



## Managing the Servers

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## Server Management in Cisco UCS Manager GUI

You can manage and monitor all servers in a Cisco UCS instance through Cisco UCS Manager GUI. Some server management tasks, such as changes to the power state, can be performed from the following locations:

- **General** tab for the server
- **General** tab for the service profile associated with the server

The remaining management tasks can only be performed on the server.

If a server slot in a chassis is empty, Cisco UCS Manager provides information, errors, and faults for that slot. You can also reacknowledge the slot to resolve server mismatch errors and to have Cisco UCS Manager rediscover the server in the slot.

## Booting Servers

### Booting a 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 the **Equipment** tab.
  - Step 2** On the **Equipment** tab, expand **Equipment** ► **Chassis** ► **Chassis 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 Cisco UCS Manager displays a confirmation dialog box, click **Yes**.
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After the server has booted, the **Overall Status** field on the **General** tab displays an OK status.

### Booting a Server from the Service Profile

#### Procedure

- 
- Step 1** In the **Navigation** pane, click the **Servers** tab.
  - Step 2** On the **Servers** tab, 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 multi-tenancy, expand the **root** node.
  - Step 4** Choose the service profile that requires the associated server to be booted.
  - Step 5** In the **Work** pane, click the **General** tab.
  - Step 6** In the **Actions** area, click **Boot Server**.
  - Step 7** If Cisco UCS Manager displays a confirmation dialog box, click **Yes**.
  - Step 8** Click **OK** in the **Boot Server** dialog box.  
After the server has booted, the **Overall Status** field on the **General** tab displays an ok status or an up status.
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# Shutting Down Servers

## Shutting Down a 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 **Shut Down** link is dimmed in the **Actions** area, the server is not running.

### Procedure

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- Step 1** In the **Navigation** pane, click the **Equipment** tab.
  - Step 2** On the **Equipment** tab, expand **Equipment** ► **Chassis** ► *Chassis 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 **Shut Down**.
  - Step 6** If Cisco UCS Manager displays a confirmation dialog box, click **Yes**.
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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

### Procedure

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- Step 1** In the **Navigation** pane, click the **Servers** tab.
  - Step 2** On the **Servers** tab, 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 multi-tenancy, expand the **root** node.
  - Step 4** Choose the service profile that requires the associated server to be shut down.
  - Step 5** In the **Work** pane, click the **General** tab.
  - Step 6** In the **Actions** area, click **Shut Down**.
  - Step 7** If Cisco UCS Manager displays a confirmation dialog box, click **Yes**.
- 

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

## Resetting a Server

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

### Procedure

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- Step 1** In the **Navigation** pane, click the **Equipment** tab.
  - Step 2** On the **Equipment** tab, expand **Equipment** > **Chassis** > **Chassis 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**.
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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 Server

Perform the following procedure if you need to have Cisco UCS Manager rediscover the server and all components 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

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- Step 1** In the **Navigation** pane, click the **Equipment** tab.
- Step 2** On the **Equipment** tab, expand **Equipment** > **Chassis** > **Chassis 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, do the following:
  - a) Click **Re-acknowledge**.
  - b) 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.

## Removing a Server from a Chassis

Perform the following procedure when you remove a server from a chassis. Do not physically remove the server first.

### Procedure

- Step 1** In the **Navigation** pane, click the **Equipment** tab.
- Step 2** On the **Equipment** tab, expand **Equipment** ► **Chassis** ► *Chassis Number* ► **Servers**.
- Step 3** Choose the server that you want to remove from the chassis.
- 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.
- Step 7** Go to the physical location of the chassis and remove the server hardware from the slot. For instructions on how to remove the server hardware, see the *Cisco UCS Hardware Installation Guide* for your chassis.

### What to Do Next

If you do not want to physically remove the server hardware, you must re-acknowledge the slot to have Cisco UCS Manager rediscover the server.

For more information, see [Reacknowledging a Server Slot in a Chassis](#), page 6

## Decommissioning a Server

This procedure removes the server from the configuration. As long as the server physically remains in the Cisco UCS instance, Cisco UCS Manager considers the server to be decommissioned and ignores it.

### Procedure

- Step 1** In the **Navigation** pane, click the **Equipment** tab.
- Step 2** On the **Equipment** tab, expand **Equipment** ► **Chassis** ► *Chassis 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.

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### What to Do Next

If you do not want to physically remove the server hardware, you must re-acknowledge the slot to have Cisco UCS Manager rediscover the server.

For more information, see [Reacknowledging a Server Slot in a Chassis](#), page 6

## Reacknowledging a Server Slot in a Chassis

Perform the following procedure if you decommission a server without removing the physical hardware and you want Cisco UCS Manager to rediscover and recommission the server.

