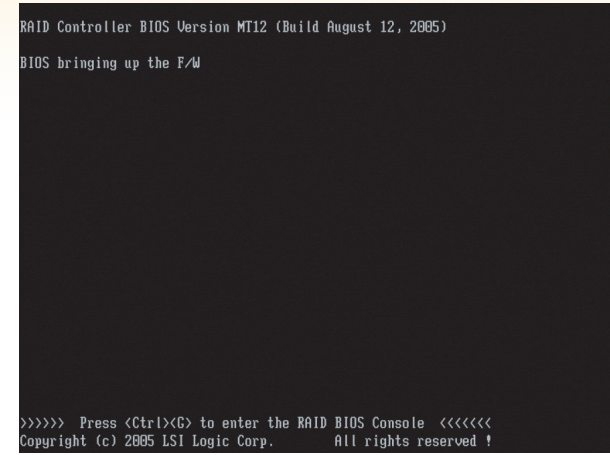**4**

Use the Intel® RAID BIOS Console Utility to Create a RAID Volume

Note: As necessary, see "Choosing the Right RAID Level" on side 1 of this Quick Start User's Guide for a brief description of the RAID levels.

1 Power on the system and press <Ctrl> + <G> when the following screen is displayed.

```
RAID Controller BIOS Version MT12 (Build August 12, 2005)
BIOS bringing up the F/W




>>>>>> Press <Ctrl><G> to enter the RAID BIOS Console <<<<<<
Copyright (c) 2005 LSI Logic Corp.        All rights reserved ↑
```
