

**Sun Blade X3-2B (formerly Sun Blade X6270
M3) Installation Guide for the Oracle®
Solaris Operating System**



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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 X3–2B Model Name Change” on page 5
- “Getting the Latest Firmware and Software” on page 5
- “Documentation and Feedback” on page 6
- “About This Documentation” on page 6
- “Support and Training” on page 6
- “Contributors” on page 7
- “Change History” on page 7

Sun Blade X3–2B Model Name Change

The Sun Blade X3-2B was formerly named the Sun Blade X3-2B. This name might still appear in the software. The name change does not indicate any change in system features or functionality.

The new name identifies the following:

- X identifies an x86 product.
- The first number, 3, 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 new 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” on page 29.

Documentation and Feedback

Documentation	Link
All Oracle products	http://www.oracle.com/documentation
Sun Blade X3-2B	http://www.oracle.com/pls/topic/lookup?ctx=SunBladeX3-2B
Oracle Integrated Lights Out Manager (ILOM) 3.1	http://www.oracle.com/pls/topic/lookup?ctx=ilom31
Oracle Hardware Management Pack	http://www.oracle.com/pls/topic/lookup?ctx=ohmp

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>

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Change History

The following lists the release history of this documentation set:

- April 2012. Initial publication.
- May 2012. Updated for SW 1.0.1. Documentation library re-released with editorial revisions.
- June 2012. Updated for SW 1.1. Revised Product Notes and Service Manual.
- July 2012. Server model name changed. All documents revised.

About the Sun Blade X3-2B Installation Guide for the Oracle Solaris OS

Note – Important: The Sun Blade X3-2B was formerly named the Sun Blade X6270 M3 server module. This name might still appear in the software. The name change does not indicate any change in system features or functionality.

The following sections of this document describe how to install a supported Oracle Solaris OS on a Sun Blade X3-2B.

Section Description	Header
Oracle Solaris installation task table and information about supported versions and installation options.	“About Oracle Solaris OS Installation” on page 11
Pre-installation preparatory steps and considerations.	“Preparing to Install the OS” on page 15
Installation procedures.	“Installing the Oracle Solaris OS” on page 23

About Oracle Solaris OS Installation

Oracle Solaris Installation Task Table

Use the following task table to assist you with installing a supported version of Oracle Solaris on your Sun Blade X3-2B.

Step	Description	Link
1	Review the list of supported Windows OS versions and learn how to obtain the latest and most up-to-date information about the server software and hardware.	“Supported OS Versions and Latest Information” on page 11
2	Review the options for single server or multiple server OS installations.	“OS Installation Options” on page 12
3	Get an overview of Oracle System Assistant and how you can use it to manage your server.	“Oracle System Assistant” on page 14
4	Prepare for the OS installation by performing necessary procedures.	“Preparing to Install the OS” on page 15

Supported OS Versions and Latest Information

Use this section to learn about the supported versions of the Oracle Solaris operating system (OS) and how to get the latest server-related information:

- [“Supported Oracle Solaris Operating System Versions” on page 11](#)
- [“Latest Information in Product Notes” on page 12](#)

Supported Oracle Solaris Operating System Versions

At the time of the publication of this document, the Sun Blade 6270 M3 server module supports the following Oracle Solaris operating systems:

- Oracle Solaris 10 08/11
- Oracle Solaris 11

For updates to the list of supported operating systems, refer to the server *Product Notes* document.

Related Information: “[Latest Information in Product Notes](#)” on page 12

Latest Information in Product Notes

The most up-to-date information about your server is maintained in the *Sun Blade X3-2B (formerly Sun Blade X6270 M3) Product Notes*. The *Product Notes* document contains detailed information about the available firmware updates and any hardware or software issues for the server. This document and other server-related documents are available online in the server's documentation library at: <http://www.oracle.com/pls/topic/lookup?ctx=SunBladeX3-2B>

OS Installation Options

You can choose to install an OS on a single server or on multiple servers. The scope of this document is for single server OS installations. The table below provides some information about these two installation options.

Option	Description
Multiple servers	See http://www.oracle.com/us/products/enterprise-manager/opscenter/index.html .
Single server	Installs an OS to a single server using one of the following methods: <ul style="list-style-type: none">▪ Locally: OS installation is performed locally at the server. This option is recommended if you have just completed the physical installation of the server in the rack. Additional hardware is required.▪ Remotely: OS installation is performed from a remote location. Uses the Oracle ILOM Remote Console application to access Oracle System Assistant or to perform a manual OS installation.

Related Information:

- “[Single-Server Installation Methods](#)” on page 12

Single-Server Installation Methods

Select a method for providing the Oracle Solaris installation media. Use the following information to determine the local or remote OS installation that best serves your needs.

