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Introduction

This document describes the procedure to add new hard drives to an existing Virtual Drives (VD) with and without Redundant Array of Independent Disks (RAID) change.

For instance if you have a VD which has three Hard drives and you want to add three more, the procedure to do so is mentioned in this document.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document is based on Cisco UCS-C Servers.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Procedure to Add new Hard Drive

This sections contains the steps to add new hard drive to an existing VD.

Note: You would need to perform the above Procedure task in a Maintenance Window.

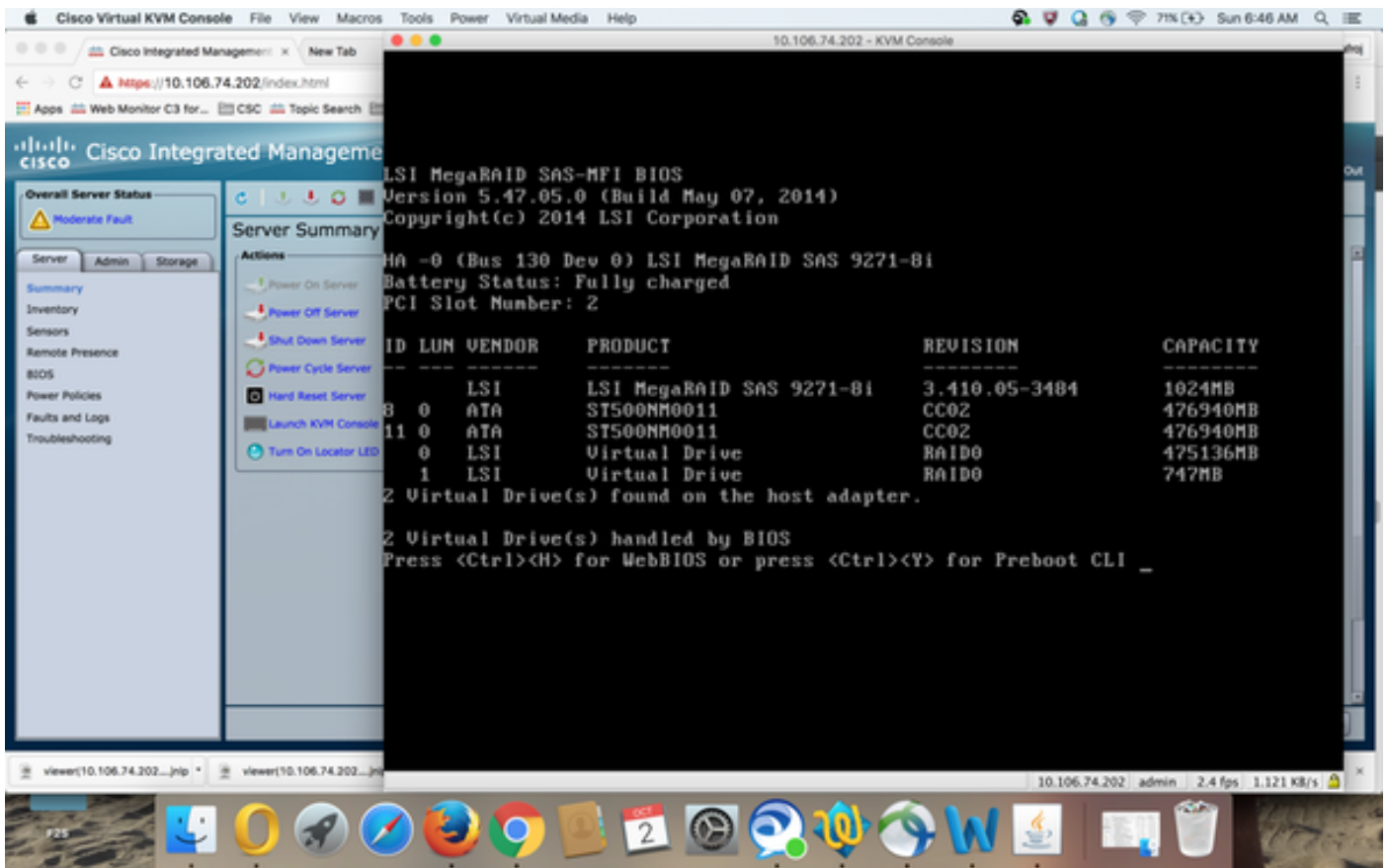
Step 1. Reboot the host into webBIOS

When the host computer is booting, this text appears:

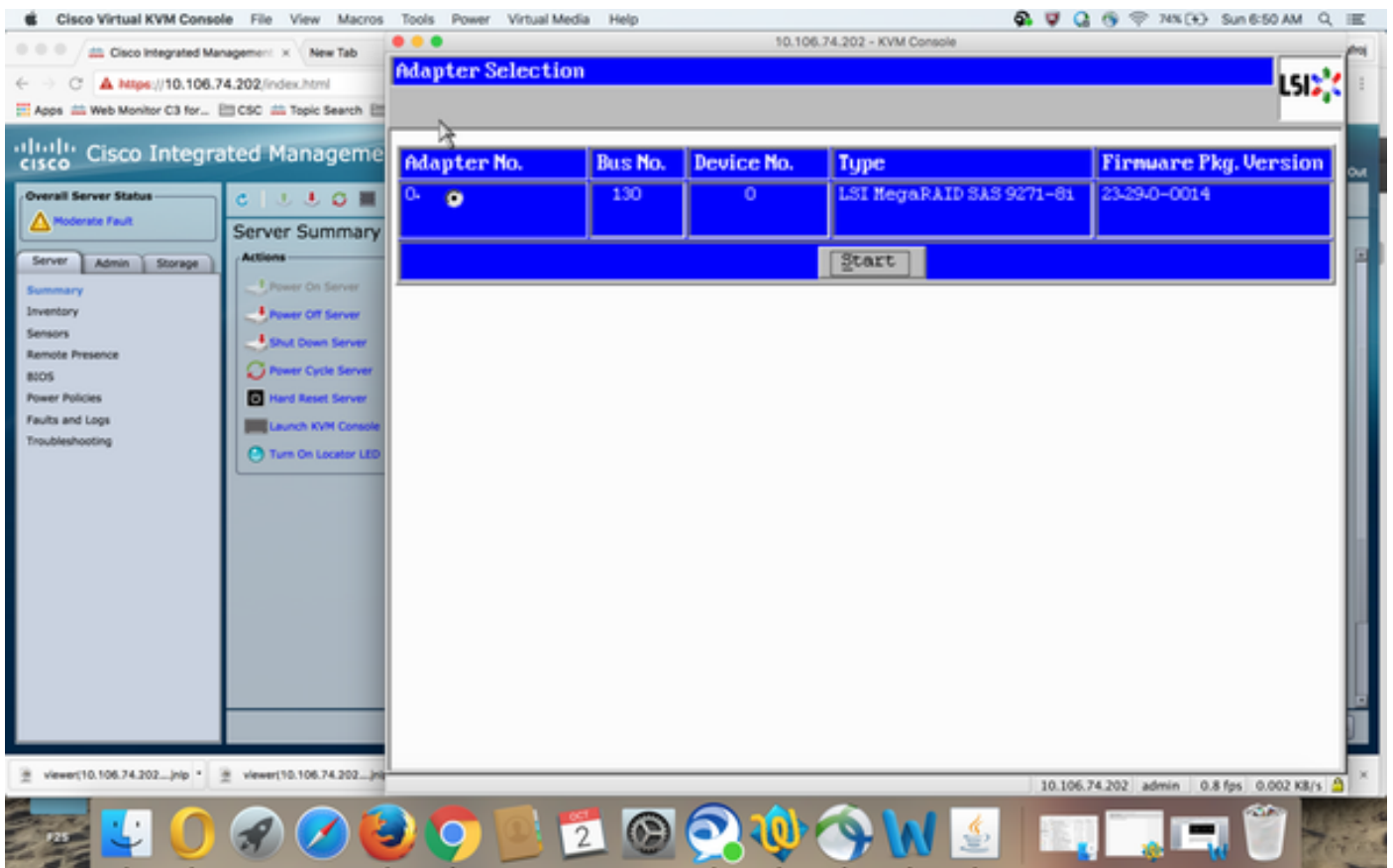
Copyright© LSI Corporation

Press <Ctrl><H> for WebBIOS

Press **Ctrl+H**

