F Commands

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

feature flexlink

To enable Flex Links, use the **feature flexlink** command. To disable Flex Links, use the **no** form of this command.

feature flexlink

no feature flexlink

Syntax Description

This command has no arguments or keywords.

Command Default

Disabled

Command Modes

Global configuration mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to enable Flex Links on the switch:

```
switch(config)# feature flexlink
```

Related Commands

Command	Description
show feature	Displays the status of features enabled or disabled on the switch.
switchport backup interface	Configures Flex Links, which are two interfaces that provide backup to each other, on a Layer 2 interface.

feature interface-vlan

To enable the creation of VLAN interfaces, use the **feature interface-vlan** command. To disable the VLAN interface feature, use the **no** form of this command.

feature interface-vlan

no feature interface-vlan

Syntax Description

This command has no arguments or keywords.

Command Default

VLAN interfaces are disabled.

Command Modes

Global configuration mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

You must use the **feature interface-vlan** command before you can create VLAN interfaces.

Examples

This example shows how to enable the interface VLAN feature on the switch:

```
switch(config)# feature interface-vlan
```

Related Commands

Command	Description
interface vlan	Creates a VLAN interface.
show feature	Displays the features that are enabled or disabled on the switch.

feature lacp

To enable the Link Aggregation Control Protocol (LACP), which bundles a number of physical ports together to form a single logical channel, use the **feature lacp** command. To disable LACP on the switch, use the **no** form of this command.

feature lacp

no feature lacp

Syntax Description

This command has no arguments or keywords.

Command Default

LACP is disabled.

Command Modes

Global configuration mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

You must remove all the LACP configuration parameters from all EtherChannels on the switch before you can disable LACP.

Even after you enable LACP globally, you do not have to run LACP on all EtherChannels on the switch. You enable LACP on each channel mode using the **channel-group mode** command.

Examples

This example shows how to enable LACP EtherChannels on the switch:

```
switch(config)# feature lacp
```

Related Commands

Command	Description
show lacp	Displays information on LACP.
show feature	Displays whether or not LACP is enabled on the switch.

feature lldp

The Link Layer Discovery Protocol (LLDP), which is a neighbor discovery protocol that is used for network devices to advertise information about themselves to other devices on the network, is enabled on the switch by default.

Command Default

Enabled

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

You cannot enable or disable LLDP on a Cisco Nexus device. LLDP is enabled on the switch by default. However, the **feature lldp** command shows as part of the running configuration on the switch, as shown below:

```
switch# show running-config

!Command: show running-config
!Time: Wed Jan 30 12:36:03 2013

version 6.02N1(1)
feature telnet
feature lldp

username admin password 5 $1$d8lkfqC8$4VfRuOoZTKvCtTq8VAKbq/  role network-admin
no password strength-check
ip domain-lookup
hostname switch
class-map type qos class-fcoe
class-map type qos match-all c1
  match cos 1
<--Output truncated-->
switch#
```

The Cisco Discovery Protocol (CDP) is a device discovery protocol that runs over Layer 2 (the data link layer) on all Cisco-manufactured devices (routers, bridges, access servers, and switches). CDP allows network management applications to automatically discover and learn about other Cisco devices connected to the network.

To support non-Cisco devices and to allow for interoperability between other devices, the switch supports the Link Layer Discovery Protocol (LLDP). LLDP is a neighbor discovery protocol that is used for network devices to advertise information about themselves to other devices on the network. This protocol runs over the data-link layer, which allows two systems running different network layer protocols to learn about each other.

Related Commands

Command	Description
lldp	Configures the global LLDP options on the switch.
lldp (Interface)	Configures the LLDP feature on an interface.
show feature	Displays that LLDP is enabled on the switch.

feature port-security

To enable port security on Layer 2 interfaces, use the **feature port-security** command. To disable port security, use the **no** form of this command.

feature port-security

no feature port-security

Syntax Description

This command has no arguments or keywords.

Command Default

Disabled

Command Modes

Global configuration mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

Use the port security feature to secure a port by limiting and identifying the MAC addresses of the switches that are allowed to access the port.

You can enable port security on a virtual port channel (vPC) port only if the following occurs:

- Port security is enabled on both the vPC peers
- Port security is enabled on the vPC port on both the vPC peers.

This command does not require a license.

Examples

This example shows how to enable port security on the switch:

```
switch# configure terminal
switch(config)# feature port-security
switch(config)#
```

This example shows how to disable port security on the switch:

```
switch# configure terminal
switch(config)# no feature port-security
switch(config)#
```

Related Commands

Command	Description
show feature	Displays the features that are enabled or disabled on the switch.

Command	Description
show port-security	Displays the port security configuration information.
switchport port-security	Configures the switchport parameters to establish port security.

feature private-vlan

To enable private VLANs, use the **feature private-vlan** command. To return to the default settings, use the **no** form of this command.

feature private-vlan

no feature private-vlan

Syntax Description

This command has no arguments or keywords.

