Sun Fire X4170, X4270, and X4275 Servers Product Notes

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Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Contents

Using This Documentation

- **Overview** – Lists known issues for Oracle's Sun Fire X4170, X4270, and X4275 Servers, and includes information about supported software, firmware, and important operating guidelines
- **Audience** – System administrators, network administrators, and service technicians
- **Required knowledge** – Users with an advanced understanding of server systems

Product Documentation Library

Documentation and resources for this product and related products are available at `https://www.oracle.com/technetwork/documentation/oracle-x86-servers-190077.html`.

Feedback

Provide feedback about this documentation at `https://www.oracle.com/goto/docfeedback`.

Sun Fire X4170, X4270, and X4275 Servers Product Notes

This document contains late-breaking information and issues for the Sun Fire X4170, X4270, and X4275 Servers and supplemental Software Release 2.8.1. Each issue is associated with an internal Bug Identification (Bug ID) number that is provided as a reference for Oracle Service personnel. When necessary, Oracle Service personnel can refer to the Bug ID number for additional information about the issue.

These product notes include the following information.

Description	Links
Review the summary of changes in this release.	"Summary of Changes in This Release" on page 9
Review supported hardware.	"Supported Hardware" on page 10
Review supported firmware revisions.	"Supported Firmware Versions" on page 10
Review supported operating systems.	"Supported Operating Systems" on page 11
Learn where to find all product documentation.	"Documentation for Sun Fire X4170, X4270, and X4275 Servers" on page 12
Learn how to download the latest tools and drivers.	"Tools and Drivers for Sun Fire X4170, X4270, and X4275 Servers" on page 12
Review Important Operating Information	"Important Operating Information" on page 12
Review known issues.	"Known Issues" on page 15
Review resolved issues.	"Resolved Issues" on page 33
Learn how to get the latest firmware and software updates.	"Getting Firmware and Software Updates" on page 36

Summary of Changes in This Release

The following updates or changes were included in platform software release 2.8.1 for the Sun Fire X4170, X4270, and X4275 Servers:

- Support for enabling or disabling external USB ports through the BIOS Configuration utility

You can choose to enable or disable the USB ports using the new fields in the Advanced > USB Configuration menu of the utility.

■ Display of timestamps in host console logs to assist in troubleshooting

Supported Hardware

You can find detailed information about supported hardware in these Sun Fire X4170, X4270, and X4275 Servers documents.

■ "About Server Features and Components" in the *Sun Fire X4170, X4270, and X4275 Servers Installation Guide*

■ "About the Sun Fire X4170, X4270, and X4275 Servers" in the *Sun Fire X4170, X4270, and X4275 Servers Service Manual*

Within those documents, you can find information about supported hardware for these and other components:

■ Processors
■ Memory
■ Storage drives
■ Host bus adapters

Supported Firmware Versions

Firmware version 3.2.11.20.b or higher is the minimum required version for the Sun Fire X4170, X4270, and X4275 Servers.

Server firmware versions are updated as needed to correct any known issues; therefore, the supported firmware versions will change over time.

Platform Software Release	ILOM SP Firmware Version	BIOS Firmware Version
2.8.1	3.2.11.20.b	07.06.03.14
2.8	3.2.11.20	7.06.03.14
2.7	3.2.10.22.a	07.06.03.14
2.6.8	3.0.16.36	07.06.03.14
2.6.7	3.0.16.15.j	07.06.03.13
2.6.6	3.0.16.15.i	07.06.03.13

Platform Software Release	ILOM SP Firmware Version	BIOS Firmware Version
2.6.5.1	3.0.16.15.h	07.06.03.10
2.6.5	3.0.16.15.e	07.06.03.10
2.6.4	3.0.16.15.d	07.06.03.09
2.6.3	3.0.16.15.c	07.06.03.07
2.6.2	3.0.16.15.b	07.06.03.06
2.6.1	3.0.16.15.a	07.06.03.04
2.6	3.0.16.15	07.06.03.02
2.5.1	3.0.9.19.e	07.06.02.32
2.4	3.0.9.19.b	07.06.02.30
2.3.1	3.0.9.19.a	07.06.02.23
2.1.1	3.0.6.21	07.06.02.15
2.1	3.0.6.10	07.06.02.15
2.0.1	3.0.3.35.a	07.05.01.01
2.0	3.0.3.35	07.03.00.04
1.4 (latest update for systems running ILOM 2.0)	2.0.2.22	07.04.40.04
1.2	2.0.2.17	07.02.39.01
1.0	2.0.2.9	07.01.38.03

Note - When upgrading the server from Oracle ILOM 2.0 to Oracle ILOM 3.0, you can go directly from Oracle ILOM 2.0 to the latest version of Oracle ILOM 3.0. It is not necessary to upgrade to any intermediate versions of Oracle ILOM 3.0.

Supported Operating Systems

As of supplemental Software Release 2.8.1, the Sun Fire X4170, X4270, and X4275 Servers support the following operating system editions.

- Oracle Unbreakable Enterprise Kernel Release 2 for Oracle Linux 5.11
- Oracle Unbreakable Enterprise Kernel Release 3 for Oracle Linux 6.6 and 7
- Oracle VM 3.3.1

Refer to the *Sun Fire X4170, X4270, and X4275 Servers Linux, VMware, Solaris, and OpenSolaris Operating Systems Installation Guide* (820-5828) for installation instructions for the operating systems listed above, and a complete list of operating systems supported.

> **Note -** The Solaris 10 Operating System is available as a preinstalled option on a server disk drive. For configuration instructions for the preinstalled Solaris 10 Operating System, refer to the *Sun Fire X4170, X4270, X4275 Servers Installation Guide* (820-5827).

Documentation for Sun Fire X4170, X4270, and X4275 Servers

Product documentation, as well as updated Product Notes for the servers, are available at https://www.oracle.com/technetwork/documentation/oracle-x86-servers-190077.html

Tools and Drivers for Sun Fire X4170, X4270, and X4275 Servers

Tools and drivers for the server are shipped with your server as part of the software, including device drivers, RAID management software, and other software utilities for use with your server. If you require updates to the software, you can download the latest operating system package, with updated tools and drivers for the server, from the My Oracle Support web site at:

- https://support.oracle.com

Important Operating Information

This section provides important information related to the operation of the servers.

- "Server Security, Software Releases, and Critical Patch Updates" on page 12
- "Important – Install Latest OS Updates, Patches, and Firmware" on page 13
- "Downloading an OS or Software Applications" on page 14
- "Oracle ILOM Setting Causes Longer Reset and Multiple Reboots" on page 14

Server Security, Software Releases, and Critical Patch Updates

To ensure continued security of your system, Oracle strongly recommends that you apply the latest Software Releases. Server Software Releases include Oracle ILOM, BIOS, and other

firmware updates, often referred to as "patches." Oracle publishes these patches regularly on the My Oracle Support site. Applying these patches will help ensure optimal system performance, security, and stability. You can identify the latest Software Release for your system at `https://www.oracle.com/technetwork/systems/patches/firmware/release-history-jsp-138416.html`.

To download a Software Release, go to My Oracle Support at `https://support.oracle.com`.

Oracle notifies customers about security vulnerability fixes for all its products four times a year through the Critical Patch Update (CPU) program. Customers should review the CPU advisories to ensure that the latest software release updates are applied to their Oracle products. Note that updates for Engineered Systems will be specifically published for a specific Engineered Systems product (that is, you need not look at specific updates for individual software components included in your Engineered System). For more information about the Oracle CPU program, go to `https://www.oracle.com/technetwork/topics/security/alerts-086861.html`.

