



# Managing Chassis and Dynamic Storage

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## Chassis Summary

### Viewing Chassis Summary

By default when you log on to the Cisco UCS C-Series rack-mount server, the **Summary** pane of the Chassis is displayed in the Web UI. You can also view the Chassis summary when in another tab or working area, by completing the following steps:

#### Procedure

- Step 1** In the **Navigation** pane, click the **Chassis** menu.
- Step 2** In the **Chassis** menu, click **Summary**.
- Step 3** In the **Chassis Properties** area of the **Chassis Summary** pane, review the following information:

Name	Description
<b>Product Name</b> field	The model name of the chassis.
<b>Serial Number</b> field	The serial number for the chassis.
<b>PID</b> field	The product ID.
<b>Description</b> field	A user-defined description for the server.

**Step 4** In the **Cisco IMC Information** area of the **Chassis Summary** pane, review the following information:

Name	Description
<b>Hostname</b> field	A user-defined hostname for the Cisco IMC. By default, the hostname appears in CXXX-YYYYYY format, where XXX is the model number and YYYYYY is the serial number of the server.
<b>Management IP Address</b> field	The management IP address for the Cisco IMC.
<b>Timezone</b> field	Displays the chosen time zone.
<b>Select Timezone</b> button	Allows you to select a time zone. In the <b>Select Timezone</b> pop-up screen, mouse over the map and click on the location to select your time zone or choose your time zone from the <b>Timezone</b> drop-down menu.
<b>Current Time</b> field	The current date and time according to the Cisco IMC clock.  <b>Note</b> Cisco IMC gets the current date and time from the server BIOS when the NTP is disabled. When NTP is enabled, BIOS and Cisco IMC gets the current time and date from the NTP server. To change this information, reboot the server and press F2 when prompted to access the BIOS configuration menu. Then change the date or time using the options on the main BIOS configuration tab.
<b>Local Time</b> field	The local time of the region according to the chosen time zone. You can set your local time by clicking on the calendar icon and choosing the local time on it

**Step 5** In the **CMC 1** and **CMC 2** area of the **Chassis Summary** pane, review the following information:

Name	Description
<b>IP Address</b> field	The IP address for CMC.
<b>MAC Address</b> field	The MAC address assigned to the active network interface.
<b>Firmware Version</b> field	The current CMC firmware version.
<b>State</b> field	State of the server. This can be one of the following: <ul style="list-style-type: none"> <li>• <b>Active</b>—CMC is active.</li> <li>• <b>Standby</b>—CMC is in standby mode.</li> </ul>

**Step 6** In the **Chassis Status** area of the **Chassis Summary** pane, review the following information:

Name	Description
<b>Overall Chassis Status</b> field	<p>The overall status of the chassis. This can be one of the following:</p> <ul style="list-style-type: none"> <li>• <b>Good</b></li> <li>• <b>Moderate Fault</b></li> <li>• <b>Severe Fault</b></li> </ul>
<b>Temperature</b> field	<p>The temperature status. This can be one of the following:</p> <ul style="list-style-type: none"> <li>• <b>Good</b></li> <li>• <b>Fault</b></li> <li>• <b>Severe Fault</b></li> </ul> <p>You can click the link in this field to view more temperature information.</p>
<b>Overall DIMM Status</b> field	<p>The overall status of the memory modules. This can be one of the following:</p> <ul style="list-style-type: none"> <li>• <b>Good</b></li> <li>• <b>Fault</b></li> <li>• <b>Severe Fault</b></li> </ul> <p>You can click the link in this field to view detailed status information.</p>
<b>Power Supplies</b> field	<p>The overall status of the power supplies. This can be one of the following:</p> <ul style="list-style-type: none"> <li>• <b>Good</b></li> <li>• <b>Fault</b></li> <li>• <b>Severe Fault</b></li> </ul> <p>You can click the link in this field to view detailed status information.</p>
<b>Fans</b> field	<p>The overall status of the power supplies. This can be one of the following:</p> <ul style="list-style-type: none"> <li>• <b>Good</b></li> <li>• <b>Fault</b></li> <li>• <b>Severe Fault</b></li> </ul> <p>You can click the link in this field to view detailed status information.</p>
<b>Front Locator LED</b> field	<p>Whether the front panel locator LED on the chassis is on or off.</p> <p><b>Note</b> This option is available only on some UCS C-Series servers.</p>

