Sun Blade X6275 M2 Server Module Installation Guide for Linux Operating Systems

Contents

Using This Documentation

This section describes related documentation, submitting feedback, and a document change history.

Product Information Web Site

For information about the Sun Blade X6275 M2 server module, go to the `http://www.oracle.com/goto/blades` page and click on your server model listed near the bottom.

At that site, you can find links to the following information and downloads:

- Product information and specifications
- Software and firmware downloads

Related Books

The following is a list of documents related to Oracle's Sun Blade X6275 M2 server module. These and additional support documents are available on the web at:

`http://download.oracle.com/docs/cd/E19962-01/`

Document Group	Document	Description
Sun Blade X6275 M2 Server Module Documentation	Sun Blade X6275 M2 Server Module Product Documentation	Integrated HTML version of all starred (*) documents, including Search and Index.
	Sun Blade X6275 M2 Server Module Getting Started Guide	Pictorial setup quick reference.
	Sun Blade X6275 M2 Server Module Installation Guide *	How to install, rack, and configure the server up to initial power-on.
	Sun Blade X6275 M2 Server Module Product Notes *	Important late-breaking information about your server.
	Sun Blade X6275 M2 Server Module Installation Guide for Oracle Solaris Operating Systems *	How to install the Oracle Solaris OS on your server.
	Sun Blade X6275 M2 Server Module Installation Guide for Linux Operating Systems *	How to install a supported Linux OS on your server.
	Sun Blade X6275 M2 Server Module Installation Guide for Windows Operating Systems *	How to install a supported version of Microsoft Windows OS on your server.
	Sun Blade X6275 M2 Server Module Installation Guide for Oracle VM Operating Systems *	How to install a supported version of Oracle VM OS on your server.
	Oracle x86 Servers Diagnostics Guide *	How to diagnose problems with your server.
	Sun Blade X6275 M2 Server Module Service Manual *	How to service and maintain your server.
	Sun Blade X6275 M2 Server Module Safety and Compliance Guide	Safety and compliance information about your server.
	Oracle Integrated Lights Out Manager (ILOM) 3.0 Supplement for the Sun Blade X6275 M2 Server Module *	Version-specific supplemental information for your server's Integrated Lights Out Manager.
Sun Disk Management Documentation	*Sun x64 Server Disk Management Overview*	Information about managing your server's storage.
x64 Servers Applications and Utilities Documentation	*Sun x64 Server Utilities Reference Manual*	How to use the available utilities included with your server.

Document Group	Document	Description
Oracle Integrated Lights Out Manager (ILOM) 3.0 Documentation	*Oracle Integrated Lights Out Manager (ILOM) 3.0 Feature Updates and Release Notes*	Information about new ILOM features.
	Oracle Integrated Lights Out Manager (ILOM) 3.0 Getting Started Guide	Overview of ILOM 3.0.
	Oracle Integrated Lights Out Manager (ILOM) 3.0 Concepts Guide	Conceptual information about ILOM 3.0.
	Oracle Integrated Lights Out Manager (ILOM) 3.0 Web Interface Procedures Guide	How to use ILOM through the web interface.
	Oracle Integrated Lights Out Manager (ILOM) 3.0 CLI Procedures Guide	How to use ILOM through commands.
	Oracle Integrated Lights Out Manager (ILOM) 3.0 Management Protocols Reference Guide	Information about management protocols.

Translated versions of some of these documents are available at the web site described previously in Simplified Chinese, Korean, Japanese, French and Spanish. English documentation is revised more frequently and might be more up-to-date than the translated documentation.

About This Documentation (PDF and HTML)

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.

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

Note – The "Documentation Information" and "Index" topics do not have associated PDF.

Documentation Comments

Oracle is interested in improving the product documentation and welcomes your comments and suggestions. You can submit comments by clicking the Feedback {+} link on the lower right of any page of the documentation site at: http://www.oracle.com/technetwork/indexes/documentation/index.html.

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Change History

The following lists the release history of this documentation set:

- November 2010. Initial publication.
- November 2010. Information added to the *Sun Blade X6275 M2 Server Module Product Notes* for platform software release 1.1. Added new firmware version, PC-Check 6.27s support, CRs 6994690, 6992284, 6994464.
- January 2011. Information added to the Sun Blade X6275 M2 Installation Guide for configuring pre-installed Oracle Solaris or Oracle VM. Information added to the *Sun Blade X6275 M2 Server Module Product Notes* for platform software release 1.2. Added new firmware version, CRs 6971164, 7009654, 7009666, 7010601. Information added to the *Oracle Integrated Lights Out Manager (ILOM) 3.0 Supplement for the Sun Blade X6275 M2 Server Module* for proving physical presence, reading available_power in ILOM.

Preparing to Install an OS

This section provides instructions for installing the Linux operating system (OS) on a Sun Blade X6275 M2 server module.

The Sun Blade X6275 M2 server module consists of two nodes, each with its own service processor (SP), and each capable of supporting its own operating system. These nodes are fully independent of each other, and must be managed as if they were separate servers. Therefore, for each server module, you must perform a separate operating system installation on each node.

