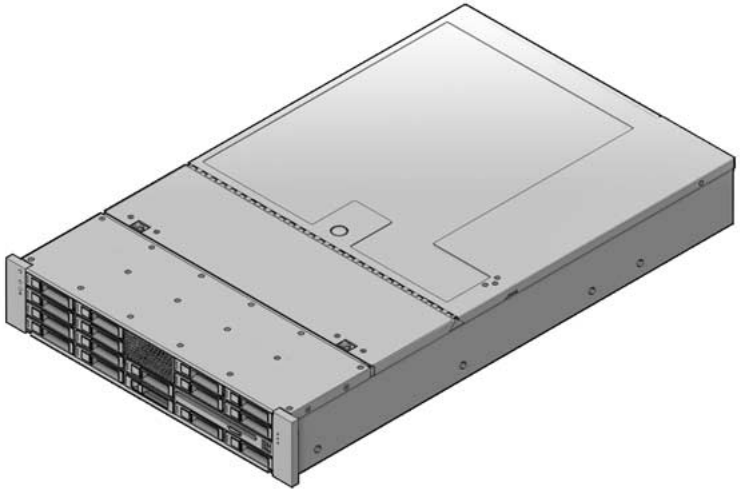
Sun Fire™ X4250 Server Product Notes



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Sun Fire X4250 Server Product Notes

This document contains late-breaking information and issues for the Sun Fire™ X4250 server.

The following issues are covered in these product notes:

- "Software and Firmware Information" on page 2
- "Hardware and BIOS" on page 10
- "System Management General Issues" on page 16
- "System Management Virtual Device Issues" on page 17
- "System Management Browser Issues" on page 22
- "Diagnostics Issues" on page 23
- "Sun Installation Assistant Issues" on page 25
- "Solaris Issues" on page 27
- "Linux Issues" on page 29
- "Windows Issues" on page 31
- "LSI 3081E Host Bus Adapter Issues" on page 35
- "StorageTek SAS Controller Issues" on page 36
- "Sun 10G Network Adapter Issues" on page 38
- "Documentation Issues" on page 40

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Software and Firmware Information

This section contains the following software information:

- "Supported Operating Systems" on page 2
- "Software Options" on page 2

Supported Operating Systems

The following operating systems are supported on the Sun Fire X4250 server:

- Red Hat Enterprise Linux (RHEL 32-bit/64-bit) 4.5, 4.6, 4.7, 4.8, 5.1, 5.2, 5.3
- SUSE Linux Enterprise Server (SLES) 10 SP1 (64-bit); SLES 10 SP2 (64-bit), SLES 10 SP3 (64-bit/XEN)
- Windows Server 2003 (32-bit/64-bit), Windows Server 2008 (32-bit/64-bit). Windows Server 2008 R2 (64-bit)
- Solaris™ 10 5/08 OS, Solaris 10 10/08 OS. Solaris 10 10/09
- VMware 3.5 ESX/ESXi, VMware 4.0
- OpenSolaris 2009.06

Software Options

The following software can be ordered to ship with your system or downloaded:

- "Software Supplemental" on page 3
- "Tools and Drivers DVD" on page 4
- "Sun Validation Test Suite" on page 9
- "Sun Installation Assistant" on page 9

Software Supplemental

The software supplemental releases include BIOS and ILOM updates only. The Tools and Drivers CD is not updated for these releases. You can download the supplemental software updates at

`http://www.sun.com/servers/x64/x4250/downloads.jsp`

Software Supplemental 3.0.2

Sun Fire X4250 Software Supplemental 3.0.2 firmware package is now available for download:

The firmware versions include:

- BIOS: 1ADQW062
- ILOM: 3.0.3.30 build r48374

The following issue was introduced in 3.0.3.30 build r48374: "Correctable Errors Incorrectly Listed in the ILOM SEL as a Critical Error" on page 17.

Note – Refer to "Issues Fixed in Software Supplemental 3.0.2" on page 43 for information on issues that have been fixed with this release.

Software Supplemental 3.0.1

Sun Fire X4150 and X4250 Software Supplemental 3.0.1 firmware package is now available for download.

The firmware versions include:

- BIOS: 1ADQW061
- ILOM: 3.0.3.30 r47608

Note – Refer to "Issues Fixed in Software Supplemental 3.0.1" on page 43 for information on issues that have been fixed with this release.

Software Supplemental 2.2.2

Sun Fire X4150 and X4250 Software Supplemental 2.2.2 firmware packages is now available for download.

The firmware versions include:

- BIOS: 1ADQW060

- ILOM: 2.0.2.10 r42701

Note – Refer to "Issues Fixed in Software Supplemental 2.2.2" on page 44 for information on issues that have been fixed with this release.

Tools and Drivers DVD

You can download the Tools and Drivers DVD for the Sun Fire X4250 server from:

`http://www.sun.com/servers/x64/x4250/downloads.jsp`

The Tools and Drivers CD/DVD includes firmware and software for the Sun Fire X4250 server. The Tools and Drivers CD or DVD is offered as an option to order with your system.

- "Tools and Drivers DVD 3.1.0" on page 5

Tools and Drivers DVD 3.1.1

The most recent software update is Tools and Drivers DVD Version 3.1.1.

The updates for Tools and Drivers 3.1.1 include:

- ILOM version: 3.0.6.15 Build r50607
- BIOS: 1ADQW065
- Sun StorageTek SAS RAID HBA Firmware Update:
  - Firmware version: 16732
  - Sun StorageTek SAS RAID HBA Drivers for Windows (16732), Linux (1.1.5-2463)
- Additional driver updates include:
  - RHEL 4.8 (32-bit/64-bit), Solaris 10 10/09, SLES10 SP3(64-bit/XEN),
  - Intel NIC Driver 14.3 for Windows Server 2008
  - AST2000 driver 089
- ipmitool 1.8.10.2
- PC Check: 6.23s

Additional software updates include:

- SunVTS Diagnostics CD Bootable CD 7.0 ps7
- Sun Installation Assistant 2.3.14.0
- Sun StorageTek PCIe SAS RAID Host Bus Adapter ASM: 17551

Note – Refer to "Issues Fixed in Tools and Drivers DVD 3.0" on page 44 for issues that have been introduced in ILOM 3.0 and "Issues Fixed in Tools and Drivers DVD 3.1.1" on page 41 or information on issues that have been fixed with this release.

For further information on the Tools and Drivers DVD 3.x refer to the ILOM 3.0 documentation included in the Sun Fire X4250 server documentation set.

Tools and Drivers DVD 3.1.0

The most recent software update is Tools and Drivers DVD Version 3.1.0.

The updates for Tools and Drivers 3.1.0 include:

- ILOM version: 3.0.6.15
- BIOS: 1ADQW063
- Sun StorageTek SAS RAID HBA Firmware Update:
  - Firmware version: 16732
  - Sun StorageTek SAS RAID HBA Drivers for Windows (16732), Linux (1.1.5-2463)
- Additional driver updates include:
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Note – Refer to "Issues Fixed in Tools and Drivers DVD 3.0" on page 44 for issues that have been introduced in ILOM 3.0 and "Issues Fixed in Tools and Drivers DVD 3.1.0" on page 42 or information on issues that have been fixed with this release.

For further information on the Tools and Drivers DVD 3.x refer to the ILOM 3.0 documentation included in the Sun Fire X4250 server documentation set.