Media Delivery Method	Additional Requirements
Local assisted OS installation – Uses Oracle System Assistant.	A monitor, USB keyboard and mouse, a USB device, and Oracle Solaris distribution media. For more information, see “ Assisted OS Installation ” on page 13.
Remote assisted OS installation – Uses Oracle System Assistant.	Oracle ILOM Remote Console application, a redirected CD/DVD drive or ISO image file, and Oracle Solaris distribution media. For more information, see “ Assisted OS Installation ” on page 13.
Local using a CD/DVD drive – Uses a physical CD/DVD drive connected to the server.	A monitor, USB keyboard and mouse, a USB CD/DVD drive, and Oracle Solaris distribution media. For more information, see “ Manual OS Installation ” on page 13.
Remote using a CD/DVD drive or CD/DVD ISO image – Uses a redirected physical CD/DVD drive on a remote system running the JavaRConsole Oracle ILOM application.	A remote system with a browser, an attached physical CD/DVD drive, Oracle Solaris distribution media, and network access to the server management port. For more information, see “ Manual OS Installation ” on page 13.

Assisted OS Installation

Note – Oracle System Assistant *does not* currently support the Oracle Solaris OS for assisted installation.

This is the easiest method for installing a supported OS on the server. This method involves using the Oracle System Assistant application. You deliver the Oracle Solaris OS installation media on either a local or remote CD/DVD drive or CD/DVD image, and use the Oracle System Assistant Install OS task to initiate the installation process. To use the Install OS task, Oracle System Assistant must support the OS for assisted installation.

For server-related updates and information, refer to the *Sun Blade X3-2B (formerly Sun Blade X6270 M3) Product Notes*.

Manual OS Installation

With this method, you deliver the Oracle Solaris distribution media on either a local or remote CD/DVD drive, USB device, or CD/DVD image. You also need to supply the necessary drivers. The drivers for the server are available from the My Oracle Support site as server-specific and OS-specific packages. To install the OS, use the distribution media's installation script.

Related Information: “[Oracle System Assistant](#)” on page 14

Oracle System Assistant

Oracle System Assistant is a single-server system set-up and maintenance tool for x86 Sun Fire and Sun Blade servers. It integrates Oracle's Single System Management products and a selection of related software to provide a suite of tools that allow for the quick and convenient startup and maintenance of the server. The components of Oracle System Assistant include:

- Hardware Management Pack
- User interface access to startup and maintenance provisioning tasks (including Install OS task*)
- Oracle Linux command-line environment
- Operating system drivers and tools
- Server-specific firmware
- Server-related documentation

Oracle System Assistant is installed in the server and is factory configured with a server-specific version of tools and drivers that is maintained through the use of online updates.

* OS installation not supported for some operating systems.

Related Information: Refer to the [Sun Blade X3-2B \(formerly Sun Blade X6270 M3\) Administration Guide](#)

Preparing to Install the OS

This section describes the steps for preparing to install an OS. Use the following task table as a guide.

Step	Task	Link
1	You must have already reviewed the OS installation task table.	“About Oracle Solaris OS Installation” on page 11
2	Get the installation documentation.	“Obtaining Oracle Solaris Documentation” on page 15
3	Setup for the installation based on your selected installation method.	“Setting Up the Installation Session” on page 16
4	Prepare the BIOS by loading the optimal default values, and selecting a BIOS mode.	“Setting Up the BIOS” on page 20
5	Install and update the OS	“Installing the Oracle Solaris OS” on page 23

Obtaining Oracle Solaris Documentation

Documentation for supported versions of Oracle Solaris operating systems are available at:

- Oracle Solaris 10: <http://download.oracle.com/docs/cd/E19253-01/index.html>
- Oracle Solaris 11: <http://www.oracle.com/technetwork/documentation/solaris-11-192991.html>

Note – Oracle Solaris documentation is also available on the Documentation DVD included with the Oracle Solaris OS software.

Setting Up the Installation Session

This section describes how to set up a local or remote installation session. A local OS installation is performed at the server. A remote OS installation is performed using the JavaRConsole System, the Oracle ILOM Remote Console application, and a redirected CD/DVD drive or CD ISO image.

- “Set Up for Local Installation” on page 16
- “Set Up for Remote Installation” on page 17

▼ Set Up for Local Installation

Use this procedure to set up for a local installation.

Note – For a local OS installation, additional hardware is required and server web access is recommended.

Before You Begin

- You should have already performed the server installation as described in the *Sun Blade X3-2B (formerly Sun Blade X6270 M3) Installation Guide*
- You need the following items:
 - Video monitor with 15-pin (DB-15) connector capabilities
 - USB keyboard and mouse
 - USB device (CD/DVD drive or thumb drive)
- To ensure that the server has the latest updates, server web access is recommended.

