



Cisco UCS Server Diagnostics Utility User Guide, Release 5.0(1)

For Cisco UCS C-Series Servers

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Preface

This preface describes the organization and conventions of the *Cisco UCS Server Diagnostics Utility, Release 5.0(1)*. It also provides information on how to obtain related documentation and submit a service request.

Audience

This guide is intended primarily for data center administrators with responsibilities and expertise in server, storage, and network administration and network security.

Organization

This guide is organized as follows:

Chapter	Title	Description
Chapter 1	Overview	Provides an introduction to the utility and the features it provides.
Chapter 2	Launching UCS Server Diagnostics Utility	Contains information on booting the utility.
Chapter 3	Understanding UCS Server Diagnostics Utility User Interface	Contains information about the GUI and its elements.
Chapter 4	Viewing Server Inventory	Contains information about viewing the server inventory
Chapter 5	Viewing Server Health	Contains information about viewing the server health.
Chapter 6	Viewing Sensors	Contains sensor information of the server.
Chapter 7	Diagnostic Tools	Contains information about diagnostic tools.
Chapter 8	Viewing Logs	Contains information about viewing system and system event logs.

Related Documentation

The documentation set for the Cisco Unified Computing System (UCS) C-Series rack-mount servers is described in the roadmap document at the following link:

[Cisco UCS C-Series Documentation Roadmap](#)

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at:

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Overview

The Cisco UCS Server Diagnostics Utility is an application that helps you perform the following tasks:

- View server inventory
- Perform interactive offline diagnostics
- View server health and logs

This chapter includes the following sections:

- [Supported Platforms, page 1-1](#)
- [Hardware Requirements, page 1-2](#)

Supported Platforms

The Cisco UCS Server Diagnostics Utility is supported on the following Cisco platform:

- UCS-C22 M3
- UCS-C24 M3
- UCS-C220 M3
- UCS-C240 M3
- UCS-S3160 M3
- UCS-S3260 M4
- UCS-C220 M4
- UCS-C240 M4
- UCS-C460 M4
- UCS-C220 M5
- UCS-C240 M5
- UCS-C480 M5
- UCS-S3260 M5
- UCS-C125 M5

Hardware Requirements

The following are the minimum hardware requirements for Cisco UCS Server Diagnostics Utility:

- CD-ROM drive—A USB CD/DVD-ROM drive is required to be able to boot and run the Diagnostics Utility. You can also use the virtual media option in the CMC KVM to boot the utility.
- Mouse—Some functions require a standard mouse (PS/2 or USB) for navigation.
- USB disk on key device—Functions such as saving the diagnostics logs require a USB disk on key.
- RAM—A minimum of 1 GB RAM. If the available RAM is less than the minimum recommended value, the diagnostics utility may not function as expected.



Launching UCS Server Diagnostics Utility

UCS Server Diagnostics Utility (SDU) is a bootable image based on a 64-bit Linux kernel and can be used to perform diagnostics on Cisco rack servers. It is designed to run on one server at a time.



Note

You can also launch UCS-SDU using the F6 boot option.

This chapter contains the following sections:

- [Obtaining ISO Image From cisco.com, page 2-1](#)
- [Booting UCS-SDU, page 2-2](#)
- [Exiting UCS-SDU, page 2-4](#)

Obtaining ISO Image From cisco.com

To find the ISO file download for your server online, follow these steps:

- Step 1** Go to <http://www.cisco.com/cisco/software/navigator.html>.
 - Step 2** Click **Unified Computing** in the middle column.
 - Step 3** Click **Cisco UCS C-Series Rack-Mount Standalone Server Software** in the right-hand column.
 - Step 4** Click the name of your server model in the right-hand column.
 - Step 5** In the Select a Software Type list, select **Unified Computing System (UCS) Server Diagnostics Utility**. The Download Software page appears listing the release version and the UCS-SDU image.
 - Step 6** Click **Download Now** to download the ISO file.
 - Step 7** Verify the information on the next page, then click **Proceed With Download**. If prompted, use your cisco.com credentials to log in.
 - Step 8** Continue through the subsequent screens to accept the license agreement and browse to a location where you want to save the SDU ISO file.
-

Booting UCS-SDU

You can launch the UCS-SDU application using one of the following options:

- [Using Virtual Media, page 2-2](#)
- [Using Physical Media, page 2-3](#)

Using Virtual Media

You can use KVM Console to boot the UCS-SDU application with virtual media.

