Sun Blade X4-2B Product Notes

Part No: E37038-06
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Contents

Using This Documentation

This section describes how to get the latest firmware and software for the system, documentation and feedback, and a document change history.

Sun Blade X4-2B Model Name

The name identifies the following: Sun Blade **X4-2B** Server Module

- The alpha character, X, identifies an x86 product.
- The first number, 4, identifies the generation of the server.
- The second number, 2, identifies the number of processors.
- The alpha character, B, identifies the product as a blade server.

Getting the Latest Firmware and Software

Firmware, drivers, and other hardware-related software for each Oracle x86 server, server module (blade), and blade chassis are updated periodically.

You can obtain the latest version in one of three ways:

- Oracle System Assistant – This is a factory-installed option for Sun Oracle x86 servers. It has all the tools and drivers you need and resides on a USB drive installed in most servers.
- My Oracle Support – `http://support.oracle.com`
- Physical media request

For more information, see “Getting Server Firmware and Software Updates”.

Documentation and Feedback

Documentation	Link
All Oracle products	http://www.oracle.com/documentation
Sun Blade X4-2B server module	http://www.oracle.com/goto/X4-2B/docs
X4 server series system administration	Oracle x86 Administration Guide for X4 Series Servers (http://www.oracle.com/goto/x86AdminDiag/docs)
Oracle System Assistant	Oracle x86 Administration Guide for X4 Series Servers (http://www.oracle.com/goto/x86AdminDiag/docs)
Oracle Integrated Lights Out Manager (ILOM) 3.1	http://www.oracle.com/goto/ILOM/docs
Oracle Hardware Management Pack	http://www.oracle.com/goto/OHMP/docs
Chassis Sun Blade 6000 modular system	http://www.oracle.com/goto/SB6000/docs

Provide feedback on this documentation at: http://www.oracle.com/goto/docfeedback.

About This Documentation

This documentation set is available in both PDF and HTML. The information is presented in topic-based format (similar to online help) and therefore does not include chapters, appendixes, or section numbering.

You can generate a PDF that includes all information about a particular topic subject (such as hardware installation or product notes) can be generated by clicking the PDF button in the upper left corner of the HTML page.

Support and Training

These web sites provide additional resources:

- Support: http://support.oracle.com
- Training: http://education.oracle.com

Access to Oracle Support

Oracle customers 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.

Contributors

Primary Authors: Lisa Kuder, Ray Angelo, Mark McGothigan

Contributors: Mike Ma, Qing-su Hu, Lu Wei, Cynthia Chin-Lee, Michael Tabor, Ralph Woodley, Ling Chen, Qing Gu, Donghua Zhou, David Zhuang.

Change History

The following lists the release history of this documentation set:

- September 2013. Initial publication.
- November 2013. Software 1.0.1 update.
- March 2013. Software 1.1 update.
- May 2014. CR update.
- November 2014. Software 1.2 update. Sun Blade 6000 Virtualized Multi-Fabric 10GbE M2 NEM support for 1G ports only update.
- December 2014. Add Sun Blade X6270 M2 to chassis support list in *Supported Components with A90-D or 7105379 Chassis*.

Sun Blade X4-2B Product Notes

For the most up-to-date information about supported firmware and operating systems, important operating notes, and known issues, refer to the latest product notes, which are available at:

`http://www.oracle.com/goto/X4-2B/docs`

Sun Blade X4-2B Product Notes include the following information.

Review	Links
Changes in this release.	"Summary of Changes Releases" on page 11
Supported hardware.	"Supported Hardware" on page 12
Supported firmware revisions.	"Supported Firmware Revisions" on page 14
Supported operating systems.	"Supported Operating Systems" on page 15
Important operating notes.	"Important Operating Notes"
Supported Oracle server management tools.	"Server Management Tools" on page 21
Chassis support.	"Sun Blade 6000 Modular System Environment" on page 16
Supported PCIe EMs.	"Supported PCIe ExpressModules" on page 19
Known Issues.	■ "Important Operating Notes" Includes Hardware, Firmware and BIOS Issues. ■ "Oracle System Assistant Issues" ■ "Oracle Solaris Issues" ■ "Oracle VM and VMware ESXi Issues" ■ "Linux Current Issues" ■ "Windows Issues"

Note - This document contains information that was accurate for the server at the time of the document's publication.

Summary of Changes Releases

The following improvements/changes were included in platform software release 1.2 of the Sun Blade X4-2B:

- Oracle ILOM 3.2.4 is now supported.
- Oracle VM 3.3, 3.2.7, 3.2.8 are now supported.
- Oracle Solaris 11.2 is now supported.
- RHEL7 is now supported. Oracle Linux 7 is now supported.
- VMware ESXi 5.1U2 and 5.5U1 are now supported.
- Oracle Hardware Mangement Pack 2.3 is now supported.
- Oracle VTS 7.OPS18 is now supported.
- A Sun Blade X4-2B with Sun Blade 6000 Virtualized Multi-Fabric 10GbE M2 NEM (with very limited conditions) can now be installed in the chassis.

The following improvements/changes were included in platform software release 1.1 of the Sun Blade X4-2B:

- Oracle Linux 6.5 is now supported. Previously only 6.3 (UEK2) and 6.4 was supported.
- Oracle Linux 5.10 is now supported. Previously only 5.9 was supported.
- Microsoft Windows 2012 R2 is now supported.
- Oracle Solaris 11 U1 is now supported for server preinstall.
- VMware ESXi 5.5 is now supported.

The following improvements/changes were included in platform software release 1.0.1 of the Sun Blade X4-2B:

- SUSE Linux Enterprise Server (SLES) 11 SP3 is now supported. Previously only SLES 11 SP2 was supported.
- The 32-GB LRDIMMs are now available for order.
- The Dual 16 Gb/s Fibre Channel ExpressModule Universal HBA (Emulex) is now available for order.
- A Sun Blade X4-2B with Oracle Solaris S11.1 SRU13.6 or later, a Dual 8Gb Fibre Channel and Dual 1 GbE (Emulex) can now be installed in the chassis.

Supported Hardware

You can find detailed information about supported hardware in these Sun Blade X4-2B documents:

- “Supported Components” in “Sun Blade X4-2B Installation Guide”
- “About the Sun Blade X4-2B” in “Sun Blade X4-2B Service Manual”

Within this document, you can find information about supported hardware for these components.

Supported Components	Link
Processors	“Supported CPUs” on page 13

Supported Components	Link
Memory	“Supported Memory” on page 13
Storage drives	“Supported Storage Drives” on page 13
Chassis	“Sun Blade 6000 Modular System Environment” on page 16
PCIe Express Modules	“Supported PCIe ExpressModules” on page 19 “FEMs and REMs Required for NEMs” on page 20

Supported CPUs

The supported CPUs are listed in the following table.

Supported CPUs
■ Intel Xeon E5-2697 V2 (12-core, 2.7 GHz, 130W)
■ Intel Xeon E5-2690 V2 (10-core, 3.0 GHz, 130W)
■ Intel Xeon E5-2650 V2 (8-core, 2.6 GHz, 95W)
■ Intel Xeon E5-2630 V2 (6-core, 2.6 GHz, 80W)
■ Intel Xeon E5-2609 V2 (4-core, 2.5 GHz, 80W)

Supported Memory

Twenty-four registered DDR3 DIMMs with ECC memory slots total (12 slots per CPU). The supported memory is listed in the following table.

Supported Memory
■ 8 GB DDR3 LV RDIMM
■ 16 GB DDR3 LV RDIMM
■ 32 GB DDR3 LRDIMM

Supported Storage Drives

The server has four SAS/SATA 2.5-inch disk bays supporting hard disk drives (HDDs) and solid-state drives (SSDs). The supported storage drives are listed in the following table.

Supported Storage Drives
■ 300 GB 10000 rpm SAS-2 HDD
■ 600 GB 10000 rpm SAS-2 HDD
■ 1.2 TB 10000 rpm SAS-2 HDD

Supported Storage Drives
■ 400 GB SATA3 SSD

Supported Firmware and Software

The following topics describe supported components for the Sun Blade X4-2B:

Supported Firmware Revisions

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

For the latest and most up-to-date information on supported firmware versions, see the ReadMe file on Oracle System Assistant. To access the ReadMe file, click the Help button on the Oracle System Assistant System Overview page, and then click Release Notes. To ensure that the ReadMe file contains the most recent firmware version information, update Oracle System Assistant with the latest software release that is available for the server.

The ReadMe file can also be accessed on My Oracle Support as the top-level ReadMe, and it is included in any server software package that you download from My Oracle Support. For download instructions, see "Getting Server Firmware and Software Updates".

Firmware Release History

The following table lists the released versions of the server firmware.

Note - Oracle recommends that you upgrade to the latest system software release. This will ensure you have the latest supported firmware, BIOS and drivers for your system. You can download the latest software release for your system by going to `http://support.oracle.com`.

System Software Release	Oracle ILOM SP Firmware	System BIOS	CPLD
1.0	3.1.2.34 (r82635)	28001700	3.2
1.0.1	3.1.2.34.a	28001800	3.3
1.1	3.1.2.34.b	28010200	3.3
1.2	3.2.4.24	28.03.06.00	3.3

Supported Operating Systems

The following Hardware Compatibility Lists (HCLs) identify the latest operating system versions supported on Oracle hardware. To find the latest operating system version supported for the Sun Blade X4-2B, go to the following sites and search using your server model number:

- Oracle Solaris -- http://www.oracle.com/webfolder/technetwork/hcl/index.html
- Oracle Linux -- http://linux.oracle.com/pls/apex/f?p=117:1:3991604960223967
- Oracle VM -- http://linux.oracle.com/pls/apex/f?p=117:1:3991604960223967
- Windows -- http://www.windowsservercatalog.com/
- VMware ESXi -- http://www.vmware.com/resources/compatibility/search.php
- Red Hat Enterprise Linux -- https://access.redhat.com/certifications
- SUSE Linux Enterprise Server -- https://www.suse.com/yessearch/Search.jsp

You can find the operating systems supported on the Sun Blade X4-2B at: https://wikis.oracle.com/display/SystemsComm/Sun+Blade+Systems+Products#tab:Operating-Systems

At this site, click the tab for x86 System Options and Downloads, then click the link for the Sun Blade X4-2B. On the Sun Blade X4-2B page, click the tab for Operating Systems.