Oracle also recommends that you update to the latest operating system release when it becomes available. Although a minimum operating system release is supported, updating to the latest OS release will ensure that you have the most up-to-date software and security patches. To confirm that you have the latest OS release, refer to the Oracle Hardware Compatibility Lists. See "Supported Operating Systems" on page 11.

For details about the current system software update, see "Important – Install Latest OS Updates, Patches, and Firmware" on page 13

▼ Important – Install Latest OS Updates, Patches, and Firmware

System software release 2.8.1 is associated with system firmware version 3.2.11.20.b. Newer system firmware versions have a higher number or letter added. For example, a future software release might be associated with system firmware version 3.2.11.20.c.

Some product features are enabled only when the latest versions of patches and firmware are installed. To retain optimal system performance, security, and stability, you must install the latest operating system, patches, and firmware. For further information, see "Getting Server Firmware and Software Updates" in the *Sun Fire X4170, X4270, and X4275 Servers Installation Guide*.

To verify that the firmware is a minimum of 3.2.11.20.b or newer:

1. **Use Oracle ILOM to check the system firmware version.**

   - From the web interface, click System Information → Summary, then view the property information for the System Firmware Version in the General Information table.

- From the CLI, at the command prompt (->) type: `show /System/Firmware`

  For more details, refer to information about viewing system information and inventory in your server administration guide, which is available at http://www.oracle.com/goto/x86admindiag/docs.

2. **Ensure that the firmware version is at the minimum required version, noted above, or a subsequent release, if available.**

3. **If the required firmware version (or newer) is not installed:**

   a. **Download the firmware from My Oracle Support at `https://support.oracle.com`. For more information, see "Getting Firmware and Software Updates" on page 36.**

   b. **Install the downloaded firmware.**

      Refer to the information about performing firmware updates in the *Oracle ILOM Administrators Guide for Configuration and Maintenance*, which is available at `https://www.oracle.com/goto/ilom/docs`. Ensure that you perform the preparatory steps described in that document before updating the firmware.

Note - Occasionally after installing the firmware, the Oracle ILOM web interface cannot display the power state correctly on the power control page. To correct this problem, clear your browser cache before logging in to the Oracle ILOM web interface.

Downloading an OS or Software Applications

You can download an operating system (OS) or software applications for all licensed Oracle products from Oracle Software Delivery Cloud (formerly called Oracle eDelivery). Software is available in zip and ISO formats, which you can unzip or burn to DVDs, respectively. All of the download links on the Oracle Technology Network (OTN) point to the Software Delivery Cloud, making this site the authoritative source for all Oracle OS and application downloads. To access Oracle Software Delivery Cloud, go to `https://edelivery.oracle.com/`

Oracle ILOM Setting Causes Longer Reset and Multiple Reboots

If you have a pending BIOS upgrade, a routine reset takes longer than expected and causes the server to power cycle and reboot several times. This is expected behavior, as it is necessary to

power cycle the server to upgrade the BIOS firmware. If the upgrade includes an FPGA update, the process can take as long as 26 minutes to complete.

A pending BIOS upgrade exists when both conditions are true:

- You update the BIOS and service processor firmware using Oracle ILOM.
- You select the option to Delay BIOS Upgrade.

Caution - If you reboot the server expecting a routine server reset and instead initiate a (delayed) BIOS upgrade, wait until the upgrade is finished. Do not interrupt the process, as this can result in corrupted firmware and server downtime.

Known Issues

For the latest information about known issues on the Sun Fire X4170, X4270, and X4275 Servers, refer to the updated product notes, which are available at the following web site:

https://www.oracle.com/technetwork/documentation/oracle-x86-servers-190077.html

Known open issues are grouped by categories and presented in tables in the following sections:

- "Hardware Known Issues" on page 16
- "BIOS Known Issues" on page 18
- "Oracle ILOM Known Issues" on page 19
- "VMware ESX and ESXi Operating Systems Known Issues" on page 22
- "Oracle Solaris Operating System Known Issues" on page 23
- "Linux Operating Systems Known Issues" on page 25
- "Windows Operating System Known Issues" on page 27
- "Oracle Hardware Installation Assistant Known Issues" on page 30
- "Documentation Known Issues " on page 32

Related Information

- "Supported Firmware Versions" on page 10
- "Resolved Issues" on page 33

Hardware Known Issues

TABLE 1 Hardware Known Issues

Bug ID	Description
27441441	**SP Might Reboot Under Heavy Workload**
	Issue:
	The service processor (SP) on the Sun Fire X4170 M2 Server or Sun Fire X4270 M2 Server might reboot under a heavy workload due to lack of memory caused by a Sun Fire X4170 M2/X4270 M2 Oracle ILOM memory limitation.
	Affected hardware and software:
	■ Sun Fire X4170, X4270, and X4275 Servers ■ Supplemental Releases 2.8 and 2.8.1 ■ Oracle ILOM 3.2.11.20, or later
	Workaround:
	To prevent SP reboots from occurring when upgrading to Oracle ILOM 3.2.x.x, or later (or to prevent SP reboots on a system already upgraded to Oracle ILOM 3.2.x.x, or later), follow these guidelines:
	1. When running the Oracle ILOM Snapshot utiltiy, run the fewest number of command-line interface (CLI) or web interface sessions necessary. Keep only one interface session running, and ideally, run the Snapshot utility using the CLI. Do not run multiple tasks concurrently in different interface sessions.
	2. If you need to run multiple interface sessions, run up to a maximum of five sessions. The five-session limitation can include all CLI sessions, four CLI sessions with one web interface session, or four CLI sessions with one Remote System Console session. Avoid running or trying to open more than one web interface session or more than one Remote System Console session simultaneously with the CLI sessions.
	3. When updating Oracle ILOM, use the `load -source PKG_URL` CLI command with the `PKG_URL` as a TFTP/FTP/SFTP-based protocol. Do not use an HTTP/HTTPS protocol in the package URL, if possible. Avoid updating Oracle ILOM using the web interface by uploading a package file or providing a `PKG_URL`. If the Oracle ILOM update fails, Oracle ILOM will boot into Preboot. Use the CLI `net flash` command to rescue the update with the flash file in the release:
	a. Use the `net config` command to set `ipdiscovery`, `managementport`, and other configurations. (You can list the configuration parameters using the `show` command.)
	b. Use the `net dhcp` command to obtain the IP address if `ipdiscovery` is configured as DHCP.
	c. Use the `net flash TFTP-server-IP-address path-to-flash-file` command to flash Oracle ILOM.
6824822	**Misleading "MB/R#/PCIE#/P" Log Entries When PCIe Card Is Not Present**
	Issue:
	Event log messages are misleading when the host is reset on a server with no PCIe card connected on Riser 2. Present, absent, hot insertion, and removal messages appear in the event log about this absent device while no messages appear about the other PCIe cards that are connected.
	Affected hardware and software:

Bug ID	Description
	■ Sun Fire X4170, X4270, and X4275 Servers
	■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	Upgrade the Oracle ILOM firmware version to 3.0.9.19.a or later.
6912443	**Hard Drives Can Be Difficult to Remove From Right-Side Drive Bays**
	Issue:
	Hard drives in the right-side drive bays can be difficult to remove.
	Affected hardware:
	■ Sun Fire X4170, X4270, and X4275 Servers
	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. See Step 4 in the following figure.
6938599	**Incorrect Ordering Listed on the Top Cover Service Label.**
	Issue:
	The top cover service label (on the lid) of the Sun Fire X4275 has incorrect ordering listed for the Right LED Label. Some systems manufactured before September 2009 also have incorrect labeling on the front right ear. The top cover lists the LED order as:
	■ Rear PS
	■ Temperature
	■ Top Fan
	Affected hardware and software:
	■ Sun Fire X4275 Server
	■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	The correct order is:
	■ Top Fan
	■ Rear PS
	■ Temperature
6795890	**USB Devices Are Not Shown in BIOS Boot Order When Using a CompactFlash Device**
	Issue:
	In rare cases, when a CompactFlash device is connected using the CompactFlash connector, some USB devices might not be accessible in the BIOS boot list.

