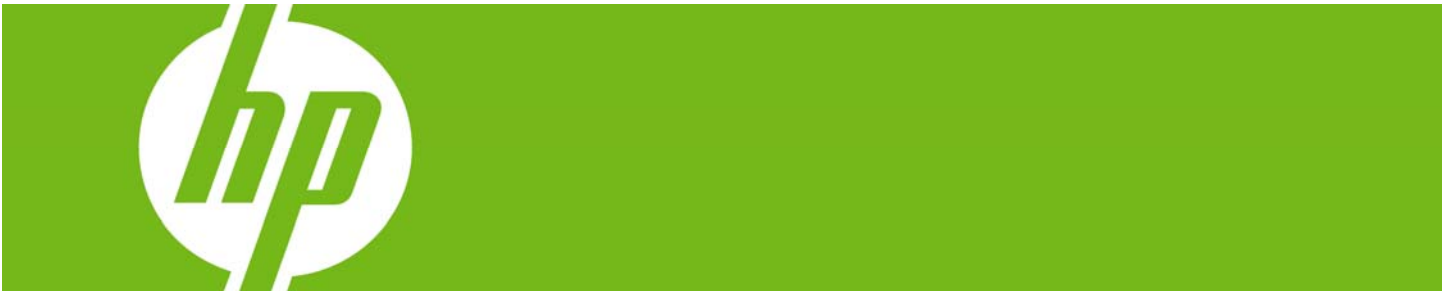


Setting Up SATA RAID on the HP xw8200/xw6200

Mini-White Paper



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Introduction

This document details the steps needed to set up RAID 0 and RAID 1 disk configurations on HP xw8200/xw6200 Workstations. Additional information on these RAID modes can be found in the *Workstation RAID Primer* mini-white paper which can be found by visiting www.hp.com/support/xw6200_manuals or www.hp.com/support/xw8200_manuals and selecting the **White papers** quick jump link.

Steps

The steps are common to all RAID configurations. RAID-configuration-specific values are given as needed.

Install Drives

1. With the power off, physically install the correct number of SATA drives using any combination of the two available SATA ports. Table 1 below indicates the number of drives to install.

Table 1	RAID 0	RAID 1	RAID 10	JBOD
# of Disks	2,3, or 4	2	4	1,2,3,4

Table 1

Enable RAID

2. Boot the system and enter BIOS Setup (F10).
3. Using the Arrow keys and Enter, go to Advanced, then Device Options.
4. Enable the SATA RAID Option ROM. Leave the other settings as you found them.
5. Press F10 twice and Enter to save these settings. The system reboots.



Screen 1 Device Options

Configure the RAID Volume

- When the system comes up, it will prompt you to enter the Intel® RAID for Serial ATA – RAID Configuration Utility. Press CTRL-I to enter the utility.

```
Intel(R) RAID for Serial ATA - RAID BIOS v3.5.6.6253
Copyright(C) 2003 Intel Corporation. All Rights Reserved.

RAID Volumes:
None defined.

Non-RAID Disks:
Port Drive Model Serial # Size Status Bootable
0 ST3160820AS 5MT1XL0A 149.0GB Normal Yes
1 ST3160820AS 5MT1XLDP 149.0GB Normal Yes

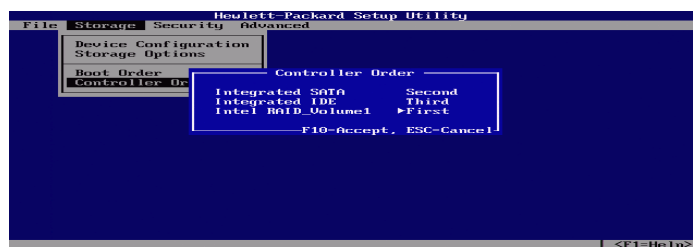
Press <CTRL-I> to enter Configuration Utility..
```

Screen 2 Intel® RAID for Serial ATA – RAID Configuration Utility

- Select Create RAID Array.
- Select the Name. RAID_VOLUME1 is the default.
- RAID Level: RAID 0 (Stripe), RAID 1 (Mirror). Use the up and down arrow keys to set the RAID Mode.
- Stripe Size: Stripe block size select (4K, 8K, 16K, 32K, 64K, 128K). The default is 128K. Use the up and down arrow keys to set the block size. If Mirror is selected, there is no block size.
- Capacity: This will be determined by the RAID Level and drive sizes.
- Tab to Create Volume and press Enter, then Y. Note the RAID Volume created in the DISK/VOLUME INFORMATION section.
- Press 4 to exit, then Y.

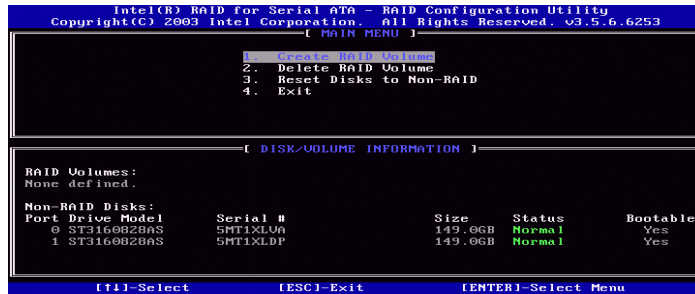
Set the Boot Order

- Reboot the system and enter Setup (F10) again.
- Enter Storage and then Controller Order.



Screen 3 Controller Order

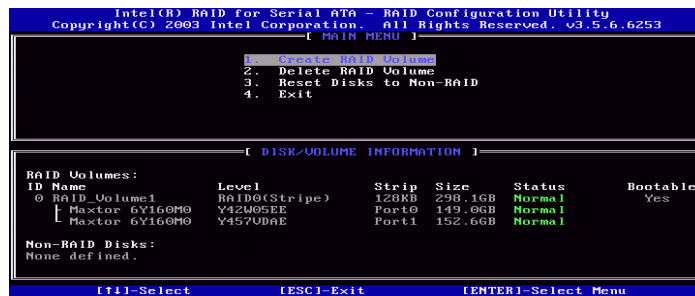
- Use the arrow keys to move the pointer to Intel RAID_Volume1, then use the left arrow key to change the order to First.
- OS install (Windows XP SP2) - at this point, place an xw8200 Recovery CD or xw6200 Recovery CD in the optical drive for the upcoming rebuild of the OS.
- Press F10 twice and Enter to accept changes,
- Press Enter and F10 again to exit Setup and save the changes. The system reboots.



Screen 4 Create RAID Volume

Rebuild the OS on the new RAID Volume

- When the recovery CD boots, follow the instructions to install the OS (Windows XP SP2) on to the newly-created RAID Volume.



Screen 5 Disk/Volume Information

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