Command Default

Private VLANs are disabled.

Command Modes

Global configuration mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

The private VLAN commands are not available until you enable the private VLAN feature.

You cannot disable the private VLANs if there are operational ports on the switch that are in private VLAN mode.

Note A private VLAN-isolated port on a Cisco Nexus device running the current release of Cisco NX-OS does not support IEEE 802.1Q encapsulation and cannot be used as a trunk port.

Examples

This example shows how to enable private VLAN functionality on the switch:

```
switch(config)# feature private-vlan
```

Related Commands

Command	Description
private-vlan	Configures a VLAN as either a community, isolated, or primary private VLAN.
show vlan private-vlan	Displays information on private VLANs. If the feature is not enabled, this command is not available.
show feature	Displays whether or not private VLAN is enabled on the switch.

feature udld

To enable the Cisco-proprietary Unidirectional Link Detection (UDLD) protocol, which allows ports that are connected through fiber optics or copper Ethernet cables to monitor the physical configuration of the cables and detect when a unidirectional link exists, use the **feature udld** command. To disable UDLD on the switch, use the **no** form of this command.

feature udld

no feature udld

Syntax Description

This command has no arguments or keywords.

Command Default

UDLD is disabled.

Command Modes

Global configuration mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to enable UDLD on the switch:

```
switch(config)# feature udld
```

Related Commands

Command	Description
show udld	Displays the administrative and operational UDLD status.
show feature	Displays whether or not UDLD is enabled on the switch.

feature vmfex

To enable the Cisco Virtual Machine Fabric Extender (VM-FEX), use the **feature vmfex** command. To disable VM-FEX, use the **no** form of this command.

feature vmfex

no feature vmfex

Syntax Description

This command has no arguments or keywords.

Command Default

Disabled

Command Modes

Global configuration mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

Before you use this command, make sure that you install and enable the virtualization feature set using the **install feature-set virtualization** and **feature-set virtualization** commands respectively.

If you attempt to disable the VM-FEX feature with virtual Ethernet interface or port profile configurations enabled, the switch returns an error message.

This command requires an Enhanced Layer 2 license.

Examples

This example shows how to enable VM-FEX on the switch:

```
switch# configure terminal
switch(config)# feature vmfex
switch(config)#
```

This example shows how to disable VM-FEX on the switch:

```
switch# configure terminal
switch(config)# no feature vmfex
switch(config)#
```

Related Commands

Command	Description
feature-set virtualization	Enables the virtualization features.
interface vethernet	Configures a virtual Ethernet interface.

Command	Description
install feature-set virtualization	Installs the virtualization feature set on the switch.
port-profile	Configures a port profile.
show feature	Displays the features that are enabled or disabled on the switch.
show feature-set	Displays the status of the virtualization feature set.
switchport mode	Configures the interface as a nontrunking nontagged single-VLAN Ethernet interface.

feature vtp

To enable VLAN Trunking Protocol (VTP), use the **feature vtp** command. To disable VTP, use the **no** form of this command.

feature vtp

no feature vtp

Syntax Description

This command has no arguments or keywords.

Command Default

Disabled

Command Modes

Global configuration mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to enable VTP on the switch:

```
switch(config)# feature vtp
```

Related Commands

Command	Description
show vtp status	Displays the VTP information.
vtp	Configures VTP.

feature-set virtualization

To enable the Cisco Virtual Machine features on the switch, use the **feature-set virtualization** command. To disable the virtualization feature, use the **no** form of this command.

feature-set virtualization

no feature-set virtualization

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

Note The Cisco virtual machine feature is supported only on the Cisco Nexus devices.

Before you use this command, make sure that you install the virtualization feature set on the switch by using the **install feature-set virtualization** command.

You cannot view or access any virtualization commands until you enable a Cisco virtual machine on the switch.

Note You must install the Cisco virtual machine feature set before you enable virtualization on the switch.

Before you disable this feature on the switch, do the following:

- Remove all virtual Ethernet interface configurations on the switch.
- Remove all virtual network tag (VNTag) configurations on the switch.
- Remove all port profiles of type vethernet.
- Change the port mode to access by using the **switchport mode access** command.

This command requires an Enhanced Layer 2 license.

Examples

This example shows how to enable the virtualization feature on the switch:

```
switch# configure terminal
switch(config)# feature-set virtualization
```

```
switch(config)#
```

This example shows how to disable the virtualization feature on the switch:

```
switch# configure terminal
switch(config)# no feature-set virtualization
switch(config)#
```

Related Commands

Command	Description
feature vmfex	Enables or disables Cisco Virtual Machine Fabric Extender (VM-FEX) on the switch.
install feature-set virtualization	Installs the virtualization feature set on the switch.
show feature-set	Displays the status of the virtualization feature set.