Bug ID	Description
	Affected hardware and software:
	■ Sun Fire X4170, X4270, and X4275 Servers ■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	Reboot the system. If the problem persists after the reboot, initiate a service call.
6858722	**PCIe Errors Reported with QLE2562 or QLE2560 Card Attached Using Active Riser**
	Issue:
	If the Sun QLogic QLE2562-based, 8 Gigabit/second PCI-E Dual FC Host Adapter (SG-XPCIE2FC-QF8-Z) or Sun QLogic QLE2560-based, 8 Gigabit/second PCI-E Single FC Host Adapter (SG-XPCIE1FC-QF8-Z) is placed in PCIe slot 1, 2, 4, or 5, a stream of correctable PCIe errors will be reported. This can cause performance issues and operating system stability issues due to the large number of errors received.
	Affected hardware and software:
	■ Sun Fire X4270 and X4275 Servers ■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	The Sun QLE2562-based or QLE2560-based cards must be placed in PCIe slot 0 or 3 only.

BIOS Known Issues

TABLE 2   BIOS Known Issues

Bug ID	Description
7005619	**Operating System Might Hang After Running Pc-Check Diagnostics**
	Issue:
	After running Pc-Check, if you attempt to install or boot an operating system, the operating system install or boot might hang.
	Affected software:
	■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	Reboot the system after running Pc-Check and before trying to install or boot an operating system.
6917623	**"EHCI: BIOS handoff failed" Message Appears When Legacy USB Is Enabled**
	Issue:
	The following BIOS error appears in the log during boot:
	`[ 118.727293] 0000:00:1d.7 EHCI: BIOS handoff failed (BIOS bug ?) 01010001....`

Bug ID	Description
	Affected operating systems and software: ■ All supported operating systems ■ Supplemental Releases 1.0 through 2.8.1
	Workaround: There is no workaround. Check for the availability of a patch for this defect.
6839587	**System Will Not Boot From Hard Disk Drive With Unused CF Card Installed**
	Issue: On systems on which an unused Compact Flash (CF) card was factory installed, on the first reboot a blank screen appears after BIOS/POST, the system does not boot the installed OS, and the system hangs.
	Affected operating systems and software: ■ All supported operating systems ■ Supplemental Releases 1.0 through 2.8.1
	Workaround: Use BIOS to modify the boot order so that the system will boot from the desired hard disk drive, not the Compact Flash. To modify the boot order: 1. Go into the BIOS Setup menus (F2 during BIOS POST) and navigate to the Boot tab. 2. Go into Boot Device Priority and change the boot order. 3. Press F10 to save the new settings and exit from BIOS Setup.

Oracle ILOM Known Issues

TABLE 3 Oracle ILOM Known Issues

Bug ID	Description
6913602	**Oracle ILOM Fails to Read DIMM FRU Information When Host Is On**
	Issue: When configured for sideband (SB) network port sharing, in-chip connectivity between the service processor (SP) and the host OS is not supported by the on-board host Gigabit Ethernet controller.
	Affected software: ■ Supplemental Releases 1.0 through 2.8.1
	Workaround: Power off the host before setting `reset_to_defaults=factory`, then reboot the SP.
6779289	**In-Chip Connectivity Between the SP and the Host OS Is Not Supported When Using Sideband Network Port Sharing**
	Issue:

Bug ID	Description
	When configured for sideband (SB) network port sharing, in-chip connectivity between the service processor (SP) and the host OS is not supported by the on-board host Gigabit Ethernet controller.
	Affected software: ■ Supplemental Releases 1.0 through 2.8.1
	Workaround: Use a different port or route to transmit traffic between the source and destination targets instead of using L2 bridging/switching.
6795975	**When Multiple Oracle ILOM Remote Console Sessions Are Open on the Same SP, the KVMS Interface Might Not Work**
	Issue: When multiple Oracle ILOM Remote Console sessions are opened to the same service processor (SP), the additional session's keyboard interface might not work. The first session's keyboard interface is not affected.
	Affected software: ■ Supplemental Releases 1.0 through 2.8.1
	Workaround: ■ Double-click in the Oracle ILOM Remote Console dialog to activate the mouse, then move the mouse. OR ■ In the Oracle ILOM Remote Console menu bar, select Devices → Mouse, then move the mouse.
6800702 6813782	**64-bit JRE Fails to Launch the Oracle ILOM Remote Console**
	Issue: An attempt to start Storage Redirection in Oracle ILOM might fail when using a 64-bit Java runtime environment (JRE). Since the 64-bit JRE is the default on a 64-bit system, you might need to download a 32-bit JRE. When using a 64-bit JRE to start storage redirection, an "Unsupported platform" error will appear.
	Affected software: ■ Supplemental Releases 1.0 through 2.8.1
	Workaround: Install a 32-bit JRE on the 64-bit system. The JRE can be downloaded at: `http://java.com/en/download/index.jsp`
6873660	**Property `write_cache` Is Not Available on Oracle ILOM SP**
	Issue: Certain controllers (for example, Adaptec) enable the user to configure a RAID with the Write_Cache parameter set to predefined values. Irrespective of what this parameter is set to, this property is not available to the user from the Oracle ILOM SP command-line interface (CLI). Ideally this property would reside under `/STORAGE/raid/controller#/raid_id#/`. Currently the Adaptec SDK does not provide this data.

Bug ID	Description
	Affected operating systems and software: ■ Solaris 10 05/09, RHEL 4.8 and 5.3, SLES 10 SP2, SLES 11, and VMware ESX 3.5 U4 ■ Supplemental Release 2.1 through 2.8.1
	Workaround: There is no workaround. Check for the availability of an update.
6875715	**Property `max-disks` Is Always Incorrectly Set to 0 on Oracle ILOM SP**
	Issue: The maximum number of disks that a controller supports is a property of that controller and should be available as part of the Storage Viewer functionality under `/STORAGE/raid/controller#` on the Oracle ILOM command-line interface (CLI). Currently this property value is always set to 0.
	Affected operating systems and software: ■ Solaris 10 05/09, RHEL 4.8 and 5.3, SLES 10 SP2, SLES 11, and VMware ESX 3.5 Update 4 ■ Supplemental Releases 1.0 through 2.8.1
	Workaround: There is no workaround. Check for the availability of an update.
6877654	**Property `raid_global_hotspare` Does Not Display the Correct Information for Certain Controllers and Operating Systems on the Oracle ILOM SP**
	Issue: When a RAID is configured to have a global hotspare using the Adaptec Configuration, the corresponding raid_global_hotspare parameter in Oracle ILOM SP command-line interface (CLI) does not indicate that information. Instead the raid_dedicated_hotspare parameter is displayed as true.
	Affected operating systems and software: ■ Solaris 10 05/09, RHEL 4.8 and 5.3, SLES 10 SP2, SLES 11, and VMware ESX 3.5 U4 ■ Supplemental Releases 1.0 through 2.8.1
	Workaround: There is no workaround. Check for the availability of an update.
6882835 6884652	**Power Management Budget Is Not Supported on RHEL 4.7, 5.3, or 5.4**
	Issue: Multiple issues occur if you try to use the Power Budget feature of Power Management on servers running Red Hat Enterprise Linux (RHEL) 4.7, 5.3, or 5.4. These issues can lead to configured power budgets being exceeded or lower than expected CPU performance.
	Affected operating systems and software: ■ Red Hat Enterprise Linux (RHEL) 4.7, 5.3, 5.4 ■ Supplemental Releases 2.1 through 2.8.1
	Workaround: Do not use the Power Budget feature when running Red Hat Enterprise Linux (RHEL) 4.7, 5.3, or 5.4.

