Modular servers, which are introduced in Cisco UCS M-Series, are contained in compute cartridges. You cannot remove servers from their cartridges.
Cisco UCS Manager Release 3.1(2) and later releases do not support Cisco UCS M-Series Servers.

Booting a Modular Server

If the Boot Server link is dimmed in the Actions area, you must shut down the server first.

Procedure

Step 1 In the Navigation pane, click Equipment.
Step 2 Expand Equipment > Chassis > Chassis Number > Cartridges > Cartridge Number > Servers
Step 3 Choose the server that you want to boot.
Step 4 In the Work pane, click the General tab.
Step 5 In the Actions area, click Boot Server.
Step 6 If a confirmation dialog box displays, click Yes.

After the server has booted, the Overall Status field on the General tab displays an OK status.

Booting a Rack-Mount Server from the Service Profile

Procedure

Step 1 In the Navigation pane, click Servers.
Step 2 Expand Servers > Service Profiles.
Step 3 Expand the node for the organization where you want to create the service profile.
If the system does not include multitenancy, expand the root node.
Step 4 Choose the service profile that requires the associated server to boot.
Step 5 In the Work pane, click the General tab.
Step 6 In the Actions area, click Boot Server.
Step 7 If a confirmation dialog box displays, click Yes.
Step 8 Click OK in the Boot Server dialog box.
After the server boots, the Overall Status field on the General tab displays an ok status or an up status.
Determining the Boot Order of a Modular Server

Tip
You can also view the boot order tabs from the General tab of the service profile associated with a server.

Procedure

Step 1
In the Navigation pane, click Equipment.

Step 2
Expand Equipment > Chassis > Chassis Number > Cartridges > Cartridge Number > Servers

Step 3
Click the server for which you want to determine the boot order.

Step 4
In the Work pane, click the General tab.

Step 5
If the Boot Order Details area is not expanded, click the Expand icon to the right of the heading.

Step 6
To view the boot order assigned to the server, click the Configured Boot Order tab.

Step 7
To view what will boot from the various devices in the physical server configuration, click the Actual Boot Order tab.

Note
The Actual Boot Order tab always shows "Internal EFI Shell" at the bottom of the boot order list.

Shutting Down a Modular Server

When you use this procedure to shut down a server with an installed operating system, Cisco UCS Manager triggers the OS into a graceful shutdown sequence.

If the Shutdown Server link is dimmed in the Actions area, the server is not running.

Procedure

Step 1
In the Navigation pane, click Equipment.

Step 2
Expand Equipment > Chassis > Chassis Number > Cartridges > Cartridge Number > Servers

Step 3
Choose the server that you want to shut down.

Step 4
In the Work pane, click the General tab.

Step 5
In the Actions area, click Shutdown Server.

Step 6
If a confirmation dialog box displays, click Yes.

After the server has been successfully shut down, the Overall Status field on the General tab displays a power-off status.
Shutting Down a Server from the Service Profile

When you use this procedure to shut down a server with an installed operating system, Cisco UCS Manager triggers the OS into a graceful shutdown sequence.

If the Shutdown Server link is dimmed in the Actions area, the server is not running.

Procedure

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>In the Navigation pane, click Servers.</td>
</tr>
<tr>
<td>Step 2</td>
<td>Expand Servers &gt; Service Profiles.</td>
</tr>
<tr>
<td>Step 3</td>
<td>Expand the node for the organization where you want to create the service profile. If the system does not include multitenancy, expand the root node.</td>
</tr>
<tr>
<td>Step 4</td>
<td>Choose the service profile that requires the associated server to shut down.</td>
</tr>
<tr>
<td>Step 5</td>
<td>In the Work pane, click the General tab.</td>
</tr>
<tr>
<td>Step 6</td>
<td>In the Actions area, click Shutdown Server.</td>
</tr>
<tr>
<td>Step 7</td>
<td>If a confirmation dialog box displays, click Yes.</td>
</tr>
</tbody>
</table>

After the server successfully shuts down, the Overall Status field on the General tab displays a down status or a power-off status.

Resetting a Modular Server

When you reset a server, Cisco UCS Manager sends a pulse on the reset line. You can choose to gracefully shut down the operating system. If the operating system does not support a graceful shutdown, the server is power cycled. The option to have Cisco UCS Manager complete all management operations before it resets the server does not guarantee the completion of these operations before the server is reset.

Note

If you are trying to boot a server from a power-down state, you should not use Reset.

