/mhau-sjc/deewhy_june_2/build by mhau
09/06/2010 07:44:12.26883: Version: 2109/06/2010 07:44:12.26898: ***************
************************************
09/06/2010 07:44:12.38241: satellite_init: initializing modules
09/06/2010 07:44:12.38466: satctrl_get_cardid: Platform card ID 99
09/06/2010 07:44:12.38772: Platform info: cardid=99, num_slots=1
09/06/2010 07:44:12.463410: satctrl_get_cardid: Platform card ID 99
09/06/2010 07:44:12.463455: satellite_init: swcardid=99
09/06/2010 07:44:12.463598: get fru: chas ser:SSI14061500 chas model:N2K-C2248TP
-1GE chas part: 68-3601-04
09/06/2010 07:44:12.463625: get fru: mod ser:JAF1407AANJ mod model:N2K-C2248TP-1
GE mod part: 73-12748-04
09/06/2010 07:44:12.463649: satellite_init: initializing inband
09/06/2010 07:44:12.477534: satellite_init: inband initialized
09/06/2010 07:44:12.477723: satellite_module_cfg_init: initializing modue (0)
09/06/2010 07:44:12.478987: satctrl_module_fsm_init: Fsm initialized for fabric
module no (0, 0)
09/06/2010 07:44:12.479080: satctrl_module_fsm_init: Fsm initialized for fabric
module no (1, 0)
```

```
09/06/2010 07:44:12.479423: satellite_init: done initializing satctrl module
09/06/2010 07:44:12.479466: satctrl_set_mts_addr: dummy_addr: 0xff02
09/06/2010 07:44:12.479709: My addr is changed to 0xff
--More--
```

This example shows how to display all troubleshooting information for all FEXes:

```
switch# show tech-support fex all
09/06/2010 07:44:12.26583: ***************************************************
09/06/2010 07:44:12.26863: Satctrl Built at Thu Aug  5 19:12:00 PDT 2010 on rami
neni-lnx in directory /ws/mhau-sjc/deewhy_june_2/build by mhau
09/06/2010 07:44:12.26883: Version: 2109/06/2010 07:44:12.26898: ***************
************************************
09/06/2010 07:44:12.38241: satellite_init: initializing modules
09/06/2010 07:44:12.38466: satctrl_get_cardid: Platform card ID 99
09/06/2010 07:44:12.38772: Platform info: cardid=99, num_slots=1
09/06/2010 07:44:12.463410: satctrl_get_cardid: Platform card ID 99
09/06/2010 07:44:12.463455: satellite_init: swcardid=99
09/06/2010 07:44:12.463598: get fru: chas ser:SSI14061500 chas model:N2K-C2248TP
-1GE chas part: 68-3601-04
09/06/2010 07:44:12.463625: get fru: mod ser:JAF1407AANJ mod model:N2K-C2248TP-1
GE mod part: 73-12748-04
09/06/2010 07:44:12.463649: satellite_init: initializing inband
09/06/2010 07:44:12.477534: satellite_init: inband initialized
09/06/2010 07:44:12.477723: satellite_module_cfg_init: initializing modue (0)
09/06/2010 07:44:12.478987: satctrl_module_fsm_init: Fsm initialized for fabric
module no (0, 0)
09/06/2010 07:44:12.479080: satctrl_module_fsm_init: Fsm initialized for fabric
module no (1, 0)
09/06/2010 07:44:12.479423: satellite_init: done initializing satctrl module
09/06/2010 07:44:12.479466: satctrl_set_mts_addr: dummy_addr: 0xff02
09/06/2010 07:44:12.479709: My addr is changed to 0xff
--More--
```

Related Commands

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

show version fex

To display the software version information about a Fabric Extender (FEX), use the **show version fex** command.

show version fex *chassis_ID*

Syntax Description

chassis_ID	Fabric Extender chassis ID. The chassis ID range is from 101 to 199.

Command Default

None

Command Modes

EXEC mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
4.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the software version of a Fabric Extender:

```
switch# show version fex 101
Software
  Bootloader version:           1.12
  System boot mode:             primary
  System image version:         4.2(1)N2(1) [build 4.2(1)N2(1)]

Hardware
  Module:                       Fabric Extender 48x1GE Module
  CPU:                          Motorola, e300c1
  Serial number:                JAF1302ABDP
  Bootflash:                    locked

Kernel uptime is 0 day(s), 9 hour(s), 9 minutes(s), 16 second(s)