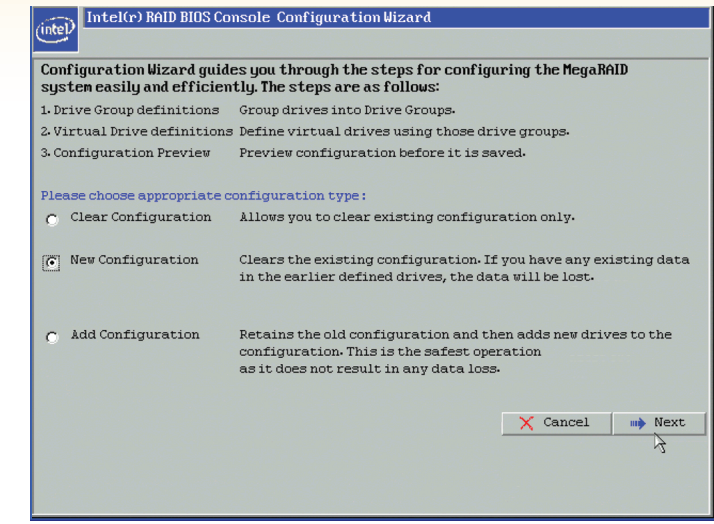
2 When the Intel® RAID BIOS Console starts, it will display the Intel® RAID Controller RT3WB080 installed in the system. Click on the "Adapter No." radio button to choose the controller, and then click **Start.**
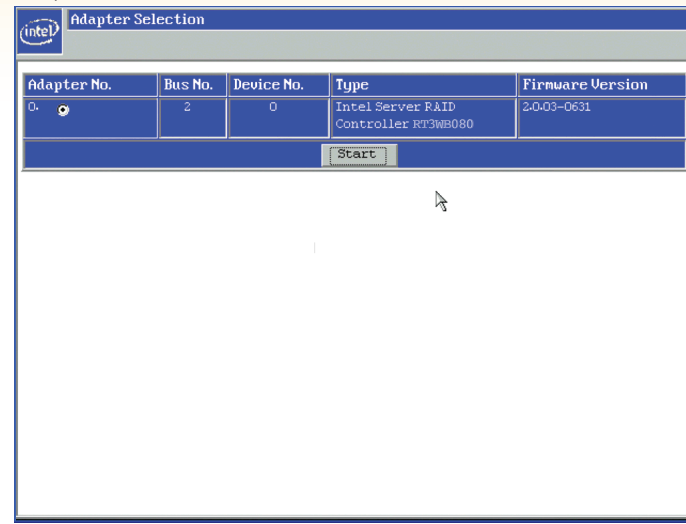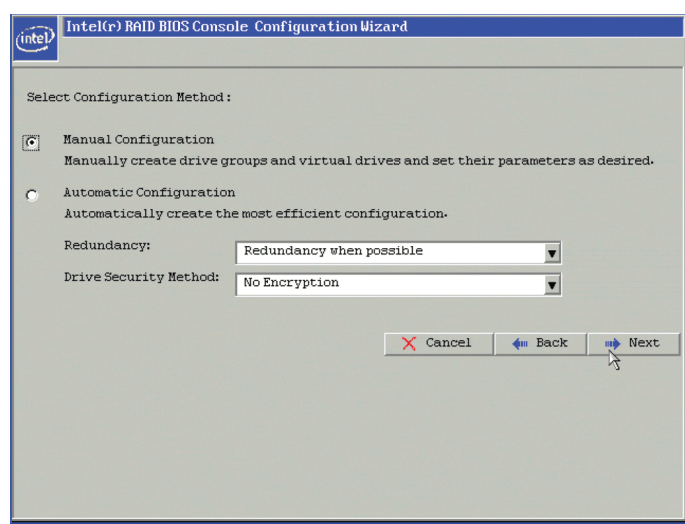
3 After a brief pause, the RAID BIOS Console screen is displayed. Click **Configuration Wizard.**
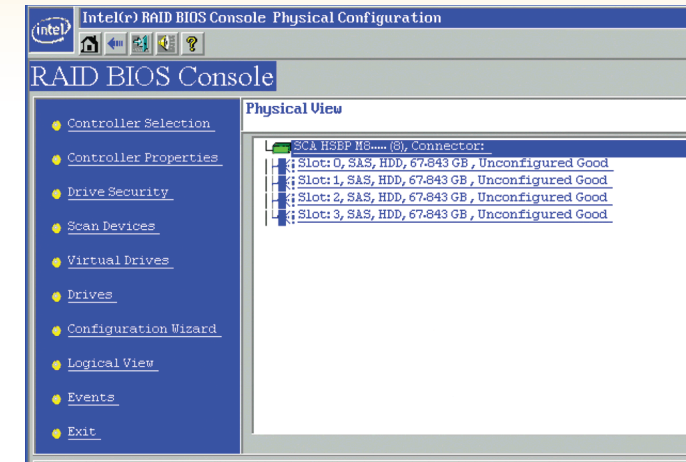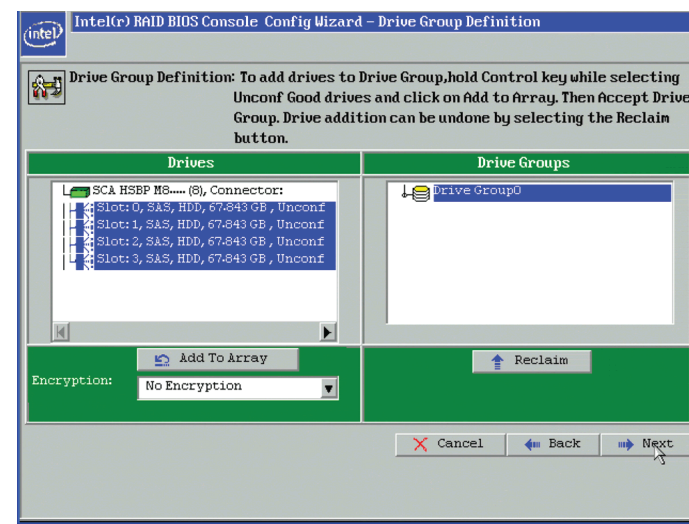
4 Select **New Configuration** and click **Next.**

