I Commands

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

import interface

To import an interface configuration to a switch profile, use the **import interface** command.

import interface {**ethernet** s*lot*/[*QSFP-module*/]*port* | **port-channel** *channel-no*}

Syntax Description		
ethernet		Specifies the Ethernet interface configuration to import to the switch profile.
s*lot*/[*QSFP-module*/]*port*		Chassis or slot number and the port or slot number. The *slot* number is from 1 to 255. The *QSFP-module* number is from 1 to 4. The *port* number is from 1 to 128.
	Note	The *QSFP-module* number applies only to the QSFP+ Generic Expansion Module (GEM).
port-channel		Specifies the EtherChannel interface configuration to import to the switch profile.
channel-no		EtherChannel number. The range is from 1 to 4096.

Command Default None

Command Modes Switch profile configuration mode

Command History

Release	Modification
6.0(2)N1(2)	Support for the QSFP+ GEM was added.
5.2(1)N1(1)	This command was introduced.

Usage Guidelines When no option is specified with the **import** command, an empty switch profile is created. You can then selectively add the configuration that is needed to be synchronized with the peer switch.

You can import a switch profile based on the set of commands that you want to import. The following three ways can be used to import commands that were added using the configuration terminal mode:

1. Add selected commands to the switch profile.

2. Add supported commands that were specified for an interface.

3. Add supported system-level commands.

When you import commands to a switch profile, the switch profile buffer must be empty.

Use the **commit** command to complete the import process and move the configuration into the switch profile. Because configuration changes are not supported during the import process, if new commands are added before entering the **commit** command, the switch profile remains unsaved and the switch remains in the switch profile import mode (config-sync-sp-import). You can remove the added commands or use the **abort** command to stop the import. Unsaved configurations are lost if the process is aborted. New commands can be added to the switch profile after the import is complete.

Examples   This example shows how to import the Ethernet interface configuration to a switch profile named s5010 on switch 1 of the peer:

```
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)# show switch-profile s5010 buffer

switch-profile  : s5010
----------------------------------------------------------
Seq-no  Command
----------------------------------------------------------

switch(config-sync-sp)# import interface ethernet 1/1
switch(config-sync-sp)# show switch-profile buffer

switch-profile  : s5010
----------------------------------------------------------
Seq-no  Command
----------------------------------------------------------
1       interface Ethernet1/1

switch(config-sync-sp-import)# commit
Verification successful...
Proceeding to apply configuration. This might take a while depending on amount o
f configuration in buffer.
Please avoid other configuration changes during this time.
Commit Successful
switch(config-sync)#
```

This example shows how to create an empty switch profile named sp100 on switch 1 of the peer and then add the configuration commands:

```
switch# config sync
Enter configuration commands, one per line.  End with CNTL/Z.
switch(config-sync)# switch-profile sp100
Switch-Profile started, Profile ID is 1
switch(config-sync-sp)# show switch-profile sp100 buffer

switch-profile  : sp100
----------------------------------------------------------
Seq-no  Command
----------------------------------------------------------

switch(config-sync-sp)# import
switch(config-sync-sp-import)# interface port-channel 100
switch(config-sync-sp-import-if)# switchport mode trunk
switch(config-sync-sp-import-if)# vpc peer-link
switch(config-sync-sp-import-if)# exit
switch(config-sync-sp-import)# commit
Verification successful...
Proceeding to apply configuration. This might take a while depending on amount o
f configuration in buffer.
Please avoid other configuration changes during this time.
Commit Successful
switch(config-sync)#
```

This example shows how to import an interface in a switch profile:

```
switch(config)# cfs ipv4 distribute
```

```
switch(config)# config sync
switch(config-sync)# switch-profile test Switch-Profile started, Profile ID is 1
switch(config-sync-sp)# import interface e3/1/1
switch(config-sync-sp-import)# show switch
switch-profile switchname
switch(config-sync-sp-import)# show switch-profile buffer

switch-profile : test
----------------------------------------------------------
Seq-no Command
----------------------------------------------------------
1 interface Ethernet3/1/1

switch(config-sync-sp-import)#
```

