

1 Overview

The basic MegaRAID documentation is contained in three manuals:

- the MegaRAID Hardware Guide for your MegaRAID board
 - the *MegaRAID Operating System Drivers Guide*
 - the *MegaRAID Configuration Software Guide*
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MegaRAID Configuration Software Guide This manual provides information about MegaRAID software utility programs. You will not need this manual until after you have planned your RAID system and have installed the MegaRAID controller.

RAID system planning, installation, and configuration information is provided in the MegaRAID hardware guide for your MegaRAID board. Read the MegaRAID hardware guide before you read the *MegaRAID Configuration Software Guide*.

MegaRAID Hardware Guide Each MegaRAID board has a MegaRAID hardware guide that contains information about installing the MegaRAID controller. It also contains general introductory information about RAID and RAID system planning and configuration information.

You must read the MegaRAID Hardware Guide before you read the *MegaRAID Configuration Software Guide*.

MegaRAID Operating System Drivers Guide This manual provides all the information you will need to install the appropriate operating system software drivers.

Read this manual after you have installed the MegaRAID card, planned the RAID system, and configured the system using the MegaRAID software configuration utilities described in the *MegaRAID Configuration Software Guide*

In this Manual

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Note:

Some of the features and procedures in this manual apply only to boards that support Ultra 160M, and 40 logical drives. This will be noted in the description of the feature or procedure. The Ultra 160M boards are:

- **Enterprise 1600 (Series 471)**
 - **Elite 1600 (Series 493)**
 - **Express 500 (Series 475)**
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MegaRAID BIOS Configuration Utility The MegaRAID BIOS Configuration utility is a character-based utility that you can run by pressing <Ctrl> <M> when the computer boots. Use MegaRAID BIOS Configuration Utility to:

- create hotspare drives
 - configure physical arrays and logical drives
 - initialize one or more logical drives
 - individually access controllers, logical drives, and, physical drives
 - low-level format hard disk drives
 - rebuild failed disk drives
 - verify that the redundancy data in logical drives using RAID level 1, 3, or 5 is correct
 - select a MegaRAID host adapter to work on
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WebBIOS Configuration Utility MegaRAID WebBIOS Configuration Utility is an HTML utility that you can run by pressing <Ctrl><H> when the computer boots. Use WebBIOS Configuration Utility to perform the same functions as the BIOS Configuration Utility described above.

MegaRAID Manager MegaRAID Manager is a character-based utility that you can run at any time. Use MegaRAID Manager to:

- choose a configuration method
 - designate drives as hot spares
 - create physical arrays
 - define logical drives
 - initialize logical drives
 - use logical drives in your operating system
 - rebuild failed disk drives
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Power Console Plus Power Console Plus provides on the fly RAID migration, creating almost limitless adaptability and expansion of any logical drive while the system remains operational.

Power Console Plus is an object-oriented GUI utility that configures and monitors RAID systems locally or over a network with several servers. Power Console Plus can be executed from any workstation. Power Console Plus allows you to control and monitor the status of hard disk drives, tape drives, and CD-ROM drives. Power Console Plus runs under Microsoft Windows NT. Use Power Console Plus to: choose a configuration method, designate drives as hot spares, create physical arrays, define and initialize logical drives, and rebuild failed disk drives.

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In This Manual, Continued

Power Console Plus, cont'd Power Console Plus can:

- add drives to any OPTIMAL RAID logical drive,
 - convert from RAID 0 or 1 to RAID 1, 3, or 5 by adding a physical drive,
 - restripe logical drives,
 - change from a DEGRADED redundant logical drive to an OPTIMAL RAID 0 logical drive,
 - convert a RAID 5 logical drive to a RAID 3 logical drive,
 - convert a RAID 3 logical drive to a RAID 5 logical drive,
 - remove any physical drive from a logical drive, and
 - change a RAID 1, 3, or 5 logical drive to a RAID 0 logical drive
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Operating System Drivers The MegaRAID PCI SCSI Disk Array RAID Controller is installed in any IBM AT®-compatible computer with a PCI local bus. MegaRAID can operate under MS-DOS® or any DOS-compatible operating system using the standard AT BIOS INT 13h Hard Disk Drive interface.

To operate with other operating systems, you must install software drivers. MegaRAID provides software drivers for most common operating systems. Read the *MegaRAID Operating System Drivers Guide* for complete information about all MegaRAID operating system drivers.