- 1 **Ensure the server is in standby power mode.**
- 2 **Attach the 3-cable dongle to the universal connector port (UCP) on the front of the server module.**
- 3 **Connect the video monitor to the video connector on the 3-cable dongle.**
- 4 **Connect the keyboard and mouse to one of the USB connectors on the front of the server (or to one of the USB connectors on the 3-cable dongle).**
- 5 **Connect the CD/DVD drive to the other USB connector on the front of the server (or to one of the USB connectors on the 3-cable dongle).**

Next Steps “Setting Up the BIOS” on page 20

▼ Set Up for Remote Installation

Use this procedure to set up for a remote installation.

Note – Using the CD-ROM or CD-ROM image option to install the OS significantly increases the time necessary to perform the installation as the content of the CD-ROM is accessed over the network. The installation duration depends on the network connectivity and traffic. This installation method also has a greater risk of issues due to transient network errors.

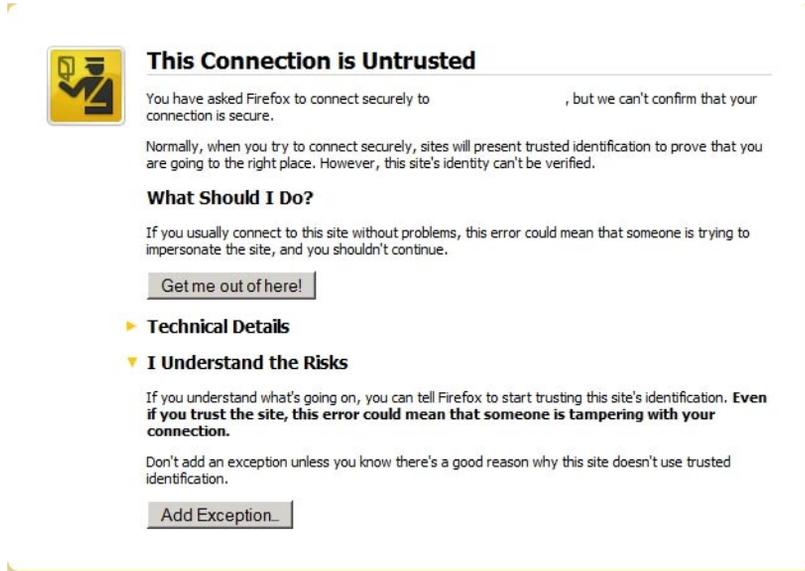
Before You Begin The following requirements must be met:

- You should have already performed the server installation as described in the *Sun Blade X3-2B (formerly Sun Blade X6270 M3) Installation Guide*
- The JavaRConsole system must be running on Oracle Solaris, Linux, or Windows.
- The JavaRConsole system must be connected to a network that has access to the Sun server Ethernet management port.
- Java Runtime Environment (JRE) 1.5 must be installed.
- If the JavaRConsole system is running Solaris, volume management must be disabled for JavaRConsole to access the CD/DVD-ROM drive.
- If the JavaRConsole system is running Windows, disable Internet Explorer Enhanced Security.
- The server service processor (SP) has been set up according to the instructions in the Oracle ILOM documentation for your server.
- You need the SP IP address to access Oracle ILOM. For information about determining the SP IP address, see *Sun Blade X3-2B (formerly Sun Blade X6270 M3) Installation Guide*.
- To ensure that the server has the latest updates, server web access is required.

Note – Some of the screen shots shown in this procedure might differ from the screens you see.

- 1 To access Oracle ILOM, type the IP address of the service processor into a web browser on the JavaRConsole system.

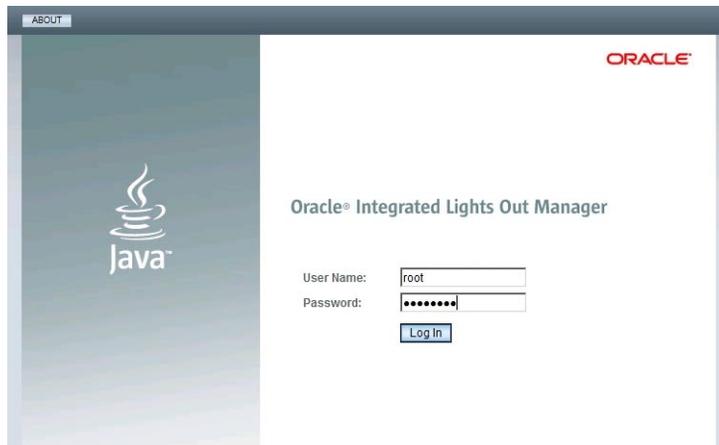
The Security Alert dialog box appears.



- 2 Click the I Understand the Risks link.