This section includes the following sections:

- [About KVM Console, page 2-2](#)
- [Entering Virtual KVM Console, page 2-2](#)
- [Booting From Virtual KVM Console, page 2-3](#)

About KVM Console

KVM Console is an interface accessible from CMC that emulates a direct keyboard, video, and mouse (KVM) connection to the server. KVM Console allows you to connect to the server from a remote location.



Note

KVM Console requires Java Runtime Environment (JRE) version 1.6.0 or higher.

KVM Console has the following tabs:

- **KVM**—This tab displays the UCS-SDU application when the application is booted.
- **Virtual Media**—This tab allows you to map the following to a virtual drive:
 - CD/DVD on your computer or your network
 - Disk image files (ISO or IMG files) on your computer or your network
 - USB flash drive on your computer

Entering Virtual KVM Console

To enter the virtual KVM Console, follow these steps:

-
- Step 1** Log in to CMC.
 - Step 2** Select the server node to launch the corresponding KVM console.
 - Step 3** Click **Launch KVM Console**.

Virtual KVM Console displays the server console.

Booting From Virtual KVM Console

Before You Begin

- Download the UCS-SDU ISO image file from cisco.com. For information on how to download the image, go to the [“Obtaining ISO Image From cisco.com”](#) section on page 2-1.

To boot the UCS-SDU application using virtual KVM Console, follow these steps:

-
- Step 1** Log in to CMC from your desktop.
- Step 2** Click **Launch KVM Console** to launch KVM Console.
- Step 3** Click the **Virtual Media** tab.
The Virtual Media tab opens.
- Step 4** Click **Add Image**.
- Step 5** Navigate to and select the ISO file and click **Open** to mount the image.
- Step 6** In the Client View section, select the check box in the Mapped column for the ISO file that you added and then wait for the mapping to complete.
KVM Console displays the progress in the Details section.
- Step 7** Reboot the server by clicking **Power Cycle Server** in the CMC.
- Step 8** Press **F6** when the server starts to select a boot device.
The boot selection menu appears.
- Step 9** Use the arrow keys to select Cisco Virtual CD/DVD and then press **Enter**.
The server boots using the UCS-SDU image and launches the application in the KVM tab.
-

Using Physical Media

Before You Begin

- Download the UCS-SDU ISO image file from cisco.com. For information on how to download the image, go to the [“Obtaining ISO Image From cisco.com”](#) section on page 2-1.
- Create an .iso CD using an application that burns .iso CDs.

To boot the application on your server using a physical CD/DVD, follow these steps:

-
- Step 1** Connect the USB DVD drive to the server through the USB port.
- Step 2** Insert the physical media on to your DVD drive.
- Step 3** Restart the server and press **F6** to enter the boot selection menu. Select **CDROM drive** as the boot device.
The server boots using the UCS-SDU image and starts the application.
-

Exiting UCS-SDU

To exit the UCS-SDU application, follow these steps:

-
- Step 1** Remove the .iso disk from the disk drive.
 - Step 2** Click **Reboot** and then click **Yes** to confirm reboot of your server.
-



Understanding UCS Server Diagnostics Utility User Interface

The UCS-SDU 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-SDU GUI Home Page, page 3-1](#)

License Agreement

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

UCS-SDU GUI Home Page

[Figure 3-1](#) shows the UCS-SDU GUI and the different elements in the GUI and [Table 3-1](#) shows the description of each element.

