

# **Chassis Management**

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# Chassis Management in Cisco UCS Manager CLI

You can manage and monitor all chassis in a Cisco UCS domain through Cisco UCS Manager CLI.

## The Cisco UCS S3260 Chassis

Cisco UCS Manager Release 4.0(1) introduces support for the Cisco UCS S3260 chassis on Cisco UCS 6454 Fabric Interconnect.

Cisco UCS Manager Release 3.1(2) introduces support for the Cisco UCS S3260 chassis on Cisco UCS 6300 Series, and 6200 Series fabric interconnect setups.

The Cisco UCS S3260 chassis is a 4U chassis that is designed to operate in a standalone environment and also as part of the Cisco Unified Computing System. It has the following main components:

- Four 1050 Watt AC modular power supplies (2 + 2 shared and redundant mode of operation)
- Two System IO Controller (SIOC) slots
- Two storage server slots out of which one can be used for storage expansion



Note

The second server slot in the chassis can be utilized by an HDD expansion tray module for an additional four 3.5" drives.

• 56 3.5" drive bays with an optional 4 x 3.5" HDD expansion tray module instead of the second server

- Up to 360 TB storage capacity by using 6 TB HDDs
- Serial Attached SCSI (SAS) expanders that can be configured to assign the 3.5" drives to individual server modules
- The two servers in the chassis can be replaced by a single, dual-height server with an IO expander

### Cisco UCS 5108 Blade Server Chassis

The Cisco UCS 5100 Series Blade Server Chassis is logically part of the fabric interconnects, thus creating a single, coherent management domain and decreasing management complexity. In the management domain, server management is handled by the fabric interconnect, while I/O and network management is extended to every chassis and blade server. Basing the I/O infrastructure on a unified fabric allows the Cisco Unified Computing System to have a simple and streamlined chassis yet offer a comprehensive set of I/O options. This results in the chassis having only five basic components:

- The physical chassis with passive midplane and active environmental monitoring circuitry
- Four power-supply bays with power entry in the rear, and redundant-capable, hot-swappable power supply units accessible from the front panel
- Eight hot-swappable fan trays, each with two fans
- Two fabric extender slots accessible from the back panel
- Eight blade server slots accessible from the front panel

The blade server chassis has flexible partitioning with removable dividers to handle two blade server form factors:

- Half-width blade servers have access to power and two 10GBASE-KR connections, one to each fabric
  extender slot.
- Full-width blade servers connect to power and two connections to each fabric extender.

## **Extended Chassis for UCS Mini**

Cisco UCS Manager Release 3.1(1) introduces support for an extended UCS 5108 chassis to an existing single-chassis Cisco UCS 6324 fabric interconnect setup. This extended chassis enables you to configure an additional 8 servers. Unlike the primary chassis, the extended chassis supports IOMs. Currently, it supports UCS-IOM-2204XP and UCS-IOM-2208XP IOMs. The extended chassis can only be connected through the scalability port on the FI-IOM.



Important

Currently, Cisco UCS Manager supports only one extended chassis for UCS Mini.

To use a extended chassis, do the following:

- Connect the second Cisco UCS 5108 chassis to the existing single-chassis Cisco UCS 6324 Series fabric interconnect configuration through the scalability port.
- Configure the chassis discovery policy.

• Configure the server ports and wait for the second chassis to be discovered.

# **Guidelines for Removing and Decommissioning Chassis**

Consider the following guidelines when deciding whether to remove or decommission a chassis using Cisco UCS Manager:

### **Decommissioning a Chassis**

Decommissioning is performed when a chassis is physically present and connected but you want to temporarily remove it from the Cisco UCS Manager configuration. Because it is expected that a decommissioned chassis will be eventually recommissioned, a portion of the chassis' information is retained by Cisco UCS Manager for future use.

### **Removing a Chassis**

Removing is performed when you physically remove a chassis from the system. Once the physical removal of the chassis is completed, the configuration for that chassis can be removed in Cisco UCS Manager.



Note

You cannot remove a chassis from Cisco UCS Manager if it is physically present and connected.

If you need to add a removed chassis back to the configuration, it must be reconnected and then rediscovered. During rediscovery Cisco UCS Manager will assign the chassis a new ID that may be different from ID that it held before.

# **Acknowledging a Chassis**

Acknowledging the chassis ensures that Cisco UCS Manager is aware of the change in the number of links and that traffics flows along all available links.

After you enable or disable a port on a fabric interconnect, wait for at least 1 minute before you re-acknowledge the chassis. If you re-acknowledge the chassis too soon, the pinning of server traffic from the chassis might not get updated with the changes to the port that you enabled or disabled.

### **SUMMARY STEPS**

- 1. UCS-A# acknowledge chassis chassis-num
- 2. UCS-A# commit-buffer

### **DETAILED STEPS**

	Command or Action	Purpose
Step 1	UCS-A# acknowledge chassis chassis-num	Acknowledges the specified chassis.
Step 2	UCS-A# commit-buffer	Commits the transaction to the system configuration.

