Understanding UCS Server Configuration Utility

User Interface

The UCS-SCU GUI is a web-based management interface that allows you to perform tasks such as operating system installation, RAID configuration, and firmware updates.

This section includes the following sections:

- License Agreement, page 3-1
- UCS-SCU GUI Home Page, page 3-1

License Agreement

After UCS-SCU boots up, the first interface is the End User License Agreement. Select I Accept and click Next to agree to this license.

UCS-SCU GUI Home Page

Figure 3-1 shows the UCS-SCU GUI and the different elements in the GUI and Table 3-1 shows the description of each element.
Figure 3-1 UCS-SCU GUI

Table 3-1 UCS-SCU GUI Elements

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigation Pane</td>
<td>Displays on the left side in the UCS-SCU user interface. See Table 3-2 for a description of all the navigation pane elements.</td>
</tr>
<tr>
<td>Toolbar</td>
<td>Displays on the left-hand top corner and has a set of icons. See Table 3-3 for a description of all the toolbar icons.</td>
</tr>
</tbody>
</table>
| Tabs                     | Provides the following options in the UCS-SCU:  
                           - KVM—Use this tab to enter KVM Console.  
                           - Virtual Media—Use this tab to access the virtual media. |
| Help                     | Opens a window in the application that displays context-sensitive help for the displayed page. |
| Content Pane             | Displays on the right side of the GUI. Different pages appear on the content pane depending on the tab that you select in the Navigation Pane. |
| Tests Summary Pane       | Provides details of tests passed, tests in the queue, and tests failed. Viewed only when Diagnostic Tools is selected. |
This section includes the following topics:

- Navigation Pane, page 3-3
- Toolbar Pane, page 3-4

### Navigation Pane

Table 3-2 describes the elements in the Navigation Pane.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
</table>
| Server Inventory      | Displays the server information and inventory. Contains links to the following pages:
  - Server Information
  - Inventory
  For more information about Server Inventory, go to Chapter 4, “Viewing Server Inventory.” |
| Server Health         | Displays the health of the subsystems on your server such as CPUs, memory, power supplies, fans, storage, PCI devices, BIOS, and CIMC.
  For more information about Server Health, go to Chapter 5, “Viewing Server Health.” |
| Server Configuration  | Sets the BIOS boot order and configures a RAID volume on attached hard drives of your server.
  Contains links to the following pages:
  - Boot Order Configuration
  - RAID Configuration
  For more information about Server Configuration, go to Chapter 8, “Configuring Boot Order and RAID Levels.” |
| OS Install            | Installs the RHEL, SLES, and Windows operating systems in a fully unattended mode. The most recent drivers for all onboard components are added from the Tools and Drivers CD or from other supported locations during the operating system installation.
  For more information about OS Install, go to Chapter 6, “Installing Operating Systems.” |
Table 3-2 Navigation Pane Elements (continued)

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnostic Tools</td>
<td>Allows you to run various types of diagnostic tests to detect server failure. For more information about Diagnostic Tools, go to Chapter 7, “Diagnostic Tools.”</td>
</tr>
</tbody>
</table>
| Logs       | Displays the System Log and System Event Log of your server. Contains links to the following pages:  
- System Logs  
- System Event Log  
For more information about Logs, go to Chapter 9, “Viewing Logs.” |

## Toolbar Pane

Table 3-3 lists and describes all the UCS-SCU icons that you can use to perform specific tasks.

Table 3-3 Toolbar Elements

<table>
<thead>
<tr>
<th>Toolbar Icon</th>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Network Configuration Icon" /></td>
<td>Network Configuration</td>
<td>Configures the IP address, DNS and Subnet mask, and Cisco.com credentials.</td>
</tr>
<tr>
<td><img src="image" alt="Probe Server Icon" /></td>
<td>Probe Server</td>
<td>Performs health check.</td>
</tr>
<tr>
<td><img src="image" alt="Save Logs Icon" /></td>
<td>Save Logs</td>
<td>Saves logs to an USB.</td>
</tr>
<tr>
<td><img src="image" alt="Server Snapshot Icon" /></td>
<td>Server Snapshot</td>
<td>Allows you to take a point-in-time inventory of the server.</td>
</tr>
<tr>
<td><img src="image" alt="Refresh Icon" /></td>
<td>Refresh</td>
<td>Refreshes the content area, if supported.</td>
</tr>
</tbody>
</table>
Configuring a Network

To configure a network, follow these steps:

**Step 1** Click the **Network Configuration** button on the toolbar.

The Network Configuration dialog box appears.

