



# S Commands

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This chapter describes the Cisco NX-OS virtual port channel (vPC) commands that begin with S.

# state enabled

To enable a port profile, use the **state enabled** command. To disable a port profile, use the **no** form of this command.

**state enabled**

**no state enabled**

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

**Command Default** Disabled

**Command Modes** Port profile configuration mode

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

**Usage Guidelines** Use this command to enable a port profile to apply the port profile configurations to the interfaces. You can configure and inherit a port profile onto a range of interfaces before you enable that port profile. You must then enable that port profile for the configurations to take effect on the specified interfaces.

**Examples** This example shows how to enable a port profile named ppEth that is configured for Ethernet interfaces:

```
switch# configure terminal
switch(config)# port-profile ppEth
switch(config-port-prof)# state enabled
switch(config-port-prof)#
```

This example shows how to disable a port profile named ppEth that is configured for Ethernet interfaces:

```
switch# configure terminal
switch(config)# port-profile ppEth
switch(config-port-prof)# no state enabled
switch(config-port-prof)#
```

Related Commands	Command	Description
	<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
	<b>inherit</b>	Attaches a port profile to an interface.

Command	Description
<b>show port-profile</b>	Displays information about all port profiles.
<b>show running-config port-profile</b>	Displays the running configuration for the port profile.

# switch-profile

To create or configure a switch profile, use the **switch-profile** command. To delete a switch profile, use the **no** form of this command.

**switch-profile** *sw-profile-name*

**no switch-profile** *sw-profile-name* { **all-config** | **local-config** }

## Syntax Description

<i>sw-profile-name</i>	Name of the switch profile. The name is case sensitive, can be a maximum of 64 alphanumeric characters and can include an underscore and hyphen. The name cannot contain spaces or special characters.
<b>all-config</b>	Specifies that the switch profile be deleted with all local and peer configurations.
<b>local-config</b>	Specifies that the switch profile and all local configurations be deleted.

## Command Default

None

## Command Modes

Configuration synchronization mode

## Command History

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

## Usage Guidelines

Use this command to create a switch profile on each of the peer switches. You must use the same profile name on both the switches in the Cisco Fabric Services (CFS) peer configuration.



### Note

In this release of Cisco NX-OS, only a pair of switches can be configured as a peer.

You can configure only one active switch profile on each peer switch. If you create or configure a second switch profile, you see the following error message:

```
Error: Another switch profile already exists. Cannot configure more than one switch-profile.
```

The configuration that is made locally on the switch is synchronized and made available on the peer switch only after the connectivity is established between the peer switches and the configuration is verified and committed on the local switch.

You can configure a switch profile to include the interface configuration, quality of service (QoS), and virtual port channel (vPC) commands. FCoE commands are not supported on a switch profile.

When you delete a switch profile, you can choose to delete the local switch profile with the local configurations on the switch, or delete the switch profile with the local configurations and configuration information in the peer. The peer becomes unreachable.

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**Examples**

This example shows how to create a switch profile named s5010 on switch 1 of the peer:

**Peer A**

```
switch# configure terminal
switch(config)# cfs ipv4 distribute
switch(config)# exit
switch# config sync
Enter configuration commands, one per line. End with CNTL/Z.
switch(config-sync)# switch-profile s5010
Switch-Profile started, Profile ID is 1
switch(config-sync-sp)#
```

This example shows how to create a switch profile named s5010 on switch 2 of the peer:

**Peer B**

```
switch# configure terminal
switch(config)# cfs ipv4 distribute
switch(config)# exit
switch# config sync
Enter configuration commands, one per line. End with CNTL/Z.
switch(config-sync)# switch-profile s5010
Switch-Profile started, Profile ID is 1
switch(config-sync-sp)#
```

This example shows how to delete a switch profile named s5010 and its local configuration on switch 1 of the peer:

**Peer A**

```
switch# config sync
Enter configuration commands, one per line. End with CNTL/Z.
switch(config-sync)# no switch-profile s5010 local-config
switch(config-sync)#
```

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**Related Commands**

Command	Description
<b>config sync</b>	Enters configuration synchronization mode.
<b>show switch-profile</b>	Displays the switch profile created on the switch and its configuration revision.
<b>sync-peers destination</b>	Configures the peer switch for configuration synchronization.

# sync-peers destination

To add a peer switch to a switch profile, use the **sync-peers destination** command. To remove a peer from the switch profile, use the **no** form of this command.

**sync-peers destination** *ipv4-address*

**no sync-peers destination** *ipv4-address*

Syntax Description	<b>destination</b>	Specifies the destination IPv4 address of the peer switch.
	<i>ipv4-address</i>	Destination IPv4 address of the peer switch in the format <i>A.B.C.D</i> .

Command Default	None
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Command Modes	Switch profile configuration mode
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Command History	Release	Modification
	5.2(1)N1(1)	This command was introduced.