### **Example**

The following example acknowledges chassis 2 and commits the transaction:

```
UCS-A# acknowledge chassis 2
UCS-A* # commit-buffer
UCS-A #
```

# **Decommissioning a Chassis**

### **SUMMARY STEPS**

- 1. UCS-A# decommission chassis chassis-num
- 2. UCS-A# commit-buffer

### **DETAILED STEPS**

	Command or Action	Purpose
Step 1	UCS-A# decommission chassis chassis-num	Decommissions the specified chassis.
Step 2	UCS-A# commit-buffer	Commits the transaction to the system configuration.

The decommission may take several minutes to complete.

### **Example**

The following example decommissions chassis 2 and commits the transaction:

```
UCS-A# decommission chassis 2
UCS-A* # commit-buffer
UCS-A # show chassis

Chassis:

Chassis Overall Status Admin State

1 Operable Acknowledged
2 Accessibility Problem Decommission
UCS-A #
```

# **Removing a Chassis**

### Before you begin

Physically remove the chassis before performing the following procedure.

### **SUMMARY STEPS**

1. UCS-A# remove chassis chassis-num

### 2. UCS-A# commit-buffer

### **DETAILED STEPS**

	Command or Action	Purpose
Step 1	UCS-A# remove chassis chassis-num	Removes the specified chassis.
Step 2	UCS-A# commit-buffer	Commits the transaction to the system configuration.

The removal may take several minutes to complete.

### **Example**

The following example removes chassis 2 and commits the transaction:

```
UCS-A# remove chassis 2
UCS-A* # commit-buffer
UCS-A #
```

# **Recommissioning a Chassis**

This procedure returns the chassis to the configuration and applies the chassis discovery policy to the chassis. After this procedure, you can access the chassis and any servers in it.



Note

This procedure is not applicable for Cisco UCS S3260 Chassis.

### Before you begin

Collect the following information about the chassis to be recommissioned by using the **show chassis decommissioned** or **show chassis inventory** commands:

- Vendor name
- · Model name
- · Serial number

### **SUMMARY STEPS**

- **1.** UCS-A# **recommission chassis** *vendor-name model-name serial-num*
- 2. UCS-A# commit-buffer

### **DETAILED STEPS**

	Command or Action	Purpose	
•	UCS-A# recommission chassis vendor-name model-name serial-num	Recommissions the specified chassis.	

	Command or Action	Purpos	е	
Step 2	UCS-A# commit-buffer	Commits the transaction to the system configuration		
		Note	After recommissioning a chassis and committing the transaction, if you immediately run the <b>show chassis</b> command, you may not see any change in the Admin State of the chassis. It may take a while before the state of the chassis changes after it is recommissioned.	

### **Example**

The following example recommissions a Cisco UCS 5108 chassis and commits the transaction:

UCS-A# show chassis

```
Chassis:

Chassis Overall Status Admin State

1 Accessibility Problem Decommission

UCS-A# recommission chassis "Cisco Systems Inc" "N20-C6508" FOX1252GNNN

UCS-A* # commit-buffer

UCS-A #
```

# **Renumbering a Chassis**



Note

You cannot renumber a blade server through Cisco UCS Manager. The ID assigned to a blade server is determined by its physical slot in the chassis. To renumber a blade server, you must physically move the server to a different slot in the chassis.



Note

This procedure is not applicable for Cisco UCS S3260 Chassis.

### Before you begin

If you are swapping IDs between chassis, you must first decommission both chassis, then wait for the chassis decommission FSM to complete before proceeding with the renumbering steps.

### **SUMMARY STEPS**

- 1. UCS-A# show chassis inventory
- **2.** Verify that the chassis inventory does not include the following:
- **3.** UCS-A# **recommission chassis** vendor-name model-name serial-num [chassis-num]
- 4. UCS-A# commit-buffer

### **DETAILED STEPS**

	Command or Action	Purpose
Step 1	UCS-A# show chassis inventory	Displays information about your chassis.
Step 2	Verify that the chassis inventory does not include the following:	<ul><li> The chassis you want to renumber</li><li> A chassis with the number you want to use</li></ul>
		If either of these chassis are listed in the chassis inventory, decommission those chassis. You must wait until the decommission FSM is complete and the chassis are not listed in the chassis inventory before continuing. This might take several minutes.
		To see which chassis have been decommissioned, issue the <b>show chassis decommissioned</b> command.
Step 3	UCS-A# <b>recommission chassis</b> vendor-name model-name serial-num [chassis-num]	Recommissions and renumbers the specified chassis.
Step 4	UCS-A# commit-buffer	Commits the transaction to the system configuration.