5 For this example, **Manual Configuration** is used. Click **Next.** (For further information, see the Intel® RAID Software User's Guide on the Resource CD.)
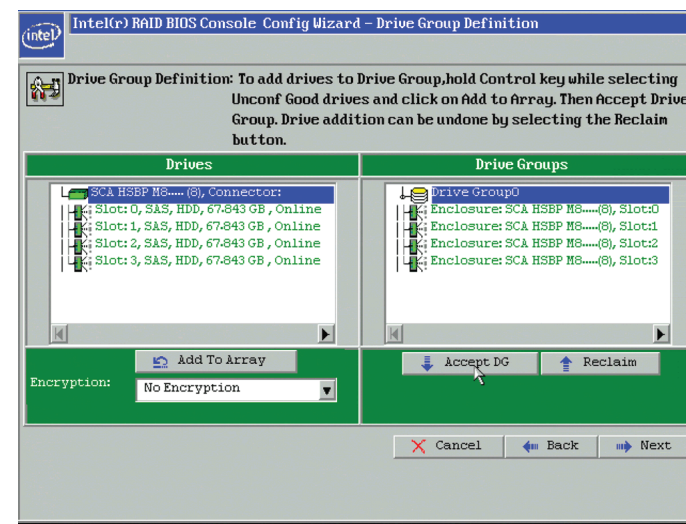
6 Add physical drives to the array by pressing the <Ctrl> key while clicking on entries under Physical Drives. Once you have selected all the drives you wish to add to the array, click **Add To Array.** Then, click **Next.**
