

HP User Manual for LSI Integrated RAID on HP xw4200/xw6200/xw8200/xw9300 Workstation



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LSI Integrated RAID controller and Host Bus Adapter

This document describes how to enable LSI Integrated RAID on your HP xw4200 Workstation, HP xw6200 Workstation, HP xw8200 Workstation, or HP xw9300 Workstation.

Note: Before taking advantage of RAID functionality, you must have two or more SCSI HDDs connected to the LSI Integrated RAID device. Refer to the Technical Reference Guide for your workstation by visiting http://www.hp.com/support/workstation_manuals.

Warning: Please back up all user data before enabling LSI Integrated RAID. These processes may destroy all data on the drives used in the RAID set.

Steps common to all methods for enabling LSI Integrated RAID

1. Turn on or restart the workstation.
2. Press the **F10** key when `F10=Setup` appears on the screen.
3. Select your language from the list and press **Enter**.
4. Use the arrow keys (left, right, up, or down) to make the selections.
5. For the HP xw8200 Workstation embedded LSI Integrated RAID Controller:
 - I. Select **Security > Device Security > OnBoard SCSI Controller = Device available**, then press the **F10** key to accept changes.
 - II. Select **Advanced > Device Options > SCSI Option ROM = Enable**, then press the **F10** key to accept changes.
 - III. To apply and save changes, use the arrow key (left or right) to select **File** and use the arrow key (up or down) to select **Save Changes and Exit**, then press **Enter**.
6. For the HP xw9300 Workstation embedded LSI Integrated Controller (non-RAID):
 - I. Select **Advanced > Device Options > SCSI Option ROM = Disable**, then press the **F10** key to accept changes.
 - II. To apply and save changes, use the arrow key (left or right) to select **File** and use the arrow key (up or down) to select **Save Changes and Exit**, then press **Enter**.
 - III. After you configure RAID with the following instructions, re-enable the onboard **SCSI Option ROM**.
7. For the HP xw4200 Workstation, HP xw6200 Workstation, HP xw8200 Workstation, and HP xw9300 Workstation with an LSI Integrated RAID HBA (Host Bus Adapter):
 - I. Use the arrow key (left or right) to select **Advanced** and use the arrow key (up or down) to select the appropriate I/O slot where the HBA is installed, then press **Enter**.
 - II. Ensure **Option ROM = Enable**.
 - III. To apply and save changes, use the arrow key (left or right) to select **File** and use the arrow key (up or down) to select **Save Changes and Exit**, then press **Enter**.
8. If appropriate, download and update RAID Firmware and OPROM for the type of RAID array you want to create. Utility to update the RAID Firmware and OPROM can be found at <http://www.hp.com/go/workstationsupport>.

Configuring an Integrated Mirroring Enhanced array

1. Restart your workstation.

2. Press any key during POST to view POST messages.
3. During the reboot, press **CTRL-C** to enter the LSI Logic Configuration Utility when the following is displayed on the monitor.

Press Ctrl-C to start LSI Logic Configuration Utility...

4. Select the Adapter that you want to configure an array on.
5. Select **<RAID Properties>**.
6. Use the arrow key (up or down) to select the primary drive you want to include in the array and press **Space**.
7. If you are migrating a single drive (OS or data) to an array, press **F3**; otherwise, press **Delete**.
8. Use the arrow key (up or down) to select the next drive you want to include in the array and press **Space**.
9. Repeat step 8 to include any additional drives to the array. An array can have 2 to 6 drives.
10. Press **Esc**.
11. Use the arrow key (up or down) to select **<Save changes then exit this menu>** then press **Enter**.
12. Press **Esc**.
13. Use the arrow key (up or down) to select **<Exit the Configuration Utility>** then press **Enter**.

Configuring an Integrated Striping array

1. Restart your workstation.
2. Press any key during POST to view POST messages.
3. During the reboot, press **CTRL-C** to enter the LSI Logic Configuration Utility when the following is displayed on the monitor:

Press Ctrl-C to start LSI Logic Configuration Utility...