The following table lists the supported operating systems and virtual machine software for the Sun Blade X4-2B. Supported operating systems and software are cumulative with each release; that is, later software releases contain all components of earlier software releases.

Platform Software Release	Supported Operating Systems
1.2	■ Oracle Linux 6.5 and 7.0 for x86 (64-bit) with both Oracle Unbreakable Enterprise Kernel (UEK3) for Linux and Red Hat compatible kernels ■ Oracle Linux 6.3 for x86 (64-bit) with Oracle Unbreakable Enterprise Kernel (UEK2) for Linux, ■ Oracle Linux 5.9, 5.10, 6.4 for x86 (64-bit) with both Oracle Unbreakable Enterprise Kernel (UEK2) for Linux and Red Hat compatible kernels ■ Oracle Solaris 10 1/13 ■ Oracle Solaris 11.1, 11.2 (also available as a preinstalled option) ■ Oracle VM Server 3.3, 3.2 (3.2.1, 3.2.2, 3.2.3, 3.2.4, 3.2.6, 3.2.7, 3.2.8) (3.2.1 available as a preinstalled option.) ■ SUSE Linux Enterprise Server 11 SP3 ■ RHEL 5.9, 5.10, 6.4, 6.5, 7.0 ■ SLES 11 SP2 and SP3 ■ VMware ESXi 5.5, 5.5 update 1, 5.0 update 2, 5.0 update 3, 5.1 update 1, 5.1 update 2 ■ Windows Server 2008 SP2, Windows Server 2008 R2 SP1, Windows Server 2012, Windows Server 2012 R2
1.1	■ Oracle Linux 6.5 for x86 (64-bit) with both Oracle Unbreakable Enterprise Kernel (UEK3) for Linux and Red Hat compatible kernels

Platform Software Release	Supported Operating Systems
	■ Oracle Linux 6.3 for x86 (64-bit) with Oracle Unbreakable Enterprise Kernel (UEK2) for Linux ■ Oracle Linux 5.9, 5.10, and 6.4 for x86 (64-bit) with both Oracle Unbreakable Enterprise Kernel (UEK2) for Linux and Red Hat compatible kernels ■ Oracle Solaris 10 1/13 ■ Oracle Solaris 11.1 (also available as a preinstalled option) ■ Oracle VM Server 3.2 (3.2.1, 3.2.2, 3.2.3, 3.2.4, 3.2.6) (3.2.1 available as a preinstalled option.) ■ SUSE Linux Enterprise Server 11 SP3 ■ RHEL 5.9, 5.10, 6.4, 6.5 ■ SLES 11 SP2 and SP3 ■ VMware ESXi 5.5, 5.0 update 2, 5.0 update 3, and 5.1 update 1 ■ Windows Server 2008 SP2, Windows Server 2008 R2 SP1, Windows Server 2012, Windows Server 2012 R2
1.0.1	■ Oracle Linux 6.3 for x86 (64-bit) with Oracle Unbreakable Enterprise Kernel (UEK2) for Linux ■ Oracle Linux 5.9 and 6.4 for x86 (64-bit) with both Oracle Unbreakable Enterprise Kernel (UEK2) for Linux and Red Hat compatible kernels ■ Oracle Solaris 10 1/13 ■ Oracle Solaris 11.1 (also available as a preinstalled option) ■ Oracle VM Server 3.2 (3.2.1, 3.2.2, 3.2.3, 3.2.4, 3.2.6) (3.2.1 available as a preinstalled option.) ■ SUSE Linux Enterprise Server 11 SP3 ■ RHEL 5.9, 6.4 ■ SLES 11 SP2 and SP3 ■ VMware ESXi 5.0 update 2 and 5.1 update 1 ■ Windows Server 2008 SP2, Windows Server 2008 R2 SP1, Windows Server 2012
1.0	■ Oracle Linux 6.3 for x86 (64-bit) with the Oracle Unbreakable Enterprise Kernel for Linux ■ Oracle Linux 5.9 and 6.4 for x86 (64-bit) with the Oracle Unbreakable Enterprise Kernel for Linux or the Red Hat Compatible Kernel ■ Oracle Solaris 10 1/13 ■ Oracle Solaris 11.1 (also available as a preinstalled option) ■ Oracle VM 3.2 (3.2.1, 3.2.2, 3.2.3, 3.2.4) (3.2.1 available as a preinstalled option.) ■ RHEL 5.9, 6.4 ■ SLES 11 SP2 ■ VMware ESXi 5.0 update 2 and 5.1 update 1 ■ Windows Server 2008 SP2, Windows Server 2008 R2 SP1, Windows Server 2012

Sun Blade 6000 Modular System Environment

The following three Sun Blade 6000 Modular System chassis models support the Sun Blade X4-2B server module.

Chassis Model	Link
A90-B	“Supported Components with A90-B Chassis ” on page 17
A90-D	“Supported Components with A90-D or 7105379 Chassis ” on page 18
7105379	“Supported Components with A90-D or 7105379 Chassis ” on page 18

Note - To determine your chassis model, refer to the *Sun Blade 6000 Modular System Service Manual* at: `http://www.oracle.com/goto/SB6000/docs`.

For some configurations, chassis support for NEMs, server modules, and PCIe ExpressModules might change when the Sun Blade X4-2B is installed. See “Supported PCIe ExpressModules” on page 19.

Supported Components with A90-B Chassis

The Sun Blade X4-2B is currently supported for use in the A90-B Sun Blade 6000 Modular System chassis with the following configuration:

- PCIe 2.0 midplane
- Minimum chassis software release: 3.3.7

The following tables list the NEMs and server modules supported by the A90-B chassis when the Sun Blade X4-2B is installed.

Note - If a server module or NEM is installed in the chassis that is not listed in the following tables, the component *must* be removed from the chassis *before* the Sun Blade X4-2B is installed.

Supported NEMs[†]
■ Sun Blade 6000 10p GbE Pass-Thru NEM (X4250A-N) ■ Sun Blade 6000 Ethernet Switched NEM 24p 10 GbE (X2073A-N) ■ Sun Blade 6000 Virtualized Multi-Fabric 10GbE M2 NEM (X4338A, 4338A) **Note -** The Sun Blade X4-2B Server Module supports Sun Blade 6000 Virtualized Multi-Fabric 10GbE M2 NEM with very limited conditions including support for 1GbE ports only. 10GbE ports are not operational. **Note -** See the chassis product notes for information on the CMM requirements for this NEM.

[†]Additional FEM and REM support might be required for each NEM. See “FEMs and REMs Required for NEMs” on page 20.

Supported Server Modules
■ SPARC T3-1B ■ SPARC T4-1B ■ SPARC T5-1B

Supported Server Modules
■ Sun Blade T6320 ■ Sun Blade T6340 ■ Sun Blade X6270 ■ Sun Blade X6270 M2 ■ Sun Blade X3-2B ■ Sun Blade X4-2B ■ Sun Blade Storage Module M2 **Note -** The Sun Blade Storage Module M2 is not supported as a storage resource for the Sun Blade X4-2B.

Supported Components with A90-D or 7105379 Chassis

The Sun Blade X4-2B is currently supported for use in the A90-D or 7105379 Sun Blade 6000 Modular System chassis with the following configuration:

- PCIe 2.0 midplane
- Minimum supported chassis software release 4.2.3.

  (Use CMM version 4.2.3 or above, earlier versions do not support Sun Blade X4-2B)

The following table lists the NEMs and storage modules supported by the A90-D or 7105379 chassis when the Sun Blade X4-2B is installed.

Note - If a server module or NEM is installed in the chassis that is not listed in the following tables, the component *must* be removed from the chassis *before* the Sun Blade X4-2B is installed.

Supported NEMs [†]
■ Sun Blade 6000 10p GbE Pass-Thru NEM (X4250A-N) ■ Sun Blade 6000 Ethernet Switched NEM 24p 10 GbE (X2073A-N) ■ Sun Blade 6000 Virtualized Multi-Fabric 10GbE M2 NEM (X4338A, 4338A) **Note -** The Sun Blade X4-2B Server Module supports Sun Blade 6000 Virtualized Multi-Fabric 10GbE M2 NEM with very limited conditions including support for 1GbE ports only. 10GbE ports are not operational. **Note -** See the chassis product notes for information on the CMM requirements for this NEM.

[†]Additional FEM and REM support might be required for each NEM. See "FEMs and REMs Required for NEMs" on page 20.

The following table lists the server modules supported by the A90-D or 7105379 chassis when the Sun Blade X4-2B is installed.

Note - If a server module is installed in the chassis that is not listed in the following table, it *must* be removed from the chassis *before* the Sun Blade X4-2B is installed.

Supported Server Modules
■ SPARC T3-1B ■ SPARC T4-1B ■ SPARC T5-1B ■ Sun Blade X6270 M2 ■ Sun Blade X6275 M2 GbE ■ Sun Blade X6275 M2 10 GbE ■ Sun Blade X3-2B ■ Sun Blade X4-2B ■ Sun Blade Storage Module M2 **Note -** The Sun Blade Storage Module M2 is not supported as a storage resource for the Sun Blade X4-2B.

Supported PCIe ExpressModules

The following PCIe ExpressModules (PCIe EMs) are supported for use with the Sun Blade X4-2B server module in Sun Blade 6000 Modular System chassis models: A90-B, A90-D, or 7105379.