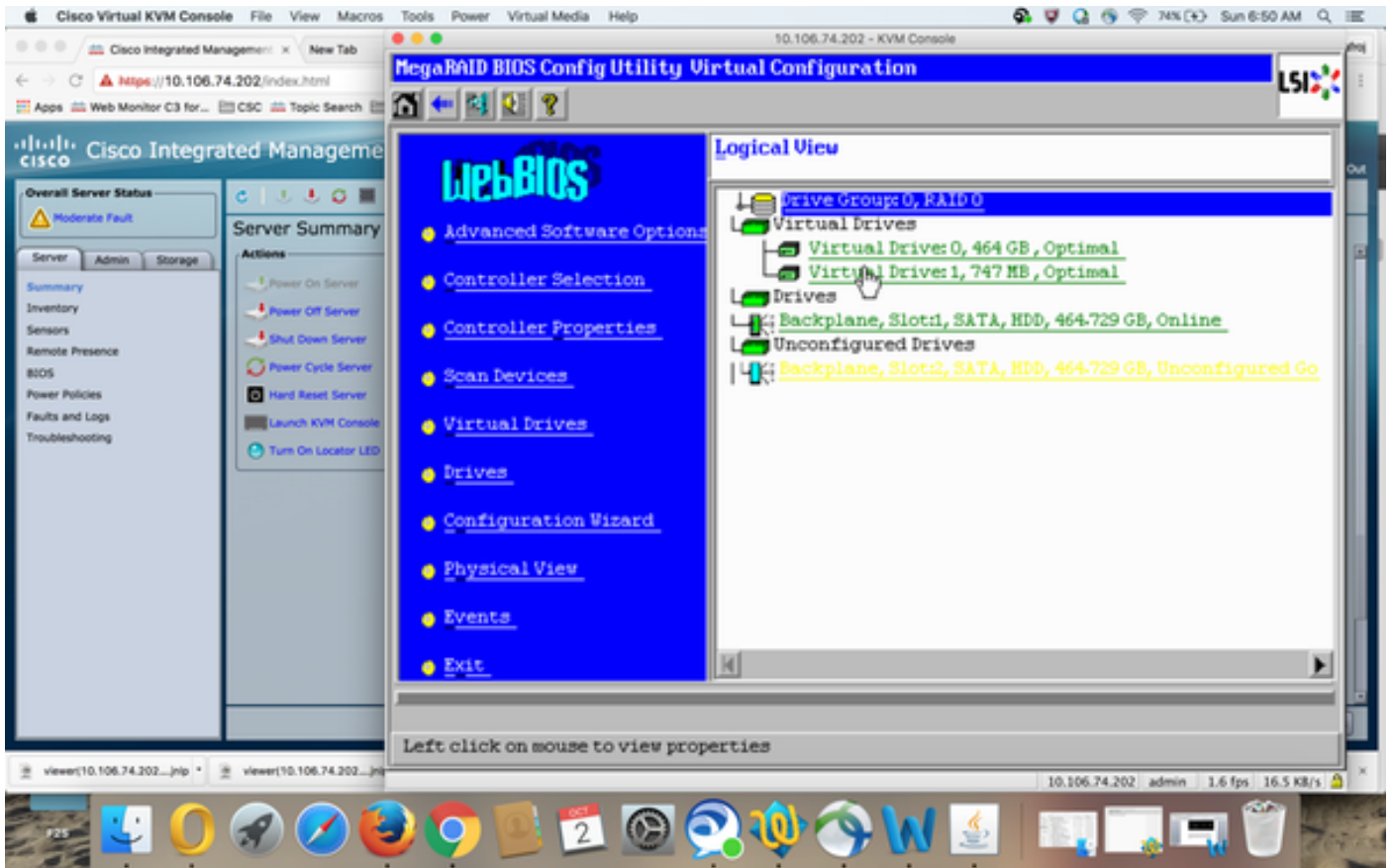


Step 2. The Controller Selection window appears, as shown in the image:

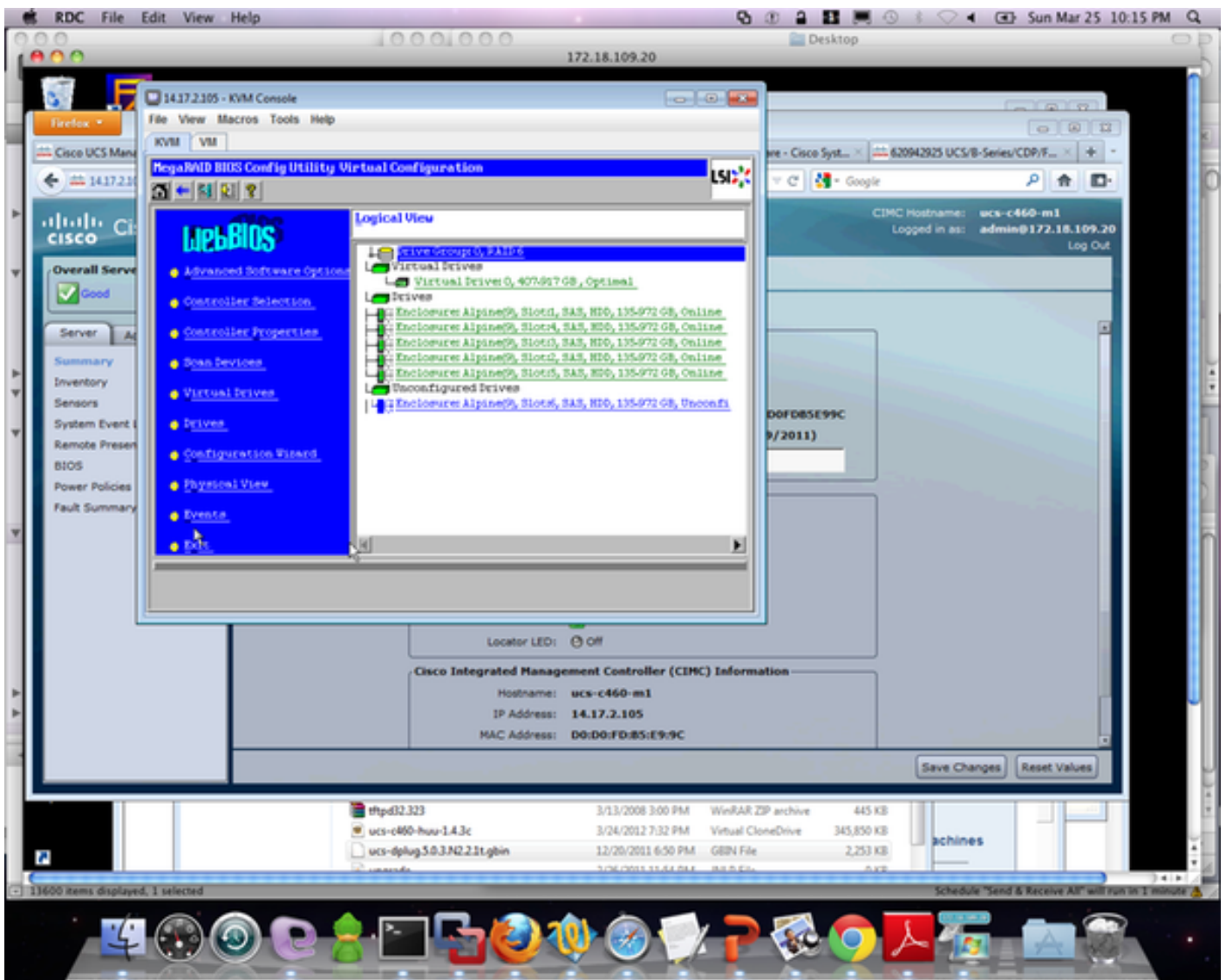


Main Menu Screen

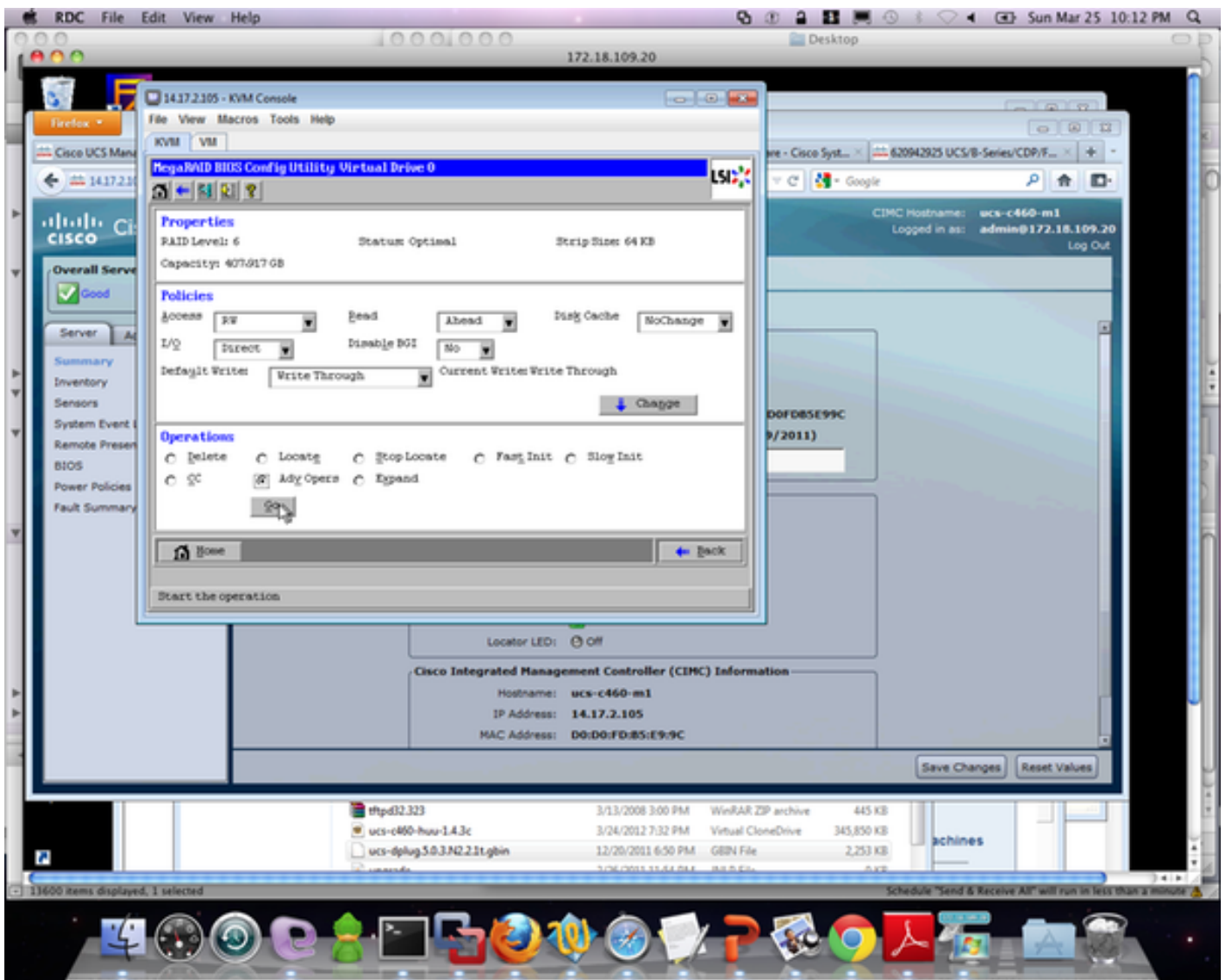
The Main Menu Screen displays a menu of items that you can select to display the information and make changes to the RAID arrays attached to the controllers in the server. This screen also shows the current configuration of the physical and logical drives from which you can configure and manage the RAID arrays.