The Sun Blade X6275 M2 supports multiple versions of the Linux OS. The minimum supported versions are:

- Oracle Linux 5.5 64-bit
- Red Hat Linux (RHEL) 5.5 64-bit
- SLES 10 SP3 64-bit and SLES 11 SP1 64-bit

For the latest list of supported operating systems, see `http://www.oracle.com/goto/x6275m2`.

Next Steps

Before installing an OS onto your server module, review the following sections and complete the tasks.

After you have completed the tasks in these sections, proceed to one of the following sections to complete the installation:

Preparing the Server

Before installing an OS, prepare your server by completing the following tasks:

1. Install the server hardware.

2. (Optional) Configure the service processor.

3. If you are going to install the OS on a storage device connected to a PCIe EM card, configure it so that you can boot from the storage device. For details, refer to the PCIe EM documentation.

Next Step

Things You Must Decide

The following tables list the things you must decide before installing an operating system.

Where will you install the OS?

You can install an OS onto a flash module, a USB flash drive, or a storage device connected to a PCIe EM card.
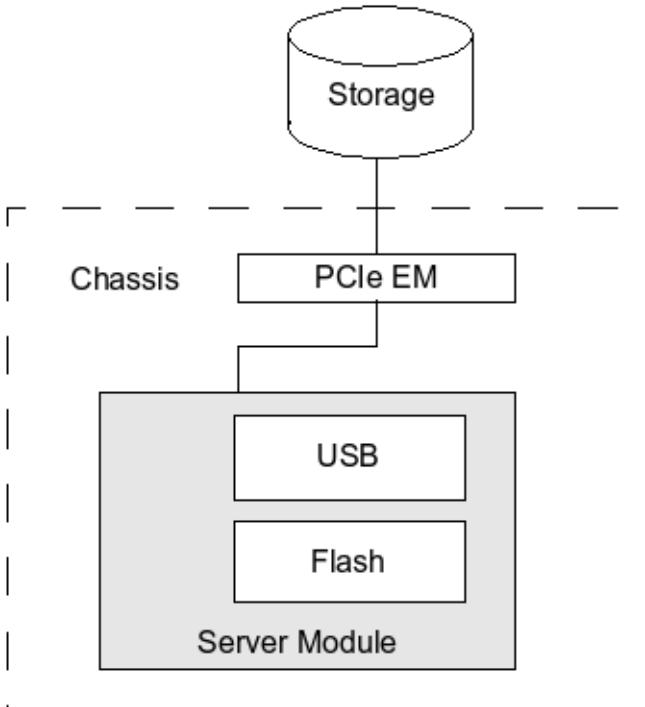
Device	Information
Flash module	The server module includes one Sun Flash Module (FMod) socket per node.
	When an FMod is present it appears as a disk device and you can install an operating system on it.
	To install an FMod, refer to the *Sun Blade X6275 M2 Server Module Service Manual*.
USB flash drive	The server module includes one internal USB port per node.
	When a USB flash drive is present, it appears as a disk device, and you can install an operating system onto it.
	To install a USB flash drive, refer to the *Sun Blade X6275 M2 Server Module Service Manual*.
PCIe EM device	Each chassis blade slot has two assigned PCIe EM slots. One of these is assigned to each node.
	If you wish to boot from a storage device connected to a PCIe EM slot, you must configure it to be a boot device. For instructions, refer to your PCIe EM documentation.

Which installation method will you use?

Installation Method	See:
From distribution media (CD/DVD) on the server using a USB-attached external CD/DVD drive	"Using the Multi-Port Cable" in *Sun Blade X6275 M2 Server Module Service Manual*
From distribution media (CD/DVD or ISO file) from a remote system	"How to Connect to the Host Console Using the ILOM Web Interface" in *Sun Blade X6275 M2 Server Module Installation Guide*
From a network boot image using Preboot Execution Environment (PXE).	PXE installation instructions are provided in the corresponding section for each OS.

Next Step

"Obtaining Necessary Items" on page 12

Obtaining Necessary Items

Before installing the OS, gather the following items.

- Required information for your network environment (IP address, gateway, netmask, etc.)
- All the required drivers. For a list of drivers, see "Obtaining Drivers" on page 13.
- The operating system distribution media set or equivalent ISO images.

  Download instructions are included in the section for the corresponding OS.

- The required hardware. It includes:
  - If you are installing remotely, the DVD-ROM drive, keyboard, mouse, and monitor are connected to the local system instead of the server where you are installing the OS. Also, you can use an ISO image instead of an actual CD/DVD-ROM.
  - If you are installing locally, you need:
    - A multiport cable to connect to the front of the server. For details, refer to "Using the Multi-Port Cable" in *Sun Blade X6275 M2 Server Module Service Manual*.
    - USB keyboard and mouse.
    - Monitor.
    - DVD-ROM drive.

