Overview

This chapter includes the following sections:

- Overview of the Cisco UCS C-Series Rack-Mount Servers, page 1
- Cisco Integrated Management Controller, page 2
- Server Software, page 3
- Server Ports, page 3
- CIMC GUI, page 4

Overview of the Cisco UCS C-Series Rack-Mount Servers

Following are the Cisco UCS C-Series rack-mount servers:

- Cisco UCS C200 M1 Rack-Mount Server
- Cisco UCS C210 M1 Rack-Mount Server
- Cisco UCS C250 M1 Rack-Mount Server

**UCS C200 M1 Rack-Mount Server**

The Cisco UCS C200 M1 server is a high-density, two-socket, 1 RU rack-mount server. This server is built for production-level network infrastructure, web services, and mainstream data centers, and branch and remote-office applications.

**UCS C210 M1 Rack-Mount Server**

The Cisco UCS C210 M1 server is a general-purpose, two-socket, 2 RU rack-mount server. It is designed to balance performance, density, and efficiency for storage-intensive workloads. This server is built for applications such as network file and appliances, storage, database, and content-delivery.

**UCS C250 M1 Rack-Mount Server**

The Cisco UCS C250 M1 server is a high-performance, memory-intensive, two-socket, 2 RU rack-mount server. It is designed to increase performance, and it has the capacity for demanding virtualization and large-data-set workloads. The C250 M1 server also can reduce the cost of smaller memory footprints.
Cisco Integrated Management Controller

The Cisco Integrated Management Controller (CIMC) is the management service for the C-Series servers. CIMC runs within the server.

Management Interfaces
You can use a web-based GUI or SSH-based CLI to access, configure, administer, and monitor the server. Almost all tasks can be performed in either interface, and the results of tasks performed in one interface are displayed in another. However, you cannot do the following:

- Use CIMC GUI to invoke CIMC CLI
- View a command that has been invoked through CIMC CLI in CIMC GUI
- Generate CIMC CLI output from CIMC GUI

Tasks You Can Perform in CIMC
You can use CIMC to perform the following server management tasks:

- Power on, power off, power cycle, reset and shut down the server
- Toggle the locator LED
- Configure the server boot order
- View server properties and sensors
- Manage remote presence
- Create and manage local user accounts, and enable remote user authentication through Active Directory
- Configure network-related settings, including NIC properties, IPv4, VLANs, and network security
- Configure communication services, including HTTP, SSH, and IPMI Over LAN
- Manage certificates
- Configure platform event filters
- Update CIMC firmware
- Monitor faults, alarms, and server status

No Operating System or Application Provisioning or Management
CIMC provisions servers, and as a result, exists below the operating system on a server. Therefore, you cannot use it to provision or manage operating systems or applications on servers. For example, you cannot do the following:

- Deploy an OS, such as Windows or Linux
- Deploy patches for software, such as an OS or an application
- Install base software components, such as anti-virus software, monitoring agents, or backup clients
- Install software applications, such as databases, application server software, or web servers
• Perform operator actions, including restarting an Oracle database, restarting printer queues, or handling non-CIMC user accounts
• Configure or manage external storage on the SAN or NAS storage

Server Software

CIMC is a separate management module that is built into the motherboard. CIMC has its own ARM-based processor which runs the CIMC software. It is shipped with a running version of the firmware. Users can update CIMC firmware through the Firmware Update Management page. You need not worry about installing the initial CIMC firmware.

You do not need to install an OS like Windows or Linux on the server. Servers are shipped pre-installed. You can however, install a different OS on the server using the DVD drive or over the network. You can use CIMC to install the new OS using the KVM console and vMedia.

The following operating systems are supported by the server:

• VMware ESX 3.5 U4, VMware vSphere 4, 4 U1, 4i, 4i U1
• RedHat RHEL 5.3, 64 bit, RHEL 5.4 KVM, 64 bit, RHEL 6 KVM, 64 bit, RedHat Rhat 4.8, 64 bit, and Fedora
• Novell SLES 10 SP3, 64 bit, SLES 11, 64 bit, SLES 11 SP1 XEN, aSLES 11 XEN, 64 bit
• Solaris x86 10.x, 64 bit
• Oracle OVM 2.1.2, 2.2
• Oracle Enterprise Linux
• XenServer Citrix

Use specific product installation documentation when installing an operating system.

Server Ports

Following is a list of server ports and their default port numbers:

• HTTP—By default, TCP port 80
• HTTPS—By default, TCP port 443
• TFTP—By default, UDP port 69
• SSH—By default, TCP port 22
• IPMI—By default, UDP port 623
• SoL—By default, TCP port 22
CIMC GUI

The CIMC GUI is a web-based management interface for Cisco C-Series servers. You can launch the CIMC GUI and manage the server from any remote host that meets the following minimum requirements:

- Java 1.6 or higher
- HTTP and HTTPS enabled
- Adobe Flash Player 10 or higher

In case you lose or forget the password that you use to log into CIMC, see the Cisco UCS C-Series server installation and service guide for your platform for password recovery instructions.

CIMC Elements

Figure 1 shows the CIMC GUI.

**Figure 1: CIMC GUI**

Navigation Pane

The Navigation pane displays on the left side of the CIMC GUI. Clicking links on the **Server** or **Admin** tabs in the **Navigation** pane displays the selected pages in the **Work** pane on the right side of the CIMC GUI.

The following table describes the elements in the **Navigation** pane:

<table>
<thead>
<tr>
<th>Element Name</th>
<th>Description</th>
</tr>
</thead>
</table>

- KVM—By default, TCP port 2068
**Overall Server Status area**

The **Overall Server Status** area is found above the **Server** and **Admin** tabs. Click this area to refresh the **Server Summary** page.