Figure 3-1 UCS-SDU GUI

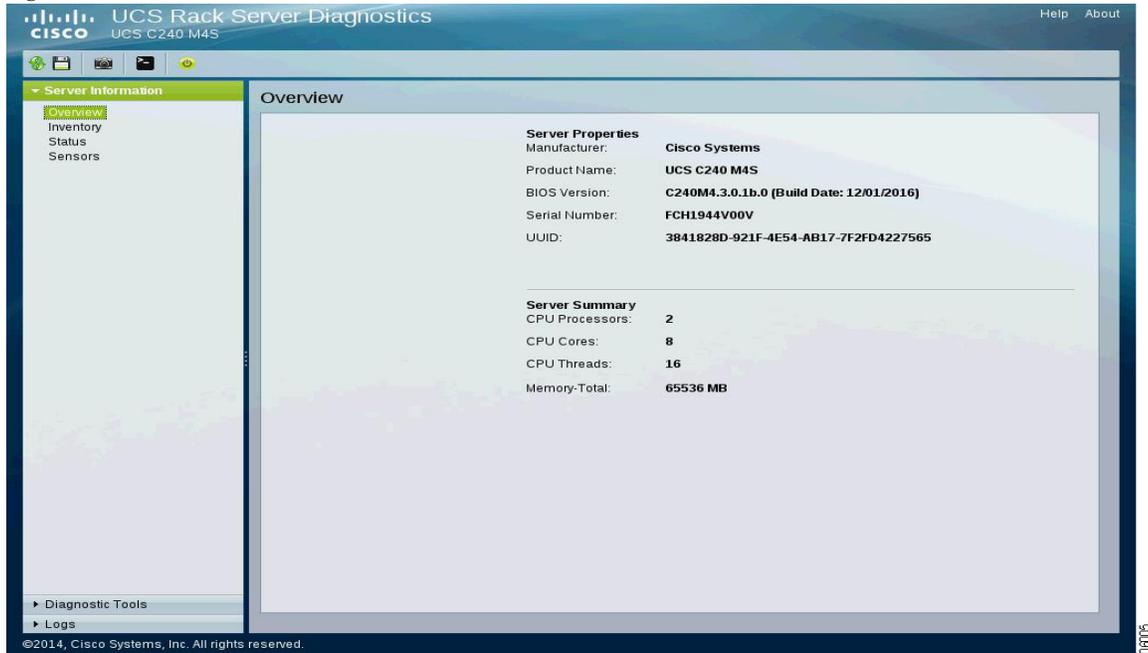


Table 3-1 UCS-SDU GUI Elements

Element	Description
Navigation Pane	Displays on the left side in the UCS-SDU user interface. See Table 3-2 for a description of all the navigation pane elements.
Toolbar	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.
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 3-2](#)
- [Toolbar Pane, page 3-4](#)

Navigation Pane

[Table 3-2](#) describes the elements in the Navigation Pane.

Table 3-2 Navigation Pane Elements

Element	Description
Server Information	Displays the server information on the left hand pane, for the following tabs: <ul style="list-style-type: none"> • Overview • Inventory • Status • Sensors
Overview	Contains Server Overview information. For more information about Overview, go to Overview, page 1-1
Inventory	and inventory. Contains links to the following pages: <ul style="list-style-type: none"> • Server Information • Inventory For more information about Server Inventory, go to Chapter 4, “Viewing Server Inventory.”
Status	Displays the health of the subsystems on your server such as CPUs, memory, power supplies, fans, storage, PCI devices, BIOS, and CMC. For more information about Server Health, go to Chapter 5, “Viewing Server Health”
Sensors	Displays the sensor values of the server. For more information about Sensors, go to Viewing Sensors, page 6-1
Diagnostic Tools	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”
Logs	Displays the System Log and System Event Log of your server. Contains links to the following pages: <ul style="list-style-type: none"> • System Logs • System Event Log For more information about Logs, go to Chapter 8, “Viewing Logs”

Toolbar Pane

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

Table 3-3 *Toolbar Elements*

Toolbar Icon	Name	Function
	Save Logs	Saves logs to an USB.
	Server Snapshot	Allows you to take a point-in-time inventory of the server.
	Refresh	Refreshes the content area, if supported.
	Reboot	Reboots the server.
	Enter CLI Mode	Enters the command prompt mode using a KVM console window.

This section describes the toolbar elements in more detail:

- [Performing Server Health Check, page 3-4](#)
- [Saving Logs, page 3-4](#)
- [Using Server Snapshot, page 3-5](#)
- [Rebooting the Server, page 3-6](#)
- [Using the CLI Command Option, page 3-6](#)

Performing Server Health Check

To view the health check results, click the **Status** tab in the navigation pane.

For more information about the **Status** tab, go to [Chapter 5, “Viewing Server Health”](#).

Saving Logs

You can use the **Save Logs** functionality to save your log files. Before saving 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 SDU 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 SDU retrieves information on the server components, and also runs a series of quick tests to determine the state of the server. When you initiate a server snapshot, a series of quick tests such as processor, memory, disk, cache, network interface tests, QPI Link and Traffic, LSI Battery backup and RAID adapter tests, and Chipset tests, are performed on the server.

The time to complete a server snapshot process depends on the server configuration such as installed memory, the number of physical disks and their sizes, and the number of network interfaces. This process could complete in 30-45 minutes or could a few hours.

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 SDU 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:
Server_UCSC-C240-M3S_FCH1716V24S_06_28_2014.txt is the log file name of a server snapshot taken for UCS C-240 server on June 28th, 2014.
- 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.