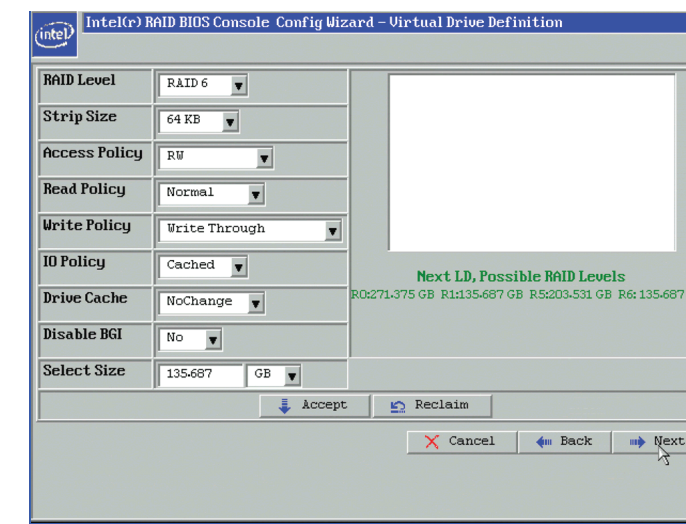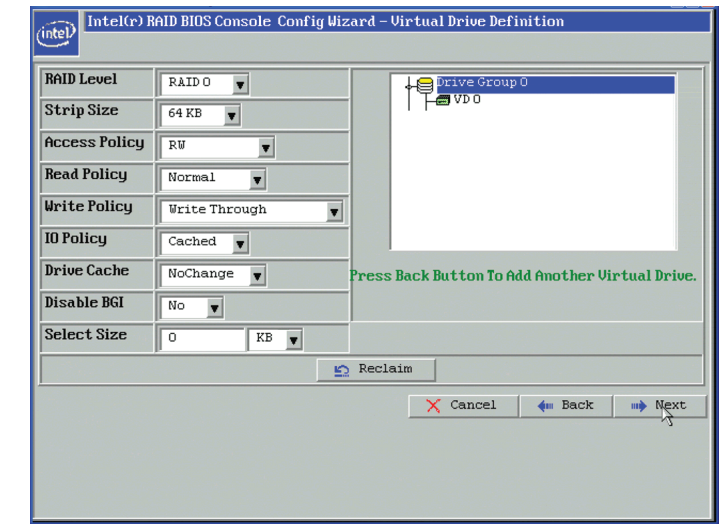
7 Define further arrays or click **Accept DG** if finished. Then, click **Next.**
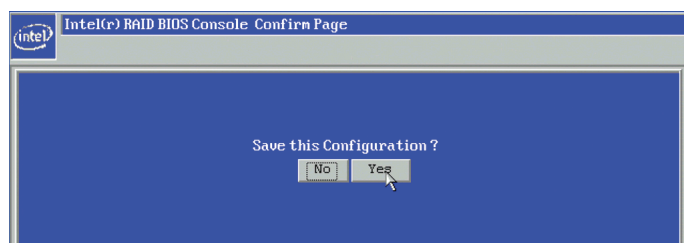
8 Select the **RAID Level** from the drop-down list. Select the **Stripe Size.** Enter the size of the logical drive. Click **Accept.**
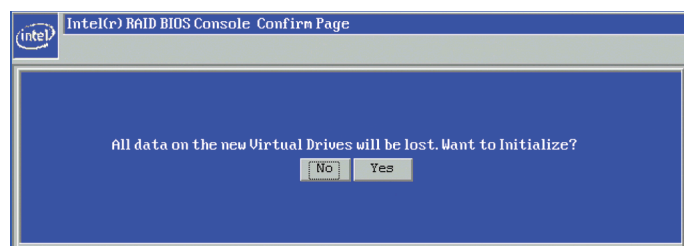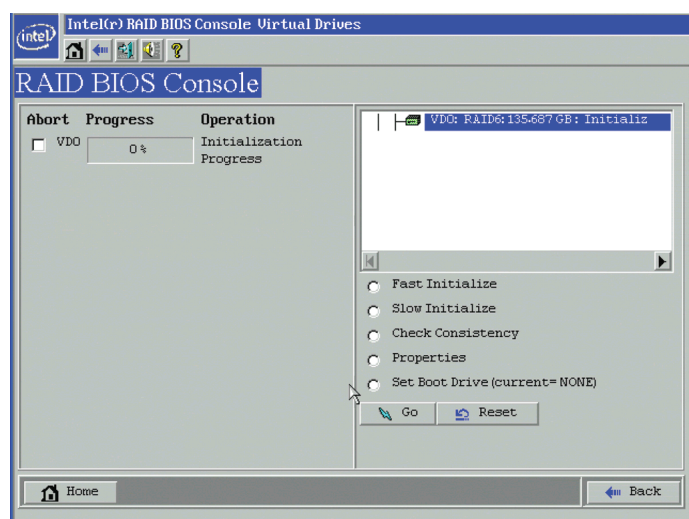
9 Click **Next.**