If you continue the power-up with this process, the desired power state of the servers become out of sync with the actual power state and the servers might unexpectedly shut down at a later time. To safely reboot the selected servers from a power-down state, click Cancel, then select the Boot Server action.
Procedure

Step 1 In the Navigation pane, click Equipment.
Step 2 Expand Equipment > Chassis > Chassis Number > Cartridges > Cartridge Number > Servers
Step 3 Choose the server that you want to reset.
Step 4 In the Work pane, click the General tab.
Step 5 In the Actions area, click Reset.
Step 6 In the Reset Server dialog box, do the following:
   a) Click the Power Cycle option.
   b) (Optional) Check the check box if you want Cisco UCS Manager to complete all management operations that are pending on this server.
   c) Click OK.

The reset may take several minutes to complete. After the server has been reset, the Overall Status field on the General tab displays an ok status.

Reacknowledging a Modular Server

Perform the following procedure to rediscover the server and all endpoints in the server. For example, you can use this procedure if a server is stuck in an unexpected state, such as the discovery state.

Procedure

Step 1 In the Navigation pane, click Equipment.
Step 2 Expand Equipment > Chassis > Chassis Number > Cartridges > Cartridge Number > Servers
Step 3 Choose the server that you want to acknowledge.
Step 4 In the Work pane, click the General tab.
Step 5 In the Actions area, click Server Maintenance.
Step 6 In the Maintenance dialog box, click Re-acknowledge, then click OK. Cisco UCS Manager disconnects the server and then builds the connections between the server and the fabric interconnect or fabric interconnects in the system. The acknowledgment may take several minutes to complete. After the server has been acknowledged, the Overall Status field on the General tab displays an OK status.

Deleting the Inband Configuration from a Modular Server

This procedure removes the inband management IP address configuration from a server. If this action is greyed out, no inband configuration was completed.
Decommissioning a Server

Decommissioning of a server is performed to temporarily remove the server from the UCSM configuration.

Procedure

Step 1 In the Navigation pane, click Equipment.
Step 2 Expand Equipment > Chassis > Chassis Number > Cartridges > Cartridge Number > Servers
Step 3 Choose the server that you want to decommission.
Step 4 In the Work pane, click the General tab.
Step 5 In the Actions area, click Server Maintenance.
Step 6 In the Maintenance dialog box, do the following:
   a) Click Decommission.
   b) Click OK.
   The server is removed from the Cisco UCS configuration.

What to Do Next

If you physically re-install the server, you must re-acknowledge the slot to have Cisco UCS Manager rediscover the server.
Recommissioning a Modular Server

Procedure

Step 1 In the Navigation pane, click Equipment.
Step 2 Expand Equipment node.
Step 3 Click the Chassis node.
Step 4 In the Work pane, click the Decommissioned tab.
Step 5 On the row for each server that you want to recommission, check the check box in the Recommission column, then click Save Changes.
Step 6 If a confirmation dialog box displays, click Yes.
Step 7 (Optional) Monitor the progress of the server recommission and discovery on the FSM tab for the server.

Turning the Locator LED for a Server On and Off

Procedure

Step 1 In the Navigation pane, click Equipment.
Step 2 Expand Equipment > Chassis > Chassis Number > Cartridges > Cartridge Number > Servers
Step 3 Choose the server for which you want to turn the locator LED on or off.
Step 4 In the Work pane, click the General tab.
Step 5 In the Actions area, click one of the following:
   - Turn on Locator LED—Turns on the LED for the selected server.
   - Turn off Locator LED—Turns off the LED for the selected server.

Turning the Local Disk Locator LED on a Modular Server On and Off

Before You Begin

- Ensure the server, on which the disk is located, is powered on. If the server is off, you are unable to turn on or off the local disk locator LED.
Resetting the CMOS for a Modular Server

Sometimes, troubleshooting a server might require you to reset the CMOS. Resetting the CMOS is not part of the normal maintenance of a server.

**Procedure**

**Step 1** In the Navigation pane, click **Equipment**.
**Step 2** Expand **Equipment > Chassis > Chassis Number > Cartridges > Cartridge Number > Servers**
**Step 3** Choose the server for which you want to reset the CMOS.
**Step 4** In the Work pane, click the **Inventory > Storage > Disks** tabs.
The Storage Controller inventory appears.
**Step 5** In the Details area, click **Toggle Locator LED**.
If the **Locator LED** state is **On**, it will turn **Off**. If the **Locator LED** state is **Off**, it will turn **On**.
**Step 6** Click **Save Changes**.

Resetting the CIMC for a Modular Server

Sometimes, with the firmware, troubleshooting a server might require you to reset the CIMC. Resetting the CIMC is not part of the normal maintenance of a server. After you reset the CIMC, the server boots with the running version of the firmware for that server.