VMware ESX and ESXi Operating Systems Known Issues

TABLE 4 VMware ESX and ESXi Operating Systems Known Issues

Bug ID	Description
6779112	**Misleading Status for Power Supplies Reported by VMware Health Status Screen**
	Issue:
	The VMware Virtual Infrastructure client Health Status screen under the Power component reports the server power supplies in an Off-Line Disabled state and 0 watts, even though the power supplies are on-line and enabled.
	Affected operating systems and software:
	■ VMware ESX 3.5 U4 ■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	While in the VMware Virtual Infrastructure client Health Status screen, click on Other component from the list of available options to view the correct power supply status.
6835570	**Local Storage Drive Is Not Seen After Installing VMware ESXi 3.5 U4**
	Issue:
	If the Sun Fire X4170, X4270, or X4275 Server has a local storage drive attached to the PCI-Express SAS LSI Controller (SG-XPCIE8SAS-I-Z), the local storage drive is not seen by the system after installing VMware ESXi 3.5 U4.
	Affected operating systems and software:
	■ VMware ESXi 3.5 U4 ■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	After completing the ESXi installation, follow these steps to add the local storage drive to the storage inventory: 1. Add the ESXi host to the datacenter of your choice using the Virtual Infrastructure Client. 2. Select the ESXi host added in step one, then click the Configuration tab. 3. In the hardware box (in the upper left of the display), select Storage 4. In the upper right part of the display, click `Add Storage`. 5. Ensure that the Disk/LUN Storage Type is selected, then click `Next`. 6. Highlight the vmhba entry that corresponds to the local storage drive and click `Next`. 7. Select the `Use free space` entry, and then click `Next`. 8. Create a Datastore Name (for example, local_storage), then click `Next`. 9. Adjust the Maximum file size, if needed, then click `Next`. 10. Verify the proposed disk layout, then click `Finish`. The local Virtual Machine File System (VMFS) datastore should now be available for use.

Oracle Solaris Operating System Known Issues

TABLE 5   Oracle Solaris Known Issues

Bug ID	Description
6930223	**Network Case Fails When Running Oracle VTS 7.0PS8**
	Issue:
	When running Oracle VTS 7.0PS8, the network case will fail. The fix has not yet been backported to Oracle Solaris 10. **Note -** Oracle VTS was previosuly referred to as Sun VTS.
	Affected operating systems and software:
	■ Oracle Solaris 10 ■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	Run NIC loopback test with Oracle VTS. You need to use a loopback connector.
6889350	**Oracle Solaris FMA May Fail to Load and Cause Hang on System Shutdown With Particular Memory Configuration**
	Issue:
	With mixed 4GB and 8GB DIMMs present in the same channel (for example, 8GB DIMMs in D2, D5, D8 and 4GB DIMMs in D1, D4, D7), Oracle Solaris Fault Management Architecture (FMA) may fail to start correctly on system boot, and may cause the system to hang or shut down. Services will report that the fma daemon (fmd) is offline.
	Affected operating systems:
	■ Oracle Solaris 10 10/08 ■ Oracle Solaris 10 5/09
	Workaround:
	Place the DIMMs in the following order to ensure that all DIMMs within a given channel are the same capacity: 8GB DIMMs in D1, D4, D7 and 4GB DIMMs in D2, D5, D8. See the Oracle Solaris 10 patch 136914-01 available from the My Oracle Support web site at `https://support.oracle.com`.
6731637	**Boot Disk Size Limitation**
	Issue:
	Versions of Oracle Solaris prior to Oracle Solaris 10 05/09 will not install on a disk device that is greater than 1TB in size.
	Affected operating systems and software:
	■ Oracle Solaris versions prior to Oracle Solaris 10 05/09 ■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	Install the OS on a boot device that is 1TB or smaller. This issue is fixed in Oracle Solaris 10 05/09 and subsequent supported versions of Oracle Solaris.

Bug ID	Description
6836594	**DVD Drive Might Not Be Detected by Oracle Solaris, and Subsequently Not by BIOS**
	Issue:
	In rare cases, when booting the Oracle Solaris Operating System, a USB initialization problem can occur that causes the system's internal DVD drive and any devices attached to the front panel USB ports to go undetected by Oracle Solaris, even though the devices were seen by BIOS. Once this occurs, these devices will fail to be detected by both BIOS and Oracle Solaris for subsequent warm reboots.
	Affected operating systems and software:
	■ Oracle Solaris 10 10/08 ■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	Turn the chassis main power off and then back on. If issues with the DVD or other USB devices persist for multiple consecutive power off/on cycles, then the problem is not due to this known issue. Initiate a service call.
6836590	**High-Speed USB 2.0 Devices Might Not Enumerate Properly**
	Issue:
	In rare cases when booting the Oracle Solaris Operating System, a USB initialization problem can occur that causes high-speed devices to go undetected by Oracle Solaris.
	Affected operating systems and software:
	■ Oracle Solaris 10 10/08 ■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	Reboot Oracle Solaris. If USB enumeration issues persist across multiple consecutive reboots, then the problem is not due to this known issue. Initiate a service call.
6883310	**On Systems Running the Oracle Solaris OS, Setting the Power Management Hardcap Power Limit Prior to Booting the System Does Not Control System Power**
	Issue:
	If you set a power limit with timelimit=0 (none) prior to booting the system and the operating system (OS) is Oracle Solaris 10 05/09, the power limit is not adhered to by the system.
	Affected operating systems and software:
	■ Solaris 10 05/09 ■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	After the OS is booted, do the following:
	1. Disable the budget activation state. 2. Re-enable the budget activation state.

Bug ID	Description
	Note - This action must be taken each time after booting the OS.

Linux Operating Systems Known Issues

TABLE 6   Linux Operating Systems Known Issues

Bug ID	Description
6974818	**Black Screen Shows Occasionally When Booting Oracle Linux 5.4 XEN Kernel**
	Issue:
	During power cycle testing on the Sun Fire X4170, X4270, or X4275 Server, and after several reboots of the Oracle Linux 5.4 XEN kernel, the server will occasionally hang and the screen will go black.
	Affected operating systems and software:
	■ Oracle Linux 5.4 ■ Red Hat Enterprise Linux 5.4 ■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	Update inbox NIC driver version to igb-2.19 or higher.
20367749	**The System Experiences Frequent Hard Resets**
	Issue:
	The system experiences frequent hard resets with Oracle Linux 6.6 when the `freeipmi-bmc-watchdog` (watchdog timer) package is installed.
	Affected operating systems and software:
	■ Oracle Linux 6.6 ■ Supplemental Release 2.6.6 through 2.8.1
	Workaround:
	Append a `-W ignorestateflag` option to the `/etc/sysconfig/bmc-watchdog` configuration file. Then, type the following command with `root` privilege to restart the bmc-watchdog service:
	`service bmc-watchdog restart`
6771120	**Benign Error Messages Might Appear When Using RHEL 5.3**
	Issue:
	When using RHEL 5.3, benign error messages might appear in the boot logs. These benign messages are related to the PCI device probe of the Aspeed video device. Example of benign error messages:
	■ PCI: Ignore bogus resource 6 [0:0] of 0000:20:05.0 ■ PCI: Ignore bogus resource 6 [0:0] of 0000:35:05.0
	Affected operating systems and software:

Bug ID	Description
	■ Red Hat Enterprise Linux (RHEL) 5.3
	■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	These error messages are benign and have no effect on the system stability or performance.
6800672	**ixgbe (1.3.53) Driver Is Not Supported on RHEL 5.3**
	Issue:
	The latest ixgbe (1.3.53) driver from Intel cannot compile on RHEL 5.3 for PCI Express Single (1106A-Z) or Dual (1108A-Z or 1107A-Z) 10-Gigabit Ethernet card unless the setting for Large Receive Offload is disabled.
	Affected operating systems and software:
	■ Red Hat Enterprise Linux (RHEL) 5.3
	■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	Compile with the earlier ixgbe driver (1.3.47).
6801897	**RHEL 4.7 ipmi_si Driver Does Not Load, and IPMI Service Fails to Start**
	Issue:
	IPMI service fails to start. RHEL 4.7 ipmi_si driver does not load with default parameters.
	Affected operating systems and software:
	■ Red Hat Enterprise Linux (RHEL) 4.7
	■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	1. Edit `/etc/modprobe.conf`
	2. Add the following line to change default ipmi_si driver parameters: `options ipmi_si type="kcs" ports=0xCA2 regspacings="4"`
	3. Save changes and exit.
	4. Stop the service: `/etc/init.d/ipmi stop || service ipmi stop`
	5. Start the service: `/etc/init.d/ipmi start || service ipmi start`
6816210	**Intel PCI Express 10Gb Ethernet Cards Might Not Work With Some RHEL 5.3 Inbox ixgbe Drivers**
	Issue:
	There are issues with using RHEL 5.3 inbox ixgbe drivers and Intel PCI Express 10-Gigabit Ethernet cards (with fixed transceivers) I/O devices. The RHEL 5.3 ixgbe drivers are:
	■ 1.3.18-k4
	■ 1.3.47-NAPI
	■ 1.3.56.5
	The Intel I/O devices are:

Bug ID	Description
	■ For Intel 1-port Fiber XFP SR (Oplin): X1106A-Z (PCIe)
	■ For Intel 2-port Fiber XFP SR (Oplin): X1108A-Z (EM) and X1107A-Z (PCIe)
	Affected operating systems and software:
	■ Red Hat Enterprise Linux (RHEL) 5.3
	■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	To use these devices and RHEL 5.3, you will have to update the drivers.

Windows Operating System Known Issues

TABLE 7 Windows Operating System Known Issues

Bug ID	Description
15787147	**Blue Screen Appears When Installing Windows 2008 64-Bit on a System With 2GB DIMMs; Will Only Install When 4GB DIMMs Are Installed**
	Issue:
	Blue screen appears when loading Windows 2008 64-bit on the Sun Fire X4170 Server with 2GB DIMMs installed.
	Affected hardware, operating systems and firmware:
	■ Sun Fire X4170 Server
	■ Windows Server 2008, Version 6.0 (Build 6002, Service Pack 2)
	■ SP Firmware Version 3.0.6.21
	Workaround:
	Use the latest Oracle Hardware Installation Assistant or the Tools and Drivers DVD to download the fixed Adaptec driver V16795, which resolves this issue. **Note -** Oracle Hardware Installation Assistant was previously referred to as Sun Installation Assistant.
6756232	**CompactFlash Card Might Not Be Detected by Windows Setup Utility**
	Issue:
	The Windows Server 2003, 2008, and 2008 R2 Setup Utility copies the system boot files to the first disk found in the boot order. Windows detects the CompactFlash (CF) device as an ATA class device but, it is attached via the USB bus. The drives attached via USB are not supported by Microsoft for Windows Server as system boot devices.
	Affected operating systems and software:
	■ Windows Server 2008
	■ Windows Server 2008R2
	■ Windows Server 2003
	■ Supplemental Releases 1.0 through 2.8.1
	Workaround:

Bug ID	Description
	The CF card must be lower in the Boot Device Priority List than the target disk. For more information, see the BIOS section in the *Sun Fire X4170, X4270, and X4275 Servers Service Manual* (820-5830).
6783538	**Blue Error Screen Might Appear When the InfiniBand Host Channel Adapter Is Disabled in Windows Device Manager**
	Issue:
	If the X4237A InfiniBand Host Channel Adapter card is disabled in Windows Device Manager, Windows Server 2008 stops in a Blue Screen with Bug Check 0x122 - General WHEA Error indicated.
	Affected operating systems and software: ■ Windows Server 2008 ■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	Do not disable the X4237A card in Windows Device Manager. If the card is disabled causing the Blue Screen with Bug Check 0x122, reboot the host system to recover. The X4237A card will be enabled upon reboot. Check for the availability of a patch for this defect.
6803931	**After Installation, Windows Might Have a Device That Is Marked With a Yellow Exclamation Point in the Device Tree Found in Windows Device Manager**
	Issue:
	After installation of Windows Server 2003 on the Sun Fire X4275 Server, Windows might have a device that is marked with a yellow exclamation point (Yellow Bang) in the device tree found in Windows Device Manager. This device will be found under Other Devices in the device tree, and the name of the device is "LSILOGIC SASX28 A.1 SCSI Enclosure Device." Note that there is no functional impact to the system should this occur. The only indication is the Yellow Bang seen in Device Manager. This problem is not encountered in Windows Server 2008.
	Affected hardware, operating systems, and software: ■ Sun Fire X4275 Server ■ Windows Server 2003 ■ Supplemental Releases 1.0 through 2.8.1
	Workaround:
	To resolve the problem, download and install the Sun Fire X4275 Server Tools and Drivers DVD image. 1. Go to the My Oracle Support web site at: `https://support.oracle.com` 2. Download the Tools and Driver package and locate the latest Tools and Drivers CD image or the latest Oracle Hardware Installation Assistant CD image, depending upon your choice of installation method. 3. Install the driver for the LSI SAS x28 Expander (file lsinodrv.inf). This driver can be found on the Tools and Drivers DVD image under Windows\w2k3\i386isi for 32-bit or Windows\w2k3\amd64isi for 64-bit. Once the new driver has been installed, the LSI device is no longer marked with a Yellow Bang, and it can be found under System Devices in Windows Device Manager with the new name of LSI SAS x28 Expander. **Note -** Oracle Hardware Installation Assistant was previously referred to as Sun Installation Assistant.
6820942	**Windows Server 2008 64-bit Does Not Install to Local Disk With a QLogic PCIe Card Installed**

Bug ID	Description
	Issue: When installing Windows Server 2008 to the internal SAS/SATA disk or array on a system that includes a 4 Gigabit/second Dual-Port Fiber Channel PCI-Express Card (SG-XPCIE2FC-QF4), the system might crash and reboot if the option card is attached to an external storage area network (SAN). **Note -** This is not a problem if the target for the operating system is the external SAN.
	Affected operating systems and software: ■ Windows Server 2008 (64-bit) ■ Supplemental Releases 1.0 through 2.8.1
	Workaround: Do not attach the SAN array until after the operating system is installed to local disk(s). Check for the availability of a patch for this defect. This issue was fixed in Windows 2008 Service Pack 2 from Microsoft.
6820950	**LSI MegaRaid Storage Manager Does Not Work Properly When Installed With Intel Network Connections Software in Microsoft Windows Server 2003 64-bit**
	Issue: After installing the MegaRaid Storage Manager and Intel Network Connections (NIC) Teaming, the mrmonitor service stops unexpectedly and cannot start.
	Affected operating systems and software: ■ Windows Server 2003 64-bit ■ Supplemental Releases 1.0 through 2.8.1
	Workaround: Do not install the NIC Teaming software if the LSI Storage Manager software is required.
6856639	**Installation of Windows Server 2008 R2 Stalls During the "Completing installation..." Phase.**
	Issue: There is a potential issue with Sun Fire X4170, X4270, and X4275 Servers when installing Windows Server 2008 R2. During the installation the system stalls at the "Completing installation..." phase of Windows setup. The mouse will still respond, but no progress is made and the installation will not complete. If the system is restarted, setup will be incomplete and must be restarted.
	Affected operating systems and software: ■ Windows Server 2008 R2 ■ In-box Ethernet Controller driver that ships with Windows Server 2008 R2 ■ Supplemental Releases 1.0 through 2.8.1
	Workaround: You can resolve this issue by installing an updated Ethernet Controller driver during the installation procedure so that it replaces Microsoft's in-box driver in Windows Server 2008 and Windows Server 2008 R2. The required updated driver is included on the Tools and Drivers (T&D) DVD for server Software 2.1. Also included on the Tools and Drivers DVD is an AutoUnattend.xml file and the following instructions:

Bug ID	Description
	■ How to copy the AutoUnattend.xml and driver files to a USB thumb drive (or similar removable-media drive) ■ How to use the USB thumb drive to replace the in-box Ethernet Controller driver during the installation of Windows Server 2008 R2 The instructions are in the following directory on the Tools and Drivers DVD: <DVD>\windows\w2k8r2\drivers\readme.html The Tools and Drivers DVD image for Software 2.1 is available for download from the My Oracle Support web site at: https://support.oracle.com. **Note -** Your server shipment might not include the Tools & Drivers DVD. You can download the latest firmware and software from the My Oracle Support web site.
6879304	**Windows Server 2008 R2 Generates System Event Log Warning Messages When Power Is Being Limited by Oracle ILOM Power Management**
	Issue: When power is being limited by the Oracle ILOM Power Management feature, the Windows Server 2008 R2 operating system will generate warning messages in the System Event Log informing the user that the processor(s) are being restricted. Example Event: The Speed of Processor xx in group x is being limited by system firmware. The processor has been in this reduced performance state for xxxx seconds since last report.
	Affected hardware, operating systems, and software: ■ All Sun servers with Power Management support ■ Windows Server 2008 R2 ■ Supplemental Release 2.1
	Workaround: No workaround is needed. These are expected events and are not indicative of a problem.

Oracle Hardware Installation Assistant Known Issues

Note - Oracle Hardware Installation Assistant was previously referred to as Sun Installation Assistant.

TABLE 8   Oracle Hardware Installation Assistant Known Issues

Bug ID	Description
6835303	**Oracle Hardware Installation Assistant Does Not Work Correctly When Installing an ISO Image of the Red Hat Operating System Using NFS**
	Issue:

Bug ID	Description
	If you elect to install the Red Hat operating system from an ISO image that is exported using a network file system (NFS) server, profiles for the Red Hat installation will not be propagated to the installation. This will result in the following behavior: ■ Anaconda will prompt the user for the installation type (desktop, client, server, or minimal). ■ Individual packages will not be pre-selected based on the installation type, and the user will have to select these manually.
	Affected operating systems and software: ■ Red Hat Enterprise Linux (RHEL) 4.x and 5.x ■ Supplemental Releases 1.0 through 2.8.1
	Workaround: When using Oracle Hardware Installation Assistant to install the Red Hat operating system, do not use an ISO image exported using NFS.
6805366	**AHCI Device Driver Is Not Installed if Oracle Hardware Installation Assistant Is Used to Install Windows Server 2003 to RAID**
	Issue: If you are installing to an LSI or Sun StorageTek Raid HBA, Oracle Hardware Installation Assistant might not automatically install the AHCI device driver for Windows 2003 installations. Oracle Hardware Installation Assistant will copy the AHCI device driver to disk (install target) but you might need to install this driver using Windows Device Manager.
	Affected operating systems and software: ■ Windows Server 2003 ■ Supplemental Releases 1.0 through 2.8.1
	Workaround: Any of the following is an acceptable workaround for this issue: ■ Use Windows Device Manager to install the AHCI device driver that was copied to disk (install target). For instructions for using Device Manager to update or install device drivers, refer to the Windows Device Manager documentation. ■ Restart the Oracle Hardware Installation Assistant installation, and accept the automatic Oracle Hardware Installation Assistant updates when presented with the option. ■ Download the latest Oracle Hardware Installation Assistant CD image for this platform from the My Oracle Support web site at `https://support.oracle.com` . Then, restart the installation.
6864864	**Oracle Hardware Installation Assistant Will Cause Kudzu to Be Run for Red Hat 4.7 64-bit Installations With Emulex Cards**
	Issue: When an installed system is booting for the first time, Oracle Hardware Installation Assistant unintentionally causes Kudzu, a Red Hat hardware configuration utility, to be run for Red Hat 4.7 64-bit installations with Emulex cards.
	Affected operating systems and software: ■ Red Hat Enterprise Linux 4.7 64-bit ■ Supplemental Releases 2.1 through 2.8.1

Bug ID	Description
	Workaround:
	Configure the Emulex cards through the Kudzu interface.

Documentation Known Issues

TABLE 9   Documentation Known Issues

Bug ID	Description
6944969	**Locating Faulty DIMMs Differs in Oracle ILOM Mapping Versus BIOS Mapping**
	Issue:
	Oracle ILOM and BIOS use different formats to identify the location of a faulty DIMM.
	■ For Oracle ILOM, the format is Px/Dx, where x is 0 or 1 for CPUs, and 0 to 8 for DIMMs. ■ For BIOS, the format is CPUx/CHANNELx/DIMMx, where x is 0 or 1 for CPUs, and 0 to 2 for channels and DIMMs.
	Affected firmware:
	■ Oracle ILOM SP firmware version 3.0.9.19.a ■ BIOS firmware version 07.06.02.23
	Workaround:
	The different formats will be documented in the next version of the *Sun Fire X4170, X4270, and X4275 Servers Service Manual* (820-5830).
6779289	**Missing Content for Platform-Specific Oracle ILOM Sideband Management Feature**
	Issue:
	The Oracle ILOM Sideband Management topic in the *Sun Integrated Lights Out Manager (ILOM) 2.0 Supplement for Sun Fire X4170, X4270, and X4275 Servers* (820-7629) is missing some special considerations.
	Corrected Information:
	Special Considerations for Sideband Management:
	When Sideband Management is enabled in Oracle ILOM, the following conditions might occur:
	■ In-chip connectivity between the SP and the host operating system might not be supported by the on-board host Gigabit Ethernet controller. If this condition occurs, use a different port or route to transmit traffic between the source and destination targets instead of using L2 bridging/switching. ■ Server host power cycles might cause a brief interruption of network connectivity for server Gigabit Ethernet ports (NET 0, 1, 2, 3) that are configured for sideband management. If this condition occurs, configure the adjacent switch/bridge ports as host ports.
	Note - If the ports are configured as switch ports and participate in the Spanning Tree Protocol (STP), you might experience longer outages due to spanning tree recalculation.
6840674	**SAS Expander Card Sensor Is Not Documented**

Bug ID	Description
	Issue: The /SYS/SAS_EXP/PRSNT sensor is not documented for Oracle ILOM 2.0. This sensor detects whether the SAS Expander Card is installed. This card connects to the disk drive backplane.
	Corrected Information: The following information will be added to the *Sun Integrated Lights Out Manager (ILOM) 2.0 Supplement for Sun Fire X4170, X4270, and X4275 Servers* (820-7629): ■ Sensor Name: /SYS/SAS_EXP/PRSNT ■ Sensor Type: Entity Presence ■ Description: SAS Expander Card present monitor **Note -** This card connects to the disk backplane and the SAS cable connects to it. **Note -** This sensor is only supported on the Sun Fire X4275 Server.
6851878	**Missing Content for Server Ambient Temperature Sensors**
	Issue: The sensor descriptions in the *Sun Integrated Lights Out Manager (ILOM) 2.0 Supplement for Sun Fire X4170, X4270, and X4275 Servers* (820-7629) do not indicate where the /SYS/MB/T_AMB and /SYS/T_AMB sensors are located.
	Corrected Information: The following information will be added to the *Sun Integrated Lights Out Manager (ILOM) 2.0 Supplement for Sun Fire X4170, X4270, and X4275 Servers* (820-7629): ■ /SYS/MB/T_AMB: The motherboard ambient temperature sensor is located on the front end of the motherboard directly behind the storage drives. ■ /SYS/T_AMB: The system ambient temperature sensor is located on the underside of the fan board.