- 3 Click Add Exception.

The Oracle ILOM login screen appears.



4 Type the user name and password and click Log In.

The default user name is **root**, and default password is **changeme**.

The Oracle ILOM System Summary screen appears.

Summary
View system summary information. You may also change power state and view system status and fault information.

General Information	
Model	--
Serial Number	--
System Type	--
System Identifier	--
System Firmware Version	--
Primary Operating System	--
Host Primary MAC Address	--
Blade Slot	--
ILOM Address	--
ILOM MAC Address	--

Actions	
Power State	<input checked="" type="checkbox"/> ON <input type="button" value="Turn Off"/>
Locator Indicator	<input checked="" type="checkbox"/> OFF <input type="button" value="Turn On"/>
Oracle System Assistant Version:	<input type="button" value="Launch"/>
System Firmware Update	<input type="button" value="Update"/>
Remote Console	<input type="button" value="Launch"/>

Status			
Overall Status:		Total Problem Count: 2	
Subsystem	Status	Details	Inventory
Processors	<input checked="" type="checkbox"/> OK	Processor Architecture: x86 64-bit Processor Summary: 2 Intel Xeon Processor E5 Series	Processors (Installed / Maximum): 2 / 2
Memory	<input checked="" type="checkbox"/> OK	Installed RAM Size: 96 GB	DIMMs (Installed / Maximum): 24 / 24
Power	<input checked="" type="checkbox"/> OK	Permitted Power Consumption: 403 watts Actual Power Consumption: 69 watts	PSUs (Installed / Maximum): 2 / 2
Cooling	<input checked="" type="checkbox"/> OK	Inlet Air Temperature: 22 °C Exhaust Air Temperature: 29 °C	Fans (Installed / Maximum): 12 / 12

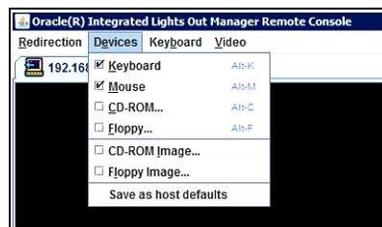
5 Click the Remote Console Launch button.

A dialog box for the `jnlpgenerator.jnlp` file appears.



6 Click Open.

The JavarConsole screen appears.



7 From the Devices menu, select one CD item according to the delivery method you have chosen.

- **CD-ROM Remote.** Select CD-ROM to redirect the server to the operating system software CD/DVD contents from the CD/DVD-ROM drive attached to the JavaRConsole system.
- **CD-ROM Image.** Select CD-ROM Image to redirect the server to the operating system software .iso image file located on the JavaRConsole system.

Next Steps [“Setting Up the BIOS” on page 20](#)

Setting Up the BIOS

Before you install the operating system, you should ensure that BIOS settings are configured to support the type of installation you plan to perform. The following topics provide specific instructions on how to configure the BIOS to support the installation:

- [“Load BIOS Optimal Default Settings” on page 20](#)
- [“Set the BIOS Mode” on page 21](#)

▼ Load BIOS Optimal Default Settings



Caution – This procedure resets the BIOS settings to the default values, and overwrites any previously customized settings. To retain customized settings, review each menu and make note of the customized values before loading the default values.

The BIOS Setup Utility contains an option to load the optimal BIOS settings for the server. Perform this procedure on a newly installed server to ensure that the BIOS is set to the optimal default values.

Before You Begin

- The server is equipped with a properly installed storage drive.
- A console connection is established to the server. For details, see [“Setting Up the Installation Session” on page 16](#).

1 Power on the server.

POST message appears on the video (KVM or RKVM) console.

2 Watch the messages, and, when prompted, press F2 to access the BIOS Setup Utility.

The BIOS Setup Utility main screen appears.

3 To ensure that the factory defaults are set, press F9.

4 To save the changes, and exit the BIOS Setup Utility, press F10.

Next Steps [“Set the BIOS Mode” on page 21](#)

▼ Set the BIOS Mode

The BIOS firmware supports both legacy BIOS and Unified Extensible Firmware Interface (UEFI); the default setting is Legacy. Some operating systems support both legacy BIOS and UEFI BIOS and some support legacy BIOS only. These are the options for setting the BIOS mode before installing the OS:

- If the OS supports legacy BIOS only, you must make sure that BIOS is set to legacy mode before you do the OS installation.
- If the OS supports both legacy BIOS and UEFI BIOS, you have the option of setting BIOS to either legacy mode or UEFI mode before you perform the OS installation.

Note – Upon initial release of the Sun Blade X6270 M2 server, the Oracle Solaris OS does **not** support UEFI BIOS. The most up-to-date information about the server hardware and software is available in the *Sun Blade X3-2B (formerly Sun Blade X6270 M3) Product Notes*.