Related Commands	Command	Description
	abort	Discards the current switch profile configuration.
	commit	Commits a switch profile configuration.
	copy running-config startup-config	Copies the running configuration to the startup configuration.
	show switch-profile buffer	Displays information about the switch profile buffer.
	show running-config switch-profile	Displays the running configuration for a switch profile.

import running-config

To import the running configuration to a switch profile, use the **import running-config** command.

import running-config [**exclude interface ethernet**]

Syntax Description

exclude	(Optional) Specifies the configurations to exclude while importing the current running configuration to a switch profile.
interface	(Optional) Specifies that interface configurations be excluded during the import operation.
ethernet	(Optional) Specifies that all Ethernet interface configurations be excluded from the running configuration during the import operation.

Command Default   None

Command Modes   Switch profile configuration mode

Command History

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

Usage Guidelines   The **import running-config exclude interface ethernet** command discards all physical interface commands in the running configuration during the import operation.

When no option is specified with the **import** command, an empty switch profile is created. You can then selectively add the configuration that is needed to be synchronized with the peer switch.

You can import a switch profile based on the set of commands that you want to import. The following three ways can be used to import commands that were added using the configuration terminal mode:

1. Add selected commands to the switch profile.

2. Add supported commands that were specified for an interface.

3. Add supported system-level commands.

When you import commands to a switch profile, the switch profile buffer must be empty.

Use the **commit** command to complete the import process and move the configuration into the switch profile. Because configuration changes are not supported during the import process, if new commands are added before entering the **commit** command, the switch profile remains unsaved and the switch remains in the switch profile import mode (config-sync-sp-import). You can remove the added commands or use the **abort** command to stop the import. Unsaved configurations are lost if the process is aborted. New commands can be added to the switch profile after the import is complete.

Examples   This example shows how to import the running configuration to a switch profile named s5010 on switch 1 of the peer:

```
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)# show switch-profile buffer

switch-profile  : s5010
----------------------------------------------------------
Seq-no  Command
----------------------------------------------------------


switch(config-sync-sp)# import running-config exclude interface ethernet
switch(config-sync-sp-import)# show switch-profile buffer

switch-profile  : s5010
----------------------------------------------------------
Seq-no  Command
----------------------------------------------------------
2       interface port-channel1
2.1        vpc 1
2.2        speed 10000
3       interface port-channel100
3.1        vpc peer-link
3.2        spanning-tree port type network
3.3        speed 10000

switch(config-sync-sp-import)# commit
Verification successful...
Proceeding to apply configuration. This might take a while depending on amount o
f configuration in buffer.
Please avoid other configuration changes during this time.
Commit Successful
switch(config-sync)#
```

Related Commands	Command	Description
	abort	Discards the current switch profile configuration.
	commit	Commits a switch profile configuration.
	copy running-config startup-config	Copies the running configuration to the startup configuration.
	show switch-profile buffer	Displays information about the switch profile buffer.
	show running-config switch-profile	Displays the running configuration for a switch profile.

inherit port-profile

To inherit a port profile into an existing profile or to apply a port profile configuration to an interface, use the **inherit port-profile** command. To remove the inheritance, use the **no** form of this command.

inherit port-profile *port-profile-name*

no inherit port-profile *port-profile-name*

Syntax Description	*port-profile-name*	Name of the port profile. The name is case sensitive, can be a maximum of 80 alphanumeric characters and can include an underscore and hyphen. The name cannot contain spaces or special characters.

Command Default   None

Command Modes   Port profile configuration mode
Interface configuration mode
Virtual Ethernet interface configuration mode

Command History

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

Usage Guidelines   You inherit the port profile when you attach the port profile to an interface or range of interfaces. When you attach, or inherit, a port profile to an interface or range of interfaces, the switch applies all the commands in that port profile to the interfaces. A port profile configured for an interface type can be applied only to that type of interface. For example, a port profile created for VLAN interfaces must be attached onto a VLAN interface. If you delete a port profile after you attach the port profile to an interface, the port profile configuration is removed from the interface.

To apply the port profile configurations to the interfaces, you must enable the specific port profile.