See the following descriptions for previous released versions of the Tools and Drivers DVD/CD:

- "Tools and Drivers DVD 3.0" on page 6
- "Tools and Drivers DVD 2.2.1" on page 6
- "Tools and Drivers DVD 2.2.0" on page 7
- "Tools and Drivers DVD 1.2.0" on page 8
- "Tools and Drivers CD 1.1" on page 8
- "Tools and Drivers CD 1.0a" on page 8

Tools and Drivers DVD 3.0

The updates for Tools and Drivers 3.0.0 include:

- ILOM version: 3.0.3.30
- BIOS: 1ADQW060
- Sun StorageTek SAS RAID HBA Firmware Update:
  - Firmware version: 15872
  - Sun StorageTek SAS RAID HBA Drivers (Windows: 15882, Linux: 2459, Solaris: 15872)
- Additional driver updates include:
  - RHEL 5.3 (32-bit/64-bit)
  - Intel NIC Driver 13.5
  - AST2000 Driver 088
  - PC Check: 6.22s
- ipmitool 1.8.10.0

Diagnostics Bootable CD Update: SunVTS 7.0 ps4 is also included in this software update.

Note – Refer to "ILOM 3.0 Issues" on page 15 for issues that have been introduced in ILOM 3.0 and "Issues Fixed in Tools and Drivers DVD 3.0" on page 44 or information on issues that have been fixed with this release.

Tools and Drivers DVD 2.2.1

Tools and Drivers DVD 2.2.1 is the latest ILOM and BIOS update for the Sun Fire X4250 server. The firmware versions include:

- ILOM: 2.0.2.10 r40317
- BIOS: 1ADQW058

Note – Refer to "Issues Fixed in Tools and Drivers DVD Version 2.2.1" on page 45 for information on issues that have been fixed with this release.

Tools and Drivers DVD 2.2.0

Tools and Drivers DVD 2.2.0 contains the following firmware updates:

The firmware versions include:

- ILOM: 2.0.2.10 r39321
- BIOS: 1ADQW057

Note – Refer to "Issues Fixed in Tools and Drivers DVD Version 2.2.0" on page 46 for information on issues that have been fixed with this release.

Tools and Drivers DVD 1.2.0

Tools and Drivers DVD 1.2.0 contains the following firmware updates:

- BIOS version: 1ADQW054
- SP version: 2.0.2.6

Prior to installing any supported E0-stepping CPU, you must first upgrade the system to 1ADQW054 BIOS. Refer to "Identifying E0-Stepping Processors" on page 12.

Refer to "Fixed Issues" on page 41 for information on issues that have been fixed with this Tools and Drivers DVD update.

Tools and Drivers CD 1.1

Tools and Drivers CD 1.1 contains the following firmware update:

- BIOS version 1ADQW052

The remaining software and firmware remains the same as for Tools and Drivers CD 1.0a.

Note – If the you are using the Qimonda Memory 2GB/DDR2 HYS72T256421EE6421EFA-3S-C2, then you must update your BIOS to 1ADQW052.

Tools and Drivers CD 1.0a

Tools and Drivers CD 1.0a contains the following firmware, tools and drivers:

- Pc-Check diagnostics version 6.20
- BIOS version 1ADQW051
- SP version 2.0.2.6
- Drivers and applications for supported Solaris, Linux and Windows operating systems.
- AutoRun utility for installation of Windows drivers
- SNMP MIB file for the X4250
- SP Recovery utility

Sun Validation Test Suite

Sun Validation Test Suite (SunVTS) provides a comprehensive diagnostic tool that tests and validates Sun hardware by verifying the connectivity and functionality of most hardware controllers and devices on Sun platforms. SunVTS software can be tailored with modifiable test instances and processor affinity features.

SunVTS is an orderable software option and can also be downloaded from:

http://www.sun.com/oem/products/vts/

For the most up-to-date information on SunVTS software, go to:

http://docs.sun.com/app/docs/prod/test.validate

Make sure to read the most recent product Release Notes before running SunVTS on your server.

Sun Installation Assistant

The Sun Installation Assistant (SIA) is a tool supported for use with x64 Sun Fire and Sun Blade servers that assists in the installation of supported Linux and Microsoft Windows operating systems (OS). With SIA, you can install the OS, the appropriate drivers, and if necessary, additional system software by simply booting the SIA media and following the prompts.

SIA is an orderable software option, and can also be download from the Sun Download page at:

http://www.sun.com/download/index.jsp

Updates to the SIA program can be obtained easily during the SIA installation by using the Remote Update option in the SIA.

For more information on the Sun Installation Assistant, see the *Sun Installation Assistant for Windows and Linux User's Guide For Sun Fire and Sun Blade Series Servers*.

Hardware and BIOS

The following issues apply to the Sun Fire X4250 server hardware or BIOS:

- "Hard Drives Can Be Difficult to Remove From Right-Side Drive Bays" on page 10
- "32GB SSD Available for Sun Fire X4250" on page 11
- "Enabling Open I/O AT Feature in BIOS Setup Menu" on page 12
- "Serial Console Does Not Show the Host Reboot After the Sharing Owner Is Set in ILOM" on page 12
- "Identifying E0-Stepping Processors" on page 12
- "BMC Not Responding During BIOS POST" on page 13
- "DIMM Population Rules" on page 13
- "Scripting the SP/BIOS Flash Process" on page 14
- "Enable USB Flash Device During Bootup" on page 14
- "Front USB Port Cable Limitations" on page 14
- "Important Note on Inserting a Hard Disk Drive" on page 15

Hard Drives Can Be Difficult to Remove From Right-Side Drive Bays

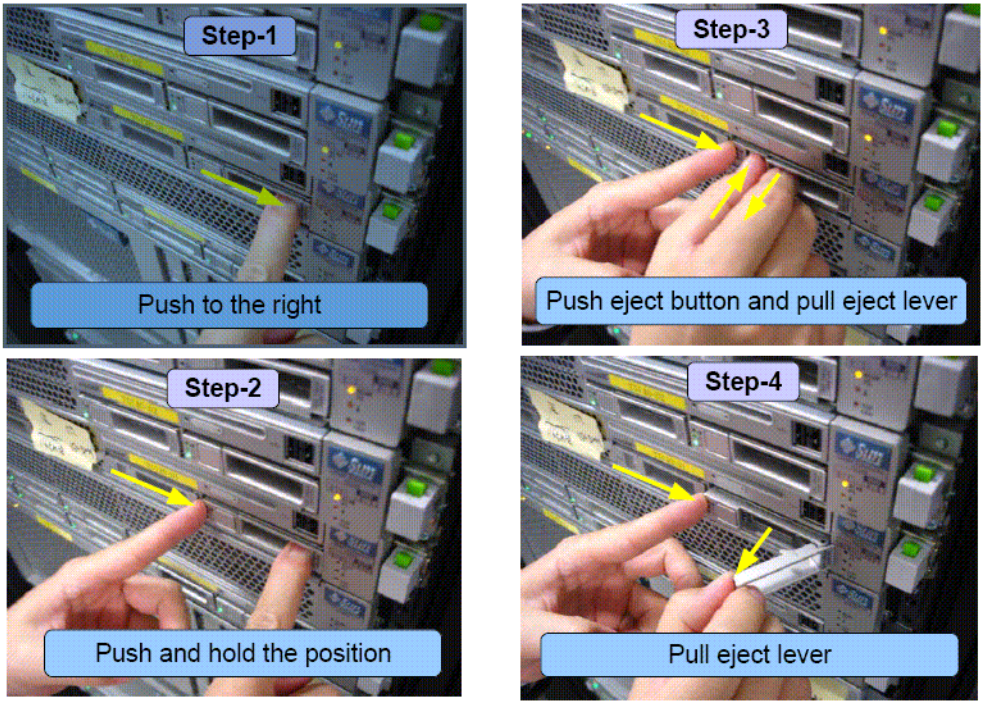
Hard Drives in the right-side drive bays can be difficult to remove.

Workaround

Until a mechanical fix is implemented, use the following procedure to remove hard drives from right-side drive bays.

1. **Press the drive to the right. See Step 1 in the following figure.**
2. **Push in on the drive, while holding it pressed to the right. See Step 2 in the following figure.**
3. **Press the drive eject button and pull on the eject lever. See Step 3 in the following figure.**
4. **Use the eject lever to slide the drive out of the bay.**

FIGURE 1 Removing Hard Drives From Right-Side Bays



32GB SSD Available for Sun Fire X4250

32GB solid state drives (SSDs) are now available for the Sun Fire X4250 server. Read the following guidelines before installing SSDs on the server.