PCIe EM Type	Supported PCIe EMs
Gigabit Ethernet and Fibre Channel	■ Dual 8Gb Fibre Channel and Dual 1 GbE (Emulex) ■ Dual 8Gb Fibre Channel and Dual 1 GbE (QLogic) ■ Dual 16GB Fibre Channel or Dual 10Gb/s FCoE HBA (Qlogic) Optional optical transceivers: ■ Sun Storage 16 Gb FC long wave optics (Qlogic) ■ Sun Storage 16 Gb FC short wave optics (Qlogic) ■ Sun Storage 10 Gb FCoE short reach optics (Qlogic) ■ Dual 16GB Fibre Channel or Dual 10 GbE HBA (Emulex) Optional optical transceivers: ■ Sun Storage 16 Gb FC short wave optics (Emulex) ■ Sun Storage 10 Gb FCoE short reach optics (Emulex)
Gigabit Ethernet	■ Sun Quad Port GbE PCIe 2.0 ExpressModule, MMF ■ Sun Quad Port GbE PCIe 2.0 ExpressModule, UTP
10 Gigabit Ethernet	■ Sun Dual 10GbE SFP+ PCIe 2.0 ExpressModule Optional optical transceivers: ■ Sun Dual rate transceivers: SPF+ short range. Support 1 Gb/s and 10Gb/s dual rate ■ Sun Dual rate transceivers: SPF+ long range. Support 1 Gb/s and 10Gb/s dual rate ■ Sun Dual Port 10GBase-T ExpressModule
SAS Host Bus Adapter (HBA)	6Gb/s SAS2 ExpressModule HBA
Infiniband	Sun InfiniBand QDR Host Channel Adapter PCIe Express Module

FEMs and REMs Required for NEMs

The following fabric expansion modules (FEMs) are required to be installed on the server modules to support NEMs in the following table.

Note - For NEM requirements based on chassis model, see the relevant topic in the section: "Sun Blade 6000 Modular System Environment" on page 16.

Supported NEMs	Required FEM
Sun Blade 6000 Virtualized Multi-Fabric 10GbE M2 NEM (X4338A, 4338A)	No FEM required. **Note -** The Sun Blade X4-2B Server Module supports Sun Blade 6000 Virtualized Multi-Fabric 10GbE M2 NEM with very limited conditions including support for 1GbE ports only. 10GbE ports are not operational. The Sun Blade 6000 Virtualized Multi-Fabric 10GbE NEM external SAS ports are disabled in Sun Blade X4-2B Server Module.
Sun Blade 6000 10p GbE Pass-Thru NEM (7105397)	No FEM required.
Sun Blade 6000 Ethernet Switched NEM 24p 10 GbE (X2073A-N)	4871A-Z-N (ATO) and X4871A-Z-N (Xoption)
Sun Blade 6000 40 GbE Virtualized NEM (7100090) **Note -** Sun Blade 6000 40 GbE Virtualized NEM (7100090) is not supported by RHEL7.0	7100283 (ATO) 7100633 (Xoption)

The Sun Blade X4-2B Server Module can be installed in a legacy Sun Blade 6000 Chassis (version A90-A with its midplane upgraded or version A90-B-N) with these NEMs: (X)4338A, NEM-10 (X)4250A & 7105397, and (X)2073A.

Please note the Sun Server X4-2B does not support NEM+ (X)4212A, Goa (X)4236A, or Hydra (X)4238, even if they are already installed in a legacy Sun Blade 6000 Chassis (version A90-A with its midplane upgraded, A90-B-N). The customer is required to remove these NEMs before getting support.

Server Update Information

Server updates are available to maintain support, add enhancements, or correct issues. Updates can include new versions of firmware (BIOS and SP/Oracle ILOM), new releases of tools and drivers, and updates to any other packaged components. When an update is released the changes are detailed in the update's ReadMe file, which is accessible at the following sources:

- In Oracle System Assistant by clicking the Help button on the System Information page.
- On My Oracle Support (MOS) as the top-level Readme at `http://support.oracle.com`.
- With any server package download from MOS.

Related Information

- "Getting Server Firmware and Software Updates"
- "Integrated Lights Out Manager (ILOM)" on page 21

Server Management Tools

The following sets of single system management tools are available for your server:

- Oracle Integrated Lights Out Manager (ILOM) – For information, refer to the Oracle Integrated Lights Out Manager (ILOM) 3.1 Documentation Library at: http://www.oracle.com/goto/ILOM/docs
- Oracle System Assistant – For information, see instructions for setting up the server using Oracle System Assistant in the Oracle X4 Series Servers Administration Guide at: http://www.oracle.com/goto/x86AdminDiag/docs
- Oracle Hardware Management Pack – For information, refer to the Oracle Hardware Management Pack Documentation Library at: http://www.oracle.com/goto/OHMP/docs

In addition, the following software is available to manage multiple systems in a data center:

- Oracle Enterprise Manager Ops Center – For information, refer to the product information page at: http://www.oracle.com/technetwork/oem/ops-center/index.html

Integrated Lights Out Manager (ILOM)

Each server module compute node includes a service processor (SP). The SP contains Oracle Integrated Lights Out Manager (ILOM), which provides IPMI 2.0 compliant remote server management capabilities.

The following interfaces provide network access to Oracle ILOM:

- Integrated Lights Out Manager (ILOM) through the server module node service processor (SP) or Chassis Monitoring Module (CMM)
- Local ILOM command-line access using serial connection
- 10/100 management Ethernet port to midplane
- Remote keyboard, video, mouse, and storage (KVMS) over IP

Related Information

- "Server Management Tools" on page 21

- ILOM 3.1 documentation library: http://www.oracle.com/goto/ILOM/docs

Important Operating Notes

This section includes important operating information and requirements for the Sun Blade X4-2B. The following table lists hardware, firmware, and BIOS issues for the Sun Blade X4-2B.

Links to Issues	Workaround?
“Do Not Install Windows 2012 R2 / Windows 2012 on Ganymede-E FCoE Target in Legacy Boot Mode (19274563) ” on page 24	Yes
“Sun Blade X4-2B Server Module Fails When Launching Remote Console (18962552) ” on page 25	Yes
“Dual 16 Gigabit/Sec Fibre Channel / 10Gbps FCoE Host Adapter, Emulex "Add Boot Device" Causes System Hang in UEFI Boot Mode (18303363) ” on page 26	Yes
“BIOS MPS Setting Added (18364710 and 18317148 and 15752501) ” on page 26	Yes
“Dual 8Gb Fibre Channel and Dual 1 GbE or Sun InfiniBand QDR Host Channel Adapter PCIe EM in Slot 0 Causes SP Fault During Reset ” on page 27	Yes
“System Reset and `qla2xxx` Error When Removing and Installing Certain PCIe ExpressModules (17605363 and 17763884) ” on page 27	No
“Warm Reset With Certain PCIe ExpressModules in PCIe EM Slot 0 Might Cause Error (16798624 and 17210462) ” on page 27	Yes
“Do Not Use Operating System Tools or Utilities to Manage UEFI Boot Variables (15818528)” on page 28	Yes
“One DIMM in a Channel Has an Uncorrectable Error, Other DIMMs Might Have Errors (16181966)” on page 28	No
“Hot-plugging 2 PCIe EMs Can Cause Correctable Error Messages (15752501)” on page 29	No
“Do Not Reboot the SP and Host Simultaneously (16346073 and 17013976) ” on page 29	No
“Oracle ILOM `restore_status` Parameter Shows Partial Status (7167938)” on page 29	Yes
“Oracle ILOM 3.1 Might Not Support the Clearing of Faults Diagnosed by the Oracle Solaris 10 1/13 and Solaris 11.1 Operating Systems (7170842)” on page 30	Yes
“Oracle Recommendations for Drive Slot Population and Virtual Drive Creation (7124194)” on page 30	N/A
“PXE-booting Fails When Using Cisco Switch (7149683)” on page 31	Yes
“UEFI Boot List Settings Might Be Lost When Transitioning Between UEFI and Legacy Boot Modes (7080526)” on page 32	Yes
“When Running an Emulex HBA in UEFI BIOS Boot Mode, the "Add Boot Device" Command Causes the System to Hang (18240994)” on page 32	Yes

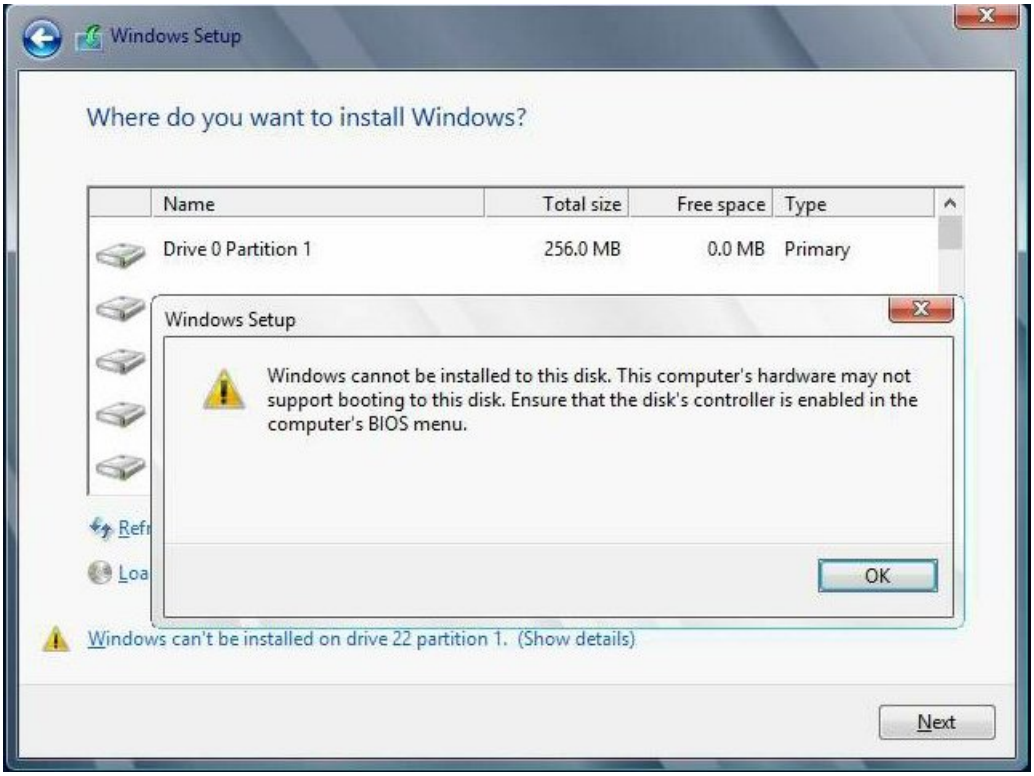
Do Not Install Windows 2012 R2 / Windows 2012 on Ganymede-E FCoE Target in Legacy Boot Mode (19274563)

Sun Blade X4-2B Server Module does not support installation of Windows 2012 R2 / Windows 2012 on Ganymede-E FCoE target.