Last reset at Fri Jul 02 04:27:04 2010
  Reason: Reset Requested by CLI command reload
  Service: Reload requested by supervisor
switch#
```

Related Commands

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

type

To set the Fabric Extender (FEX) card type to a specific card, use the **type** command. To revert to the default FEX card, use the **no** form of this command.

type *fex_card_type*

no type

Syntax Description

fex_card_type	Fabric Extender card type. The following Fabric Extender card types are supported: • **N2224TP**—Fabric Extender 24x1G 2x10G SFP+ Module • **N2232P**—Fabric Extender 32x10G 8x10G Module • **N2232TM**—Fabric Extender 32x10GBase-T 8x10G SFP+ Module • **N2232TM-E**—Fabric Extender 32x10GBase-T 8x10G SFP+ Module • **N2248PQ**—Fabric Extender 48x10GE SPF+4x40GE QSPF Module • **N2248T**—Fabric Extender 48x1G 4x10G Module • **N2248TPE** —Fabric Extender 48x1G 4x10G SFP+Module • **NB22HP**—Fabric Extender 16x10G 4x10G SFP+8x10G SFP+Module

Command Default

None

Command Modes

Fabric extender configuration mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
6.2(2)	N2232TM-E, N2248PQ and NB22HP are supported from release 6.2(2).
6.1(1)	2232TM and 2248TPE are supported from release 6.1(1).
5.2(1)	2224TP and 2232P are supported from release 5.2.(1).
4.2(1)N1(1)	This command was introduced.

Usage Guidelines

The following Cisco Nexus 7000 Series Fabric Extenders are supported on a Cisco Nexus 7000 Series switch that runs a Cisco NX-OS Release 4.2(1)N2(1):

- Cisco Nexus N2224TP Fabric Extender—It has two 10-Gigabit Ethernet fabric interfaces with small form-factor pluggable (SFP+) interface adapters for its uplink connection to the parent Cisco Nexus 5000 Series switch and 24 1000BASE-T (1-Gigabit) Ethernet host interfaces for its downlink connection to servers or hosts. It does not support Fibre Channel over Ethernet (FCoE).
- Cisco Nexus 2232PP Fabric Extender—It has eight 10-Gigabit Ethernet fabric interfaces with small form-factor pluggable (SFP+) interface adapters for its uplink connection to the parent Cisco Nexus 5000 Series switch and 32 10-Gigabit Ethernet fabric interfaces with SFP+ interface adapters for its downlink connection to servers or hosts.
- Cisco Nexus 2248TP Fabric Extender—Has four 10-Gigabit Ethernet fabric interfaces with SFP+ interface adapters for its uplink connection to the parent Cisco Nexus 5000 Series switch and 48 1000BASE-T (1-Gigabit) Ethernet host interfaces for its downlink connection to servers or hosts.

The following Cisco Nexus 7000 Series Fabric Extenders are supported on a Cisco Nexus 7000 Series switch that runs a Cisco NX-OS Release 5.0(3)N2(1):

- Cisco Nexus N2224TP Fabric Extender—Has two 10-Gigabit Ethernet fabric interfaces with small form-factor pluggable (SFP+) interface adapters for its uplink connection to the parent Cisco Nexus 5000 Series switch and 24 1000BASE-T (1-Gigabit) Ethernet host interfaces for its downlink connection to servers or hosts. It does not support Fibre Channel over Ethernet (FCoE).
- Cisco Nexus 2232PP Fabric Extender—Has eight 10-Gigabit Ethernet fabric interfaces with small form-factor pluggable (SFP+) interface adapters for its uplink connection to the parent Cisco Nexus 5000 Series switch and 32 10-Gigabit Ethernet fabric interfaces with SFP+ interface adapters for its downlink connection to servers or hosts.
- Cisco Nexus 2232TM Fabric Extender—Has eight 10-Gigabit Ethernet fabric interfaces with small form-factor pluggable (SFP+) interface adapters for its uplink connection to the parent Cisco Nexus 5000 Series switch and 32 10-Gigabit BASE-T Ethernet fabric interfaces for its downlink connection to servers or hosts.
- Cisco Nexus 2248TP Fabric Extender—Has four 10-Gigabit Ethernet fabric interfaces with SFP+ interface adapters for its uplink connection to the parent Cisco Nexus 5000 Series switch and 48 1000BASE-T (1-Gigabit) Ethernet host interfaces for its downlink connection to servers or hosts.

Examples

This example shows how to set the Fabric Extender card type:

```
switch(config)# fex 101
switch(config-fex)# type N2224TP
switch(config-fex)#
```

Related Commands

Command	Description
fex	Creates a Fabric Extender and enters fabric extender configuration mode.
show fex	Displays all configured Fabric Extender chassis connected to the switch.