CHAPTER 1

Introduction to Cisco UCS-Server Configuration Utility

This chapter introduces the UCS-Server Configuration utility along with the features added in the release.

This chapter contains the following sections:

Overview

The Cisco UCS-SCU (Server Configuration Utility) is an application that helps you manage various tasks on your server. The utility helps you easily set up and manage your servers from a single application.

UCS-SCU is intended for system administrators responsible for upgrading, troubleshooting, and configuring the UCS C-Series server. As a system administrator, you can use it to view server inventory, configure the BIOS boot order, configure a RAID volume on attached hard drives, install an operating system, perform interactive offline diagnostics and view server health and logs.

UCS-SCU Features

UCS-SCU reduces the complexity and time associated with setting up and maintaining Cisco C-series servers. Server deployment is made easier. It guides you through questions to help quickly configure the server through automatic recognition of server hardware, with minimal reboots and an automated unattended operating system installation.

UCS-SCU is packaged onto a single CD which contains its own operating system (Linux), a GUI, and supporting files for setup and deployment. The utility can be booted off a CD (physical or vMedia) and runs completely in a RAMDISK.

These are the features of this utility:

- **Diagnostic Tools**—Allows you to run various diagnostic tests to help identify sources of failure on your server. You can use new functionality like quick tests, comprehensive tests, quick tasks, tests suite and tests log summary to identify problems with your server. See Using UCS-Server Configuration Utility for details on using diagnostic tools.
- A unified framework to perform the following:

- **Server Inventory**—View an inventory of your server's CPU, memory, power supplies, fans, IO, storage, BIOS and CIMC.
- **Server Configuration**—Set the BIOS boot order and configure a RAID volume on attached hard drives of your server.
- **OS Installation**—Install the RHEL, SLES, and Windows operating systems in a fully unattended mode. The most recent drivers for all on-board components are added from the Tools and Drivers CD or from other supported locations during the operating system installation.
- **Diagnostic Tools**—Allow you to run various types of diagnostic tests to detect server failure.
- **Server Health**—View the health of the subsystems on your server like CPUs, memory, power supplies, fans, storage, PCI devices, BIOS and CIMC.
- **Server Logs**—View the System Log and System Event Log of your server.

New Features in SCU 2.2(1)

These are the features that have been added in SCU 2.2(1):

- Support for the UCS-C260 M2 server. This server comes with a Cisco Flexible Flash card, based on the Secure Digital (SD) card technology.
- A new **Update** icon to download the most current versions of UCS-SCU, Host Upgrade Utility (HUU) and drivers from cisco.com or from a network share location.
- A new **Server Snapshot** icon to take a point-in-time snapshot of the current server inventory.

Cisco Flexible Flash Cards on Cisco Servers

Many C-series servers today have support for hypervisors to some degree. Installation of the hypervisors from various vendors mostly requires the hypervisor to be installed on the local hard drive. Though many vendors have support for booting the hypervisor from a removable media such as a thumb drive, this method is not widely adopted due to reliability concerns.

The next generation of Cisco rack servers will be available with a Flexible Flash card that is based on the Secure Digital (SD) card technology, typically used in portable devices such as digital cameras and camcorders as well as other small form factor devices such PDAs and handheld computers. The other goal of this Flexible Flash card is to allow for an alternate mechanism to ship to the customer other utility software that is today included on CDs along with a rack server shipment. The utility software currently shipped includes Cisco device drivers, online diagnostic and server utilities. This Cisco Flexible Flash card built into the rack server will enable this software to be pre-loaded at the factory during the manufacturing process. Alternatively, the utility software can be made available online along with the rest of the firmware updates. These updates can then be downloaded to the storage on the Flexible Flash card through a dedicated set of management or user interface functions on the CIMC.