Windows 2012 R2/ Windows 2012 can not be installed on an FCoE target under the following conditions.

- Oracle ILOM 3.2.4.24 r90698
- BIOS 28.03.02.00
- REM: SAS 2.0 RAID HBA PCIe LP 8-port
- CPU: Intel(R) Xeon(R) CPU E5-2609 v2 2.50GHz
- MEM: M386B4G70DM0-YK04 x 2
- PEMs: Ganymede-E FCoE
- Mode: Legacy mode

When you do the following: Mount Windows 2012 R2 to a LUM via ISO; change Ganymede-E FCoE port to the first boot device from boot list; and install Win2012 R2 via OSA so the system can see the FCoE LUN attached to Ganymede-E PEM. When you select a LUN to install, the system displays the following message: "`Windows cannot be installed to this disk. This computer's hardware may not support booting to this disk. Ensure that the disk's controller is enabled in the computer's BIOS menu`", even if the PEM has already been enabled in BIOS setting.



Workaround

Install Windows2012 R2 on the same LUN via Ganymede-E FCoE PEM in UEFI boot mode.

Sun Blade X4-2B Server Module Fails When Launching Remote Console (18962552)

When you launch Remote Console for Sun Blade X4-2B Server Module with SW1.2 in a Sun Blade 6000 chassis with CMM firmware SW3.3.8, SW4.2.4 and earlier ILOM, the Sun Blade X4-2B Server Module fails when using the following method: 1. Login to CMM ILOM via browser 2. Choose your X4-2B blade from "`Manage Menu`" at the top left corner 3. Press "`Launch Remote Console`".

Workaround

Bypass the CMM. Access the blade service processor (SP) directly, then start a JRC (Java Remote Console).

Do Not Use Sun Blade 6000 Virtualized Multi-Fabric 10GbE M2 Network Express Module 10G Ports Without FEM (18297744)

Sun Blade X4-2B Server Module does not support Sun Blade 6000 Virtualized Multi-Fabric 10GbE M2 Network Express Module10GbE ports. Only 1GbE ports on the NEM can be used.

Workaround

None.

Dual 16 Gigabit/Sec Fibre Channel / 10Gbps FCoE Host Adapter, Emulex "Add Boot Device" Causes System Hang in UEFI Boot Mode (18303363)

The Dual 16Gigabit/Sec Fibre Channel / 10Gbps FCoE Host Adapter "Add Boot Device" can cause a system stop on Sun Blade X4-2B Server Module when accessing the BIOS menu: "*BIOS Setup Utility" > "UEFI Driver Control" > "Oracle Sun Storage 16Gb Fibre Channel Exp" > "Add Boot Device*".

Workaround

Enter "*BIOS Setup Utility" > "UEFI Driver Control" > "Oracle Sun Storage 16Gb Fibre Channel Exp" > "Scan for Fibre Devices*" first.

BIOS MPS Setting Added (18364710 and 18317148 and 15752501)

On RHEL5.10 (2.6.18-371.el5) if a reboot on Sun Blade X4-2B Server Module after hot-plugging Metis-Q PEM, then fmadm faulty will report PEM faulted. Applies to PEM Metis-E, IB-CX2, Powerville-UTP and Powerville-MMF. Cause: MPS setting for a hot-plug PCIE device. This issue is also *15752501 - SUNBT7107777. Add a setup item for user to adjust the MPS setting*.

Workaround

Change BIOS MPS setting to adjust the "*Maxmum Payload*" under "*IO->PCI Subsystem Settings->PCI Hot-Plug Settings*" to "*128 Bytes*" instead of "*Auto*"

Dual 8Gb Fibre Channel and Dual 1 GbE or Sun InfiniBand QDR Host Channel Adapter PCIe EM in Slot 0 Causes SP Fault During Reset

If a Dual 8Gb Fibre Channel and Dual 1 GbE (QLogic) or Sun InfiniBand QDR Host Channel Adapter PCIe ExpressModule is installed in the chassis PCI EM slot 0 and the Sun Blade X4-2B Server Module is reset, a fault might be logged in the SP. For example:

```
fault.cpu.intel.l2cache on /SYS/MB/P0
```

The system will auto reboot several times until the PCIe card recovers, then the system reboots normally.

Workaround

Update to SW 1.0.1 or later. This issue is corrected in CPLD 3.3, SW 1.0.1. See “Getting Server Firmware and Software Updates”.

System Reset and `qla2xxx` Error When Removing and Installing Certain PCIe ExpressModules (17605363 and 17763884)

The server module might reset, and a `qla2xxx` fault might be logged in `dmesg` when all of the following conditions occur.

- SLES11 SP3 OS is installed.
- The server is set to UEFI boot mode.
- The Dual 16GB Fibre Channel or Dual 10Gb/s FCoE HBA (Qlogic) PCIe ExpressModule is removed and installed (hotplug) in the chassis PCI EM slot 0.

Workaround

None.

Warm Reset With Certain PCIe ExpressModules in PCIe EM Slot 0 Might Cause Error (16798624 and 17210462)

If a Dual 8Gb Fibre Channel and Dual 1 GbE (QLogic) or Sun InfiniBand QDR Host Channel Adapter PCIe ExpressModule is installed in the chassis PCI EM slot 0 and the blade is reset, a fault might be logged in the SP. For example:

```
fault.cpu.intel.l2cache on /SYS/MB/P0
```

The system will auto reboot several times until the PCIe card recovers, then the system reboots normally.

Workaround

Update to SW 1.0.1 or later. This issue is corrected in CPLD 3.3, SW 1.0.1. See "Getting Server Firmware and Software Updates".

▼ Do Not Use Operating System Tools or Utilities to Manage UEFI Boot Variables (15818528)

During operating system installations in Unified Extensible Firmware Interface (UEFI) mode, operating system installers will create UEFI Boot variables to be used in BIOS menus to select the operating system to boot.

To avoid potential loss of a boot variable created by the operating system installer, you should not use any operating system tools or utilities to manage (create, modify, or delete) these boot variables. Loss of a boot variable will preclude users from being able to boot the operating system.

Workaround

- **If a UEFI Boot variable is lost, reinstall the operating system so as to create a new UEFI Boot variable.**

One DIMM in a Channel Has an Uncorrectable Error, Other DIMMs Might Have Errors (16181966)

The following behavior is expected for DIMM uncorrectable (UE) errors:

- If DIMM 0 in one channel has a UE, it will be mapped out. Subsequently, the DIMM1 and DIMM2 in the same channel will have training errors, then be mapped out also. Eventually the whole channel be disabled.
- If a DIMM1 or DIMM2 in one channel has a UE, the failed DIMM will be mapped out, but the other DIMM is not impacted.

In either of these cases, a memory patrol scrub error on the mapped-out DIMM may occur.

Workaround

Update to SW 1.1 or later. This issue is corrected in SW 1.1. See "Getting Server Firmware and Software Updates".

Hot-plugging 2 PCIe EMs Can Cause Correctable Error Messages (15752501)

If you hot -plug 2 PCIe EMs with different MPS values into the same slot sequentially, then the OS reports many correctable error (CE) messages.

MPS values can only be auto-negotiated once. The value negotiated with the first PCIe EM might be different than the value required by the second PCIe EM. Such a mismatch might cause a CE message.

Do Not Reboot the SP and Host Simultaneously (16346073 and 17013976)

If you try to reboot the service processor (SP) while the host is rebooting, the BIOS can stop operating.

Oracle ILOM `restore_status` Parameter Shows Partial Status (7167938)

When an Oracle ILOM UEFI BIOS configuration is loaded, the configuration file might contain typographical errors or inactive parameters (parameters that are no longer valid for the current version of the BIOS). This can result in the failure of one or more parameters to load.

When this occurs, the Oracle ILOM /System/BIOS/Config/restore_status parameter, which provides the user with the status of the last attempted configuration load, reports the configuration load as a partial restore. The value of /System/BIOS/Config/restore_status parameter will not change until a subsequent load of an Oracle ILOM UEFI BIOS configuration occurs.

Workaround:

1. **Using a text editor, create a file with the following contents:**

   <BIOS>

   </BIOS>

2. **Save the file with an .xml extension.**

3. **To load the configuration, enter the following command:**

   -> **`load -source`** *URI_location/file_name.xml* **`/System/BIOS/Config`**

   where *URI_location* is the path and *file_name.xml* is the file created in a previous step.