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

- Chassis Summary
 - BaseBoard Summary
 - Cisco IMC Summary
 - Processor Summary
 - Memory Summary
 - Storage Summary
 - PCI Adapter Summary
 - Power Supply Summary
 - Server Inventory Data
 - Server diagnostics Quick Test Results
 - Server Probe Data
-

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-SDU GUI reappears.

Using the CLI Command Option

To use the CLI command option, follow these steps:

Step 1 Click the **Enter CLI mode** icon.

The KVM Console window appears. Use the Tab key on the keyboard to navigate and perform actions in this window.



Viewing Server Inventory

This chapter provides information on viewing the server inventory.

You can use the server inventory functionality to perform an inventory of your server. You can view details such as server summary, server properties, and an inventory of subsystems on your server such as CPU, memory, IO devices, storage, BIOS, and PCI devices.

To view the inventory of your server, follow these steps:

- Step 1** Click the **Server Inventory** tab on the left navigation pane.
- Step 2** Click the **Server Information** tab on the left navigation pane. The server properties and server summary appear.
- Step 3** Click the **Inventory** tab to view an inventory of your server's subsystems.

[Table 4-1](#) explains the various subsystem details you can view.

Table 4-1 *Server Inventory Properties*

Subsystem	Description
CPU	Displays the socket name, status, number of cores, number of threads, vendor, version, cores enabled, and signature of the CPUs on your server.
Memory	Displays the size, data width, locator, speed, and serial number of the DIMMs on your server.
Fans	Displays the status, power state, and speed of the fans on your server.
IO Devices	Displays the type, vendor, description, and MAC address and serial number of the I/O devices on your server.
Storage	Displays the type, description, vendor, size, bus information, and serial number of the storage devices on your server.
BIOS	Displays the vendor, version, physical ID, size, capacity, and boot order of the BIOS on your server.
PCI Devices	Displays a list of PCI devices present in the server.



Viewing Server Health

This chapter provides information on viewing the health of your servers.

With the Server Health functionality, you can view the health of all the subsystems of your server (such as memory, processor, power supply, hard disk, fans, chipset, and Cisco IMC) along with the status and message of a specific subsystem.

To view the health of your server, follow these steps:

-
- Step 1** Click the **Status** tab in the left navigation pane.
The server health displays in the right-hand content pane, along with the status and message for a specific subsystem.
 - Step 2** Click **Refresh** to refresh the page.
 - Step 3** Click the line corresponding to a subsystem to view details of your server health in the Server Health Details pane.
-



Note The message column in the server health pane displays the first issue corresponding to the subsystem. If the subsystem has multiple issues, they will appear in the Server Health Details pane.





Viewing Sensors

This chapter provides information on viewing sensor values.

You can view sensor values of the server using the Sensors tab in the web UI.

To view sensors, follow these steps:

-
- Step 1** Click the **Sensors** tab in the left navigation pane.
The sensor values are displayed in the right-hand content pane.
 - Step 2** Enter the relevant information in the **Filters** field to view corresponding details. You can filter information by Class or Sensor Name.



Diagnostic Tools

You can use diagnostics tools to diagnose hardware problems with your Cisco servers. The user interface displays the status of the test run and examines log files for troubleshooting hardware issues.

This chapter contains the following sections:

- [Diagnostic Tools Functions, page 7-1](#)
- [Using Diagnostic Tools, page 7-2](#)

Diagnostic Tools Functions

Diagnostic tools allows you to:

- Run tests on various server components to find out hardware issues and analysis of the test results in a tabular format.
- Run all the tests using the Quick Tasks functionality without browsing through available tests.
- Run tests serially, as running some tests in parallel may interfere with other tests.
- Configure the test by entering different argument values other than the default ones.
- Select tests you want to run using the Test Suite functionality.
- Save all the tests logs, such as SEL logs, to an external USB flash drive.
- Probe the current state of the server and view hardware issues.

[Table 7-1](#) describes when you should use a specific diagnostic functionality.

Table 7-1 Using Diagnostics

Diagnostic Component	Function
F7 option	Use this option to run a specific set of tests when the server is booting up. The components that are tested are memory, processor, cache, Smart disk, QPI, memory pattern, and RAID adapter.
Quick Test	Use this test when you want to quickly check the status of a subsystem within a stipulated period. The components that can be tested under the quick test are processor, cache, memory, disk, video, network, QPI, CMC, RAID, and chipset.