Note – Some of the procedures for cabling HDDs are documented in the *Sun Fire X4250 Server Service Manual*. The service manual will be updated with more detailed information on installing SSDs at a later date.

- 8 SSD maximum installed.
- LSI HBA with minimum firmware version 1.27.02 is required.
- SATA (minimum firmware version 5.02.14) and PATA (minimum firmware version 5.02.01) are supported.

Systems with preinstalled SSDs will have the correct HBA/SATA/PATA firmware installed. If you are installing SSDs into an older system, contact Sun support for information on how to update your firmware.

Enabling Open I/O AT Feature in BIOS Setup Menu

When running Intel I/O AT test tool, the feature needs to be enabled in the BIOS menu first.

- **In the BIOS setup menu, select Advanced -> PCI Configuration -> Crystal Beach/DMA to enable the feature.**

Serial Console Does Not Show the Host Reboot After the Sharing Owner Is Set in ILOM

When changing serial port sharing owner in the ILOM WebGUI or CLI from the SP to the host, the connect serial port connects, but no there is no output.

This issue will be fixed in a future BIOS release.

Workaround

Change the serial port sharing from SP to System using the BIOS menu directly, as follows

1. **In the BIOS setup menu, select Server -> External Serial Port**
2. **Change the External Serial Port selection from "SP" to "System".**

Identifying E0-Stepping Processors

If you have an E0-stepping processor installed in your system, the BIOS will already be updated.

If you receive an E0 stepping processor as a separate option, you can identify the processor by the labeling on the box. Prior to installing any supported E0-stepping CPU, you must first upgrade the system to 1ADQW054 BIOS.

Refer to TABLE 1 for a listing of the product codes that identify each E0-stepping processor.

TABLE 1 Product Code Identifiers for E0 Processors

Processor Selection	E-0 Product Code
Dual-Core Intel Xeon X5260 processor (6MB L2, 3.33 GHz, 1333 MHz FSB, 80W), RoHS-5.	AT80573KJ0936M
Quad-Core Intel Xeon E5410 processor (2x6MB L2, 2.33 GHz, 1333 MHz FSB, 80W), RoHS-5.	AT80574KJ053N
Quad-Core Intel Xeon E5440 processor (2x6MB L2, 2.83 GHz, 1333 MHz FSB, 80W), RoHS-5.	AT80574KJ073N
Quad-Core Intel Xeon X5460 processor (2x6MB L2, 3.16 GHz, 1333 MHz FSB, 120W), RoHS-5.	AT80574KJ087N
Quad-Core Intel Xeon L5420 processor (2x6MB L2, 2.5 Ghz, 1333 MHz FSB, 50W), RoHS-5.	AT80574JJ060N
Quad-Core Intel Xeon E5450 processor (2x6MB L2, 3.0 GHz, 1333 MHz FSB, 80W), RoHS-5.	AT80574KJ080N
Dual-Core Intel Xeon X5270 processor (6MB L2, 3.5 Ghz, 1333 MHz FSB, 80W), RoHS-5.	AT80573KJ1006M
Quad-Core Intel Xeon L5430 processor (2x6MB L2, 2.66 Ghz, 1333 MHz FSB, 50W), RoHS-5.	AT80574JJ067N
Quad-Core Intel Xeon X5470 processor (2x6MB L2, 3.33 GHz, 1333 MHz FSB, 120W), RoHS-5.	AT80574KJ093N

BMC Not Responding During BIOS POST

Under rare circumstances, you may see a BMC not responding message during BIOS POST. If the BIOS halts and reports this message, do the following:

- **Press Ctrl+Alt+Delete and reboot the server.**

  This will be fixed in a future release. Refer to CR6714006 for more information.

DIMM Population Rules

- DIMMs must be populated in identical pairs.
- DIMM pairs are populated in the following DIMM slot order: A0/B0, C0/D0, A1/B1, C1/D1, etc.

- DIMMs within a given pair must be identical with respect to size, speed, and organization.
- DIMM capacities can be different between different DIMM pairs.

  For example, a valid mixed DIMM configuration might have 1GB DIMMs installed in DIMM Slots A0/B0, and 2GB DIMMs installed in DIMM slots C0/D0.
- DIMMS should be installed with the largest module pair size first.

  For example, (4) 4GB DIMMs and (4) 2GB DIMMS should be installed as follows: A0/B0=4G, C0/D0=4G, A1/B1=2G, C1/D1=2G.

Scripting the SP/BIOS Flash Process

The SP/BIOS flash process includes an "Update Successful" message when the service processor (SP) flash completes. This message signals the end of the SP flash activity only. At this point in the process, the BIOS has not been flashed and premature termination of the process (for example, a manual reboot) will result in BIOS corruption. To avoid corrupting the BIOS review the flash sequence below:

1. SP begins the flash process.
2. SP completes the flash process.
3. CLI returns an Update Successful message.
4. The system reboots and the BIOS begins the flash process.
5. The BIOS flash process completes.

Before writing a script to flash the BIOS/SP remotely, observe the sequence in real-time and test the script on a single system before updating all systems.

Enable USB Flash Device During Bootup

In order to enable a USB flash device during bootup, you need to press F2 to enter into BIOS menu, select Boot->Hard Disk Drives, and select USB flash device as the first drive.

Front USB Port Cable Limitations

The front panel USB ports only support a 3-meter cable to an attached device.

Important Note on Inserting a Hard Disk Drive

When inserting a hard disk drive, do not extend the lever past 70 degrees. If the lever is extended past 70 degrees on insertion there is a risk that the right most tab will break off. The end result of accidentally breaking off the tab is purely cosmetic- the drive will still function properly if fully inserted.

ILOM 3.0 Issues

The following issues are specific to ILOM 3.0. Additional ILOM 3.0 information is available in *Sun Integrated Lights Out Manager (ILOM) Feature Updates and Release Notes*.

- "The System Shuts Down When CPU Temperature Rises Without SEL or LED Notification (6790299)" on page 15
- "Do Not Start New Flash Process While SP Is Already in a Flash Process (6778713)" on page 15
- "ILOM Update To or From ILOM 3.0 Causes BIOS Version to Not Be Viewable (6789995)" on page 16

The System Shuts Down When CPU Temperature Rises Without SEL or LED Notification (6790299)

When the CPU temperature reaches its upper critical limit, the system shuts down, though there is no event logged in the system event log (SEL) and the Tempfail LED does not light.

Do Not Start New Flash Process While SP Is Already in a Flash Process (6778713)

While the SP is being updated (flashed), do not start a new flash process. Wait until the current flash is completed before you start a new one.

ILOM Update To or From ILOM 3.0 Causes BIOS Version to Not Be Viewable (6789995)

When ILOM is downgraded from ILOM 3.0 to ILOM 2.0 or upgraded from ILOM 2.0 to 3.0, the BIOS version might not appear in the Firmware Upgrade section of the web interface. TABLE 2 indicates when you can expect to see the BIOS version visible in the Firmware Upgrade section of the ILOM web interface.

TABLE 2 When BIOS Viewable in Web Interface

ILOM State	BIOS Update Required?	Existing BIOS Version Viewable in Web Interface?	New BIOS Version Viewable in Web Interface?
Upgraded from 2.0 to 3.0	Optional	No	Yes
Downgraded from 3.0 to 2.0	Mandatory	No	No

Workaround

If you can not get the BIOS version from web interface while it is updating, you can view the BIOS version connected with the ILOM version from these product notes. See "Tools and Drivers DVD" on page 4.

If the BIOS is currently running and not in update mode, you can obtain the BIOS version from BIOS Setup utility or CLI.

System Management General Issues

The following issues are related to ILOM system management.