4. **If the host power is on, enter the following command to reset the host:**

```
-> reset /System
```

▼ Oracle ILOM 3.1 Might Not Support the Clearing of Faults Diagnosed by the Oracle Solaris 10 1/13 and Solaris 11.1 Operating Systems (7170842)

Oracle Integrated Lights Out Manager (ILOM) 3.1 might not be able to clear a fault diagnosed by the following Oracle Solaris operating systems:

- Oracle Solaris 10 8/11
- Oracle Solaris 11 11/11

Workaround:

- **Do one of the following:**
  - **Use the Oracle Solaris OS to clear the fault.**
  - **Run the following procedure from the faultmgmt shell of the Oracle ILOM CLI:**
    a. **Find the UUID of the faults in the output of 'fmadm faulty'.**
    b. **Clear the faults via 'fmadm acquit<UUID>.**

Oracle Recommendations for Drive Slot Population and Virtual Drive Creation (7124194)

Because of the unique architecture of blade servers, consider the following when configuring your disk sub-system. Considerations include both drive type selection (SAS, SSD) and location of these drives in the server modules. Disks that are internal on most server modules are connected by a single port and run at a maximum speed of 3 Gbs.

Note - Sun Blade 6000 storage modules are not supported with the Sun Blade X4-2B server module.

Dual port drives provide additional fault tolerance that keep a drive online if the primary port fails. Currently SAS drives support two ports. SATA and SATA SSD drives are single ported.

In consideration of the differences between server modules and drive types, you should take the following into account when configuring your system:

- Virtual drives must be composed of drives using the same interface only (for example: SAS only or SATA SSD only).
- Use dedicated hot-spares only. Do not use global hot-spares unless they cannot be accessed by another failure domain.
- Dedicated hot-spares should only include drive groups that reside in the same failure domain. Using this method, you can create a "virtual" global hot-spare for any domain.
- Both SAS and SATA drives are supported in Sun Blade X4-2B; however, if used in the server module, the SAS drives do not run at full speed and cannot utilize the second port.
- SAS and SATA drives can be mixed in the server module, but not amongst virtual drives. For example you could have a two drive SAS RAID 1 and a two drive SATA-SSD RAID 1 in a Sun Blade X4-2B.

▼ PXE-booting Fails When Using Cisco Switch (7149683)

PXE booting the server fails when using a Cisco switch. This issue has two workarounds:

- **Do one of the following:**

  - **Log in to exec mode on the serial console of the switch and turn off Spanning Tree:**

    ```
    Router(config)#no spanning-tree
    ```

  - **Enable Portfast enhancement by typing the following command:**

Note - Portfast is a Cisco enhancement to spanning tree that allows ports to transition from a blocked/disabled/learning/listening state to the forwarding state. Enabling portfast allows devices to send and receive data as soon as the port is initialized.

```
Switch>enable Switch#configure terminal Switch(config)#spanning-tree portfast
default
```

To check the changes you made, run the following command:

```
Switch#show spanning-tree interface GigabitEthernet 0/48 portfast
```

▼ UEFI Boot List Settings Might Be Lost When Transitioning Between UEFI and Legacy Boot Modes (7080526)

Unified Extensible Firmware Interface (UEFI) boot priority list settings might be lost after transitioning between UEFI BIOS boot mode and Legacy BIOS boot mode. Save UEFI configuration settings before switching between UEFI and Legacy Only BIOS modes.

For example, UEFI configuration settings might be lost after selecting Legacy BIOS boot mode to run the Pc-Check utility, which is only available in Legacy Boot mode.

1. **Use the `ueficonfig` application to save the configuration settings prior to transitioning between BIOS boot modes.**
2. **Restore the BIOS configuration settings after transitioning back to UEFI boot mode.**

   For more information on saving and restoring UEFI configuration settings, refer to the *Oracle ILOM 3.1 Configuration and Maintenance Guide* in the Oracle Integrated Lights Out Manager (ILOM) 3.1 Documentation Library at:

   `http://www.oracle.com/goto/ILOM/docs`

When Running an Emulex HBA in UEFI BIOS Boot Mode, the "Add Boot Device" Command Causes the System to Hang (18240994)

When you use the BIOS Setup Utility menu to access `UEFI Driver Control > Oracle Sun Storage 16Gb Fibre Channel LP > Add Boot Device`, the system hangs. This issue only occurs on Emulex host bus adapters (HBAs) running in UEFI BIOS boot mode. If you are running the Emulex HBAs in Legacy BIOS boot mode, you will not experience this issue.

Affected hardware and software: Sun Storage 10 Gb FCoE Short Range Optics, Emulex (7101687 and 7101688 Sun Storage 16 Gb FC Short Wave Optics, Emulex (7101685 and 7101686) Platform software releases 1.0, 1.0.1, and 1.1

Workaround:

When you use the BIOS Setup Utility menu, enter this command first: `UEFI Driver Control > Oracle Sun Storage 16Gb Fibre Channel LP > Scan for Fibre Devices`.

Oracle System Assistant Issues

This section contains topics that describe Oracle System Assistant issues for the Sun Blade X4-2B. The following table lists the issues that are covered in this section.

Links to Issues	Workaround?
“Firmware Update Task Fails if There Are No Hard Disks in the Server (7178868)” on page 33	Yes
“User Must Have Full Administrator Role Privileges to Update SP (7158820)” on page 34	n/a
“Some Operating Systems Do Not Mount the Oracle System Assistant USB Device” on page 34	Yes
“Oracle System Assistant Does Not Support Username “user” (7153741)” on page 34	Yes
“The Virtual Ethernet Device is Reported as Not Installed in Windows 2008 (7129124)” on page 35	Yes
“Oracle System Assistant Cannot be Used to Update a Sun Storage 6 Gb SAS PCIe HBA From Legacy BIOS Firmware to UEFI BIOS Firmware (7123372)” on page 35	Yes
“'Path too Long' Errors When Unzipping Windows Downloads (7116803)” on page 36	Yes
“Popup Message Appears in the Oracle ILOM Web Interface When Launching Oracle System Assistant With the Launch Button (7126194)” on page 36	Yes

▼ Firmware Update Task Fails if There Are No Hard Disks in the Server (7178868)

The Oracle System Assistant Firmware Update task fails if the server has no HDDs. A popup window appears and reports the following error message:

```
Oracle System Assistant failed to get firmware version for the following components:
```

Workaround

- **Add one or more HDs to the server and run the Firmware Update task again.**

User Must Have Full Administrator Role Privileges to Update SP (7158820)

When updating the Oracle ILOM/SP firmware from Oracle System Assistant using the USB/LAN local host interconnect, a login prompt appears. To perform the firmware update, you must log in as root, administrator, or as a user with advanced (aucro) role privileges.

Note - A log-in prompt does *not* appear when the local host interconnect is *not* USB/LAN. However, SP update times are increased (up to 40 minutes when the local host interconnect is not USB/LAN). The interconnect method is determined by the Local Host Interconnect setting in Oracle ILOM.

For firmware update procedures, refer to the Oracle X4 Series Servers Administration Guide.

Some Operating Systems Do Not Mount the Oracle System Assistant USB Device

Some operating systems, such as, Oracle VM 3.0, Oracle Solaris 10, and versions of Linux might not automount the Oracle System Assistant USB device. To access the device, you need to manually mount it. For instructions on how to mount the device on Oracle VM 3.0-, Oracle Solaris 10-, and Linux-based systems, refer to the *Oracle X4 Series Servers Administration Guide*.

▼ Oracle System Assistant Does Not Support Username “user” (7153741)

Oracle System Assistant Service Processor Configuration task does not allow you to create a user with the username, “user.” Additionally, while it is possible to create a user named as such using Oracle ILOM, the task does not allow the deletion or modification of that user.

Workaround:

- **Use the Oracle ILOM web interface or command-line interface to create, delete, and modify a user with a username of user.**

  For instructions on how to use Oracle ILOM, see the Oracle Integrated Lights Out Manager (ILOM) Documentation Library at:

  `http://www.oracle.com/goto/ILOM/docs`

The Virtual Ethernet Device is Reported as Not Installed in Windows 2008 (7129124)

After installing the Windows Server 2008 SP2 and Windows Server 2008 R2 SP1 drivers, the Windows Device Manager reports that the virtual Ethernet device is not installed. Oracle System Assistant does not provide the driver for this interface. The driver is available with Oracle Hardware Management Pack.

Workaround:

- **Do one of the following:**
  - **To obtain this driver, install Oracle Hardware Management Pack, which is available as a supplemental tool on Oracle System Assistant.**
  - **To disable this device and prevent it from appearing in the Windows Device Manager, use the following command:**

    ```
    ilomconfig disable interconnect
    ```

Oracle System Assistant Cannot be Used to Update a Sun Storage 6 Gb SAS PCIe HBA From Legacy BIOS Firmware to UEFI BIOS Firmware (7123372)

Oracle System Assistant cannot be used to update a Sun Storage 6 Gb SAS PCIe host bus adapter (HBA) from Legacy (non-UEFI) BIOS firmware to UEFI BIOS firmware.

Updating the HBA to Unified Extensible Firmware Interface (UEFI) BIOS firmware requires two consecutive firmware updates. Oracle System Assistant is unable to perform consecutive firmware updates on a single HBA. Instead, use the LSI `sas2flash` utility.

Perform the following workaround to update the HBA firmware using the LSI `sas2flash` utility:

1. **Download the OS version-specific `sas2flash` utility for the HBA at:**

   http://www.lsi.com/sep/Pages/oracle/sas_6gbs_support.aspx

2. **To identify the controller number, use the `sas2flash` utility to list all of the installed SAS2 (Sun Storage 6 Gb SAS PCIe) HBAs: -> `sas2flash -listall`**

3. **To update the HBA, use the following `sas2flash` commands, where *n* is the controller number displayed by the `sas2flash list` command in step 2.**

```
-> sas2flash -c n -f fw-rem-11050000-0a030019.bin
-> sas2flash -c n - b x64sas2-07180207.rom
-> sas2flash -c n - b mptsas2-7210400.rom
```

'Path too Long' Errors When Unzipping Windows Downloads (7116803)

When you unzip a downloaded Windows package from MOS using the default Windows Server 2008/2008R2 compression utility, you might get errors stating that the path is too long. Path length is determined by the Windows OS . The maximum path, which includes drive letter, colon, backslash, name components separated by backslashes, and a terminating null character, is defined as 260 characters.