If the CIMC is reset, the power monitoring functions of Cisco UCS become briefly unavailable until the CIMC reboots. Typically, the reset only takes 20 seconds; however, it is possible that the peak power cap can exceed during that time. To avoid exceeding the configured power cap in a low power-capped environment, consider staggering the rebooting or activation of CIMCs.
Procedure

**Step 1**  In the **Navigation** pane, click **Equipment**.

**Step 2**  Expand **Equipment** > **Chassis** > **Chassis Number** > **Cartridges** > **Cartridge Number** > **Servers**

**Step 3**  Choose the server for which you want to reset the CIMC.

**Step 4**  In the **Work** pane, click the **General** tab.

**Step 5**  In the **Actions** area, click **Recover Server**.

**Step 6**  In the **Recover Server** dialog box, click **Reset CIMC (Server Controller)**, then click **OK**.

### Issuing an NMI from a Server

Perform the following procedure if the system remains unresponsive and you need Cisco UCS Manager to issue a Non-Maskable Interrupt (NMI) to the BIOS or operating system from the CIMC. This action creates a core dump or stack trace, depending on the operating system installed on the server.

**Procedure**

**Step 1**  In the **Navigation** pane, click **Equipment**.

**Step 2**  Expand **Equipment** > **Chassis** > **Chassis Number** > **Cartridges** > **Cartridge Number** > **Servers**

**Step 3**  Choose the server from which you want to issue the NMI.

**Step 4**  In the **Work** pane, click the **General** tab.

**Step 5**  In the **Actions** area, click **Server Maintenance**.

**Step 6**  In the **Maintenance** dialog box, do the following:

- a) Click **Diagnostic Interrupt**.
- b) Click **OK**.

Cisco UCS Manager sends an NMI to the BIOS or operating system.

### Viewing Health Events on a Server

**Procedure**

**Step 1**  In the **Navigation** pane, click **Equipment**.

**Step 2**  Expand **Equipment** > **Chassis** > **Chassis Number** > **Cartridges** > **Cartridge Number** > **Servers**

**Step 3**  Choose the server for which you want to view health events.

**Step 4**  In the **Work** pane, click the **Health** tab

The health events triggered for this server appear. The fields in this tab are:
### Health Summary area

**Health Qualifier** field  
Comma-separated names of all the health events that are triggered for the component.

**Health Severity** field  
Highest severity of all the health events that are triggered for the component. This can be one of the following:
- critical
- major
- minor
- warning
- info
- cleared

**Note**  
The severity levels listed here are from highest to lowest severity.

### Health Details area

**Severity** column  
Severity of the health event. This can be one of the following:
- critical
- major
- minor
- warning
- info
- cleared

**Note**  
The severity levels listed here are from highest to lowest severity.

**Name** column  
Name of the health event.

**Description** column  
Detailed description of the health event.

**Value** column  
Current value of the health event.

**Details** area  
The Details area displays the **Name**, **Description**, **Severity**, and **Value** details of any health event that you select in the **Health Details** area.
Health LED Alarms

The server health LED is located on the front of each Cisco UCS M-Series server. Cisco UCS Manager allows you to view the sensor faults that cause the server health LED to change color from green to amber or blinking amber.

The health LED alarms display the following information:

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Severity</strong></td>
<td>The severity of the alarm. This can be one of the following:</td>
</tr>
<tr>
<td><strong>column</strong></td>
<td>• Critical—The blade health LED is blinking amber. This is indicated with a red dot.</td>
</tr>
<tr>
<td></td>
<td>• Minor—The blade health LED is amber. This is indicated with an orange dot.</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>A brief description of the alarm.</td>
</tr>
<tr>
<td><strong>column</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Sensor ID</strong></td>
<td>The ID of the sensor that triggered the alarm.</td>
</tr>
<tr>
<td><strong>column</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Sensor Name</strong></td>
<td>The name of the sensor that triggered the alarm.</td>
</tr>
</tbody>
</table>

Viewing Health LED Alarms

**Procedure**

**Step 1** In the Navigation pane, click Equipment.

**Step 2** Expand Equipment > Chassis > Chassis Number > Cartridges > Cartridge Number > Servers

**Step 3** Click the server for which you want to view health LED alarms.

**Step 4** In the Work pane, click the General tab.

**Step 5** In the Actions area, click View Health LED Alarms.

**Step 6** Click OK to close the View Health LED Alarms dialog box.

Viewing the POST Results for a Modular Server

You can view any errors collected during the Power On Self-Test process for a server.
**Procedure**

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**Step 1** In the Navigation pane, click **Equipment**.

**Step 2** Expand **Equipment > Chassis > Chassis Number > Cartridges > Cartridge Number > Servers**

**Step 3** Choose the server for which you want to view the POST results.

**Step 4** In the Work pane, click the **General** tab.

**Step 5** In the Actions area, click **View POST Results**.

The **POST Results** dialog box lists the POST results for the server.

**Step 6** Click **OK** to close the **POST Results** dialog box.