**Step 2** In the Network Configuration dialog box, do the following:

a. Select IP Address from DHCP server or Static IP Address. If you select Static IP Address, do the following:
   - In the IP Address field, enter the IPv4 address.
   - In the Subnet Mask field, enter the subnet IPv4 address.
   - In the Gateway field, enter the gateway IPv4 address.
   - (Optional) In the DNS field, enter the DNS IPv4 address.

   **Note** Go to Step **b**. if you want to download software and drivers from cisco.com.

b. Select Direct Connection to internet or Manual Proxy. If you select Manual Proxy, do the following:
   - In the HTTP Proxy Server URL field, enter the URL of the proxy server. The maximum limit is 45 characters.
   - In the Port field, enter the port number. The maximum limit is 5 characters. By default, it is 8080.
In the Proxy Server UserName field, enter the user name of the proxy server. The maximum limit is 45 characters.

In the Proxy Server Password field, enter the password of the proxy server. The maximum limit is 45 characters.

Step 3   Click Configure to save the settings.

Network configuration is a one-time process, and if you have not configured your network, you are prompted to configure it during the following procedures:

- When you are updating images to Cisco Flexible Flash. (See “Updating Images to Cisco Flexible Flash” section on page 3-8).
- When you are downloading drivers from the network share or cisco.com during the operating system installation. (See “Installation Drivers” section on page 6-7).

Performing Server Health Check

The Probe Server functionality allows to perform a health check of the server subsystems. When you click the Probe Server icon, the server health check is initiated.

To view the health check results, click the Server Health tab in the navigation pane.

For more information about the Server Health tab, go to Chapter 5, “Viewing Server Health.”

Saving Logs

You can use the Save Logs functionality to save your log files. Before using Save Logs, you must insert a USB flash drive or vMedia for storing the log files.

Using Server Snapshot

You can use the Server Snapshot feature in the UCS SCU user interface to take a point-in-time inventory of a server. This feature allows you to compare inventories or components of a server over certain periods of time. Before you initiate a server snapshot, be sure that you connect a USB flash drive into the server. Without a flash drive available, the log file created by the server snapshot is not saved.

When you initiate a server snapshot, UCS SCU retrieves information on the server components, and also runs a series of quick tests to determine the state of the server. Taking a server snapshot can take approximately 20 minutes. After the server snapshot process is complete, the log file is saved on to the USB flash drive that you specified. You can open this log file in any editor, for example, WordPad. To help compare server inventories across time periods, we recommend that you store these log files in a location and archive it. When you have multiple log files, you can use a comparison tool from the Internet to view differences in the server inventory.

To take a server snapshot, follow these steps:

Step 1   Connect a USB flash drive to the server or through vMedia.

Without this flash drive, you cannot save the server snapshot log file. Be sure that there is adequate space on the flash drive to save the log file.

Step 2   Click the Server Snapshot icon in the UCS SCU interface.

A dialog box is displayed that prompts you to insert the USB flash drive.
Step 3  
Click **Yes** to continue.

A dialog box prompts you to select the USB flash drive in which you would like to save the log file.

Step 4  
Choose the USB flash drive from the drop-down menu and click **Save**.

The Server Snapshot process is initiated. This process could last up to 20 to 30 minutes. A dialog box indicating the progress of the server snapshot process appears. During this process, you cannot perform any other tasks on the server. At any moment during the process, you can cancel the server snapshot process by clicking **Cancel** in the dialog box.

**Note**  
During the server snapshot process, if the KVM connection is terminated, it does not terminate the server snapshot process. When you log in again to KVM Console, you will notice that the server snapshot process is still running or has completed. However, if the USB flash drive is connected through vMedia and the KVM connection is terminated, then the server snapshot process is halted as the connection to the USB flash drive is lost.