Resolved Issues

This section lists and describes issues that have been resolved.

For the latest information about resolved issues on the Sun Fire X4170, X4270, and X4275 Servers, refer to the updated product notes, which are available at the following web site: `http://www.oracle.com/technetwork/documentation/oracle-x86-servers-190077.html`

Related Information

■
■

Resolved Issues as of Software Release 2.8.1

TABLE 10   Resolved Issues as of Platform Software Release 2.8.1

Bug ID	Description
23634048	**SNMP Version 3 Traps Not Delivered**
	Issue:
	If you change the SNMP engine ID, Oracle Integrated Lights Out Manager SNMP v3 traps do not get delivered.
	Affected software:
	■ Supplemental Releases 1.0, 1.2, 1.4, 2.0, 2.0.1, 2.1, 2.3, 2.4, 2.6.6, 2.6.7, 2.6.8
	Fix available:
	This issue is fixed in Software Release 2.8.
6806444	**Oracle ILOM Remote Console Might Hang on Windows Client When Redirecting a CD-ROM Image or Floppy Image**
	Issue:
	When using a Windows client to redirect a CD-ROM image or floppy image from the Oracle ILOM Remote Console, the Oracle ILOM Remote Console might not respond.
	Affected operating systems and software:
	■ Windows Operating System installed on a client system ■ Oracle ILOM 2.0 or later, and Oracle ILOM 3.0 or later ■ Java Runtime Environment (JDK) 1.6.0_07 ■ Software Releases 1.0, 1.2, 1.4, 2.0, 2.0.1, 2.1, 2.3.1
	Fix available:
	This issue is fixed in Software Release 2.4.
6876246 6861981	**Alternatives to F2 and Ctrl-E On Serial Console Line for Entering BIOS**
	Issue:
	There is a display lag on the serial line that results in the customer pressing the F2 key or Ctrl-E key combination too late, which leads to difficulty displaying the option ROM. You can use Oracle ILOM or non-ILOM alternatives to F2 and Ctrl-E to avoid this problem and access BIOS from the serial line.
	Affected operating systems and software:
	■ All supported operating systems ■ Supplemental Releases 1.0, 1.2, 1.4, 2.0, 2.0.1, 2.1, 2.3.1, 2.4, 2.6.6, 2.6.7, 2.6.8
	Workaround:
	Non-Oracle ILOM Workaround:
	■ Press "Esc" then "2" that emulates the F2 sequence on a serial line. The SAS host bus adapter (HBA) does not interpret this as Ctrl-E and still loads.

Bug ID	Description
	Oracle ILOM Workaround: 1. Via IPMItool -H <ILOM IP address> -U root chassis bootdev bios, which forces the BIOS to enter setup during the next reset/boot cycle. 2. Via Oracle ILOM command-line interface (CLI) via SSH: -> set /HOST boot_device=bios. Then enter -> start /SYS or -> reset /SYS 3. Via Oracle ILOM web interface, select "Remote Control" tab, then "Host Control" tab, and then "BIOS" from the drop-down menu. Then reset or power on the system with the "Remote Power Control" tab. **Note -** Oracle ILOM workarounds are the preferred options because they do not require pressing any keys during BIOS bootup. However, they are only applicable for the next reset/boot cycle, and they do constitute a permanent boot order change.
6854502	**NET2 NIC Port (vmnic3) Will Be Disabled When ESX 3.5 U4 Is Installed**
	Issue: VMware ESX 3.5 U4 will disable the NET2 NIC port after installation on the Sun Fire X4170, X4270, and X4275 Servers.
	Affected operating systems and software: ■ VMware ESX 3.5 Update 4 ■ Supplemental Releases 1.0, 1.2, 1.4, 2.0, 2.0.1
	Fix available: This issue is fixed in Software Release 2.1.
6863766	**Install Will Fail When Using a Diskette Made From the Tools and Drivers DVD or the Floppy Image (QLogic64.img) on the Tools and Drivers DVD to Install Windows Server 2003 64-bit to a Fiber Channel Array Over a QLogic Fiber Channel HBA**
	Issue: If you use a diskette made from the Tools and Drivers (T&D) DVD or the QLogic64.img floppy image available on the Tools and Drivers DVD to install Windows Server 2003 64-bit to a Fiber Channel Array over a QLogic Fiber Channel HBA, the install will fail with a "Blue Screen" late in the setup process. The install fails because the 64-bit QLogic boot from SAN driver set available on the Tools and Drivers DVD has mismatched files and this results in a Bug Check 0x07B near the end of the installation process.
	Affected operating systems and software: ■ Windows Server 2003 (64-bit) ■ Supplemental Releases 1.0, 1.2, 1.4, 2.0, 2.0.1
	Fix available: The corrected QLogic driver set, Boot from SAN for STOR Miniport 64-bit Driver (x64), for installing Windows 2003 64-bit to a QLogic connected fiber channel array (the drivers used when pressing F6 during install) are available for download at this web site: `http://driverdownloads.qlogic.com/QLogicDriverDownloads_UI/Sun_Details.aspx?productid=928&OSTYPE=Window&oemid=124` This issue is fixed in Software Release 2.1.

Bug ID	Description
6817764	**Oracle ILOM Power Budget Feature Does Not Work Unless RHEL 5.3 Errata CPUSPEED Package Is Used**
	Issue:
	The speedstep-centrino cpufreq driver was built into the RHEL kernel, and the acpi-cpufreq driver was included as a module. The two cpufreq scaling drivers conflict due to Red Hat init scripts. This conflict causes the RHEL kernel to not honor CPU power capping directives from Oracle ILOM.
	Affected operating systems and software:
	■ Red Hat Enterprise Linux (RHEL) 5.3 ■ Supplemental Releases 1.0, 1.2, 1.4, 2.0, 2.0.1, 2.1, 2.3.1, 2.4, 2.6.6, 2.6.7, 2.6.8
	Workaround:
	The problem was corrected by Red Hat and a fix was released to the public. Users of Red Hat Enterprise Linux 5.3 should use the latest 5.3 errata cpuspeed package available for download. For more information, see the following document for download details: `https://access.redhat.com/errata/RHBA-2009:0424`
6830785	**SLES XEN Host (Dom 0) Using igb.ko Driver Will Drop XEN Guest (Dom U) Packets When IPv4 TX Checksum Offload Is Enabled**
	Issue:
	The XEN Host (Dom 0) will corrupt XEN Guest (Dom U) network traffic during transmission to and from the physical interface under the following conditions:
	1. XEN Host (Dom 0) is SLES 10 SP2 operating system. 2. The inbox SLES 10 SP2 Intel igb.ko driver is being used on the XEN Host (Dom 0). 3. IPv4 TX checksum is enabled on the XEN Guests (Dom U). 4. XEN Guests (Dom U) are using optimized paravirtualized NIC drivers.
	Affected operating systems and software:
	■ SUSE Linux Enterprise Server (SLES) 10 Service Pack 2 ■ Supplemental Releases 1.0, 1.2, 1.4, 2.0, 2.0.1, 2.1, 2.3.1, 2.4, 2.6.6, 2.6.7, 2.6.8
	Workaround:
	A later version of the driver has been compiled for SLES 10 SP2 to resolve this issue. Upgrade to the latest driver version. This issue has been documented by Novell SLES support in the following Technical Information Document (TID), which is available at this location: `http://www.novell.com/support/php/search.do?cmd=displayKC&docType=kc&externalId=7003448&sliceId=1&docTypeID=DT_TID_1_1&dialogID=39728435&stateId=0%200%2060594008` . Refer to the TID for information on the latest igb driver that fixes this issue.

