Configuring FlexFlash SD Card Support

This chapter includes the following sections:

FlexFlash Secure Digital Card Support

Overview

FlexFlash is the Secure Digital (SD)-based local flash storage support Cisco has introduced in its newer Cisco UCS blade and rack servers. The FlexFlash controller has two SD card slots, only one of which can be used at a time. If both slots are populated, both cards should be the same size, but only the card in slot 1 will be usable.

Note   The only supported SD card size is 16GB.

Important   Cisco UCS Manager does not support the use of an SD card from a rack server in a blade server, or the use of an SD card from a blade server in a rack server. Switching SD cards from one server type to the other might result in data loss from the SD card.

FlexFlash in Supported B-Series and C-Series Servers

The FlexFlash SD cards shipped with supported B-series servers only have an HV partition. Those shipped with supported C-series rack servers have four partitions; HV, HUU, SCU, and Drivers. When the FlexFlash controller is enabled for either a B-series or C-series server, Cisco UCS Manager will show only the HV partition, as a USB drive, to both the BIOS and the host operating system.

In order to manually boot from the HV partition, Local Disk should be present in the boot policy used in the Service Profile, and be launched from the BIOS boot menu (F6).

FlexFlash in Disk Policies and Service Profiles

FlexFlash is disabled by default in Cisco UCS servers. It can be enabled in a local disk policy used in a service profile. When FlexFlash is enabled in a local disk policy, and a server is capable of supporting SD cards, the FlexFlash controller will be enabled during service profile deployment. If a server is not capable of supporting SD cards or has an older CIMC version, the service profile association will fail.

If you disable the FlexFlash option in a supported server, a host reboot will be triggered and a reboot warning message displayed. The FlexFlash controller will also be disabled as part of a related service profile disassociation.

Limitations Related to FlexFlash

The following are the known limitations related to FlexFlash SD cards in this release of Cisco UCS Manager:

- If FlexFlash is enabled and the boot policy contains Local Disk, SAN Boot, or iSCSI Boot, then the boot order cannot be determined. You should disable FlexFlash before using any of these boot options, and enable it after bootup is complete.

- Cisco UCS hardware information and inventory data about the controller and SD cards is not collected.

- Monitoring of the controller and SD card status or health is not supported. In the case of a failure of a FlexFlash controller or SD card, no faults or errors will be displayed in Cisco UCS Manager.

- Formatting of the SD cards is not supported.

- Booting from SD cards using the Cisco UCS Manager Boot Policy is not supported.

- After you update and activate the CIMC firmware, you must power cycle the server to update the FlexFlash controller firmware.

Enabling FlexFlash SD Card Support

This procedure describes how to enable the FlexFlash SD card support in a local disk policy.

Procedure

Step 1	In the **Navigation** pane, click on the **Servers** tab.
Step 2	Select **Policies** from the **Filter** dropdown list.
Step 3	Expand the **Local Disk Config Policies** tree.
Step 4	Highlight the policy for which you want to enable FlexFlash.
Step 5	Click the **Events** tab of the task pane, select the **Enable** radio button next to **FlexFlash State**.
Step 6	Click **Save Changes**.