- "Correctable Errors Incorrectly Listed in the ILOM SEL as a Critical Error" on page 17
- "Time on SP Resets to January 1, 1970, When the System is Power-Cycled (6739395, 6739868)" on page 17
- "Must Be Physically Present When Logging Into Serial Console With the Default Account" on page 17

Correctable Errors Incorrectly Listed in the ILOM SEL as a Critical Error

Correctable errors detected by the background scrubber in ILOM: 3.0.3.30 build r48374 are incorrectly listed in the ILOM system event log (SEL) as a critical error with the following description:

```
Memory Scrub Failed
```

These messages are caused by Correctable ECC Error, which should have a severity of minor, not critical. This SEL message will be fixed in a future release.

Time on SP Resets to January 1, 1970, When the System is Power-Cycled (6739395, 6739868)

ILOM stores the time in a file every 15 minutes. After the system reboots, the time is restored to whatever time was last written to that file plus a small delta. So in most cases, major events have timestamps that are monotonically increasing.

During boot process, the date might temporarily be displayed as January 1, 1970. This will automatically change to the current time once the boot process reaches the timestamp file check.

Must Be Physically Present When Logging Into Serial Console With the Default Account

Physical presence is required when you try to log in with default account from the serial console. You will need to press the Locate button twice for the system to recognize your physical presence.

System Management Virtual Device Issues

The following issues are related to a virtual device connected to the Integrated Lights Out Manager (ILOM) remote console system:

- "Minimum Supported Version for a Remote Sparc System" on page 18
- "Some Virtual USB Flash Devices Do Not Mount in Solaris" on page 18

- "Solaris Remote Console Session Requires Java Plug-in" on page 18
- "Select the Web Interface Time-out Duration" on page 19
- "Select Mouse Mode Settings According to Host OS" on page 20
- "Switch Control Between Local Mouse and Host Mouse" on page 20
- "Pop-ups Must Be Enabled to Run Remote Console on Firefox" on page 20
- "Remote Console and Virtual Devices on Solaris" on page 20
- "There is No Java Support for Red Hat Enterprise Linux 5" on page 20
- "Virtual Media Considered a USB Device" on page 21
- "Enable Virtual CD ROM During Bootup" on page 21
- "Remote OS Installation Over a Remote Console Requires Unmount and Remount of the Virtual CD-ROM" on page 21
- "OS Installation Stops During a Remount of the CD- ROM" on page 21

For more information on the ILOM, see the online *Sun Integrated Lights Out Manager 2.0 User's Guide.*

Minimum Supported Version for a Remote Sparc System

When running the web interface from a Sparc-based system, Solaris 10 is the minimum version that is supported.

Some Virtual USB Flash Devices Do Not Mount in Solaris

For some USB flash devices, the virtual device will appear mounted in the ILOM, but will not actually be mounted. This issue is under investigation.

Solaris Remote Console Session Requires Java Plug-in

When you launch a Remote Console session on a Solaris system, the system prompts you for a decision regarding the `javaRKVM.jnlp` file. You have the following two options:

- If you are logged in as root, choose the option to open this file with its default application.

- If you are logged in as a user other than root, do the following:

1. **Choose the option to save the file.**

   The `javaRKVM.jnlp` file is downloaded and must be run manually. The download manager will displays the location of this file.

2. **Move the** `javaRKVM.jnlp` **file to the** `/tmp` **directory.**

   % **mv /*location_of_javaRKVM.JNLP*/javaRKVM.JNLP /tmp**

   Where *location_of_javaRKVM.JNLP* is the directory where `javaRKVM.JNLP` resides.

3. **To find the location of the javaws application, type the following in a terminal window:**

   % **which javaws**

4. **Execute the following command from the terminal window:**

   % **/*location_of_javaws*/javaws /tmp/javaRKVM.JNLP**

   Where *location_of_javaws* is the directory where `javaws` resides.

   Example:

   Assume the `javaws` application is run from the `/usr/bin` directory:

   % **/usr/bin/javaws /tmp/javaRKVM.JNLP**

This will open a Remote Console session. Once the remote console window is closed, the `/tmp/javaRKVM.jnlp` is removed.

Select the Web Interface Time-out Duration

It is best to select the web interface time-out duration when performing remote installations. To choose the web interface time-out duration:

1. **Login to the ILOM web interface.**
2. **Click the System Information Tab and click the Session Time-out Tab.**
3. **Set timeout to be 15 minutes, 30 minutes, 1 hour, or 3 hours.**
4. **Click apply.**

Select Mouse Mode Settings According to Host OS

You need to select the correct mouse mode corresponding to the host OS in order for your local mouse to manage the host remotely via the ILOM web interface.

1. **Select the appropriate mouse mode:**
   - Select Absolute mouse mode if your host is running Windows OS or Solaris
   - Select Relative mouse mode for Linux OS.
2. **Reset the SP to apply this change.**

Switch Control Between Local Mouse and Host Mouse

In order to switch control between local mouse and host mouse, you can press "Alt +m".

Pop-ups Must Be Enabled to Run Remote Console on Firefox

If you have a pop-up blocker enabled in the browser that is running the remote console through the ILOM web interface, the remote console will be blocked from launching on Firefox. If you don't see the remote console, check to see if the built in pop-up blocker has blocked it.

Remote Console and Virtual Devices on Solaris

If you are running Solaris on your remote console system, you must log into the operating system as root (superuser) to mount any virtual devices.

There is No Java Support for Red Hat Enterprise Linux 5

There is no Java support for Red Hat Enterprise Linux 5.

Virtual Media Considered a USB Device

Virtual Media is considered as a USB device, and is listed as a CD-ROM device. This setting over-rules any CD-ROM currently set as a USB device.

Enable Virtual CD ROM During Bootup

In order to enable Virtual CD-ROM during bootup:

1. **Press F2 to enter into BIOS menu.**
2. **Select Boot -> CD/DVD Drives.**
3. **Select Virtual CDROM as the first drive.**

Remote OS Installation Over a Remote Console Requires Unmount and Remount of the Virtual CD-ROM

When installing an operating system remotely using an Remote Console session, each CD request from an installation requires the user to unmount and remount the Virtual CD-ROM. When a Virtual CD is ejected, the OS treats it as a USB device removal, and it must be remounted to continue the installation.

OS Installation Stops During a Remount of the CD- ROM

The remounting of the CD during an operating system installation causes an error and the OS cannot access the CD. This will be fixed in a future release.

System Management Browser Issues

The following issues are contained in this section:

- "Minimum Supported Browsers" on page 22
- "Configuring Java Runtime Environment for Each Browser" on page 22
- "Streaming Video and Remote Console" on page 23

Minimum Supported Browsers

The following table shows the minimum versions that are supported for running the ILOM web interface for the Sun Fire X4250 server on Solaris, Linux and Windows operating systems.

TABLE 3 Version Numbers for Browsers

	Solaris X86	RHEL 32-bit	RHEL 64-bit	SLES 32-bit	SLES 64-bit	Windows
Mozilla	1.7	1.7.12	1.7.13	1.7.8	1.7.13	N/A
Firefox	1.5.0.4	1.0.7	1.5.0.4	1.5.0.4	1.5.0.4	1.5.0.4
Internet Explorer	N/A	N/A	N/A	N/A	N/A	6

Configuring Java Runtime Environment for Each Browser

Java Runtime Environment (JRE) 5 Update 7 is the minimum supported version for the browsers to run the ILOM web interface. Follow the steps below to download the JRE 5 Update 7 for Mozilla and Firefox browsers.

1. **Go to the following URL:**

   `http://www.java.sun.com/`

2. **Click on the Get Java Software button.**

3. **Click Download Now in the new window that opens.**

   The web site will display the appropriate plug-in options for the operating system that you are running.

4. **Click Download to download the appropriate plug-in.**

   Installation instructions and plug-in verification are also available on this site.

Streaming Video and Remote Console

The Remote Console feature of the ILOM SP is designed for administering your system. Applications requiring heavy video bandwidth (for example, watching videos) will not perform well with the Remote Console.