Workaround:

- **Use a third-party compression utility.**

  Unlike the default Windows compression utility, some third-party utilities allow for longer maximum path lengths.

Popup Message Appears in the Oracle ILOM Web Interface When Launching Oracle System Assistant With the Launch Button (7126194)

The Oracle ILOM web interface summary page shows the host power status indicator as correctly reflecting the host power status. However, when you click the Oracle System Assistant Launch button, the host power status indicator might no longer correctly reflect the host power status, and the following popup message might appear:

```
Cannot retrieve host power status
```

- **Dismiss the popup and update the host power state information on the page by refreshing the web browser manually.**

Oracle Solaris Issues

This section describes issues with the supported Oracle Solaris operating systems for the Sun Blade X4-2B:

Oracle Solaris 10 1/13 Required Patches

Before installing Oracle Solaris 10 1/13 on the server, you should install the patches listed in the following table.

Patches Required	CRs Fixed	Description
150179-01	15755801, 15807688	The patch provides support for the Ivy Bridge-EP based Xeon E5 processor.
150385-01	15786384	This patch fixes a system hang issue when running a `hcts conn5_net` test.
148678-01	16384609	This patch fixes a kernel panic issue when booting the Oracle Solaris Operating System.

Oracle Solaris 10 and Solaris 11 OS Current Issues

This section contains topics that describe Oracle Solaris 10 and Solaris 11 OS issues for the Sun Blade X4-2B. The following table lists the issues that are covered in this section.

Links to Issues	Workaround
"Upgrade the Preinstalled Oracle Solaris 11.1 Operating System With SRU 11 Before Using FMA 2 HA (17243186)" on page 38	No
Broken Link (Target ID: GNJTU)	Yes
Broken Link (Target ID: GNJTU)	No
"System Seems Hung After Running sys-unconfig (16353003" on page 39	Yes
"Oracle Solaris 11.1 Cannot Be Installed on a Linux iSCSI Target (16274469)" on page 39	Yes

Links to Issues	Workaround
“Hotplug of QDR IB-HCA PCI-E Gen2 Mellanox ConnectX-2 Base EM Might Fail in Oracle Solaris 10 1/13 and 11.1 (7074000, 7098279)” on page 39	Yes
“Warning Appears During System Boot (6913723)” on page 40	No

Upgrade the Preinstalled Oracle Solaris 11.1 Operating System With SRU 11 Before Using FMA 2 HA (17243186)

If the server has the 2.7-GHz, 12-core, 130W processor and you want to use the 2 Home Agent (HA) feature of the Fault Management Architecture (FMA), you must upgrade the preinstalled Oracle Solaris 11.1 operating system with Support Repository Update (SRU) 11 before using the operating system.

▼ Solaris 11.1 With Desktop Package Cannot Be Powered Off Using ILOM (16816951)

Solaris 11.1 with desktop package cannot be powered off using ILOM web interface or CLI.

Workaround

1. **In `/usr/share/dbus-1/services/gnome-power-manager.service`, add `--verbose` to the following line:`Exec=/usr/bin/gnome-power-manager`**

   The edited line should read:

   ```
   Exec=/usr/bin/gnome-power-manager--verbose
   ```

2. **Select System->Preferences-> Startup Applications from gnome-panel's menu list.**
3. **Select Power Manager -> Edit.**
4. **Change the command to `gnome-power-manager --verbose .`**

▼ Solaris 11.2 With Desktop Package Cannot Be Powered Off Using ILOM (16816951)

Solaris 11.2 with desktop package cannot be powered off using ILOM web interface or CLI.

Workaround

- **None**

System Seems Hung After Running sys-unconfig (16353003

When running sys-unconfig, init 0 and uadmin 1 6 do not work to completion on the Java Console (console=text). The commands do work in a ttya console.

Workaround

1. **Re-direct the console to ttya before booting up Solaris.**
2. **Install patch IDR151011-01.**

Oracle Solaris 11.1 Cannot Be Installed on a Linux iSCSI Target (16274469)

Do not install Solaris11.1 into Sun Blade X4-2B in legacy iSCSI mode with Linux target.

Workaround

- **Use a Solaris or Windows iSCSI target for the installation.**

  Fixed in `S11.2_GA`.

Hotplug of QDR IB-HCA PCI-E Gen2 Mellanox ConnectX-2 Base EM Might Fail in Oracle Solaris 10 1/13 and 11.1 (7074000, 7098279)

In Solaris 10 1/13 OS and Solaris 11.1 OS, hotplugging QDR IB-HCA PCI-E Gen2 Mellanox ConnectX-2 Base EM might fail.

Workaround

- **To hotplug the EM, run the following commands:**

```
# rem_drv iser
# rem_drv rdsv3
# reboot
```

Fxed in `s11.1+sru13.6, s11.2_ga`.

▼ Warning Appears During System Boot (6913723)

The following warning might appear on the console during system boot in Solaris 10 8/11 OS:

```
WARNING: pci_process_acpi_device: invalid _BBN 0xfc
```

- **The warning is harmless and you can ignore it.**

Oracle VM and VMware ESXi Issues

This section contains topics that describe Oracle VM and ESXi software issues for the Sun Blade X4-2B.

Oracle VM Current Issues

This section contains topics that describe Oracle VM OS issues for the Sun Blade X4-2B. The following table lists the issues that are covered in this section.

Link to Issue	Workaround
"Oracle VM 3 Does Not Support PCIe EM Hotplug (16566061)" on page 41	Yes
"Oracle VM Install for Large Memory Configurations Requires Additional Steps (7195262)" on page 42	N/A
"Unable to Mount Oracle System Assistant USB Device on Oracle VM 3.0.x (7149878)" on page 43	N/A
"Date Incorrect on Oracle VM 3.0 (7061790)" on page 43	No

▼ Oracle VM 3 Does Not Support PCIe EM Hotplug (16566061)

Attempting to hotswap the PCIe EM for a server running Oracle VM 3.X might cause the server to reboot. Oracle VM3 does not support hotplug/hotswap.

Workaround

- **Do not hotplug/hotswap the PCIe EM. PCIe EM hotplug/hotswap is not supported.**

Oracle VM Install for Large Memory Configurations Requires Additional Steps (7195262)

Oracle VM installations for large memory configurations requires additional steps using Oracle System Assistant shell.

Before You Begin

- This procedure requires familiarity with vi editor.
- For more information about launching and using Oracle System Assistant, refer to the Oracle X4 Series Servers Administration Guide.

1. **Launch Oracle System Assistant.**

   You can launch Oracle System Assistant from the boot screen or from Oracle ILOM.

2. **To launch the shell, click the Advanced tab, click the Shell tab, and click the Start Shell button.**

   The Shell terminal window appears. The shell prompt appears:

   ```
   #
   ```

3. **Edit the syslinux.ovm.cfg file located at /opt/osa/etc/osInstall/syslinux.ovm.cfg.**

   ```
   # vi /opt/osa/etc/osInstall/syslinux.ovm.cfg
   ```

4. **Add the following parameter to all the labels:**

   `dom0_mem=max:128G` (max:126G for rescue label)

   After the edit, your file should look like this:

   ```
   # Copyright (c) 2011, 2012, Oracle and/or its affiliates. All rights reserved.
   default ks
   prompt 1
   timeout 30
   display boot.msg
   F1 boot.msg
   F2 options.msg

   label xen
       kernel mboot.c32
        append xen.gz dom0_mem=max:128G --- vmlinuz --- initrd.img
   label p2v
       kernel mboot.c32
       append xen.gz dom0_mem=max:128G --- vmlinuz p2v --- initrd.img
   label rescue
       kernel mboot.c32
       append xen.gz dom0_mem=max:126G --- vmlinuz rescue --- initrd.img
   label ks
   ```

```
kernel mboot.c32
append xen.gz dom0_mem=max:128G --- vmlinuz ks=file:/ks.cfg --- initrd.img
```

Unable to Mount Oracle System Assistant USB Device on Oracle VM 3.0.x (7149878)

See the following entry: "Some Operating Systems Do Not Mount the Oracle System Assistant USB Device" on page 34.

Date Incorrect on Oracle VM 3.0 (7061790)

The Oracle VM server might boot with the current year set to 2005. The SP and Host TOD and RTC clocks are not synchronized, and the correct clock setting is not persistent between server boots.

VMware ESXi Current Issues

This section contains topics that describe VMware ESXi software issues for the Sun Blade X4-2B. The following table lists the issues that are covered in this section.

Link to Issues	Workaround
16373075	No
"Can Not Install VMware ESXi 5.1 On SG-SAS6-REM-Z Configuration When Non-RAID Volumes Exist (16373075) " on page 44	No
"ESXi Cannot Mount the Oracle System Assistant USB Device (7154313)" on page 44	No

Can Not install VMware ESXi5.1 on an Erie-INT Configuration When Non-RAID Volumes Exist (16373075)

The Sun Blade X4-2B does not support installing VMware ESXi5.1 on an Erie-INT configuration when non-RAID volumes exist

ESXi5.1 installer may hang during installation if erie-rem and non-RAID volume presents

Workaround

None

Can Not Install VMware ESXi 5.1 On SG-SAS6-REM-Z Configuration When Non-RAID Volumes Exist (16373075)

The Sun Blade X4-2B does not support VMware ESXi 5.1 on SG-SAS6-REM-Z Configuration when Non-RAID Volumes Exist.