Step 5  
After the snapshot process is complete, a dialog box message appears to indicate that the server snapshot process is complete. Click **OK**.

The log file is saved on the USB flash drive. The log file is a text file and is saved with the server name, and includes the date when the server snapshot was taken. For example: 


Step 6  
Open this log file with any editor.

**Note**  
To compare inventory information of the same server over a period of time, we recommend that you archive these log files so that they are always available for comparison.

While running quick tests on the server, the server snapshot feature can determine only if a server component passed or failed a test. It cannot determine the reasons for a component not passing the quick test. While viewing the log file of the server snapshot process, if you notice that a server component did not pass the quick test, then check the quick test logs available under the Diagnostics Tools.

**Note**  
To know more about Diagnostic Tools, go to Chapter 7, “Diagnostic Tools.”

The log file of the server snapshot process includes the following information:

- Chassis Summary
- BaseBoard Summary
- CIMC Summary
- Processor Summary
- Memory Summary
- Storage Summary
- PCI Adapter Summary
- Power Supply Summary
- Server diagnostics Quick Test Results
Updating Images to Cisco Flexible Flash

You can use the UCS-SCU GUI to download the most recent versions of UCS-SCU, operating system drivers and Host Upgrade Utility (HUU). These images can be flashed to the SD card on your system on the respective partitions.

To update the images to Cisco Flexible Flash using the UCS-SCU GUI, follow these steps:

**Step 1**  Click the **Update** icon in the toolbar.

The Cisco Flex Flash Software Update dialog box appears displaying a list of partitions.

**Step 2**  Select **Cisco Server Configuration Utility** in the list.

You can update the image to the SD card using one of the following options to update the image:

- Updating from Cisco.com, page 3-8
- Updating from Network, page 3-8

**Step 3**  Click **Apply** to apply the image.

The Cisco Flex Flash Software Update dialog box appears and the table is refreshed with the version of the image.

**Step 4**  Repeat Step 1 to Step 4 for the remaining partitions.

### Updating from Cisco.com

To update the images to the Cisco Flexible Flash from cisco.com, follow these steps:

**Step 1**  Click **Cisco.com**.

If the network or user credentials are not configured, the Network Configuration dialog box appears. If they are configured, the Select Updates dialog box appears. If you need to configure the network, go to **Step 2**. If you do not need to configure the network, go to **Step 3**.

**Step 2**  In the Network Configuration dialog box, do the following:

a. Enter the IP addresses to configure the network. For more information about configuring the network, go to the “Configuring a Network” section on page 3-5.

b. In the User Name field, enter the cisco.com username. The maximum limit is 45 characters.

c. In the Password field, enter the cisco.com password. The maximum limit is 45 characters.

**Step 3**  In the Select Updates dialog box that is displayed, select the required version of the ISO image.

**Step 4**  Click **OK**.

### Updating from Network

To update the image from your network to the Cisco Flexible Flash, follow these steps:

**Step 1**  Click **From Network**.
If the network or user credentials are not configured, the Network Configuration dialog box appears. If they are configured, the Network Location dialog box appears. If you need to configure the network, go to Step 2. If you do not need to configure the network, go to Step 3.

**Step 2**
In the Network Configuration dialog box, enter the IP addresses to configure the network. For more information about configuring network, go to “Configuring a Network” section on page 3-5.

**Step 3**
In the Network Location dialog box that is displayed, do the following:

a. In the User Name field, enter the login name to the network location.
b. In the Password field, enter the password to the network location.
c. In the Network Location field, enter the path name of the folder that contains the ISO image files.
d. Click **Connect**.
   A file dialog box is displayed listing the images.
e. Select an .iso image file.
f. Click **Open**.
   The selected file appears as a package name in the Network Location dialog box.
g. Click **Ok**.

---

**Rebooting the Server**

To reboot the server, follow these steps:

**Step 1**
Click the **Reboot** icon on the toolbar.
The Reboot dialog box appears.

**Step 2**
Click **Yes** to reboot.
The server is rebooted, and the UCS-SCU GUI reappears.