Diagnostics Issues

The following topics are contained in this section:

- "SunVTS Issues" on page 23
- "Pc-Check Issues" on page 23

SunVTS Issues

The following issue applies to SunVTS diagnostics software.

SunVTS 7.0 ps2 Does Not Support Network Loopback Testing

Running the "Network" test on the X4250 platform will fail due to lack of support in Solaris for the ESB-2 nic loopback operations.

This will be fixed in a future version of SunVTS 7.0.

Pc-Check Issues

The following issues apply to Pc-Check software version 6.0.5:

- "Pc-Check Fails to Identify RAID Devices" on page 24
- "Pc-Check Will Hang When Running Keyboard LED Test" on page 24
- "Serial Port Test Fails" on page 24
- "Selecting Standby Power in APM Menu Fails to Recover" on page 24

- "Keyboard Input Lost After Running USB Controller Test" on page 24
- "System Hangs After Interrupt Controller Test" on page 24
- "User Has to Agree to the Licensing Terms Every Time" on page 25

Pc-Check Fails to Identify RAID Devices

After creating a RAID 1 device in the BIOS, the Pc-Check diagnostics software fails to identify the device as a RAID device. Pc-Check can not identify that the device as RAID device, but Pc-Check can run all HDD tests.

Pc-Check Will Hang When Running Keyboard LED Test

The text for the keyboard LED test is not included in the diagnostics scripts. It can only can be run manually. This issue is under investigation and you should not attempt to run this test until a fix is available.

Serial Port Test Fails

This issue is under investigation and you should not attempt to run this test until a fix is available.

Selecting Standby Power in APM Menu Fails to Recover

This issue is under investigation and you should not attempt to run this test until a fix is available.

Keyboard Input Lost After Running USB Controller Test

This issue is under investigation and you should not attempt to run this test until a fix is available.

System Hangs After Interrupt Controller Test

This issue is under investigation and you should not attempt to run this test until a fix is available.

User Has to Agree to the Licensing Terms Every Time

This issue is under investigation.

Sun Installation Assistant Issues

The following issues are related to the use of Sun Installation Assistant (SIA) for installing an OS on the server:

- "Minimum SIA Version Required For Windows Server 2008" on page 25
- "Installing Windows Server 2003 Using SIA From a NFS Share or FTP Share Does Not Work" on page 25
- "Monitor Resolution Might Need to be Reset After Installing Linux Using SIA" on page 26
- "Unusable Network Drivers for RHELv5.1 64-bit With Sun Installation Assistant" on page 26

Minimum SIA Version Required For Windows Server 2008

In order to install Windows Server 2008 on a Sun Fire X4150 server using SIA, you will need to use SIA version 2.2.1 or later.

For further information on using SIA to install an operating system onto the server, see *Sun Installation Assistant for Windows and Linux User's Guide* available on `http://docs.sun.com`.

Installing Windows Server 2003 Using SIA From a NFS Share or FTP Share Does Not Work

Installing Windows Server 2003 from a NFS share or FTP share does not work with SIA.

This is planned to be fixed in a future release of SIA.

Monitor Resolution Might Need to be Reset After Installing Linux Using SIA

For most Linux installations using SIA, the monitor resolution will need to be reset during the first-time-boot configuration, which runs after the OS installation is completed.

To reset the monitor resolution:

1. **Configure the type (make/model) of the monitor.**
2. **Set the correct monitor resolution.**

Unusable Network Drivers for RHELv5.1 64-bit With Sun Installation Assistant

After installing and configuring Red Hat Enterprise Linux (RHEL) v. 5.1 (64-bit), the network devices are there and mapped as expected, but the interfaces are non-functional.

This issue occurs with the following configuration:

- Network cables are not plugged into all NICs.

  If the network cables are plugged in all NICs, this problem does not occur.
- User chooses to activate all NICs on boot.

  If user chooses to activate only the NIC with network cable plugged, this problem will not occur.
- User configures all NICs with static IP addresses.

  This problem will not occur if DHCP is chosen.
- User configures the same network/gateway for all NICs.

  If different networks are configured for different NICs, this problem is not seen.

Workaround

After booting the installed system, perform the following:

1. **Log in as root.**

2. **Enter the `ifdown` command for all the interfaces.**

   ```
   ifdown eth0
   ifdown eth1
   ifdown eth2
   ifdown eth3
   ```

3. **Enter the `ifup` command for the interface with network cable plugged in.**

   For example:

   ```
   ifup eth0
   ```

   At this point, the network should be up and running.

4. **To make this configuration persistent across reboots, you can make only the interface with network cable active on boot by doing the following:**

   a. **Change to the `network-scripts` directory.**

      ```
      cd /etc/sysconfig/network-scripts
      ```

   b. **For the NICs that are not being used, edit the `cfg-eth[1...n]` file and change the line `ONBOOT=yes` to `ONBOOT=no`.**

Note – Keep the `ONBOOT=yes` setting for the NIC with the network cable.

Solaris Issues

This section contains issues that apply to Sun Fire X4250 servers running the Solaris 10 operating system.

Issues contained in this section:

- "Do Not Install the STK 15872 Driver for Solaris 10 5/09" on page 28
- "Solaris Xserver and NIC Interfaces" on page 28
- "Some KVM Switches Out of Sync Following Solaris Installation" on page 28

Do Not Install the STK 15872 Driver for Solaris 10 5/09

Do not install the driver from the Tools and Drivers CD if you are running Solaris 10 5/09. The Sun StorageTek RAID driver is included in the Solaris 10 5/09 distribution. The STK 15872 driver on the Tools and Drivers CD can be used for previous versions of Solaris.

Solaris Xserver and NIC Interfaces

In order to start the Solaris Xserver, all of the configured network interface cards (NIC) must be connected to the network. If a NIC is not configured, it does not need to be connected.

Some KVM Switches Out of Sync Following Solaris Installation

When installing Solaris 10 6/06 in a rack with a KVM switch, the monitor might go out of sync when the xserver starts to log into the operating system.

Possible Workarounds:

1. **Install Solaris in text mode, then do the following:**
2. **Run the** `install.sh` **script from the Tools and Drivers CD.**
3. **Reboot the server.**

   Running install.sh resolves the issue, as it installs the updated AST2000 VGA driver. See the *Sun Fire X4250 Server Operating System Installation Guide,* for additional instructions on running the `install.sh` script for Solaris.
4. **Use KVMS over IP with the Integrated Lights Out Manager (LOM) GUI.**

   See the *Sun Integrated Lights Out Manager 2.0 User's Guide,* for additional instructions on KVMS over IP.
5. **Install Solaris in GUI mode, then do the following:**
6. **Boot failsafe or kill the Xserver prior to starting.**
7. **Run the** `install.sh` **script on the Tools and Drivers CD.**

   See the *Sun Fire X4250 Server Operating System Installation Guide*, for additional instructions on running the `install.sh` script for Solaris.

Linux Issues

The following issues apply to Sun Fire X4250 servers running the supported Red Hat or SUSE Linux operating systems.

- "Need to Manually Install LSI Driver on SLES Systems" on page 29
- "Red Hat 5 (64-bit) Does Not Support a 2 TB Single Volume Configuration" on page 29
- "Tools and Drivers CD Cannot Be Executed Using Automount on Red Hat 5" on page 30
- "Keystrokes Auto-Repeat" on page 30
- "How to Mount a Virtual USB Drive in RHEL5" on page 30

Need to Manually Install LSI Driver on SLES Systems

LSI drivers need to be manually installed on SLES systems.

To install the LSI drivers manually:

1. **Locate and download the LSI drivers from the Tools and Drivers CD.**
   a. **Go to** `\drivers\linux\RAID\LSI\drivers` **directory.**
   b. **Copy the** `RHEL4_SLES9.tar.gz` **or** `RHEL5_SLES10.tar.gz` **file to your system.**
   c. **Unzip and untar the file and locate the** `mptlinux-`*xxx*`.rpm` **file.**
2. **Use the** `rpm -i mptlinux-xxxxxx.rpm` **to install the driver.**
   The command `install.sh` will not install this driver.