- 1 Power on the server.**
POST messages appear on the console.
- 2 Watch the messages, and, when the prompt appears, press F2 to access the BIOS Setup Utility.**
The BIOS Setup Utility main screen appears.
- 3 In the BIOS Setup Utility, use the left or right arrow keys to navigate to the Boot screen.**
The Boot Menu screen appears.
- 4 Use the down arrow key to select the UEFI/BIOS Boot Mode field.**
- 5 Press Enter and use the up or down arrow keys to select the Legacy BIOS option.**
- 6 To save the changes, and exit the BIOS Setup Utility, press F10.**

Next Steps [“Installing the Oracle Solaris OS” on page 23](#)

Installing the Oracle Solaris OS

This section describes how to install the Oracle Solaris OS. Procedures for identifying logical and physical network interface names and installing the server system tools are also included.

Step	Description	Links
1	Start the installation.	“Install Supported Versions of the Oracle Solaris OS” on page 23
2	When configuring an operating system for a networked server, you might need to provide the logical name (assigned by the OS) and the physical name (MAC address) of each network interface.	“Identify Logical and Physical Network Interface Names” on page 24
3	Install the Oracle Solaris OS system tools and access the drivers that are included with Oracle System Assistant software and the downloaded software package.	<ul style="list-style-type: none">▪ “Install Server System Tools” on page 26▪ “Access System Drivers” on page 27

▼ Install Supported Versions of the Oracle Solaris OS

Use this procedure to install the OS locally or remotely using CD/DVD installation media or ISO image.

- Before You Begin**
- Perform the procedures in the section, [“Preparing to Install the OS” on page 15](#).
 - Review Oracle Solaris OS installation documentation:
 - Oracle Solaris 10: <http://download.oracle.com/docs/cd/E19253-01/index.html>
 - Oracle Solaris 11: <http://www.oracle.com/technetwork/documentation/solaris-11-192991.html>

- 1 Ensure that the installation media is installed in the primary boot drive.**
- 2 Power on the server.**

The server boots from the CD/DVD or CD/DVD ISO image, and the Solaris Installation Program screen appears.

- 3 Use the text- or GUI-based installation program to install the OS.

▼ Identify Logical and Physical Network Interface Names

When you are configuring an operating system for a networked server, you might need to provide the logical name (assigned by the OS) and the physical name (MAC address) of each network interface. This topic shows you how to get this information.

Use this procedure to display information about MAC addresses and network interfaces, including their logical and physical names (MAC addresses).

- 1 In the Install Type menu, select Option (6) Single User Shell and press Enter.

Note – Alternatively, you can run these commands from a command shell.

If a message appears about mounting an OS instance, select **q**. You should not mount any OS instance.

The message "Starting Shell" appears. See the following figure.

```

1. Solaris Interactive (default)
2. Custom JumpStart
3. Solaris Interactive Text (Desktop session)
4. Solaris Interactive Text (Console session)
5. Apply driver updates
6. Single user shell

Enter the number of your choice.
Selected: 6

Single user shell

Searching for installed OS instances...

Multiple OS instances were found. To check and mount one of them
read-write under /a, select it from the following list. To not mount
any, select 'q'.

 1 /dev/dsk/c2t0d0s0 Solaris 10 6/06 s10x_u2wos_08 X86
 2 /dev/dsk/c2t1d0s0 Solaris 10 6/06 s10u2_08-DN-WOS X86

Please select a device to be mounted (q for none) [?,??,q]: q

Starting shell.
#
```

- 2 At the command prompt (#), type the following command to plumb all network interfaces.
ifconfig -a plumb

Note – The plumb process might take some time.

3 At the command prompt, type the following command.

```
# ifconfig -a
```

The output of Solaris named interfaces and MAC addresses appears. For example:

```
# ifconfig -a | more
e1000g0: flags=1000802<BROADCAST,MULTICAST,IPv4> mtu 1500 index 2
    inet 0.0.0.0 netmask 0
    ether 0:14:4f:c:a1:ee
e1000g1: flags=1000802<BROADCAST,MULTICAST,IPv4> mtu 1500 index 3
    inet 0.0.0.0 netmask 0
    ether 0:14:4f:c:a1:ef
e1000g2: flags=1000802<BROADCAST,MULTICAST,IPv4> mtu 1500 index 4
    inet 0.0.0.0 netmask 0
    ether 0:14:4f:c:a5:d6
e1000g3: flags=1000802<BROADCAST,MULTICAST,IPv4> mtu 1500 index 5
    inet 0.0.0.0 netmask 0
    ether 0:14:4f:c:a5:d7
e1000g4: flags=1000802<BROADCAST,MULTICAST,IPv4> mtu 1500 index 6
    inet 0.0.0.0 netmask 0
    ether 0:14:4f:c:a1:4e
e1000g5: flags=1000842<BROADCAST,RUNNING,MULTICAST,IPv4> mtu 1500 index 1
    inet 0.0.0.0 netmask 0
    ether 0:14:4f:c:a1:4f
e1000g6: flags=1000802<BROADCAST,MULTICAST,IPv4> mtu 1500 index 7
    inet 0.0.0.0 netmask 0
    ether 8:0:20:b6:ce:94
e1000g7: flags=1000802<BROADCAST,MULTICAST,IPv4> mtu 1500 index 8
    inet 0.0.0.0 netmask 0
```