### Procedure

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- Step 1** In the **Navigation** pane, click the **Equipment** tab.
  - Step 2** On the **Equipment** tab, expand **Equipment** ► **Chassis** ► **Chassis Number** ► **Servers**.
  - Step 3** Choose the server whose slot you want to reacknowledge.
  - Step 4** If Cisco UCS Manager displays a **Resolve Slot Issue** dialog box, do one of the following:

| Option  | Description   |
|---|---|
| The <b>here</b> link in the <b>Situation</b> area | Click this link and then click <b>Yes</b> in the confirmation dialog box. Cisco UCS Manager reacknowledges the slot and discovers the server in the slot.   |
| <b>OK</b>   | Click this button if you want to proceed to the <b>General</b> tab. You can use the <b>Reacknowledge Slot</b> link in the <b>Actions</b> area to have Cisco UCS Manager reacknowledge the slot and discover the server in the slot. |

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## Removing a Non-Existent Server from the Configuration Database

Perform the following procedure if you physically removed a server from its slot in a chassis without first decommissioning the server. You cannot perform this procedure if the server is physically present in the chassis slot.

If you want to physically remove a server, see [Removing a Server from a Chassis](#), page 5.

### Procedure

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- Step 1** In the **Navigation** pane, click the **Equipment** tab.
  - Step 2** On the **Equipment** tab, expand **Equipment** ► **Chassis** ► *Chassis Number* ► **Servers**.
  - Step 3** Choose the server that you want to remove from the configuration database.
  - 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 **Remove**.
    - b) Click **OK**.
- Cisco UCS Manager removes all data about the server from its configuration database. The server slot is now available for you to insert new server hardware.
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## Toggling the Locator LED

### Turning on the Locator LED for a Server

#### Procedure

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- Step 1** In the **Navigation** pane, click the **Equipment** tab.
  - Step 2** On the **Equipment** tab, expand **Equipment** ► **Chassis** ► *Chassis Number* ► **Servers**.
  - Step 3** Choose the server that you need to locate.
  - Step 4** In the **Work** pane, click the **General** tab.
  - Step 5** In the **Actions** area, click **Turn on Locator LED**.

This action is not available if the locator LED is already turned on.

The LED on the chassis starts flashing.
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## Turning off the Locator LED for a Server

### Procedure

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- Step 1** In the **Navigation** pane, click the **Equipment** tab.
- Step 2** On the **Equipment** tab, expand **Equipment** ► **Chassis** ► *Chassis Number* ► **Servers**.
- Step 3** Choose the server for which you want to turn off the locator LED.
- Step 4** In the **Work** pane, click the **General** tab.
- Step 5** In the **Actions** area, click **Turn off Locator LED**.  
This action is not available if the locator LED is already turned off.  
The LED on the server stops flashing.
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## Starting the KVM Console

### Starting the KVM Console from a Server

#### Procedure

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- Step 1** In the **Navigation** pane, click the **Equipment** tab.
- Step 2** On the **Equipment** tab, expand **Equipment** ► **Chassis** ► *Chassis Number* ► **Servers**.
- Step 3** Choose the server that you want to access through the KVM Console.
- Step 4** In the **Work** pane, click the **General** tab.
- Step 5** In the **Actions** area, click **KVM Console**.  
The KVM Console opens in a separate window.
- Tip** If the Caps Lock key on your keyboard is on when you open a KVM session, and you subsequently turn off your Caps Lock key, the KVM Console may continue to act as if Caps Lock is turned on. To synchronize the KVM Console and your keyboard, press Caps Lock once without the KVM Console in focus and then press Caps Lock again with the KVM Console in focus.
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## Starting the KVM Console from a Service Profile

### Procedure

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- Step 1** In the **Navigation** pane, click the **Servers** tab.
  - Step 2** On the **Servers** tab, expand **Servers** ► **Service Profiles**.
  - Step 3** Expand the node for the organization which contains the service profile for which you want to launch the KVM Console.  
If the system does not include multi-tenancy, expand the **root** node.
  - Step 4** Choose the service profile for which you need KVM access to the associated server.
  - Step 5** In the **Work** pane, click the **General** tab.
  - Step 6** In the **Actions** area, click **KVM Console**.  
The KVM Console opens in a separate window.
- Tip** If the Caps Lock key on your keyboard is on when you open a KVM session, and you subsequently turn off your Caps Lock key, the KVM Console may continue to act as if Caps Lock is turned on. To synchronize the KVM Console and your keyboard, press Caps Lock once without the KVM Console in focus and then press Caps Lock again with the KVM Console in focus.
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## Resetting the CMOS for a Server

On rare occasions, troubleshooting a server may require you to reset the CMOS. This procedure is not part of the normal maintenance of a server.