Table 7-1 Using Diagnostics

Diagnostic Component	Function
Comprehensive Test	Use this test when you want to test a subsystem in detail. These tests are designed to stress the subsystems and report the error. The tests that can be run are processor, memory, QPI, disk, and NUMA.
Quick Tasks	Allows for consolidated testing of both comprehensive and quick tests. You can run both types of tests using quick tasks.
Test Suite	All the tests available under the quick and comprehensive test are available here. The test suite gives you an option to choose as many tests as you like (using a check box) and running them together.
Tests Log Summary	Use the test log summary to view the log, error log, and analysis of all the tests you have run. You can use four filters to sort the logs.
Tests Summary	This table on the left-hand navigation gives you the results of the tests you have run in the form of either passed tests, tests in queue or failed tests.

Using Diagnostic Tools

This section describes the procedures to use the diagnostic tool components and contains the following sections:

- [Using the F7 Diagnostic Option, page 7-2](#)
- [Quick Test, page 7-3](#)
- [Comprehensive Test, page 7-3](#)
- [Quick Tasks, page 7-4](#)
- [Tests Suite, page 7-5](#)
- [Tests Log Summary, page 7-5](#)
- [Non-Interactive Offline Diagnostics, page 7-5](#)

Using the F7 Diagnostic Option

UCS-SDU provides you with an option to run a few pre-defined diagnostic tests on the server when it is booting. You can initiate these diagnostic tests by using the F7 option. This F7 option boots the SDU image available on the Secure Digital (SD) memory card and automatically runs a set of pre-defined diagnostic tests.

If there is no SD card available on the server, then you should have mapped the SDU image using vMedia. If you have not mapped the SDU image using vMedia, and if there is no SD card with an SDU image on the server, then these diagnostic tests cannot be completed. After the tests are completed, the SDU interface appears and displays the test results. The interface displays a progress report indicating diagnostic tests that have passed, failed and those that are queued for completion.



Note

You can use this option only when the server is booting.

Quick Test

You can run these tests quickly to determine any hardware issue. These tests usually take 20-30 minutes to run and test limited functionality for a few subsystems. The comprehensive test provides more exhaustive diagnostics.

To run the quick test follow these steps:

-
- Step 1** Click **Diagnostic Tools** from the left navigation pane.
 - Step 2** Click **Tests**.
 - Step 3** Click the **Quick Test** collapsible button to view the types of quick tests available for you to run.
 - Step 4** Click a subsystem (such as memory, video, or network).
 - Step 5** On the content pane, click **Run Test**.

The test is run and the status is displayed in the **Tests Status** area.

[Table 7-2](#) describes the sub-systems covered under quick test.

Table 7-2 Quick Tests

Test	Description
Processor Test	Runs processor-specific tests. This test performs arithmetic and floating point operations on all available cores. You can also specify the duration of the tests.
Cache Test	Runs test to exercise the CPU caches and checks for correctable and uncorrectable cache errors.
Memory Test	Tests DIMMs and memory controllers.
Disk Test	Tests the available disks in the system by reading each disk block-by-block.
Video Test	Test to stress the video memory.
Network Test	Tests the available network interfaces by running the internal loopback test, register test, Electrically Erasable Programmable Read Only Memory (EEPROM) test and interrupt test.
QPI Test	Tests the quick path interconnect fabric.
CMC Test	Runs CMC self-test through the IPMI interface and also checks for SEL fullness.
Chipset Test	Runs a test to check the chipset for any errors logged in the chipset RAS registers.
RAID Adapter Test	Runs test to check the LSI MegaRAID 926x and 8708 controller and battery backup unit diagnostics.

Comprehensive Test

The Comprehensive test can run for hours and usually runs when quick tests cannot diagnose the issue with your server. The test is designed to test multiple hardware components and find issues that may be caused due to multiple components on your server.

The individual tests run can be customized to test some user-defined conditions. You can also select a group of tests to be run.

To run the comprehensive test, follow these steps:

-
- Step 1** Click **Diagnostic Tools** from the left navigation pane.
 - Step 2** Click **Tests**.
 - Step 3** Click the **Comprehensive Test** collapsible button to view the types of comprehensive tests available for you to run.
 - Step 4** Click a subsystem (such as processor, memory, or network).
 - Step 5** On the content pane, click **Run Tests**.

The test is run and the status is displayed in the **Tests Status** area.