Red Hat 5 (64-bit) Does Not Support a 2 TB Single Volume Configuration

You will need to break the volume up into separate partitions, so that the file system for each is under 2 TB.

Tools and Drivers CD Cannot Be Executed Using Automount on Red Hat 5

If the user inserts the Tools and Drivers CD and automounts it, the CD will be mounted with noexec attribute and you cannot execute anything off of the CD - like the install.sh scripts. The user MUST manually mount the cd (via 'mount /dev/cdrom /mnt' or some variation).

Keystrokes Auto-Repeat

When typing characters on a Linux operating system running on the Sun Fire X4250 server, the keystokes will auto-repeat. You can use the following workaround or install an updated kernel from Red Hat, see RHSA-2006:0710-7 at the following URL:

http://rhn.redhat.com/errata/RHSA-2006-0710.html

Workaround:

1. **Select Preferences - > Keyboard from the desktop menu.**
2. **Uncheck the selection: keyboard repeats when key is held down.**

How to Mount a Virtual USB Drive in RHEL5

1. **Edit the file** `/usr/share/hal/fdi/policy/10osvendor/20-storagemethods-fdii`
2. **Search for the following string: "**`<match key="volume.fsusage" string="filesystem">`**", which precedes the following commands:**

```
<append key="volume.mount.valid_options" type=
"strlist">codepage=</append>
<append key="volume.mount.valid_options" type=
"strlist">iocharset=</append>
<append key="volume.mount.valid_options" type=
"strlist">umask=</append>
<append key="volume.mount.valid_options" type="strlist">uid=
</append>
</match>
</match>
```

3. **Enter the following below the commands listed in step 2:**

```
<!-- Added for the issue that virtual ISO image can't be
shown -->
<!-- as an icon when this virtual device is inserted to REHL5
system -->

<match key="@block.storage_device:storage.vendor" string=
"Virtual">
<match key="@block.storage_device:storage.model" string=
"DVD/CD-ROM">
<match key="info.category" string="volume">
<match key="block.is_volume" bool="true">
<match key="volume.fsusage" string="">
<merge key="volume.fsusage" type="string">filesystem</merge>
<merge key="volume.fstype" type="string">iso9660</merge>
</match>
</match>
</match>
</match>
</match>
```

4. **Reboot the system.**

Windows Issues

The following issues apply to Sun Fire X4250 servers running the supported Windows operating systems.

- "LSI MegaRaid Storage Manager Does Not Work Properly With Intel Network Connections in Windows Server 2003 64-bit" on page 32
- "Adaptec Driver Cannot Be Updated With the Tools and Drivers CD v2.2.1 (and earlier) Auto Install" on page 32
- "Installing the Operating System to Enable Reburn Test" on page 33
- "LSI Backplane SAS Expander Does Not Install With One-click Autorun" on page 33
- "Initial Setup of the Factory-Installed Windows Server 2003 R2 Operating System" on page 34
- "Recovering the Windows Server 2003 Operating System" on page 34
- "Correction to Documentation Describing How To Install Intel PROSET Teaming Utility" on page 34
- "SAS Backplane Expander Requires LSI Driver" on page 35

LSI MegaRaid Storage Manager Does Not Work Properly With Intel Network Connections in Windows Server 2003 64-bit

After installing the MegaRaid Storage Manager and Intel Network Connections (NIC Teaming), the `mrmonitor` service stops unexpectedly and cannot start. This affects servers running Windows Server 2003 64-bit.

Workaround

Do not install the NIC Teaming software if the LSI Storage Manager software is required.

Adaptec Driver Cannot Be Updated With the Tools and Drivers CD v2.2.1 (and earlier) Auto Install

The Adaptec driver cannot be updated with the Tools and Drivers CD v2.2.1 (and earlier) auto install on Windows Server 2003 (32-bit/64-bit) and Windows Server 2008 (32-bit/64b-bit).

Workaround

Manually install this driver as follows:

1. **Open the Windows Device Manager.**
2. **Right click the device with yellow question mark.**
3. **Choose Update Driver.**
4. **Find the driver in** `\drivers\windows\RAID\StorageTEK\2003` **or** `\drivers\windows\RAID\StorageTEK\2008`**.**
5. **Click OK to install the driver.**

Installing the Operating System to Enable Reburn Test

In order to be able to run the reburn diagnostics test, you must install the OS on the C: drive of the server.

LSI Backplane SAS Expander Does Not Install With One-click Autorun

The Windows Server 2003 (32- and 64-bit) LSI backplane SAS expander cannot be installed with the one-click autorun drivers installation.

Workaround

Manually install the driver as follows:

1. **With the Tools and Drivers DVD inserted, click Start --> Control Panel --> System -->Hardware (tab) --> Device Manager.**
2. **Click to expand the "Other Devices" denoted by yellow question mark banner.**

   You will see device "LSILOGIC SASX28 A.0 SCSI Enclosure Device" listed.
3. **Right-Click this device and select "Update driver..."**

   You will be asked if you want Windows Update to search for software.
4. **Choose "No, not this time" and click "Next".**
5. **Choose "Install from a list or specific location (Advanced)" and click Next.**
6. **Click "Include this location in the search" checkbox then browse to the following path on your Tools and Drivers DVD:**

   `<DVDDrive>:drivers\windows\RAID\LSI\2003_`*xx*

   where *xx* represents 32-bit or 64-bit operating system.
7. **Click "Next".**

   The driver installs.
8. **Click "Finish" to complete.**

Initial Setup of the Factory-Installed Windows Server 2003 R2 Operating System

Servers shipped with the factory-installed Windows Server 2003 R2 operating system include a Getting Started Guide. Read this guide before performing the initial setup of the Windows Server 2003 R2 operating system. For initial setup procedures, refer to the *Sun x64 Servers Windows 2003 R2 Preinstall Release Notes*.

Recovering the Windows Server 2003 Operating System

If you need to restore your system to the default factory-installed Windows operating system, follow the directions in the *Sun x64 Servers Windows Server 2003 R2 Recovery Installation Guide* enclosed in the optional recovery media kit and posted online. If you do not have the recovery media kit, contact your support representative.

Correction to Documentation Describing How To Install Intel PROSET Teaming Utility

The *Sun Fire X4250 Server Operating System Installation Guide* includes directions on installing NIC Teaming drivers in Windows Server 2003 that are inaccurate. Follow the instructions listed below for proper NIC Teaming software installation:

1. **Install the Ethernet drivers from the Tools and Drivers CD Version 1.1, using your preferred method:**
   - Autorun — Insert the Tools and Drivers CD and from the Autorun menu, choose `Install/Update drivers and optional packages`.
   - Manually — Access the Ethernet properties and update the driver manually through Device Manager.
2. **Once the Ethernet cards have been installed and IP addresses assigned, run the Proset installer.**

   The installer is found on the Tools and Drivers CD (starting at version 1.1) in the following location:

   `drivers\windows\IntelNic\2003\PROSET\2003_`*xx*

   Where *xx* is 32 or 64 bit, use the `PROSETDX.msi` installer.
3. **Follow the instructions on your screen and choose the** `Advanced Network Features` **from the displayed list of options.**

4. **To access the PROSET Teaming options, access the Ethernet Card through Device Manager and choose** `Properties`**.**

5. **The new tabs installed will be,** `Teaming` **and** `VLAN`**.**

SAS Backplane Expander Requires LSI Driver

If you have a SAS backplane expander installed on your Windows server, you need to install an LSI driver. Install the LSI Driver using one of methods listed below:

- **Use the Tools and Drivers CD to execute auto run to install LSI driver.**
- **Install the LSI driver manually using the Tools and Driver CD as follows:**

  a. **Insert the Tools and Drivers CD into the system DVD drive.**

  b. **Click on Start-> Control Panel-> System-> Hardware->Device Manager.**

  c. **Find LSI SAS expander listed under other devices**

  d. **Right click the LSI SAS expander and select update driver.**

  e. **Choose "install from a list or specific location".**

  f. **Browse to the following location on the Tools and Drivers CD**

  `drivers\windows\RAID\LSI\2003_`*xx*

  Where *xx* is 32-bit or 64-bit.