In the sample output above:

- The e1000g# entry in the first column refers to the Solaris logical named interface. This first column in the output identifies the logical names assigned by Solaris to the network interfaces.
- The ether #:#:#:#:# entry in second column (third row) refers to the physical MAC address name of the network port.

For example:

The physical MAC address for the Solaris named network interface is e1000g0 is
0:14:4f:c:a1:ee.

4 Save this information to a file, or write it down.

5 When you are done, to start the system configuration script, type `sys-unconfig (1M)` at the command line.

This command restores the system configuration to the factory defaults.



Caution – The `sys-unconfig (1M)` command halts the system and restores the factory settings. Do not run this command unless you are ready to reconfigure your system.

For example:

```
# sys-unconfig
WARNING
This program will unconfigure your system. It will cause it
to revert to a "blank" system - it will not have a name or know
about other systems or networks.
This program will also halt the system.
Do you want to continue (y/n) ?
```

The system reboots and the configuration script starts.

▼ Install Server System Tools

Server system tools, which include LSI MegaRAID Storage Manager (LSI MSM), MegaCLI, and Oracle Hardware Management Pack are available with the Oracle System Assistant software and the downloaded Solaris OS software package. Use this procedure to access and install the server system tools.

1 Do one of the following:

- **If your system does *not* have Oracle System Assistant:**

- a. **Download the latest server system tools and drivers package from the My Oracle Support site.**

For more information, see [“Getting Server Firmware and Software”](#) on page 29.

- b. **Unzip the downloaded tools and drivers package to the server.**

- c. **Within the unzipped file system, navigate to the Solaris OS Tools folder:**

`Solaris/OS_name/Tools`

where *OS_name* is the installed Solaris OS.

- **If your system has Oracle System Assistant:**

- a. **From the OS, open a file browser, and navigate to the Oracle System Assistant USB device.**

The USB device is named: `ORACLE_SSM`

For USB mounting instructions, refer to the [Sun Blade X3-2B \(formerly Sun Blade X6270 M3\) Administration Guide](#).

- b. **Navigate to the appropriate Solaris OS Tools folder:**

`Solaris/OS_name/Tools`

where *OS_name* is the installed Solaris OS.

2 To install the tools, do the following:

■ For LSI MSM:

Note – The `readme.txt` file located in the `Tools/MSM` directory contains important information about installing LSI MSM.

a. Navigate to the `MSM/disk` directory and run the `install.sh` file.

This starts the installation script.

b. Follow the progress of the script until the installation is finished.

For more information, refer to the LSI MSM installation instructions at:
http://www.lsi.com/sep/Pages/oracle/sg_x_sas6-r-rem-z.aspx

■ For MegaCLI:

Note – The `readme.txt` file located in the `Tools/MegaCLI` directory contains important information about installation.

a. Navigate to the `MegaCLI` directory and run the `MegaCLI` file.

■ For Oracle Hardware Management Pack:

a. Refer to the `hmp-prerequisite-installation.txt` **ReadMe** file in the `hmp-tools/oracle-hmp-version/SOFTWARE` directory (where *version* is the version of Oracle Hardware Management Pack).

For more information, refer to the Oracle Hardware Management Pack documentation at: <http://www.oracle.com/pls/topic/lookup?ctx=ohmp>.

▼ Access System Drivers

This procedure describes how to access the `Drivers` directory on Oracle System Assistant and the OS-specific download package.

1 Do one of the following:

▪ **If your system does *not* have Oracle System Assistant:**

- a. **Download the latest server system tools and drivers package from the My Oracle Support site.**

For more information, see [“Getting Server Firmware and Software”](#) on page 29.

- b. **Unzip the downloaded tools and drivers package to the server.**

- c. **Within the unzipped file system, navigate to the appropriate Solaris OS Drivers folder:**

`Solaris/OS_name/Drivers`

where *OS_name* is the installed Solaris OS.

▪ **If your system has Oracle System Assistant:**

- a. **From the OS, navigate to the Oracle System Assistant USB device.**

The USB device is named: `ORACLE_SSM`

For USB mounting instructions, refer to the [Sun Blade X3-2B \(formerly Sun Blade X6270 M3\) Administration Guide](#).