[Table 7-3](#) describes the sub-systems covered under comprehensive tests

Table 7-3 *Comprehensive Tests*

Test	Description
Processor Stress Test	Imposes maximum stress on CPU and memory on the system. You can set the time (in minutes) that you want this test to run for.
Memory Pattern Test	Tests the available free memory by writing and reading various patterns to the memory.
QPI Stress Test	Runs test to stress the QPI interconnect by generating traffic between the NUMA nodes.
Smart Disk Test	Tests the available disks in the system by reading each disk block by block.
NUMA Test	Runs test to stress the NUMA memory access patterns and check for errors.
VDisk Stress Test	Runs test to stress the virtual disks in the system. This test runs for a longer time, depending on the size of the virtual disk.
Enclosure Test	Runs a quick basic test for the C3160 server SAS Expander

Quick Tasks

Quick Tasks allow you to get started with diagnostic tools immediately. You can run all the tests (Quick and Comprehensive) from here and report the details to Cisco to troubleshoot the logs and provide information about problems with your system. To use this feature, follow these steps:

-
- Step 1** Click **Diagnostic Tools** from the left navigation pane.
 - Step 2** Click **Quick Tasks**.
 - Step 3** Select either **Run Quick Tests** or **Run Comprehensive Test** from the toolbar.

The status appears in the Test Status pane. You can also view detailed test results under Tests log summary.

Tests Suite

The Test Suite allows you to run the quick test and comprehensive test in a batch. It lists the various tests available, along with the test type and description of the test. You can select any number of tests you want to run from the list and view the result in the Tests Status column.

To run the test suite, follow these steps:

-
- Step 1** Click **Tests Suite** from the left navigation pane.
 - Step 2** Select the tests you want to run by clicking the required check boxes.
 - Step 3** Click **Run Tests Suite** to run the tests you added to the test suite.

The status appears in the Tests Status pane along with the name, suite ID, Result, start time and end time. You can also view the Tests Log Summary to view the execution status of the tests in the test suite.

Tests Log Summary

Use the Tests Log Summary functionality to examine the test logs for troubleshooting. To view the Tests Log summary, follow these steps:

-
- Step 1** Click **Diagnostic Tools** on the left navigation pane.
 - Step 2** Click **Tests Log Summary** on the left navigation pane.
 - Step 3** Select a filter from the filter drop-down and click **Go**. The status, result, start time, and end time of the test displays.
 - Step 4** Click a specific log entry (for example, click **memory test**) for more details.

The Log, Error Log (if the test failed), and the analysis of the specific test appears in the content pane.

Tests Summary

The Test Summary table in the left navigation area provides you with a quick view of the tests that have passed, tests in queue and tests that have failed.

Non-Interactive Offline Diagnostics

Cisco UCS C-series servers with CMC version 1.5(2) or later support using an XML API interface for running server snapshot tests without any manual intervention. You can use an XMLAPI client to run the server snapshot process on a C-Series server and copy the resulting server snapshot output to another machine (Windows or UNIX) using either SFTP or SCP unattended. Non-Interactive Offline Diagnostics can be run simultaneously on multiple C-series servers with logs archived automatically on a remote server.

For more information on using the XML API, see the *Cisco UCS Rack-Mount Servers CMC XML API Programmer's Guide* available at:

http://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/c/sw/api/b_cimc_api_book.html



Viewing Logs

The UCS-SDU Logs functionality allows you to take corrective action by examining your server logs. UCS-SDU provides the following types of logs:

- [System Logs, page 8-1](#)
- [System Event Log, page 8-1](#)

System Logs

The system log file displays events that are logged by the operating system components. These events are often predetermined by the operating system itself. System log files display information about device changes, device drivers, system changes, events, operations, and more.

To view the system logs, follow these steps:

-
- Step 1** Click **Logs** on the left navigation pane.
 - Step 2** Click **System Logs**.
 - Step 3** Select a filter from the filter drop-down list.
 - Step 4** Click **Go**.
- The system log is displayed.
-

System Event Log

The system event log file displays events that are logged by your server.

To view the system event logs follow these steps:

-
- Step 1** Click **Logs** on the left navigation pane.
 - Step 2** Click **System Event Log**.
 - Step 3** Select from either the **Description** or **Severity** filter from the drop-down list.
 - If you select the **Description** filter and click **Go**, all the system event logs with a description and severity are displayed.

- If you select the **Severity** filter, you can select the type of severity from the second drop-down list and click **Go**. A list with the logs of the specified severity type is displayed.
 - Click **Clear Filter** to clear the filter you applied.
-