LSI 3081E Host Bus Adapter Issues

The following issues relate to Sun Fire X4250 servers with the LSI 3081E HBA installed.

- "HDD Space Required When Upgrading to a Mirror Configuration" on page 36
- "Only Upgrade Path That Supports Data Merging" on page 36
- "Server Might Hang With RAID Configuration in Sync Mode" on page 36

HDD Space Required When Upgrading to a Mirror Configuration

You must leave 100MB of free unpartitioned space at the end of the hard disk if you plan on upgrading to a Mirrored configuration.

Only Upgrade Path That Supports Data Merging

The only upgrade path that supports data merging is from a single disk to a mirror. This is a limitation of the card. If you wish to upgrade from a single disk to an IMe (Integrated Mirror Extension) or an IMS (Integrated Mirror Stripe), the operating system and its data will be lost and a reinstall/restore will be required.

Server Might Hang With RAID Configuration in Sync Mode

When a RAID set of disks is in sync mode, the server might hang if a reboot is issued. This hang will cause the disk to lose its RAID configuration. Do not reboot while a sync is in progress. This issue is being investigated.

StorageTek SAS Controller Issues

The following issues relate to Sun Fire X4250 servers with the Sun StorageTek SAS Controller installed.

- "HBA Driver and Firmware Upgrades to 16732 Firmware" on page 37
- "Use StorageTek BIOS Setup Utility to Initialize Drives and Create Array Before Accessing With the OS" on page 38
- "RPM Must Be Installed Before Installing StorageTek Management Software on Red Hat Linux 5" on page 38

HBA Driver and Firmware Upgrades to 16732 Firmware

The controller firmware can be flashed using Adaptec Storage Manager (ASM) or the flash utility (AFU) that is included on the Tools and Driver CD.

Use one of the following procedures to flash the firmware:

- "Using AFU To Flash Firmware with CD" on page 37
- "Using AFU To Flash Firmware with Floppy" on page 37

Using AFU To Flash Firmware with CD

1. **Boot from the Sun Fire X4250 Server Tools and Drivers DVD.**
2. **At the main menu screen prompt, type 3 to go into DOS.**
3. **Change the directory to** `firmware\SST\`
4. **Type** `flash.bat`**, then press Enter to launch the SRL card firmware update GUI.**
5. **In the Adaptec flash utility, select Controller, and then select the operation 'Update flash images'.**
6. **Make sure that the directory for the flash image is correct, and press OK to begin flash new firmware for your card.**

Using AFU To Flash Firmware with Floppy

1. **Copy each** `*.ufi` **file individually to a separate floppy disk.**

   If you don't do this, you might encounter read errors from one of the files when flashing the controller.
2. **Shut down the operating system and reboot to DOS from a bootable floppy disk.**
3. **Insert the floppy with the update files.**
4. **Run the flash utility program named AFU.EXE to backup the current BIOS and flash the new BIOS image.**

For instructions on how to update the firmware using Adaptec Storage Manager (ASM), refer to the ASM User's Guide or the ASM online help.

Use StorageTek BIOS Setup Utility to Initialize Drives and Create Array Before Accessing With the OS

Before the operating system can use hard disks attached to a StorageTek SAS Controller, the drives must first be initialized and the array created using the StorageTek BIOS setup utility. The StorageTek BIOS setup utility can be accessed using the Ctrl-A keystroke combination during server POST.

RPM Must Be Installed Before Installing StorageTek Management Software on Red Hat Linux 5

To install the StorageTek Management Software on Red Hat Linux 5, an rpm must first be installed. This is because Java is not supported in Red Hat Linux 5. Use the rpm that applies to your operating system installation:

- `xorg-x11-deprecated-libs-6.8.1-23.i386.rpm` for 32 bit OS
- `xorg-x11-deprecated-libs-6.8.1-23.EL.x86_64.rpm` for 64bit OS

They can be found in the `/drivers/linux/RAID/StorageTEK/MGMT/`*version* folder on the Tools and Drivers CD. Copy the appropriate rpm file to your Red Hat 5 system and run the **`rpm -install`** command.

Sun 10G Network Adapter Issues

The following issues relate to Sun Fire X4250 servers with the Sun 10G Network Adapter installed.

- "Not Enough Space to Copy PCI Option ROM When PCI-Express Slots Are Fully Populated" on page 39
- "Sun 10G Network Adapter Might Require a Firmware Update to Version 3.12" on page 39

Not Enough Space to Copy PCI Option ROM When PCI-Express Slots Are Fully Populated

When PCI-Express slots are fully populated, there is a limitation on the size of the option ROM card that can be installed. If the server runs out of option ROM space, it displays a message similar to the following:

```
Not enough Space to copy PCI Option ROM
```

Workaround

If you encounter this message, do the following to disable some of the option ROMs:

1. **Press F2 to enter the BIOS Setup Utility.**
2. **Select Advanced -> PCI Configuration.**
3. **Selectively disable the PCI option ROMs.**

Sun 10G Network Adapter Might Require a Firmware Update to Version 3.12

The Sun 10G network adapter can require a firmware update to version 3.12 and later for correct operation in the Sun Fire x4250. The link for this firmware update is below.

http://www.sun.com:80/download/products.xml?id=45a593ce

Documentation Issues

The following issues relate to Sun Fire X4250 server documentation:

- "New Operating System Installation Guides Now Available" on page 40
- "New Operating System Installation Guides Now Available" on page 40
- "Serial Console ttya/ttyb Default for Preinstalled Solaris in Installation Guide Is Incorrect" on page 41
- "Preinstalled Windows Server 2003 Is Not Available at Product Release" on page 41

New Operating System Installation Guides Now Available

An updated installation guide for Solaris 10. Red Hat Enterprise Linux (RHEL), SUSE Linux Enterprise Server (SLES), and VMware ESX Server operating systems is now available. This document combines operating system installation for the Sun Fire X4150, Sun Fire X4250, and Sun Fire X4450 servers. This document is available at:

`http://docs.sun.com/app/docs/prod/sf.x4250`

Windows Operating System Installation Guide Now Available

The following document is now available: *Sun Fire X4150, X4250 and X4450 Servers Windows Operating System Installation Guide*.

The information in this document supersedes the information in the *Sun Fire X4250 Server Operating System Installation Guide*.

Both documents are available at:

`http://docs.sun.com/app/docs/prod/sf.x4250`

Serial Console ttya/ttyb Default for Preinstalled Solaris in Installation Guide Is Incorrect

The *Sun Fire X4250 Server Installation Guide*, 820-4217-10 (v2), states that the default serial management port for setting up preinstalled Solaris is ttyb (COM 2).

The serial management port is now ttya (COM 1).

Preinstalled Windows Server 2003 Is Not Available at Product Release

Chapter 5 of the *Sun Fire X4250 Server Installation Guide*, 820-4217-10 (v2) states that Windows Server 2003 is available as a preinstalled option for Sun Fire X4250 server.

This option will not be available for the initial release of the server, but it will be available at a later date.