Name	Description
<b>Overall Storage Status</b> field	The overall status of all controllers. This can be one of the following: <ul style="list-style-type: none"> <li>• <b>Good</b></li> <li>• <b>Moderate Fault</b></li> <li>• <b>Severe Fault</b></li> </ul>
<b>Power Status</b> field	<ul style="list-style-type: none"> <li>• <b>Server 1</b>—Whether server 1 is powered on or off.</li> <li>• <b>Server 2</b>—Whether server 2 is powered on or off.</li> </ul>
<b>Locator LED</b> field	<ul style="list-style-type: none"> <li>• <b>Server 1</b>—Whether locator LED on server 1 is on or off.</li> <li>• <b>Server 2</b>—Whether locator LED on server 2 is on or off.</li> </ul>

## Chassis Inventory

### Viewing the Details of the Servers on the Chassis

#### Procedure

- Step 1** In the **Navigation** pane, click the **Chassis** menu.
- Step 2** In the **Chassis** menu, click **Inventory**.
- Step 3** In the **Inventory** work pane, the **Servers** tab displays by default. Review the high level details of the server on the chassis:

Name	Description
<b>Name</b> column	The model name of the server.
<b>PID</b> column	Product ID.
<b>UUID</b> column	The UUID assigned to the server.
<b>SysSerialNum</b> column	Serial Number of the server.
<b>Number of Cores</b> column	The number of cores in the CPU.

Name	Description
Memory column	Total memory available.
Power State column	The current power state.

## Viewing Power Supply Properties

### Procedure

- Step 1** In the **Navigation** pane, click the **Chassis** menu.
- Step 2** In the **Chassis** menu, click **Inventory**.
- Step 3** In the **Inventory** work pane, click the **Power Supplies** tab and review the following information for each power supply:

Name	Description
Device ID column	The identifier for the power supply unit.
Status column	The status of the power supply unit.
Input column	The input into the power supply, in watts.
Max Output column	The maximum output from the power supply, in watts.
FW Version column	The firmware version for the power supply.
Product ID column	The product identifier for the power supply assigned by the vendor.

## Viewing Cisco VIC Adapter Properties

### Procedure

- Step 1** In the **Navigation** pane, click the **Chassis** menu.
- Step 2** In the **Chassis** menu, click **Inventory**.
- Step 3** In the **Inventory** work pane, click the **Cisco VIC Adapters** tab and review the following high level information:

Name	Description
<b>Slot Number</b> column	The PCI slot in which the adapter is installed.
<b>Serial Number</b> column	The serial number for the adapter.
<b>Product ID</b> column	The product ID for the adapter.
<b>Cisco IMC Enabled</b> column	Whether the adapter is able to manage Cisco IMC. This functionality depends on the type of adapter installed and how it is configured. For details, see the hardware installation guide for the type of server you are using.
<b>Description</b> column	Description of the adapter.

## Dynamic Storage

### Dynamic Storage Support

Effective with this release, The Cisco UCS C-Series rack-mount servers support dynamic storage of Serial Attached SCSI (SAS) drives in the Cisco Management Controller (CMC). This dynamic storage support is provided by the SAS fabric manager located in the CMC.

The fabric manager interacts with the PMC SAS expanders over an Out-of-Band ethernet connection. SAS Expanders allow you to maximize the storage capability of an SAS controller card. Using these expanders, you can employ SAS controllers support up to 60 hard drives. In CMC, an active SIOC configures the expander zoning, where you can assign the drives to the server nodes through the Web UI, command line interface or Cisco UCS Manager. The standby CMC is updated with the current state, so during a CMC fail-over standby, the CMC can take over the zoning responsibilities. Once the drives are visible to a particular server node, you can manage these using RAID controller.



#### Note

The SAS controller support 56 hard disk drives (HDD) by default. There is also a provision to replace Server node 2 with an additional four HDDs on Server 2. In that case the total number of HDDs shown in the Zoning page is 60. However, CMC would not support zoning for the additional HDDs 57, 58, 59, 60.

The SAS fabric manager provides an API library for other processes to configure and monitor the expanders and drives. Configuration of the fabric involves zoning the drives, updating the firmware for expanders and drives.

