



## F Commands

---

- [feature lacp, on page 2](#)
- [feature lldp, on page 3](#)
- [feature poe, on page 5](#)
- [feature private-vlan, on page 6](#)
- [feature ptp, on page 7](#)
- [feature vtp, on page 8](#)
- [feature vmfex, on page 9](#)
- [feature-set virtualization, on page 11](#)
- [feature adapter-fex, on page 13](#)
- [feature interface-vlan, on page 15](#)

# 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
	4.0(0)N1(1a)	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
	<b>show lacp</b>	Displays information on LACP.
	<b>show feature</b>	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.

**feature lldp**  
**no feature lldp**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Command Default</b>	Enabled
------------------------	---------

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

Command History	Release	Modification
	4.0(0)N1(1a)	This feature was introduced.

<b>Usage Guidelines</b>	You cannot enable or disable LLDP on a Cisco Nexus 5000 Series switch. LLDP is enabled on the switch by default. However, the <b>feature lldp</b> command shows as part of the running configuration on the switch, as shown below:
-------------------------	---

```
switch# show running-config

!Command: show running-config
!Time: Tue Feb 10 12:36:03 2009
version 5.0(3)N1(1)
feature telnet
feature lldp
username admin password 5 $1$d81kfqc8$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#
```

Beginning with Cisco NX-OS Release 4.0(0)N1(1a) and up to Release 5.0(2)N1(1), the Book Title included the **feature lldp** command.

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.

## Examples

This example shows how to enable LLDP on the switch:

```
switch(config)# feature lldp  
switch(config)#
```

This example shows how to disable LLDP on the switch:

```
switch(config)# no feature lldp  
switch(config)#
```

## Related Commands

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

# feature poe

To enable Power over Ethernet (PoE), use the **feature poe** command. To disable PoE, use the **no** form of this command.

**feature poe**  
**no feature poe**

<b>Syntax Description</b>	This command has no keywords or arguments.
---------------------------	--

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

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

Command History	Release	Modification
	5.0(3)N2(1)	This command was introduced.

<b>Examples</b>	This example shows how to enable PoE on the switch:
-----------------	---

```
switch(config)# feature poe
```

Related Commands	Command	Description
	<b>power inline</b>	Configures the power usage for interfaces.
	<b>show feature</b>	Displays the status of features enabled or disabled on the switch.

# 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
	4.0(0)N1(1a)	This command was introduced.
	4.0(0)N1(2)	Support for configuring a virtual Ethernet port as a host port for a private VLAN was enabled.

**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 5000 Series switch 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
	<b>private-vlan</b>	Configures a VLAN as either a community, isolated, or primary private VLAN.
	<b>show vlan private-vlan</b>	Displays information on private VLANs. If the feature is not enabled, this command is not available.
	<b>show feature</b>	Displays whether or not private VLAN is enabled on the switch.

# feature ptp

To enable the Precision Time Protocol (PTP) feature, use the **feature ptp** command. To disable the PTP feature, use the **no** form of this command.

**feature ptp**  
**no feature ptp**

**Syntax Description** This command has no arguments or keywords.

**Command Default** Disabled

**Command Modes** Global configuration mode

Command History	Release	Modification
	5.1(3)N1(1)	This command was introduced.

**Usage Guidelines** This command does not require a license.

**Examples** This example shows how to enable the PTP feature:

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

This example shows how to disable the PTP feature:

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

Related Commands	Command	Description
	<b>ptp source</b>	Configures the source IP address for all PTP packets.
	<b>ptp domain</b>	Configures the domain number to use for this clock.
	<b>ptp priority1</b>	Configures the priority1 value to use when advertising this clock.
	<b>ptp priority2</b>	Configures the priority2 value to use when advertising this clock.
	<b>show ptp brief</b>	Displays the PTP status.
	<b>show ptp clock</b>	Displays the properties of the local clock.

# 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
	4.2(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
	<b>show vtp status</b>	Displays the VTP information.
	<b>vtp</b>	Configures VTP.



# 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
	5.1(3)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
	<b>feature-set virtualization</b>	Enables the virtualization features.
	<b>interface vethernet</b>	Configures a virtual Ethernet interface.
	<b>install feature-set virtualization</b>	Installs the virtualization feature set on the switch.
	<b>port-profile</b>	Configures a port profile.
	<b>show feature</b>	Displays the features that are enabled or disabled on the switch.

Command	Description
<b>show feature-set</b>	Displays the status of the virtualization feature set.
<b>switchport mode</b>	Configures the interface as a nontrunking nontagged single-VLAN Ethernet interface.

# 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
	5.1(3)N1(1)	This command was introduced.

## Usage Guidelines



**Note** The Cisco virtual machine feature is supported only on the Cisco Nexus 5500 Series switches.

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

# feature adapter-fex

To enable the Adapter Fabric Extender (Adapter-FEX), use the **feature adapter-fex** command. To disable Adapter-FEX, use the **no** form of this command.

**feature adapter-fex**  
**no feature adapter-fex**

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

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

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

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	5.1(3)N1(1)	This command was introduced.

<b>Usage Guidelines</b>	Before you disable this feature on the switch, do the following:
-------------------------	--

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

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

Before you use a virtual Ethernet interface, you must enable Cisco Virtual Machine Fabric Extender (VM-FEX) on the switch by using the **feature vmfex** command.

## Examples

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

```
switch# configure terminal
switch(config)# feature adapter-fex
Virtualization Plugin license checked out successfully
Virtualization Plugin extracted successfully
All Virtualization processes enabled successfully
switch(config)#
```

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

```
switch# configure terminal
switch(config)# no feature adapter-fex
Disabled feature adapter-fex successfully.
You should save the configuration and Reload.
switch(config)#
```

This example shows the error message that appears when you attempt to disable Adapter-FEX on a switch with virtual Ethernet interface configurations enabled:

```
switch# configure terminal
switch(config)# no feature adapter-fex
```

```

Disabling of NIV failed.veth and vntag configs found
Shutdown all veths and Remove them.
Change ports with 'switchport mode vntag' to 'switchport mode access'.
switch(config)#

```

**Related Commands**

Command	Description
<b>interface vethernet</b>	Configures a virtual Ethernet interface.
<b>port-profile</b>	Configures a port profile.
<b>show feature</b>	Displays whether or not Adapter-FEX is enabled on the switch.
<b>switchport mode</b>	Configures the interface as a nontrunking nontagged single-VLAN Ethernet 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
4.0(0)N1(1a)	This command was introduced.

## Usage Guidelines

You must use the **feature interface-vlan** or the **svi enable** 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
<b>interface vlan</b>	Creates a VLAN interface.
<b>show feature</b>	Displays the features that are enabled or disabled on the switch.

