



Intel(R) Matrix Storage Technology

Quick Start Guide

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Purpose

Provide the necessary steps to build a system using Intel(R) Matrix Storage Technology with one of two configurations.

Setting Up a RAID 0/1/5/10 System

The following steps outline how to build a RAID system with Microsoft* Windows* XP installed on a RAID volume using two, three or four SATA hard drives.

1. Assemble the system using a motherboard that supports Intel(R) Matrix Storage Technology and attach SATA hard drives depending on the RAID level that will be built.
2. Enter System BIOS Setup; ensure that Intel Matrix Storage Technology is enabled. This setting may be different for each motherboard manufacturer. Consult the user manual if necessary. When done, exit Setup.
3. Upon re-boot you will see the Intel Matrix Storage Manager option ROM status message on the screen – press CTRL-I to enter the Intel(R) Matrix Storage Manager option ROM user interface. Within this UI select option #1 ‘Create RAID Volume’. Enter a volume name, press enter, use the arrow keys to select the RAID level RAID 0, RAID 1, RAID 5 or RAID 10, press enter, select the drives to be used in the RAID array (unless the system contains the minimum number of drives necessary for the selected RAID level), select the strip size (only for RAID 0, 5, 10), press enter, enter the size of the volume (default is the maximum size, you can make it smaller if you would like to create a second volume on the array later), press enter again, then press ‘Y’ to confirm. Once this is done, exit the option ROM user interface.
4. Begin Windows XP Setup by booting from the installation CD.
5. At the beginning of Windows XP Setup, press F6 to install a third-party SCSI or RAID driver. When prompted, insert a floppy disk containing the Intel RAID driver. After reading the floppy disk, the ‘Intel(R) 82801GR/GH SATA RAID/AHCI Controller (ICH7R/DH)’ will be presented -- select this driver to install.
6. Finish the Windows XP installation and install all necessary drivers.
7. Install the Intel Matrix Storage Manager software via the CD-ROM included with your motherboard or after downloading it from the Internet. This will add the Intel(R) Matrix Storage Console which can be used to manage the RAID configuration.

Setting Up a “RAID Ready” System

The following steps outline how to build an Intel “RAID Ready” system with Windows XP installed on a single SATA hard drive.

1. Assemble the system using a motherboard that supports Intel Matrix Storage Technology and attach a single SATA hard drive.
2. Enter System BIOS Setup; ensure that Intel Matrix Storage Technology is enabled. This setting may be different for each motherboard manufacturer. Consult the user manual if necessary. When done, exit Setup.
3. Begin Windows XP Setup by booting from the installation CD.
4. At the beginning of Windows XP Setup, press F6 to install a third-party SCSI or RAID driver. When prompted, insert a floppy disk containing the Intel RAID driver. After reading the floppy disk, the ‘Intel(R) 82801GR/GH SATA RAID/AHCI Controller (ICH7R/DH)’ will be presented -- select this driver to install.
5. Finish the Windows XP installation and install all necessary drivers.

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6. Install the Intel(R) Matrix Storage Manager software via the CD-ROM included with your motherboard or after downloading it from the Internet. This will add the Intel(R) Matrix Storage Console which can be used to manage the RAID configuration.

Post Migration Note: After migrating from “RAID Ready” to RAID 0, 1, 5, or 10 volumes, the RAID 0,1,5,10 Volume will have the combined capacity of all the SATA hard drives, but the migrated partition size will be unchanged. This leaves unformatted space at the end of the RAID Volume. To use this space, use Windows XP Disk Management to create another partition in the remaining empty space in the RAID Volume or use a third-party application to expand the migrated partition to span the entire RAID Volume.