Fixed Issues

The following issues have been fixed in the specified Tools and Drivers CD/DVD or Software Supplemental release:

- "Issues Fixed in Tools and Drivers DVD 3.1.1" on page 41
- "Issues Fixed in Tools and Drivers DVD 3.1.0" on page 42
- "Issues Fixed in Software Supplemental 3.0.2" on page 43
- "Issues Fixed in Software Supplemental 3.0.1" on page 43
- "Issues Fixed in Tools and Drivers DVD 3.0" on page 44
- "Issues Fixed in Software Supplemental 2.2.2" on page 44
- "Issues Fixed in Tools and Drivers DVD Version 2.2.1" on page 45
- "Issues Fixed in Tools and Drivers DVD Version 2.2.0" on page 46
- "Issues Fixed in Tools and Drivers DVD Version 1.20" on page 47

Issues Fixed in Tools and Drivers DVD 3.1.1

The following ILOM issues have been fixed in Sun Fire X4250 3.1.1 DVD:

6905018: System Serial Number shows "To Be Filled By OEM" in BIOS set up menu

Issues Fixed in Tools and Drivers DVD 3.1.0

The following ILOM issues have been fixed in Sun Fire X4250 3.1.0 DVD:

- 6810948: Green LED does not blink while SP boots and during the system POST.
- 6862498: Add virtual DIMM presence sensors.
- 6848936: Enable `sensor_history_sys_vps_feature`.
- 6727934: Available power shows 1350 watts but the PSU only has 1100 watts.
- 6687590: Back panel and Locate and Alert LEDs are on when the SP comes up.
- 6713949: Console redirection fails to start.
- 6893206: `xvmoc-compliance-test` fails when a product name has a blank at the end of the string.

The following BIOS issues have been fixed in Sun Fire X4250 3.1.0 DVD:

- 6881539: When the BIOS finds a DIMM correctable error during memory initialization, the BIOS disables the DIMM.
- 6902797: The BIOS and SP treat all emory scrub errors as critical, though there should be two types: correctable and uncorrectable.

Remote KVM Does Not Respond Under Some Circumstances (6818246)

The Remote KVM does respond if the connection is terminated ungracefully due to any of the following actions:

- Changing the SP's management IP address with any existing Java Remote Console (JRC) client sessions running.
- Unplugging a KVMS session JRC client
- Disconnecting the network between a JRC client and the SP.

If the remote KVM session does not respond due to any of these conditions, either reset SP or wait 30 minutes for the remote session to restart.

Issues Fixed in Software Supplemental 3.0.2

The following issue has been fixed in Sun Fire X4150 and X4250 Software Supplemental 3.0.2:

BIOS issues fixed:

- CR 6871221: A server running VMware ESX 4.0 hangs due to a BIOS error.

Issues Fixed in Software Supplemental 3.0.1

The following issues have been fixed in Sun Fire X4150 and X4250 Software Supplemental 3.0.1:

ILOM issues fixed:

- CR6823488 Cannot add an SSH key for automatic password authentication.
- CR6848980 Unable to run `ipmitool -I open sunoem led get` command and view sensors or LEDs via the web at the same time.
- CR6823516 The number 5 cannot be set as a value for retries under `/SP/clients/dns`.
- CR6862166 BMC IP cannot be changed from DHCP to Static in the BIOS setup menu.

BIOS issues fixed:

- CR6870328: Support is needed for Windows 2008 R2 and WLK 1.4 test.
- CR6852923: Modify the system support CLTT mode.
- CR6818362: Windows text-mode setup is unable to correctly detect serial console redirection.

Issues Fixed in Tools and Drivers DVD 3.0

The following issues have been fixed in Sun Fire X4150 and X4250 Software Supplemental DVD:

ILOM Issues fixed:

- 6773373: Varying the value of serial port sharing from SP cannot be reflected by BIOS
- 6787990: Added chassis intrusion inventory for Sun Fire X4150 and X4250 platforms.
- 6789637: Severity of memory configuration error should be minor.

BIOS issues fixed:

- 6804558: Server will not boot the OS with full 64GB memory and 2 dual 10-Gigabit Ethernet Fiber XFP cards (501-7283)
- 6770829: BIOS should provide CSD ACPI structures to the OS.
- 6794234: BIOS splash screen duration is too quick for serial console redirect display to render.
- 6773373: Varying the value of serial port sharing from SP can not be reflected by BIOS.
- 6825225: Unable to update static IP address in BIOS.

Issues Fixed in Software Supplemental 2.2.2

The following issues have been fixed in Sun Fire X4150 and X4250 Software Supplemental 2.2.2:

- CR6805642: Severity of PSU AC lost presence should be critical, not minor.
- CR6804558: Sun Fire X4250 does not boot OS with full 64 GB memory and 2 Dual 10-Gigabit Ethernet Fiber XFP cards (501-7283) installed.

Issues Fixed in Tools and Drivers DVD Version 2.2.1

- CR6771518: The severity should not be critical with a "single-bit error".

  Some non-critical events are marked as "critical". These events are changed to "minor" in Tools and Drivers DVD 2.2.1.

- CR6758579: Receiving memory errors in SEL log to non-decodable address.

  There are some non-decodable addresses of memory error events sent from the system BIOS. This will be fixed to define a field to support the number of DIMM errors.

- CR6767086: Chassis "no usable memory" event appears with incorrect sensor name.

  When you power on the system with no usable memory (no DIMMs), the BIOS reports "no usable memory" and does not power on. The message that appears in the event log uses the incorrect sensor name.

- CR6768737: BIOS Restore on AC Power Loss “Last State” setting does not work.

  When the "Restore on AC Power Loss" is set to "Last State" from BIOS menu, but the last state is not restored.

- CR6774048: BIOS sends a hard reset to the SEL log while the system power is on or the system is power cycled.

  When performing a "power on" action, the BIOS will send out an "initiated by hard reset" event to the SEL log. This is changed to "initiated by power up" in Tools and Drivers CD 2.2.1.

- CR6765946: When a 4x Quad Gigabit Ethernet (375-3481) card and a 1x LSI controller card are installed in the X4250 server, POST is not visible.

  When a 4x Quad Gigabit Ethernet (375-3481) card and a 1x LSI controller card are installed in the X4250 server, and the system is powered on, the screen appears blank. POST is visible through the serial port, but not the system monitor. The issue has been fixed in BIOS 058 by increasing the PCI bus numbers.

Issues Fixed in Tools and Drivers DVD Version 2.2.0

BIOS Issues Fixed

The following issues have been fixed with the BIOS update included on this Tools and Drivers CD:

- CR6787270: There are some problems with configuring the Intel Quad Gigabit Ethernet card
- CR6728704: When the Solaris prtdiag command is run, cards are shown in the wrong slots.
- CR 6743812: When the server is populated with a maximum of 64GB memory (16 x 4GB) and two Neptune option cards are installed, the system hangs up during POST.
- CR6743509: The SMBIOS manufacturer field ends with white space.
- CR6786753: The SATA HDD LED light needs to be implemented via SGPIO.
- CR6782662: BIOS GUID is different than ILOM UUID. These values should be the same.
- CR6750940: Missing memory from the server is not reported as a failure in the SEL.
- CR6710644: Severe uncorrectable ECC DIMM errors do not get reported in the SEL event log of BIOS.

ILOM Issues Fixed

The following issues have been fixed with the ILOM update included on this Tools and Drivers CD:

- CR6721746: ILOM cannot detect failure or rotation stop of the PSU's fan or monitor PSU fault states.
- CR6746140: Abnormal date and time in the description of ILOM message.
- CR6715208: The **`capiledtest get`** command returns wrong status codes.
- CR6742808 Uploading an ILOM .ima file for another platform hangs the system.
- CR6580094: SUN-HW-TRAP: Wrong traps sent for /SYS/PWRGOOD assertion & deassertion.
- CR6762982: `sunHwTrapPowerSupplyOk` message sent when power supply is unplugged.

- CR6698177: ILOM does not allow hyphen "-" character in SNMP community string.

Issues Fixed in Tools and Drivers DVD Version 1.20

Windows One Click Installation of Disk Management Software Does Not Work (CR6786766)

The one-click installation function that uses Windows autorun to install the LSI3081E Management Software and StorageTek Management Software does not work correctly.

This has been corrected in Tools and Drivers DVD 1.2.0.

Workaround

If you do not update to the 1.2.0 Tools and Drivers DVD, you need to manually install the software.