Dynamic Storage supports the following options:

- Assigning physical disks to server 1 and server 2

- Chassis Wide Hot Spare (supported only on RAID controllers)
- Shared mode (supported only in HBAs)
- Unassigning physical disks

## Viewing SAS Expander Properties

### Procedure

- Step 1** In the **Navigation** pane, click the **Chassis** menu.
- Step 2** In the **Chassis** menu, click **Inventory**.
- Step 3** In the **Inventory** working area, click the **Dynamic Storage** tab.
- Step 4** In the **SAS Expander** tab, review the following high level details for SAS Expanders:

Name	Description
<b>ID</b> column	The product ID of the expander.
<b>Name</b> column	The name of the expander.
<b>Firmware Version</b> column	The firmware version the expander uses.
<b>Secondary Firmware Version</b> column	The secondary firmware version of the expander.
<b>Hardware Revision</b> column	The hardware version of the expander.
<b>SAS Address</b> column	The SAS address of the expander.
<b>Server Up Link Speed</b> column	Up link speed received with the LSI RAID Controller. <b>Note</b> This is available only on some C-Series servers. <b>Note</b> You can view up to four speed levels for Server 1 and 2 respectively using the <b>Filter</b> icon on the top right hand corner of the <b>SAS Expander</b> table. Select the Tick mark next to the speed filter to view the individual speed in the table.

## Assigning Physical Drives to Servers

You can assign a physical drive to Server 1 or Server 2, or both, based on your requirements. On the Web UI the **Chassis Front View** area displays the physical drives available on the chassis. You can choose a physical drive individually or an entire row of physical drives by checking the checkbox against the drives.

**Before You Begin**

You must log in with user or admin privileges to perform this task.

**Procedure**

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- Step 1** In the **Navigation** pane, click the **Chassis** menu.
- Step 2** In the **Chassis** menu, click **Inventory**.
- Step 3** In the **Inventory** working area, click the **Zoning** tab.  
The Chassis Front View is displayed.
- Step 4** In the **Chassis Front View** working area, select an individual server or a row of servers.
- Step 5** Click the **Assign to Server 1** or **Assign to Server 2** link.
- Step 6** Click **OK**.
- Step 7** To assign the physical drive or drives to both servers, click the **Share** link.  
A prompt appears informing that the physical drives would be assigned to both servers.
- Step 8** Click **OK** to confirm.
- Note** Shared mode is supported only for HBAs.
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**What to Do Next**

Move a physical drive as chassis wide hot spare, share, or unassign servers.

**Moving Physical Drives as Chassis Wide Hot Spare**

You can move the selected physical drive as a chassis wide hot spare. On the Web UI the **Chassis Front View** area displays the physical drives available on the chassis. You can choose a physical drive individually or an entire row of physical drives by checking the checkbox against the drives.

**Note**


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Chassis wide hot spare is supported only in Mezz RAID controllers (RAID Controller for UCS C3X60 storage). This option is unavailable if the chassis has an HBA card.

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**Before You Begin**

You must log in with user or admin privileges to perform this task.

**Procedure**

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- Step 1** In the **Navigation** pane, click the **Chassis** menu.
- Step 2** In the **Chassis** menu, click **Inventory**.
- Step 3** In the **Inventory** working area, click the **Zoning** tab.  
The Chassis Front View is displayed.



- Step 4** In the **Chassis Front View** working area, select an individual server or a row of servers.
  - Step 5** Click the **Chassis Wide Hot Spare** link.
  - Step 6** Click **OK**.
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### What to Do Next

Assign more physical drives to servers, share, or unassign servers.

## Unassigning Physical Drives

You can unassign a physical drive (remove association with) from Server 1 or Server 2, or both, based on your requirements. On the Web UI the **Chassis Front View** area displays the physical drives available on the chassis. You can choose a physical drive individually or an entire row of physical drives by checking the checkbox against the drives.

### Before You Begin

You must log in with user or admin privileges to perform this task.

### Procedure

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- Step 1** In the **Navigation** pane, click the **Chassis** menu.
  - Step 2** In the **Chassis** menu, click **Inventory**.
  - Step 3** In the **Inventory** working area, click the **Zoning** tab.  
The Chassis Front View is displayed.
  - Step 4** In the **Chassis Front View** working area, select an individual server or a row of servers.
  - Step 5** Click the **Unassign** link.
  - Step 6** Click **OK**.
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