Workaround

None.

ESXi Cannot Mount the Oracle System Assistant USB Device (7154313)

Oracle System Assistant USB device cannot be mounted on ESXi server, but the device can be accessed through the ESXi client after installing GUEST OS.

Workaround

None.

Linux Current Issues

This section contains topics that describe Linux OS issues for the Sun Blade X4-2B. The following table lists the issues that are covered in this section.

Links to Issues	Workaround
“Oracle Linux OS Reports Multiple CE Messages After Hot-plugging 2 PEMs with Different MPS Values Into Same Slot Sequentially (17035011 and 15752501) ” on page 45	Yes
“Kernel Panic Occurs With BurnInTest 3.1 on a RHEL or OL 6.4 System With Unbreakable Linux Kernel Release 2 (17047864)” on page 46	Yes
“Oracle Linux 6.3 and 6.4 Cannot Be Installed on iSCSI Using UEFI Boot Mode (15807672)” on page 47	Yes
“hwmgmtd Service Does Not Start Successfully on RHEL 6.4 (16975947)” on page 47	Yes
“Oracle Linux 6.4 System Might Hang During Reboot With Sun Blade 6000 Virtualized 40 GbE NEM (16632764)” on page 47	Yes
“SLES 11 SP2 and 3 Systems Might Not Boot in UEFI BIOS Mode (16817765)” on page 48	Yes
“ACPI C-State Does Not Work on Servers Running Oracle Linux 6.4 (16870068)” on page 48	Yes
“CPU Remains at Low Frequency After Oracle Linux 5.9 or 6.4 Reboot or Power Cycle (16728705, 17181067) ” on page 48	Yes
“Oracle Linux 6.1 Installation Fails During Libparted Disk Probe (15770848)” on page 49	Yes
“Host Reset Might Cause a Linux System to Hang (16009236)” on page 49	Yes
“Oracle ILOM Not Getting System Information After Oracle Linux 6.2 (7175441)” on page 50	Yes
“Unable to Mount Oracle System Assistant USB Device on Some Versions of Linux” on page 50	N/A

Oracle Linux OS Reports Multiple CE Messages After Hot-plugging 2 PEMs with Different MPS Values Into Same Slot Sequentially (17035011 and 15752501)

After hot-plugging 2 PEMs with different MPS values into the same slot sequentially, the Oracle Linux 6 operating system reports many CE messages. An MPS value can only be auto-

negotiated once. Thus, the value negotiated with the first PEM may be different than the value required by the second PEM.

This mismatch may cause a CE (Corrected Error) pop-up. CEs are acceptable messages and do not harm the running system. The operating system may also receive a UE fatal error and stop the system on Sun Blade X4-2B Server Module.

Workaround

Some Linux operating systems have a hotplug patch available for this case. A user may select either of the below kernel parameters for the workaround.

`pci=pcie_bus_safe //Set MPS to the minimum size`. The PCIe Specification states 128.

`pci=pcie_bus_perf //Set MPS to the largest available size`. The real value is dependent on the MPS capability of both devices across a PCIe link.

Below are the supported/unsupported Linux operating systems:

- OEL7.0, UEK3 compatible, supported
- OEL6.5, UEK3 compatible, supported
- OEL6.4, UEK2 compatible, unsupported
- OEL6.3, UEK2, unsupported
- OEL5.10, UEK2 compatible, unsupported
- OEL5.9, UEK2 compatible, unsupported
- RHEL7.0, supported
- RHEL6.5, supported
- RHEL6.4, supported
- RHEL5.10, unsupported
- RHEL5.9, unsupported
- SLES11.3, supported
- SLES11.2, supported

▼ Kernel Panic Occurs With BurnInTest 3.1 on a RHEL or OL 6.4 System With Unbreakable Linux Kernel Release 2 (17047864)

After running PassMark BurninTest Linux V3.1 on a Red Hat Enterprise Linux or Oracle Linux 6.4 system, when you are rebooting or shutting down the system, the kernel might panic at the last stage of the shut down. This affects systems with Intel 100G or 400G SSDs.

The kernel panic will not affect the operation of the system. You can ignore the error message and power cycle or power off the system.

Workaround

- **Use PassMark BurninTest Linux V2.1 for a system with this configuration.**

Oracle Linux 6.3 and 6.4 Cannot Be Installed on iSCSI Using UEFI Boot Mode (15807672)

UEFI boot mode cannot be used when installing Oracle Linux 6.3 and 6.4 on an iSCSI device.

Workaround

- **Use legacy BIOS boot mode for installation.**

hwmgmtd Service Does Not Start Successfully on RHEL 6.4 (16975947)

On RHEL 6.4, after Oracle Hardware Management Pack installation, `hwmgmtd` service cannot start normally and you cannot get the correct system information from ILOM.

Workaround

- **Restart the IPMI service (`/etc/init.d/ipmi start`) within 60 seconds of starting the hwmgmtd service (`/etc/init.d/hwmgmtd start`).**

Oracle Linux 6.4 System Might Hang During Reboot With Sun Blade 6000 Virtualized 40 GbE NEM (16632764)

An Oracle Linux 6.4 blade system using the sxge NIC device might hang during reboot if the sxge device does not have a static IP address assigned to it or it cannot contact a DHCP server to obtain an IP address.

The last thing seen on the console is "`iptables: Unloading modules:`".

Workaround

- **Do one of the following:**
  - **Assign a static IP address to the sxge device, or make sure that it can obtain an IP address from a DHCP server.**

- **Change `IPTABLES_MODULES_UNLOAD` value from `yes` to `no` in `/etc/sysconfig/iptables-config`**

SLES 11 SP2 and 3 Systems Might Not Boot in UEFI BIOS Mode (16817765)

Systems running SLES 11 SP2 and 3 with Dual 16Gb FibreChannel or Dual 10 GbE HBA (Qlogic) with Option ROM enabled cannot boot with UEFI BIOS boot mode.

Workaround

- **In the BIOS Setup Utility disable the OpROM option of the PCIe EM slot that connects to the Dual 16Gb FibreChannel or Dual 10 GbE HBA (QLogic).**

ACPI C-State Does Not Work on Servers Running Oracle Linux 6.4 (16870068)

The CPUs never enter C3 and C6 CPU C-states when running Oracle LInux 6.4.

Workaround

1. **Add the following parameter to the first line of the /boot/grub/menu.lst:**

   ```
   intel_idle.max_cstate=0
   ```

2. **Reboot the server.**

CPU Remains at Low Frequency After Oracle Linux 5.9 or 6.4 Reboot or Power Cycle (16728705, 17181067)

When the power budget is hard-capped, the CPU might remain at a low frequency after an Oracle Linux 5.9 or 6.4 system is rebooted or power cycled.

Workaround

1. **View the CPU information to be modified. Type:**

   # **`cat /proc/cpuinfo | grep processor`**

2. **Obtain the maximum CPU frequency supported. Type:**

cat /sys/devices/system/cpu/cpu*N*/cpufreq/cpuinfo_max_freq

where *N* is the CPU ID to be modified.

3. **Obtain the `scaling_max_freq` for each CPU ID. Type:**

   # **cat /sys/devices/system/cpu/cpu*N*/cpufreq/scaling_max_freq**

4. **For each CPU where the scaling maximum frequency is less than the maximum supported frequency, set the new scaling maximum frequency. Type:**

   # **echo $*max_frequency* > /sys/devices/system/cpu/cpu*N*/cpufreq/scaling_max_freq**

   where $*max_frequency* is the determined max frequency shown in step 2

5. **Verify the new scaling max frequency. Type:**

   # **cat /sys/devices/system/cpu/cpu*N*/cpufreq/cpuinfo/scaling_max_freq**

Oracle Linux 6.1 Installation Fails During Libparted Disk Probe (15770848)

Oracle Linux 6.1 installation might fail during the libparted disk probe if libparted encounters a preexisting partition.

Workaround

- **Clear the disk of preexisting partitions and data before starting the installation of Oracle Linux 6.1.**

  For example, before starting the installation, use dd command clear the disk.

Host Reset Might Cause a Linux System to Hang (16009236)

The server integrated I/0 unit's VPP (Virtual Pin Port) might stall (hang) the system after a host reset (a software reset of the system that does not involve a power cycle).

This issue has been corrected in FPGA v3.2.

Workaround

- **Power reset the system.**

  A power reset involves cycling the power (powering off and on).

▼ Oracle ILOM Not Getting System Information After Oracle Linux 6.2 (7175441)

Oracle System Assistant installs Oracle Hardware Management Pack RPM, but the hwmgmt agent is not part of the RPM install and needs to be started manually.

Workaround

- **Manually start the hwmgmt agent.**

  Refer to the Oracle Hardware Management Pack documentation:

  `http://www.oracle.com/goto/OHMP/docs`

Unable to Mount Oracle System Assistant USB Device on Some Versions of Linux

See the following entry: "Some Operating Systems Do Not Mount the Oracle System Assistant USB Device" on page 34

Windows Issues

This section contains topics that describe Windows OS issues for the Sun Blade X4-2B. The following table lists the issues and announcements.

Link to Issue	Workaround
“Hotplugging Dual 16Gb FibreChannel or Dual 10 GbE HBA (QLogic) Card Can Cause Windows 2012 Crash (17058802)” on page 51	No
“Reset BIOS to Factory Defaults Before Installing a Windows OS on a Preinstalled Linux System (15890512)” on page 52	Yes
“Error Message When Starting hwmgmtcli Tool (15909859)” on page 52	Yes

Sun Blade 6000 40 GbE Virtualized NEM Cannot Support Windows Server 2012 and 2012R2 (18463407)

Sun Blade 6000 40 GbE Virtualized NEM (7100090) cannot support Windows Server 2012 and 2012R2.