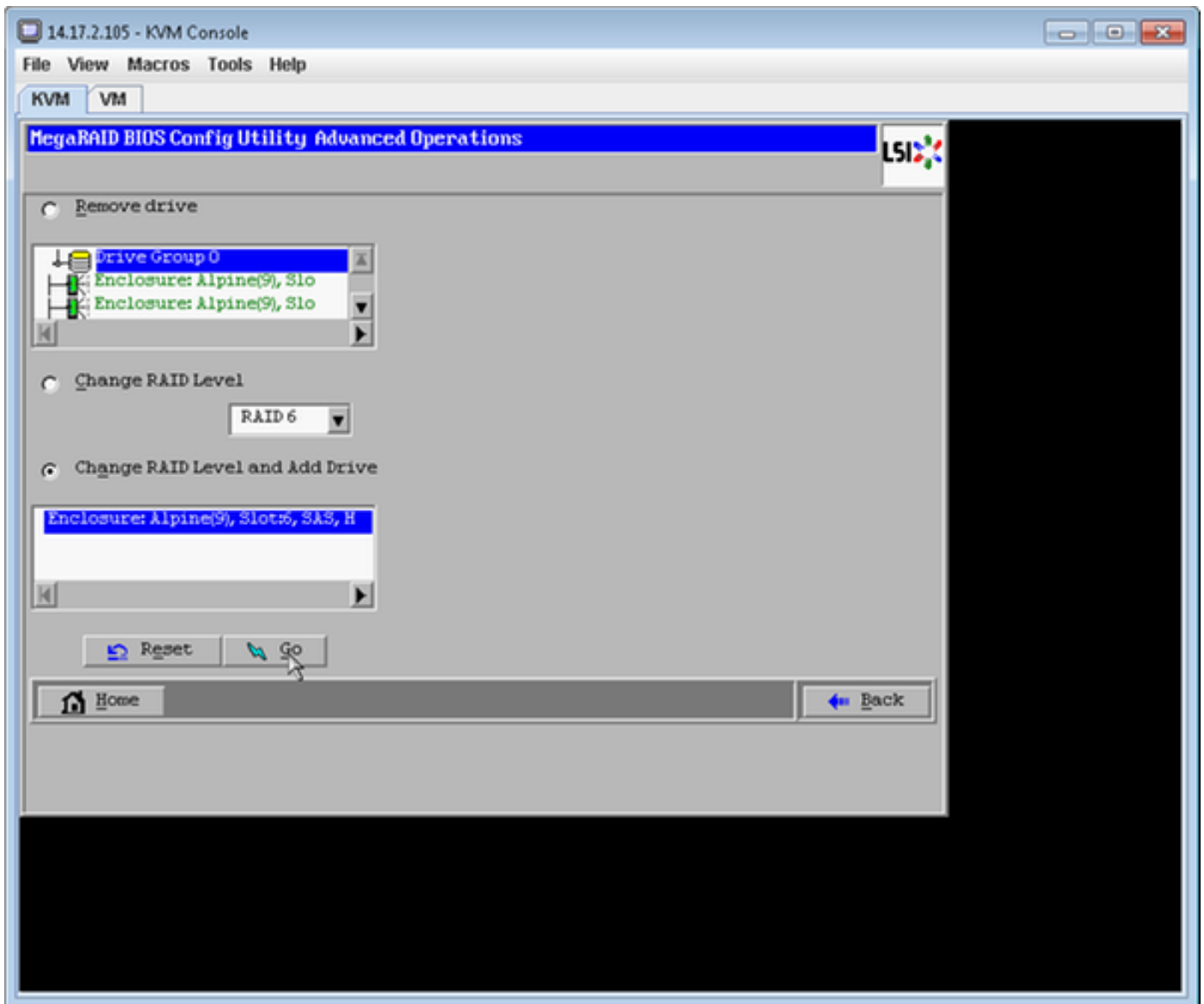
Step 3. Select the desired virtual drive.



Step 4. Select **Advanced Operations** and click **Go**, as shown in the image:



Step 5. Add an additional physical drives to the array.



Step 6. Let the virtual drive reconstruct (Reconstruction takes time to complete depending on the amount of disk you are adding)

Migrating the RAID Level of a Virtual Drive

As the amount of data and the number of drives in your system increase, you can use RAID-level migration to change a virtual drive from one RAID level to another. You do not have to power down or reboot the system. When you migrate a virtual drive, you can keep the same number of drives, or you can add drives. You can use the WebBIOS Configuration Utility (CU) to migrate the RAID level of an existing virtual drive.

Note: While you can apply RAID-level migration at any time, LSI recommends that you do so when there are no reboots. Many operating systems issue I/O operations serially (one at a time) during boot. With a RAID-level migration running, a boot can often take more than fifteen minutes.

Migrations are allowed for these RAID levels:

- RAID 0 to RAID 1
- RAID 0 to RAID 5
- RAID 0 to RAID 6
- RAID 1 to RAID 0
- RAID 1 to RAID 5
- RAID 1 to RAID 6
- RAID 5 to RAID 0
- RAID 5 to RAID 6
- RAID 6 to RAID 0
- RAID 6 to RAID 5

Related Information

- http://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/c/sw/raid/configuration/guide/RAID_GUIDE/MegaRAID.html
- [Technical Support & Documentation - Cisco Systems](#)