NOTE: Encryption is only available on the Intel® RAID Controller RT3WB080DE version.

10 Click **Yes.**

11 Click **Yes.**

12 Select **Fast Initialize** to do a preliminary initialization of the drives for loading the operating system. A full initialization will occur in the background.

Creation of a RAID volume is now complete.

5

Install the Operating System Drivers

Microsoft Windows 2003*	OR	Microsoft Windows 2008*	OR	Red Hat* Enterprise Linux	OR	SuSE* Linux Enterprise Server

Microsoft Windows 2003* / Microsoft Windows 2008*

1 Create installation media (floppy disk required for Microsoft Windows 2003*; removable media, such as a floppy disk, USB device, or CD/DVD-ROM, required for Microsoft Windows 2008*). See the instructions at the right.

2 Boot the server and start the OS installation.

3 Press the <F6> key as soon as the first screen appears.

4 When prompted to specify a mass storage controller:

a. Press <S> to specify additional storage devices.

b. Insert the installation driver disk that you created in step 1 above.

c. Press the <Enter> key to select the "Installation Driver" and continue with the Windows installation.

When you see: "Where do you want to install windows?", select **Load Driver**, and then click Next.

When prompted by the Load Driver dialog:

a. Insert the removable installation media that you created in step 1 above.

b. Press the <Enter> key to select the "Installation Driver" and continue with the Windows installation.

5 Follow the on-screen instructions to complete the Windows installation.

Red Hat* Enterprise Linux / SuSE* Linux Enterprise Server

1 Create installation media (removable media, such as a floppy disk, USB device, or CD/DVD-ROM, required). See the instructions at the right.

2 Boot the system with Red Hat* Enterprise Linux CD-ROM.

Boot the system with SuSE* Linux Enterprise Server (SLES) CD-ROM.

3 At the boot prompt, insert the Linux installation disk that you created in step 1.

When the first screen displays, insert the Linux installation disk that you created in step 1.

4 Type Linux dd , and press the <Enter> key.

Press the <F5> key for SLES 10 or the <F6> key for SLES 9 to load the driver, and then select an installation menu option.

5 Follow the on-screen instructions to complete the installation. The RAID controller driver is automatically detected and installed.

Create Installation Media

1 Obtain the drivers either from the resource CD or the Intel web site.

2 If using the Resource CD, insert the resource CD. Browse to \Drivers and then the matching OS folder.
OR
Go to http://downloadcenter.intel.com and locate your product under Server Products in the left menu.

Microsoft Windows*

3 Extract the files from the zip file to your hard drive. Copy the appropriate files to a floppy disk (for Microsoft Windows 2003*) or removable media (for Microsoft Windows 2008*).

Copy the matching .sys, .cat, .oem, and .inf driver files to a floppy disk or removable media.

Linux*

Extract the driver update disk (DUD) image (file extension .img) from the zip file to your hard drive. If you have a system with Microsoft Windows*, you will need a third-party utility such as 'rawrite' to extract the DUD image to a floppy disk. For a system under Linux or Sun Solaris*, use the 'dd' command as follows:

```
dd if=<image_file_name> of=<path-to-media>
```

'path-to-media' is usually /dev/fd0, but may differ if you are using a USB floppy drive.

To manage a RAID array, install Intel® RAID Web Console 2

Install the Intel® RAID Web Console 2 package from the Resource CD.

Extract the contents of the ZIP file and run Setup.exe from the Disk1 folder.

Install the Intel® RAID Web Console 2 package from the Resource CD.

Unpack Linux_rwc2_**.tar.gz.
Remove any line breaks and allow permissions by typing
$> tr -d '\15\32' < existing_file_name > new_file_name
$> chmod a+x new_file_name
Run ./install.sh

Choose one of four installation modes: Complete (installs all features), Client (administrative machine only), Server (can be managed remotely), or StandAlone (only manages itself).

To start Intel® RAID Web Console 2 from within the OS: Choose Start | Programs | RAID WebConsole | RAID WebConsole 2. For additional details, see the Intel® RAID Software User's Guide.

Understanding the Audible Alarm

The audible alarm will beep under two conditions: When a drive has failed, and during and following a rebuild.

The drive failure alarms are as follows:

- Degraded Array: Short tone, one second on, one second off
- Failed Array: Long tone, three seconds on, one second off
- Hot Spare Commissioned: Short tone, one second on, three seconds off

The drive failure tones will repeat until the problem is corrected or until the alarm is silenced or disabled.

The rebuild alarm tone remains ON during the rebuild. After the rebuild completes, an alarm with a different tone will sound, signaling the completion of the rebuild. This is a one-time (non-repeating) tone.

The alarm can be *disabled* either in the Intel® BIOS Console or in the Intel® Web Console 2 management utilities. When disabled, the alarm will not sound unless it is re-enabled in one of the utilities.

The alarm can be *temporarily silenced* either in the Intel® BIOS Console or in the Intel® Web Console 2 management utilities. The alarm is not disabled and will sound again if another event occurs. The temporarily silenced alarm will be enabled if the system is power cycled.