Getting Firmware and Software Updates

This section explains the options for accessing server firmware and software updates using My Oracle Support (MOS).

Customers are required to install the latest available operating system (OS), patches, and firmware versions for optimal system performance, security, and stability.

Description	Links
Learn about server firmware and software updates.	"Firmware and Software Updates" on page 37
Learn about options for accessing firmware and software.	"Options for Accessing Firmware and Software Updates" on page 38
Review available firmware and software releases.	"Software Releases" on page 38
Learn how to get firmware and software updates using My Oracle Support.	"Getting Updates From Oracle Hardware Installation Assistant or My Oracle Support" on page 39
Learn how to Install firmware and software updates using other methods.	"Installing Updates Using Other Methods" on page 40
Learn how to get support from Oracle.	"Oracle Support" on page 41

Firmware and Software Updates

Firmware and software for your server are updated periodically. These updates are made available as software releases. The software releases are a set of downloadable files (patches) that include all available firmware, software, hardware drivers, tools, and utilities for the server. All of these files have been tested together and verified to work with your server.

You must update your server firmware and software as soon as possible after a new software release becomes available. Software releases often include bug fixes, and updating your server ensures that your server has the latest firmware and software. These updates will increase your system performance, security, and stability.

The server Product Notes list the current server software release and firmware version that are available. To determine which firmware version is installed on your server, you can use either the Oracle ILOM web interface or the command-line interface.

■ For the web interface, click System Information → Summary, then view the property value for System Firmware Version in the General Information table.

■ For the CLI, at the command prompt, type: show /System

The ReadMe document that is included with each patch in a software release contains information about the patch, such as what has changed or not changed from the prior software release, as well as bugs that are fixed with the current release.

Options for Accessing Firmware and Software Updates

Use one of the following options to obtain the latest firmware and software updates for your server:

- **Oracle Hardware Installation Assistant** – Oracle Hardware Installation Assistant is a factory-installed option for the servers that enables you to easily download and install the latest software releases.

  For information about using Oracle Hardware Installation Assistant, refer to the *Oracle X4 Series Server Administration Guide* at `https://docs.oracle.com/cd/E29422_01/index.html`.

- **My Oracle Support** – All system software releases are available from the My Oracle Support web site at `https://support.oracle.com`.

- **Other Methods** – You can use Oracle Enterprise Manager Ops Center, Oracle Hardware Management Pack, or Oracle ILOM to update your server software and firmware.

  For information, see "Installing Updates Using Other Methods" on page 40.

Software Releases

Software releases on My Oracle Support are grouped by product family (such as Sun Fire), then the product (the specific server or blade), and finally the software release version. A software release contains all the updated software and firmware for your server or blade as a set of downloadable files (patches), including firmware, drivers, tools, or utilities, all tested together to be compatible with your server.

Each patch is a zip file that contains a ReadMe file and a set of subdirectories containing firmware or software files. The ReadMe file contains details on the components that have changed since the prior software release and the bugs that have been fixed.

My Oracle Support provides the set of software releases for your server as described in the following table. You can obtain these software releases by downloading the files from My Oracle Support. Alternatively, you can download the same firmware and software to your server using Oracle Hardware Installation Assistant.

TABLE 11 Software Release Packages

Package Name	Description	When to Download This Package
X4170, X4270, X4275 SW *release* – ILOM and BIOS Pack	Contains all system firmware, including Oracle ILOM, BIOS, and option card firmware.	You need the latest firmware.

Package Name	Description	When to Download This Package
X4170, X4270, X4275 SW *release* – Tools and Drivers Pack	Includes a package of all tools, drivers, and utilities for a specific OS. Software includes Oracle Hardware Management Pack, LSI MegaRAID software, and any other optional software that Oracle recommends. For the Windows OS, the OS Pack also includes Intel Network Teaming and Install Pack.	You need to update OS-specific tools, drivers, or utilities.
X4170, X4270, X4275 SW *release* – Diagnostics	Includes Oracle VTS diagnostics image.	You need the Oracle VTS diagnostics image.
X4170, X4270, X4275 SW *release* – Oracle Hardware Installation Assistant Updater	Includes Oracle Hardware Installation Assistant recovery/update ISO image.	You need to manually recover or update Oracle Hardware Installation Assistant.

Getting Updates From Oracle Hardware Installation Assistant or My Oracle Support

You can use Oracle Hardware Installation Assistant to easily download and then use the latest software release. For further information and download instructions, refer to the *Oracle X4 Series Server Administration Guide* at `https://docs.oracle.com/cd/E29422_01/index.html`.

You can also obtain updated firmware and software from the My Oracle Support (MOS) web site at `https://support.oracle.com`. For instructions, see "Download Firmware and Software Updates From My Oracle Support" on page 39.

▼ Download Firmware and Software Updates From My Oracle Support

1. **Go to the My Oracle Support web site: `https://support.oracle.com`.**

2. **Sign in to My Oracle Support.**

3. **At the top of the page, click the Patches & Updates tab.**
   The Patch Search pane appears at the right of the screen.

4. **Within the Search tab area, click Product or Family (Advanced).**
   The Search tab area appears with search fields.

5. **In the Product field, select the product from the drop-down list.**

   Alternatively, type a full or partial product name (for example, X4170) until a match appears.

6. **In the Release field, select a software release from the drop-down list.**

   Expand the list to see all available software releases.

7. **Click Search.**

   The Patch Advanced Search Results screen appears, listing the patches for the software release.

   See "Software Releases" on page 38 for a description of the available software releases.

8. **To select a patch for a software release, click the patch number next to the software release version.**

   You can use the Shift key to select more than one patch.

   A pop-up action panel appears. The panel contains several action options, including the ReadMe, Download, and Add to Plan options. For information about the Add to Plan option, click the associated button and select "Why use a plan?".

9. **To review the ReadMe file for this patch, click ReadMe.**

10. **To download the patch for the software release, click Download.**

11. **In the File Download dialog box, click the patch zip file name.**

    The patch for the software release downloads.

Installing Updates Using Other Methods

In addition to using Oracle Hardware Installation Assistant and My Oracle Support, you can install firmware and software updates using one of the following methods:

- **Oracle Enterprise Manager Ops Center** – You can use Ops Center Enterprise Controller to automatically download the latest firmware from Oracle, or firmware can be loaded manually into the Enterprise Controller. In either case, Ops Center can install the firmware onto one or more servers, blades, or blade chassis.

  For information, go to:

  https://www.oracle.com/technetwork/oem/ops-center/index.html

- **Oracle Hardware Management Pack** – You can use the fwupdate CLI Tool within the Oracle Hardware Management Pack software to update firmware within the system.

  For information, refer to the Oracle Hardware Management Pack Documentation Library at:

https://www.oracle.com/goto/ohmp/docs

- **Oracle ILOM** – You can use the Oracle ILOM web interface or command-line interface to update Oracle ILOM and BIOS firmware.

  For information, refer to the Oracle Integrated Lights Out Manager (ILOM) Documentation Library at:

  https://www.oracle.com/goto/ilom/docs

Oracle Support

If you need help getting firmware or software updates, or downloading a complete software application, you can call Oracle Support. Use the appropriate number from the Oracle Global Customer Support Contacts Directory at:

https://www.oracle.com/us/support/contact-068555.html