- b. **Navigate to the appropriate Solaris OS Drivers folder:**

`Solaris/OS_name/Drivers`

where *OS_name* is the installed Solaris OS.

2 Navigate to the driver folder.

Getting Server Firmware and Software

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

Description	Links
Learn about server firmware and software updates.	“Firmware and Software Updates” on page 29
Learn about the options for accessing firmware and software.	“Firmware and Software Access Options” on page 30
View the available firmware and software packages.	“Available Software Release Packages” on page 30
Access the firmware and software packages through Oracle System Assistant, My Oracle Support, or a physical media request.	“Accessing Firmware and Software” on page 31
Install firmware and software updates.	“Installing Updates” on page 35

Firmware and Software Updates

Firmware and software, such as hardware drivers and tools for the server, are updated periodically. Updates are made available as a software release. The software release is a set of downloads (patches) that include all available firmware, hardware drivers, and utilities for the server. All these have been tested together. The Read Me document that is included with the download explains what has changed and what has not changed from the prior software release.

You should update your server firmware and software as soon as possible after the software release becomes available. Software releases often include bug fixes, and updating ensures that your server module software is compatible with the latest chassis firmware and other chassis component firmware and software.

A Read Me file in the download package and the *Sun Blade X3-2B (formerly Sun Blade X6270 M3) Product Notes* contain information about the updated files in the download package, as well as bugs that are fixed with the current release. The product notes also provide information about which server module software versions are supported with the latest chassis firmware.

Firmware and Software Access Options

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

- **Oracle System Assistant** – Oracle System Assistant is a new factory-installed option for Oracle servers that allows you to easily download and install server firmware and software. For more information about using Oracle System Assistant, refer to [Access Oracle System Assistant From Oracle ILOM Web Interface](#).
- **My Oracle Support** – All system firmware and software are available from My Oracle Support at <http://support.oracle.com>. For more information about what is available on the My Oracle Support, see “[Available Software Release Packages](#)” on page 30. For instructions on how to download software releases from My Oracle Support, see: “[Download Firmware and Software Using My Oracle Support](#)” on page 32.
- **Physical media request (PMR)** – You can request a DVD that contains any of the downloads (patches) available from My Oracle Support. For information see: “[Request Physical Media \(Online\)](#)” on page 33.

Available Software Release Packages

Downloads on My Oracle Support are grouped by product family, then product, then version. The version contains one or more downloads (patches).

For servers and blades, the pattern is similar. The product is the server. Each server contains a set of releases. These releases are not true software product releases, but releases of updates for the server. These updates are called software releases and comprise several downloads, all tested together. Each download contains firmware, drivers, or utilities.

My Oracle Support has the same set of download types for this server family as shown in the following table. These can also be requested through a physical media request (PMR). The same firmware and software can also be downloaded using Oracle System Assistant.

Package Name	Description	When to Download This Package
X3-2B SW ^{version} – Firmware Pack	All the system firmware, including Oracle ILOM, BIOS, and option card firmware.	You need the latest firmware.

Package Name	Description	When to Download This Package
X3-2B SW $version$ – OS Pack	An OS pack is available for each supported operating system version. Each OS pack includes a package of all tools, drivers, and utilities for that version of the OS. Software includes Oracle Hardware Management Pack and LSI MegaRAID software.	You need to update OS-specific drivers, tools, or utilities.
X3-2B SW $version$ – All packs	Includes the Firmware Pack, all OS Packs, and all documents. This pack does not include SunVTS or the Oracle System Assistant image.	You need to update a combination of system firmware and OS-specific software.
X3-2B SW $version$ – Diagnostics	SunVTS diagnostics image.	You need the SunVTS diagnostics image.
X3-2B SW $version$ – Oracle System Assistant Updater	Oracle System Assistant updater and ISO update image.	You need to manually recover or update Oracle System Assistant.

Each of the downloads is a zip file that contains a Read Me and a set of subdirectories containing firmware or software files. The Read Me file contains details on the components that have changed since the prior software release and the bugs that have been fixed. For more details on the directory structure of these downloads, refer to the *Sun Blade X3-2B (formerly Sun Blade X6270 M3) Administration Guide*.

Accessing Firmware and Software

This section covers instructions for downloading or requesting software release files.

Note – You can also use Oracle System Assistant to easily download and use the latest software release. For further information, refer to the *Sun Blade X3-2B (formerly Sun Blade X6270 M3) Administration Guide*.

There are two other methods for obtaining updated firmware and software.