Examples   This example shows how to inherit a port profile named ppEth that is configured for Ethernet interfaces into an existing port profile named test:

```
switch# configure terminal
switch(config)# port-profile test
switch(config-port-prof)# inherit port-profile ppEth
switch(config-port-prof)#
```

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

```
switch# configure terminal
switch(config)# interface ethernet 1/2-5
switch(config-if)# inherit port-profile ppEth
switch(config-if)#
```

This example shows how to assign a port profile named ppVEth that is configured for virtual Ethernet interfaces to a virtual Ethernet interface:

```
switch# configure terminal
switch(config)# interface ethernet 10
switch(config-if)# inherit port-profile ppVEth
switch(config-if)#
```

This example shows how to remove an inherited port profile named ppEth from an existing port profile named test:

```
switch# configure terminal
switch(config)# port-profile test
switch(config-port-prof)# no inherit port-profile ppEth
switch(config-port-prof)#
```

Related Commands	Command	Description
	command (port profile)	Adds commands to a port profile.
	copy running-config startup-config	Copies the running configuration to the startup configuration.
	interface vethernet	Configures a virtual Ethernet (vEth) interface.
	show port-profile name	Displays information about a specific port profile.
	show running-config interface	Displays the running configuration for interfaces.
	show running-config port-profile	Displays the running configuration for a port profile.
	state enabled	Enables a port profile.

ip arp synchronize

To enable Address Resolution Protocol (ARP) synchronization between the virtual port channel (vPC) peers, use the **ip arp synchronize** comand. To disable ARP synchronization, use the **no** form of this command.

ip arp synchronize

no ip arp synchronize

Syntax Description	This command ahs no arguments or keywords.

Command Default	Disabled

Command Modes	vPC domain configuration mode

Command History

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

Usage Guidelines

The ARP table sync feature overcomes the delay involved in ARP table restoration that can be triggered when one of the switches in the vPC domain goes offline and comes back online and also when there are peer-link port channel flaps. Enabling ARP on a vPC domain improves convergence times for unicast traffic.

This command does not require a license.

Examples

This example shows how to enable ARP synchronization on a vPC domain:

```
switch# configure terminal
switch(config)# vpc domain 1
switch(config-vpc-domain)# ip arp synchronize
switch(config-vpc-domain)#
```

This example shows how to disable ARP synchronization on a vPC domain:

```
switch# configure terminal
switch(config)# vpc domain 1
switch(config-vpc-domain)# no ip arp synchronize
switch(config-vpc-domain)#
```

Related Commands	Command	Description
	show ip arp vpc-statistics	Displays the global ARP statistics for vPCs.
	show running-config vpc	Displays the running configuration information for vPCs.

ip igmp snooping mrouter vpc-peer-link

To configure a static connection to a virtual port channel (vPC) peer link, use the **ip igmp snooping mrouter vpc-peer-link** command. To remove the static connection, use the **no** form of this command.

ip igmp snooping mrouter vpc-peer-link

no ip igmp snooping mrouter vpc-peer-link

Syntax Description   This command has no arguments or keywords.

Command Default   None

Command Modes   Global configuration mode

Command History

Release	Modification
5.0(3)N1(1)	This command was introduced.

Usage Guidelines   By default, a vPC Peer-link is considered an IGMP snooping mrouter port. The multicast traffic is sent over to a peer-link for the source VLAN and for each receiving VLAN. If you use the **no ip igmp snooping mrouter vpc-peer-link** command, the multicast traffic is not sent over to a peer-link for the source VLAN and receiver VLAN unless there are orphan ports in the VLAN.

Note   In Cisco NX-OS Release 5.0(3)N1(1), the **no ip igmp snooping mrouter vpc-peer-link** command is not supported in topologies where there is a dual-homed Cisco Nexus 2000 Series Fabric Extender attached to a Cisco Nexus 5000 Series switch.

This command does not require a license.

Examples   This example shows how to configure a static connection to a vPC peer link:

```
switch(config)# ip igmp snooping mrouter vpc-peer-link
switch(config)#
```

This example shows how to remove a static connection to a vPC peer link:

```
switch(config)# no ip igmp snooping mrouter vpc-peer-link
Warning: IGMP Snooping mrouter vpc-peer-link should be globally disabled on peer
 VPC switch as well.
switch(config)#
```

Command	Description
show ip igmp snooping	Displays IGMP snooping information.