4. Select the Adapter that you want to configure an array on.
5. Select **<RAID Properties>**.
6. Use the arrow key (up or down) to select the first HDD you want to include in the array.
7. Press **Space** to toggle **Array Disk? = [Yes]**.
8. Repeat steps 6 and 7 so the array can include 2 to 6 HDDs.
9. Press **Esc**.
10. Use the arrow key (up or down) to select **<Save changes then exit this menu>** then press **Enter**.
11. Press **Esc**.
12. Use the arrow key (up or down) to select **<Exit the Configuration Utility>** then press **Enter**.

Migrating to a Integrated Mirroring Enhanced array using HP Recovery Media

1. Complete steps in section labeled ***Steps common to all methods for enabling LSI integrated RAID.***

2. Complete steps in section labeled ***Configuring an Integrated Mirroring Enhanced array.***
3. Insert the **Restore Plus! CD** and boot your system.
4. Follow the instructions on screen to complete the recovery.

Setting up an Integrated Mirroring Enhanced array using HP Recovery Media

1. Complete steps in section labeled ***Steps common to all methods for enabling LSI integrated RAID.***
2. Complete steps in section labeled ***Configuring an Integrated Mirroring Enhanced array.***
3. Insert the **Restore Plus! CD** and boot system.
4. Follow the instructions on screen to complete the recovery.

Setting up an Integrated Striping array using HP Recovery Media

1. Complete steps in section labeled ***Steps common to all methods for enabling LSI integrated RAID.***
2. Complete steps in section labeled ***Configuring an Integrated Striping array.***
3. Insert the **Restore Plus! CD** and boot your system.
4. Follow the instructions on screen to complete the recovery.

Setting up an Integrated Mirroring Enhanced array using manual OS installation

1. Complete steps in section labeled ***Steps common to all methods for enabling LSI integrated RAID.***
2. Complete steps in section labeled ***Configuring an Integrated Mirroring Enhanced array.***
3. Go to <http://www.hp.com/go/workstationsupport>.
4. Select your workstation.
5. Click **download drivers and software**.
6. Select your operating system.
7. Click **driver storage**.
8. Click download icon for **LSI Logic Ultra320 SCSI Adapters Driver for Windows XP**.
9. Select your **language**.
10. Click **download** and save the driver to a temporary location.
11. Open the temporary location and double-click the downloaded file. Follow the on-screen instructions to extract the file.

Note: The contents are typically extracted to **c:\swsetup\spxxxxxx**, where spxxxxxx is the name of the downloaded file.

12. Click **Start > Run**, enter **cmd** in the text box and click **OK**.
13. Change to the directory **c:\swsetup\spxxxxxx**.
14. Copy the contents of **<path>\Driver** to the root of a blank diskette.

NOTE: You must save the files to a 3.5-inch diskette because when copying the driver to your workstation during OS setup, you can only navigate to the diskette drive.

Setting up an Integrated Striping array using manual OS installation

1. Complete steps in section labeled ***Steps common to all methods for enabling LSI integrated RAID.***
2. Complete steps in section labeled ***Configuring an Integrated Striping array.***
3. Go to <http://www.hp.com/go/workstationsupport>.
4. Select your workstation.
5. Click **download drivers and software**.
6. Select your operating system.
7. Click **driver storage**.
8. Click download icon for **LSI Logic Ultra320 SCSI Adapters Driver for Windows XP**.
9. Select your **language**.
10. Click **download** and save the driver to a temporary location.
11. Open the temporary location and double-click the downloaded file. Follow the on-screen instructions to extract the file.
12. **Note:** The contents are typically extracted to **c:\swsetup\spxxxxxx**, where spxxxxxx is the name of the downloaded file.
13. Click **Start > Run**, enter **cmd** in the text box and click **OK**.
14. Change to the directory **c:\swsetup\spxxxxxx**.
15. Copy the contents of **<path>\Driver** to the root of a blank diskette.

NOTE: You must save the files to a 3.5-inch diskette because when copying the driver to your workstation during OS setup, you can only navigate to the diskette drive.

Setting up an Integrated Mirroring Enhanced array for data

1. Complete steps in section labeled ***Steps common to all methods for enabling LSI integrated RAID.***
2. Complete steps in section labeled ***Configuring an Integrated Mirroring Enhanced array.***

Setting up an Integrated Striping array for data

1. Complete steps in section labeled ***Steps common to all methods for enabling LSI integrated RAID.***
2. Complete steps in section labeled ***Configuring an Integrated Striping array.***