- “Download Firmware and Software Using My Oracle Support” on page 32
- “Requesting Physical Media” on page 32

▼ Download Firmware and Software Using My Oracle Support

- 1 Go to: <http://support.oracle.com>**
- 2 Sign in to My Oracle Support.**
- 3 At the top of the page, click the Patches and Updates tab.**
The Patches and Updates screen appears.
- 4 In the Search screen, click Product or Family (Advanced Search).**
The screen 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 Blade X3-2B) until a match appears.
- 6 In the Release field, select a software release from the drop-down list.**
Expand the folders to see all available software releases.
- 7 Click Search.**
The software release comprises a set of downloads (patches) .
See “[Available Software Release Packages](#)” on page 30 for a description of the available downloads.
- 8 To select a patch, click the check box next to the patch name (you can select more than one patch).**
A pop-up action panel appears. The panel contains several action options.
- 9 To download the update, click Download in the pop-up panel.**
The download begins automatically.

Requesting Physical Media

If your processes do not allow downloads from Oracle web sites, you can access the latest software release through a physical media request (PMR).

The following table describes the high-level tasks for making a physical media request and provides links for further information.

Description	Link
Gather information you will need to provide for the request.	“Gathering Information for the Physical Media Request” on page 33
Make the physical media request either online or by calling Oracle Support.	“Request Physical Media (Online)” on page 33 “Request Physical Media (by Phone)” on page 34

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, gather the following information:

- **Obtain product name, software release version, and patches required.** It will be easier to make the request if you know the latest software release and the name of the download packages (patches) 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 32](#) to determine the latest software release and view available downloads (patches). After viewing the list of patches, you can navigate away from Patch Search Results page, 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 [“Available Software Release Packages” on page 30](#) to determine which packages you want, then request these packages for the latest software release.
- **Have the shipping information ready.** You will need to provide a contact, phone number, email address, company name and shipping address for the request.

▼ Request Physical Media (Online)

Before You Begin Gather the information described in [“Gathering Information for the Physical Media Request” on page 33](#) before making the request.

- 1 Go to <http://support.oracle.com> and sign in.
- 2 Click on the **Contact Us** link in the upper right corner of the page.
- 3 In the **Request Description** section, fill in the following:
 - a. In the **Request Category** drop-down list, select the following:
Physical Media Request (Legacy Oracle Products, Primavera, BEA, Sun Products)

b. In the Request Summary field, type: .

PMR for latest software release for Sun Blade Sun Blade X3-2B

4 In the Request Details section, answer the questions shown 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 from the software release.
List the product name and version requested for the physical media shipment?	<i>Product Name:</i> Sun Blade X3-2B <i>Version:</i> 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

5 Fill in the Ship-To contact, phone number, email address, company name, and shipping address information.

6 Click Next.

7 Under Relevant Files, type: Knowledge Article 1361144.1

8 Click Submit.

▼ Request Physical Media (by Phone)

Before You Begin Gather the information described in “Gathering Information for the Physical Media Request” on page 33 before making the request.

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

<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 X3-2B.
 - If you are able to access the specific software release and patch number information from My Oracle Support, provide this information to the support representative.
 - If you are not able to access the software release information, request the latest software release for the Sun Blade X3-2B.

Installing Updates

The following topics provide information about installing firmware and software updates:

- “Installing Firmware” on page 35
- “Installing Hardware Drivers and OS Tools” on page 35

Installing Firmware

Updated firmware can be installed using one of the following:

- **Oracle Enterprise Manager Ops Center** – Ops Center Enterprise Controller can 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 more information, go to:

<http://www.oracle.com/us/products/enterprise-manager/opscenter/index.html>

- **Oracle System Assistant** – Oracle System Assistant can download and install the latest firmware from Oracle.

For more information, refer to [Using Oracle System Assistant for Server Configuration](#).

- **Oracle Hardware Management Pack** – The fwupdate CLI tool within the Oracle Hardware Management Pack can be used to update firmware within the system.

For more information, go to: <http://www.oracle.com/pls/topic/lookup?ctx=ohmp>.

- **Oracle ILOM** – Oracle ILOM and BIOS firmware are the only firmware that can be updated using the Oracle ILOM web interface and Oracle ILOM CLI.

For more information, go to: <http://www.oracle.com/pls/topic/lookup?ctx=ilom31>.

Installing Hardware Drivers and OS Tools

Updated hardware drivers and operating system (OS)-related tools, such as the Oracle Hardware Management Pack, can be installed using one of the following:

- **Oracle Enterprise Manager Ops Center** – For more information, go to:
<http://www.oracle.com/us/products/enterprise-manager/opscenter/index.html>
- **Oracle System Assistant** – For more information, refer to [Setting Up the Server With Oracle System Assistant](#).
- Other deployment mechanisms such as JumpStart, Kickstart or third-party tools.
For more information, refer to your OS documentation.

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