



# Configuring Module Pre-Provisioning

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## Information About Module Pre-Provisioning

The pre-provisioning feature allows you to preconfigure interfaces before inserting or attaching a module. If a module goes offline, you can also use pre-provisioning to make changes to the interface configurations for the offline module. When a pre-provisioned module comes online, the pre-provisioning configurations are applied. If any configurations were not applied, a syslog is generated. The syslog lists the configurations that were not accepted.

In some Virtual Port Channel (vPC) topologies, pre-provisioning is required for the configuration synchronization feature. Pre-provisioning allows you to synchronize the configuration for an interface that is online with one peer but offline with another peer.

## Guidelines and Limitations

Pre-provisioning has the following configuration guidelines and limitations:

- When a module comes online, commands that are not applied are listed in the syslog.
- If a slot is pre-provisioned for module A and if you insert module B into the slot, module B does not come online.
- There is no MIB support for pre-provisioned interfaces.
- Cisco DCNM is not supported.

# Enabling Module Pre-Provisioning

You can enable pre-provisioning on a module that is offline. Enter the **provision model** *model* command in module pre-provision mode.



**Note** After enabling pre-provisioning, you can configure the interfaces as though they are online.

## Procedure

	Command or Action	Purpose
<b>Step 1</b>	<b>configuration terminal</b>  <b>Example:</b> switch# config t switch(config)#	Enters global configuration mode.
<b>Step 2</b>	<b>slot</b> <i>slot</i>  <b>Example:</b> switch(config)# slot 101 switch(config-slot)#	Selects the slot to pre-provision and enters slot configuration mode.
<b>Step 3</b>	<b>provision model</b> <i>model</i>  <b>Example:</b> switch(config-slot)# provision model N2K-C2248T switch(config-slot)#	Selects the module that you want to pre-provision.
<b>Step 4</b>	<b>exit</b>  <b>Example:</b> switch(config-slot)# exit switch#	Exits slot configuration mode.
<b>Step 5</b>	(Optional) <b>copy running-config startup-config</b>  <b>Example:</b> switch# copy running-config startup-config	Copies the running configuration to the startup configuration.

## Example

This example shows how to select slot 101 and the N2K-C2232P module to pre-provision.

```
switch# configure terminal
switch(config)# slot 101
switch(config-slot)# provision model N2K-C2232P
switch(config-slot)# exit
```

# Removing Module Pre-Provisioning

You can remove a module that has been pre-provisioned.

## Procedure

	Command or Action	Purpose
<b>Step 1</b>	<b>configuration terminal</b>  <b>Example:</b> switch# config t switch(config)#	Enters global configuration mode.
<b>Step 2</b>	<b>slot slot</b>  <b>Example:</b> switch(config)# slot 101 switch(config-slot)#	Selects the slot to pre-provision and enters slot configuration mode.
<b>Step 3</b>	<b>no provision model model</b>  <b>Example:</b> switch(config-slot)# no provision model N2K-C2248T switch(config-slot)#	Removes pre-provisioning from the module.
<b>Step 4</b>	<b>exit</b>  <b>Example:</b> switch(config-slot)# exit switch#	Exits slot configuration mode.
<b>Step 5</b>	<b>(Optional) copy running-config startup-config</b>  <b>Example:</b> switch# copy running-config startup-config	Copies the running configuration to the startup configuration.

## Example

This example shows how to remove a preprovisioned module from a chassis slot:

```
switch(config)# slot 2
switch(config-slot)# no provision model N5K-M1404
switch(config-slot)#
```

# Verifying the Pre-Provisioned Configuration

To display the pre-provisioned configuration, perform one of the following tasks:

Command	Purpose
show module	Displays module information.
show switch-profile	Displays switch profile information.
show running-config exclude-provision	Displays the running configuration without the pre-provisioned interfaces or modules that are offline.
show provision failed-config	Displays the pre-provisioned commands that were not applied to the configuration when the interface or module came online.  This command also displays a history of failed commands.
show running-config	Displays the running configuration including the pre-provisioned configuration.
show startup-config	Displays the startup configuration including the pre-provisioned configuration.

## Configuration Examples for Pre-Provisioning

The following example shows how to enable pre-provisioning on slot 110 on the Cisco Nexus 2232P Fabric Extender and how to pre-provision interface configuration commands on the Ethernet 110/1/1 interface.

```
switch# configure terminal
switch(config)# slot 110
switch(config-slot)# provision model N2K-C2232P
switch(config-slot)# exit

switch# configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
switch(config)# interface Ethernet110/1/1
switch(config-if)# description module is preprovisioned
switch(config-if)# show running-config interface Ethernet110/1/1
Time: Wed Aug 25 21:29:44 2010

version 5.0(2)N1(1)

interface Ethernet110/1/1
  description module is preprovisioned
```

The following example shows the list of pre-provisioned commands that were not applied when the module came online.

```
switch(config-if-range)# show provision failed-config 101
The following config was not applied for slot 33
=====

interface Ethernet101/1/1
  service-policy input test

interface Ethernet101/1/2
  service-policy input test

interface Ethernet101/1/3
  service-policy input test
```

This example shows how to remove all pre-provisioned modules from a slot:

```
switch(config)# slot 2
switch(config-slot)# no provision model
switch(config-slot)#
```