### Procedure

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- Step 1** In the **Navigation** pane, click the **Equipment** tab.
  - Step 2** On the **Equipment** tab, expand **Equipment** ► **Chassis** ► *Chassis Number* ► **Servers**.
  - Step 3** Choose the server for which you want to reset the CMOS.
  - 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, do the following:
    - a) Click **Reset CMOS**.
    - b) Click **OK**.
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## Resetting the BMC for a Server

On rare occasions, such as an issue with the current running firmware, troubleshooting a server may require you to reset the BMC. This procedure is not part of the normal maintenance of a server. After you reset the BMC, the server boots with the running version of the firmware for that server.

### Procedure

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- Step 1** In the **Navigation** pane, click the **Equipment** tab.
- Step 2** On the **Equipment** tab, expand **Equipment** > **Chassis** > **Chassis Number** > **Servers**.
- Step 3** Choose the server for which you want to reset the BMC.
- 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, do the following:
- Click **Recover Corrupt BIOS**.
  - Click **OK**.
- Step 7** In the **Recover Corrupt BIOS** dialog box, do the following:
- Complete the following fields:

| Name   | Description  |
|--|--|
| <b>Version To Be Activated</b><br>drop-down list | Choose the firmware version that you want to activate from the drop-down list.   |
| <b>Ignore Compatibility Check</b><br>check box   | <p>By default, Cisco UCS makes sure that the firmware version is compatible with everything running on the server before it activates that version.</p> <p>Check this check box if you want Cisco UCS to activate the firmware without making sure that it is compatible first.</p> <p><b>Note</b> We recommend that you use this option only when explicitly directed to do so by a technical support representative.</p> |

- Click **OK**.
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## Recovering the Corrupt BIOS on a Server

On rare occasions, an issue with a server may require you to recover the corrupted BIOS. This procedure is not part of the normal maintenance of a server. After you recover the BIOS, the server boots with the running version of the firmware for that server. This radio button may be dimmed if the BIOS does not require recovery or the option is not available for a particular server.

**Before You Begin**



**Important** Remove all attached or mapped USB storage from a server before you attempt to recover the corrupt BIOS on that server. If an external USB drive is attached or mapped from vMedia to the server, BIOS recovery fails.

**Procedure**

- Step 1** In the **Navigation** pane, click the **Equipment** tab.
- Step 2** On the **Equipment** tab, expand **Equipment** > **Chassis** > *Chassis Number* > **Servers**.
- Step 3** Choose the server for which you want to recover the BIOS.
- 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, do the following:
  - a) Click **Reset iBMC (Server Controller)**.
  - b) Click **OK**.

# Monitoring a Server

**Procedure**

- Step 1** In the **Navigation** pane, click the **Equipment** tab.
- Step 2** On the **Equipment** tab, expand **Equipment** > **Chassis** > *Chassis Number* > **Servers**.
- Step 3** Click the server that you want to monitor.
- Step 4** In the **Work** pane, click one of the following tabs to view the status of the server:

| Option                        | Description   |
|-------------------------------|---|
| <b>General</b> tab            | Provides an overview of the status of the server, including a summary of any faults, a summary of the server properties, and a physical display of the server and its components. |
| <b>Inventory</b> tab          | The sub-tabs display the properties and status of the components of the server.   |
| <b>Installed Firmware</b> tab | Displays the current firmware versions on the BMC and interface cards in the server. You can also use this tab to update and activate the firmware on those components.           |
| <b>Faults</b> tab             | Provides details of faults generated by the server.   |
| <b>Events</b> tab             | Provides details of events generated by the server.   |

| Option           | Description   |
|------------------|---|
| FSM tab          | Provides details about and the status of FSM tasks related to the server. You can use this information to diagnose errors with those tasks. |
| Statistics tab   | Provides statistics about the server and its components. You can view these statistics in tabular or chart format.                          |
| Temperatures tab | Provides temperature statistics for the components of the server. You can view these statistics in tabular or chart format.                 |
| Power tab        | Provides power statistics for the components of the server. You can view these statistics in tabular or chart format.                       |

**Step 5** In the **Navigation** pane, expand *Server\_ID* ► **Interface Cards** ► *Interface\_Card\_ID*.

**Step 6** In the **Work** pane, you can view the status of one or more of the following components of the interface card:

- Interface card
- DCE interfaces
- HBAs
- NICs

**Tip** If you expand these nodes, you can view the status of the components of that element. For example, if you expand a NIC node, you can view the properties and status of each VIF created on that NIC.

## Viewing the POST Results for a Server

You can view any errors collected during the Power On Self-Test process for a server and its adapters.

### Procedure

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

**Step 2** On the **Equipment** tab, expand **Equipment** ► **Chassis** ► *Chassis 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 and its adapters.

**Step 6** (Optional) Click the link in the **Affected Object** column to view the properties of that adapter.

**Step 7** Click **OK** to close the **POST Results** dialog box.