### Example

The following example decommissions two Cisco UCS chassis (chassis 8 and 9), switches their IDs, and commits the transaction:

 ${\tt UCS-A\#} \ \, \textbf{show chassis inventory}$ 

Chassis	PID	Ver	ndor		Serial (SN)	HW	Revision
1	N20-C6508	Cisco	Systems	Tnc	FOX1252GAAA	0	
			-		FOX1252GBBB		
			-		FOX1252GCCC		
			-		FOX1252GDDD		
			-		FOX1252GEEE		
			-		FOX1252GFFF		
7	N20-C6508	Cisco	Systems	Inc	FOX1252GGGG	0	
8	N20-C6508	Cisco	Systems	Inc	FOX1252GHHH	0	
9	N20-C6508	Cisco	Systems	Inc	FOX1252GIII	0	
10	N20-C6508	Cisco	Systems	Inc	FOX1252GJJJ	0	
11	N20-C6508	Cisco	Systems	Inc	FOX1252GKKK	0	
12	N20-C6508	Cisco	Systems	Inc	FOX1252GLLL	0	
13	N20-C6508	Cisco	Systems	Inc	FOX1252GMMM	0	
14	N20-C6508	Cisco	Systems	Inc	FOX1252GNNN	0	
UCS-A# decor UCS-A*# commuCS-A# decor	mit-buffer						
UCS-A*# com	mit-buffer						
UCS-A# show	chassis in	nvento	rу				
Chassis	PID	Ver	ndor		Serial (SN)	HW	Revision
2	N20-C6508	Cisco	Systems	Inc	FOX1252GAAA FOX1252GBBB FOX1252GCCC	0	

```
      4
      N20-C6508
      Cisco
      Systems
      Inc
      FOX1252GDDD
      0

      5
      N20-C6508
      Cisco
      Systems
      Inc
      FOX1252GEEE
      0

      6
      N20-C6508
      Cisco
      Systems
      Inc
      FOX1252GGGG
      0

      10
      N20-C6508
      Cisco
      Systems
      Inc
      FOX1252GJJJ
      0

      11
      N20-C6508
      Cisco
      Systems
      Inc
      FOX1252GKKK
      0

      12
      N20-C6508
      Cisco
      Systems
      Inc
      FOX1252GMMM
      0

      13
      N20-C6508
      Cisco
      Systems
      Inc
      FOX1252GNNN
      0

      14
      N20-C6508
      Cisco
      Systems
      Inc
      FOX1252GNNN
      0
```

### UCS-A# show chassis decommissioned

```
Chassis PID Vendor Serial (SN) HW Revision

8 N20-C6508 Cisco Systems Inc FOX1252GHHH 0
9 N20-C6508 Cisco Systems Inc FOX1252GIII 0
```

Chassis	PID	Ver	ndor		Serial (SN)	ΗW	Revision
1	N20-C6508	Cisco	Systems	Inc	FOX1252GAAA	0	
2	N20-C6508	Cisco	Systems	Inc	FOX1252GBBB	0	
3	N20-C6508	Cisco	Systems	Inc	FOX1252GCCC	0	
4	N20-C6508	Cisco	Systems	Inc	FOX1252GDDD	0	
5	N20-C6508	Cisco	Systems	Inc	FOX1252GEEE	0	
6	N20-C6508	Cisco	Systems	Inc	FOX1252GFFF	0	
7	N20-C6508	Cisco	Systems	Inc	FOX1252GGGG	0	
8	N20-C6508	Cisco	Systems	Inc	FOX1252GIII	0	
9	N20-C6508	Cisco	Systems	Inc	FOX1252GHHH	0	
10	N20-C6508	Cisco	Systems	Inc	FOX1252GJJJ	0	
11	N20-C6508	Cisco	Systems	Inc	FOX1252GKKK	0	
12	N20-C6508	Cisco	Systems	Inc	FOX1252GLLL	0	
13	N20-C6508	Cisco	Systems	Inc	FOX1252GMMM	0	
14	N20-C6508	Cisco	Systems	Inc	FOX1252GNNN	0	

# **Turning On the Locator LED for a Chassis**

#### **SUMMARY STEPS**

- **1.** UCS-A# scope chassis chassis-num
- 2. UCS-A /chassis # enable locator-led
- 3. UCS-A /chassis # commit-buffer

### **DETAILED STEPS**

	Command or Action	Purpose
Step 1	UCS-A# scope chassis chassis-num	Enters chassis mode for the specified chassis.
Step 2	UCS-A /chassis # enable locator-led	Turns on the chassis locator LED.
Step 3	UCS-A /chassis # commit-buffer	Commits the transaction to the system configuration.

### **Example**

The following example turns on the locator LED for chassis 2 and commits the transaction:

```
UCS-A# scope chassis 2
UCS-A /chassis # enable locator-led
UCS-A /chassis* # commit-buffer
UCS-A /chassis #
```

# **Turning Off the Locator LED for a Chassis**

### **SUMMARY STEPS**

- **1.** UCS-A# **scope chassis** *chassis-num*
- 2. UCS-A /chassis # disable locator-led
- 3. UCS-A /chassis # commit-buffer

### **DETAILED STEPS**

	Command or Action	Purpose
Step 1	UCS-A# scope chassis chassis-num	Enters chassis mode for the specified chassis.
Step 2	UCS-A /chassis # disable locator-led	Turns off the chassis locator LED.
Step 3	UCS-A /chassis # commit-buffer	Commits the transaction to the system configuration.

### **Example**

The following example turns off the locator LED for chassis 2 and commits the transaction:

```
UCS-A# scope chassis 2
UCS-A /chassis # disable locator-led
UCS-A /chassis* # commit-buffer
UCS-A /chassis #
```

Turning Off the Locator LED for a Chassis