**Usage Guidelines**

Use this command to add the peer switch that will be included in the synchronization. You must have the IPv4 address of the peer switch. You can ensure that configuration synchronization is enabled on the peer switch by using the **config sync** command.

After you add a peer to a switch profile, you can add commands to the switch profile.

Peers maintain a configuration revision of their local configuration as well as the revision. After a network outage, when connectivity is established between the peer switches and the peers are reachable, each peer determines if any configuration in the switch needs to be synchronized with the other peer. Changed configurations will then be synchronized between the peers.

When you remove a peer from the switch profile, all configuration information about the peer is deleted from the local switch.

**Examples**

This example shows how to add a peer switch with IPv4 address 192.168.1.37 to a switch profile named s5010 on switch 1 of the peer:

## Peer A

```
switch# config sync
Enter configuration commands, one per line. End with CNTL/Z.
switch(config-sync)# switch-profile s5010
Switch-Profile started, Profile ID is 1
switch(config-sync-sp)# sync-peers destination 192.168.1.37
switch(config-sync-sp)#
```

This example shows how to add a peer switch with IPv4 address 192.168.120.3 to a switch profile named s5010 on switch 2 of the peer:

#### Peer B

```
switch# config sync
Enter configuration commands, one per line. End with CNTL/Z.
switch(config-sync)# switch-profile s5010
Switch-Profile started, Profile ID is 1
switch(config-sync-sp)# sync-peers destination 192.168.120.3
switch(config-sync-sp)#
```

This example shows how to delete a peer with IPv4 address 192.168.1.37 from a switch profile named s5010 on switch 1 of the peer:

#### Peer A

```
switch# config sync
Enter configuration commands, one per line. End with CNTL/Z.
switch(config-sync)# switch-profile s5010
switch(config-sync-sp)# no sync-peers destination 192.168.1.37
switch(config-sync-sp)#
```

#### Related Commands

Command	Description
<b>command</b>	Adds, modifies, or removes commands from a switch profile.
<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
<b>import</b>	Imports the commands from the running configuration to the switch profile.
<b>show switch-profile</b>	Displays the switch profile created on the switch and its configuration revision.
<b>show switch-profile status</b>	Displays the switch profile status.
<b>switch-profile</b>	Configures a switch profile.

# system-mac

To manually configure the virtual port channel (vPC) domain MAC address, use the **system-mac** command. To restore the default vPC system MAC address, use the **no** form of this command.

**system-mac** *mac\_address*

**no system-mac** *mac\_address*

Syntax Description	<i>mac_address</i> MAC address that you want for the specified vPC domain in the following format aaaa.bbbb.cccc.	
Command Default	None	
Command Modes	vPC domain configuration mode	
Command History	Release	Modification
	5.2(1)N1(1)	This command was introduced.
Usage Guidelines	When you create a vPC domain, the Cisco NX-OS software automatically creates a vPC system MAC address, which is used for operations that are confined to the link-scope, such as the Link Aggregation Control Protocol (LACP). However, you may choose to configure the vPC domain MAC address manually.	
Examples	This example shows how to configure the MAC address for the vPC domain:	
	<pre>switch(config-vpc-domain)# <b>system-mac 23fb.4ab5.4c4e</b> switch(config-vpc-domain)#</pre>	
Related Commands	Command	Description
	<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
	<b>show vpc peer-keepalive</b>	Displays the status of the peer-keepalive link.
	<b>show running-config vpc</b>	Displays the running configuration information for vPCs.
	<b>show vpc role</b>	Displays the vPC system priority.
	<b>show vpc statistics</b>	Displays information about the configuration for the keepalive messages.



# system-priority

To manually configure a system priority for the virtual port channel (vPC) domain, use the **system-priority** command. To restore the default system priority, use the **no** form of this command.

**system-priority** *priority\_value*

**no system-priority** *priority\_value*

## Syntax Description

<i>priority_value</i>	System priority that you want for the specified vPC domain. The range is from 1 to 65535, and the default value is 32667.
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## Command Default

The default for the system priority is 32667.

## Command Modes

vPC domain configuration mode

## Command History

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

## Usage Guidelines

We recommend that you manually configure the vPC system priority when you are running Link Aggregation Control Protocol (LACP) to ensure that the vPC peer devices are the primary devices on LACP. When you manually configure the system priority, ensure that you configure the same priority value on both vPC peer devices. If these values do not match, vPC will not come up.

## Examples

This example shows how to configure the system priority for the vPC domain:

```
switch(config-vpc-domain) # system-priority 3000
switch(config-vpc-domain) #
```

## Related Commands

Command	Description
<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
<b>show running-config vpc</b>	Displays the running configuration information for vPCs.
<b>show vpc role</b>	Displays the vPC system priority.