Workaround

None

Hotplugging Dual 16Gb FibreChannel or Dual 10 GbE HBA (QLogic) Card Can Cause Windows 2012 Crash (17058802)

Frequently hotplugging and unplugging a Dual 16Gb FibreChannel or Dual 10 GbE HBA (QLogic) PCIe EM card in the Sun Blade 6000 modular system chassis can cause a Windows 2012 server module to crash.

Reset BIOS to Factory Defaults Before Installing a Windows OS on a Preinstalled Linux System (15890512)

If you install Windows 2012 OS on a system with preinstalled Linux, you might encounter a fatal error.

Workaround

- **If you need to install Windows on a system with preinstalled Linux, reset the BIOS to factory defaults before installing Windows.**

Error Message When Starting hwmgmtcli Tool (15909859)

The Oracle HMP tool, hwmgmtcli, might not work after Windows 2008 SP2 and Windows 2008 R2 installation. When hwmgmtcli is called, the following error message appears:

```
This application has failed to start because hwmgmtcommon.dll was not found.

Re-installing the application may fix this problem.
```

The Oracle HMP agents are not installed unless the SNMP agent is installed first. SNMP must be installed before installing the Oracle Hardware Management Agent.

Workaround

1. **Install SNMP service.**
2. **Reinstall the Oracle HMP agents by clicking the oracle-hmp-agents.msi file.**

   The oracle-hmp-agents.msi file is available in the Oracle HMP software package. See “Getting Server Firmware and Software Updates”.

Document Errata

This section contains information about errors in the Sun Blade X4-2B documentation or service label. The following table lists the issues that are covered in this section.

Link to Issues	Workaround
"Incorrect SLES11 SP Version in README of Sun Blade X4-2B OSA Release 1.2 (19557543)" on page 53	N/A
"Service Animations Released" on page 53	N/A
"REM Cable Shown on Service Label" on page 54	No

Incorrect SLES11 SP Version in README of Sun Blade X4-2B OSA Release 1.2 (19557543)

Some SLES11 SP versions are incorrect in SLES11SP2/SP3 drivers installation instructions in the README of OSA release SW1.2:

- SUSE Linux Enterprise Server 11 SP2 Support is new.
- Installation instructions for SLES11-SP1 (Linux kernel 2.6.32.12_0.7) should be SLES11-SP2 SUSE Linux Enterprise Server 11 SP3 Support.
- Installation instructions for SLES11-SP1 (Linux kernel 3.0.76-0.11) should be SLES11-SP3.

Service Animations Released

Links to processor and memory service task video animations for the X4 server series, including the Sun Blade X4-2B server module, are at:

http://docs.oracle.com/cd/E52420_01/index.html

REM Cable Shown on Service Label

The X4-2B Service Label shows the REM storage drive cable on the server module motherboard as a dotted line. This cable is not supported for the Sun Blade X4-2B server module.

Getting Server Firmware and Software Updates

This section explains the options for accessing server firmware and software updates.

Description	Links
Learn about server firmware and software updates.	“Firmware and Software Updates” on page 55
Learn about options for accessing firmware and software.	“Firmware and Software Access Options” on page 56
Review available firmware and software releases.	“Software Releases” on page 56
Learn how to get firmware and software using Oracle System Assistant, My Oracle Support, or Physical Media Request.	“Getting Firmware and Software From MOS or PMR” on page 57
Install firmware and software updates using other methods.	“Installing Updates Using Other Methods” on page 61

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 these files have been tested together and verified to work with your server.

You should 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.

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.

The product notes that are part of the server documentation identify which server software release is the latest release supported on your server.

Firmware and Software Access Options

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

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

  For information about using Oracle System Assistant, refer to `Oracle X4 Series Servers Administration Guide (http://www.oracle.com/goto/x86AdminDiag/docs)`

  My Oracle Support – All system software releases are available from My Oracle Support at `http://support.oracle.com`.

  For information about what is available on the My Oracle Support web site, see "Download Firmware and Software Using My Oracle Support" on page 57.

  For instructions on how to download software releases from My Oracle Support, see "Requesting Physical Media" on page 58.
- **Physical Media Request (PMR)** - You can request a DVD that contains one or more of the software releases that are available from My Oracle Support.

  For information, see "Requesting Physical Media" on page 58.
- **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 61.

Software Releases

Software releases on My Oracle Support are grouped by product family (such as Sun Server), 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 or by submitting to Oracle a physical media request (PMR). Alternatively, you can download the same firmware and software to your server using Oracle System Assistant.

Package Name	Description	When to Download This Package
X4-*x* SW *release* – Firmware Pack	Contains all system firmware, including Oracle ILOM, BIOS, and option card firmware.	You need the latest firmware.
X4-*x* SW *release* – OS Pack	Includes a package of all tools, drivers, and utilities for a specific OS. An OS Pack is available for each supported operating system version. Software includes Oracle Hardware Management Pack and LSI Mega RAID software. 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.
X4-*x* SW *release* – All Packs	Includes the Firmware Pack, all OS Packs, and all documents. This pack does not include Oracle VTS or the Oracle System Assistant image.	You need to update a combination of system firmware and OS-specific software.
X4-*x* SW *release* – Diagnostics	Includes Oracle VTS diagnostics image.	You need the Oracle VTS diagnostics image.
X4-*x* SW *release* – Oracle System Assistant Updater	Includes Oracle System Assistant recovery and ISO update image.	You need to manually recover or update Oracle System Assistant.

Getting Firmware and Software From MOS or PMR

You can use Oracle System Assistant to easily download and then use the latest software release. For further information, refer to `Oracle X4 Series Servers Administration Guide (http://www.oracle.com/goto/x86AdminDiag/docs)`

However, you can also obtain updated firmware and software by using My Oracle Support (MOS) or by submitting to Oracle a physical media request (PMR). For information, see:

- “Download Firmware and Software Using My Oracle Support” on page 57
- “Requesting Physical Media” on page 58

▼ Download Firmware and Software Using My Oracle Support

1. **Go to the My Oracle Support web site: `http://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, Sun Server X4-2) 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 56 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.

Requesting Physical Media

If your processes do not allow downloads from Oracle web sites, you can receive the latest software release packages by submitting to Oracle a physical media request (PMR). The preferred method for submitting a PMR is through the My Oracle Support (MOS) web site.

The high-level tasks for submitting a physical media request are described in these sections:

- "Gathering Information for the Physical Media Request" on page 59

Gathering Information for the Physical Media Request

You must have a warranty or support contract for your server in order to make a physical media request (PMR).

Before you make the PMR, do the following:

- **Obtain the product name, software release version, and patches required.** It will be easier to make the request if you know the latest software release version and the name of the patches for the software release that you are requesting.
  - *If you have access to My Oracle Support* – Follow the instructions in "Download Firmware and Software Using My Oracle Support" on page 57 to determine the latest software release version and view available software release packages (patches). After viewing the list of patches, you can navigate away from the Patch Advanced Search Results screen, if you do not want to continue with the download steps.
  - *If you do not have access to My Oracle Support* – Use the information in "Software Releases" on page 56 to determine which patches for the software release you want, and then request those patches for the latest software release version.
- **Have the shipping information ready.** You will need to provide a contact name, phone number, email address, company name, and shipping address as part of the request.

▼ Request Physical Media (Online)

Before You Begin Gather the information described in "Gathering Information for the Physical Media Request" on page 59 before making the request.

1. **Go to the My Oracle Support web site: `http://support.oracle.com`.**
2. **Sign in to My Oracle Support.**
3. **Click on the Contact Us link in the upper right corner of the page.**

   The Create Service Request: Problem screen appears.
4. **Describe your request as follows:**

   a. **In the Problem Summary field, type `PMR for latest software release`.**

b. **From the Problem Type drop-down list, select Software & OS Media Requests.**

c. **In the Support Identifier field, type the Customer Support Identifier associated with your support contract.**

5. **Skip the Create Service Request: Solutions screen by clicking the Next button in the upper right corner of the screen twice.**

   The Create Service Request: More Details screen appears.

6. **Provide more information about your request as follows:**

   a. **In the Additional Information section, answer the questions listed in the following table:**

Question	Your Answer
Is this a physical software media shipment request?	Yes
Which product line does the media request involve?	Sun Products
Are you requesting a required password for a patch download?	No
Are you requesting a patch on CD/DVD?	Yes
If requesting a patch on CD/DVD, please provide the patch number and OS/platform?	Enter the patch number for each download that you want for the software release.
List the product name and version requested for the physical media shipment?	*Product Name:* Sun Blade X4-*x* *Version:* Latest software release number
What is the OS/platform for the requested media?	If you are requesting OS-specific downloads, specify the OS here. If you are requesting system firmware only, enter Generic.
Are any languages required for this shipment?	No

   b. **Fill in the ship-to contact information, which includes a contact name, phone number, email address, company name, and shipping address.**

7. **Click the Next button.**

   The Create Service Request: Severity/Contact screen appears.

8. **Enter your contact phone number and preferred method of contact.**

9. **Click the Submit button.**

   This completes the physical media request. It can take up to seven business days to receive the physical media.

▼ Request Physical Media (By Phone)

Before You Begin Gather the information described in "Gathering Information for the Physical Media Request" on page 59 before making the request.

1. **Call Oracle support, using the appropriate number from the Oracle Global Customer Support Contacts Directory at:**

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

2. **Tell Oracle support that you want to make a physical media request (PMR) for the Sun Blade X4-*x*.**

   - If you are able to find the specific software release package and patch number information from My Oracle Support, provide this information to the support representative.
   - If you are unable to find the software release package information, request the latest software release package for the Sun Server X4-*x*.

Installing Updates Using Other Methods

In addition to using Oracle System Assistant and My Oracle Support, you can install updated firmware and software 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:

  http://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 to update firmware within the system.

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

  http://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) 3.1 Documentation Library at:

  http://www.oracle.com/goto/ILOM/docs