**Server tab**

The **Server** tab is found in the **Navigation** pane. It contains links to the following pages:

- **Summary**
- **Inventory**
- **Sensors**
- **System Event Log**
- **Remote Presence**

**Admin tab**

The **Admin** tab is found in the **Navigation** pane. It contains links to the following pages:

- **Users Management**
- **Network**
- **Communication Services**
- **Certificate Management**
- **CIMC Log**
- **Event Management**
- **Firmware Management**
- **Utilities**

---

**Work Pane**

The **Work** pane displays on the right side of the UI. Different pages appear in the **Work** pane, dependant on what link you click on the **Server** or **Admin** tab.

The following table describes the elements and pages in the **Work** pane.

<table>
<thead>
<tr>
<th>Page or Element Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summary</strong></td>
<td>On the page, you view server properties, server status, and CIMC information. You also perform actions like powering the server on and off.</td>
</tr>
</tbody>
</table>
| **Inventory**        | There are four tabs on the page:  
  • **CPUs**—Use this tab to view information about the CPU.  
  • **Memory**—Use this tab to view information about memory. |
- **Power Supplies**—Use this tab to view information about power supplies.
- **Storage**—Use this tab to view information about storage.

### Sensors
There are four tabs on the page:
- **Power Supply Sensors**—Use this tab to view the power supply sensor.
- **Fan Sensors**—Use this tab to view the fan sensor.
- **Temperature Sensors**—Use this tab to view the temperature sensor.
- **Voltage Sensors**—Use this tab to view the voltage sensor.

### System Event Log
On the page, you can view the system event log.

### Remote Presence
There are three tabs on the page:
- **Virtual KVM**—Use this tab to set vKVM properties.
- **Virtual Media**—Use this tab to set virtual media properties.
- **Serial over LAN**—Use this tab to set serial over LAN properties.

### User Management
There are three tabs on the page:
- **Local Users**—Use this tab to create users.
- **Active Directory**—Use this tab to set active directory properties.
- **Sessions**—Use this tab to view current user sessions.

### Network
There are two tabs on the page:
- **Network Settings**—Use this tab to set network properties.
- **Network Security**—Use this tab to set up network security.

### Communications Services
There are three areas on this page:
- **HTTP Properties**—Use this area to set HTTP properties.
- **SSH Properties**—Use this area to set SSH properties.
- **IPMI over LAN Properties**—Use this area to set IPMI over LAN properties.

### Certificate Management
There are two areas on this page:
- **Actions**—Use this area to generate and upload a certificate.
- **Current Certificate**—Use this area to view the current certificate for the server.
CIMC Log

On this page, you view the CIMC Log.

Event Management

There are two tabs on the page:

- **Platform Event Filters**—Use this tab to set up platform event filters.
- **Trap Settings**—Use this tab to set up SNMP traps.

Firmware Management

There are four areas on this page:

- **Actions**—Use this area to install CIMC firmware from a client browser or TFTP server, or to activate installed CIMC firmware.
- **CIMC Firmware Image 1**—Use this area to view version and status information for firmware image 1.
- **CIMC Firmware Image 2**—Use this area to view version and status information for firmware image 2.
- **Last Firmware Update**—Use this area to view information about the last firmware update.

Utilities

There are two areas on this page:

- **Actions**—Use this area to export technical support data, reset the CIMC to factory default, and reboot the CIMC.
- **Last Technical Support Data Export**—Use this area to view information about the last technical support data export.

**Toolbar**

The toolbar displays above the **Work pane**.

<table>
<thead>
<tr>
<th>Element Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refresh</td>
<td>Refreshes the current page.</td>
</tr>
<tr>
<td>Power On Server</td>
<td>Powers on the server.</td>
</tr>
<tr>
<td>Power Off Server</td>
<td>Powers off the server.</td>
</tr>
<tr>
<td>Launch KVM Console</td>
<td>Launches the KVM console.</td>
</tr>
<tr>
<td>Help</td>
<td>Launches help.</td>
</tr>
<tr>
<td>Info</td>
<td>Launches server information.</td>
</tr>
</tbody>
</table>
Cisco Integrated Management Controller GUI Online Help Overview

The Cisco Integrated Management Controller GUI is divided into two main sections, a Navigation pane on the left and a Work pane on the right.

This help system describes the fields on each GUI page and in each dialog box.

To access the page help, do the following:

- In a particular tab in the GUI, click the Help icon in the toolbar above the Work pane.
- In a dialog box, click the Help button in that dialog box.

For details about the tasks you can perform using this GUI, see the Cisco CIMC GUI Configuration Guide.

Logging In to CIMC

Before You Begin

If not installed, install Adobe Flash Player 10 or higher on your local machine.

Procedure

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>In your web browser, type or select the web link for CIMC.</td>
</tr>
<tr>
<td>Step 2</td>
<td>If a security dialog box displays, do the following:</td>
</tr>
<tr>
<td></td>
<td>a) (Optional) Check the check box to accept all content from Cisco.</td>
</tr>
<tr>
<td></td>
<td>b) Click Yes to accept the certificate and continue.</td>
</tr>
<tr>
<td>Step 3</td>
<td>In the log in window, enter your username and password.</td>
</tr>
<tr>
<td>Step 4</td>
<td>Click Log In.</td>
</tr>
</tbody>
</table>

Logging Out of CIMC

Procedure

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>In the upper right of CIMC, click Log Out. Logging out returns you to the CIMC log in page.</td>
</tr>
<tr>
<td>Step 2</td>
<td>(Optional) Log back in or close your web browser.</td>
</tr>
</tbody>
</table>