Next Step

"Obtaining Drivers" on page 13

Obtaining Drivers

You must obtain the server-specific drivers for the OS you are installing. They include:

TABLE 1 Required Server-Specific Drivers

Server Module	Operating System	Minimum Driver Version Required	Location
Sun Blade X6275 M2 with 1GbE	Linux	■ AST2100 video 64-bit driver version: 6.00.10.0090 ■ Intel NIC 64-bit driver version: 1.2.10 (Oracle Linux, RHEL, SLES) ■ Intel NIC 32-bit driver version: 1.2.10 (Oracle VM Server)	Tools and Drivers CD/DVD ISO image (additional NIC configuration software is available for post-OS installation)
	Windows	■ AST2100 video 64-bit driver version: 6.00.10.0090 ■ Intel chipset 64-bit driver version: 9.1.1.1027 ■ Intel NIC 64-bit driver version: 15.5	Tools and Drivers CD/DVD ISO image (additional NIC configuration software is available for post-OS installation)
Sun Blade X6275 M2 with 10GbE	Linux	■ AST2100 video 64-bit driver version: 6.00.10.0090 ■ Mellanox CX–2 EN NIC 64-bit driver version: 1.5.1.3 (Oracle Linux, RHEL) ■ Mellanox CX–2 EN NIC 32-bit driver version: 1.5.1.3 (Oracle VM Server) ■ Mellanox CX–2 EN NIC 64-bit driver version: 1.5.1.5 (SLES)	Tools and Drivers CD/DVD ISO image (additional NIC configuration software is available for post-OS installation)
	Windows	■ AST2100 video 64-bit driver version: 6.00.10.0090 ■ Intel chipset 64-bit driver version: 9.1.1.1027 ■ Mellanox CX–2 EN NIC 64-bit driver version: 1.3.0	Tools and drivers CD/DVD (additional NIC configuration software is available for post-OS installation)

You can get a copy of the Tools and Drivers CD/DVD ISO image from `http://www.oracle.com/goto/x6275m2`.

You can also get the latest drivers by running the corresponding `install.sh` script. The following table shows the location of the corresponding `install.sh` script and drivers.

OS	install.sh Script	Driver Location
Oracle Linux	\Linux\OL\install.sh	\Linux\OL\OL5U5\Drivers\64bit
RHEL	\Linux\RHEL\install.sh	\Linux\RHEL\RHEL5.5\Drivers\64bit
SLES	\Linux\SLES\install.sh	\Linux\SLES\SLES10SP3 or
		\Linux\SLES\SLES11SP1

Installing Oracle Linux

This section provides procedures for installing Oracle Linux onto a Sun Blade X6275 M2 server module.

The minimum supported version of Oracle Linux for your server is 5.5 64-bit. For the latest list of supported operating systems, see `http://www.oracle.com/goto/x6275m2`.

This section provides the following topics:

Installing Oracle Linux from Distribution Media

Before installing Oracle Linux on your server, review the section "Preparing to Install an OS" on page 9 and complete the preparations described there.

Obtain the following Oracle documentation.

Document	Description	Where to Find
Release Notes	Contains late-breaking information about system requirements and system configuration for your version of the Oracle Linux software.	Online from `http://oss.oracle.com/el5/docs/`
Oracle Linux Installation Guide	An online article with step-by-step instructions for installing Oracle Linux.	Available for download from `http://www.oracle-base.com/articles/linux/OracleEnterpriseLinux5Installation.php`

See Also

▼ How to Download Oracle Linux Media

1 **Go to the Oracle e–delivery site: `http://edelivery.oracle.com/linux`.**

2 **If you do not already have one, create an account.**

You need an account to download the updated ISO images.

3 **Find and download Oracle Linux.**

Next Steps Proceed to "How to Install Oracle Linux From Distribution Media" on page 16.

▼ How to Install Oracle Linux From Distribution Media

1 **Connect to your server console.**

2 **Insert your Linux distribution DVD or access the ISO image.**

3 **Power on or reset the server.**

BIOS messages appear on the console.
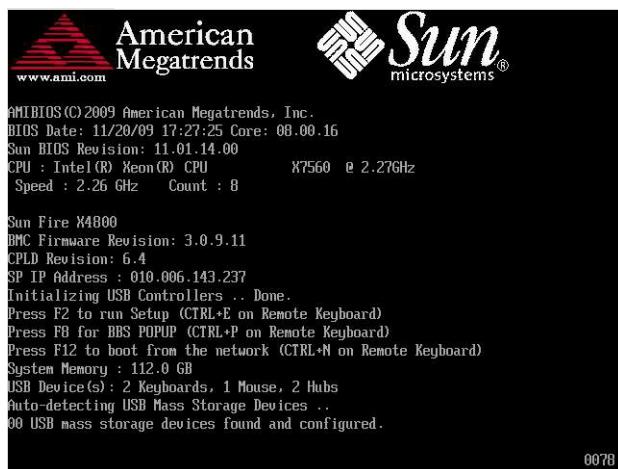
4   When you see a message offering a series of selections, press F8.

After a delay, a menu offers a selection of boot devices (see the following example).

```
┌─────────────────────────────────────────────┐
│          Please select boot device:          │
│                                               │
│ USB:Port1:TSSTcorp CD/DVDW                    │
│ PXE:IBA GE Slot 1000 v1331                    │
│ PXE:IBA GE Slot 1001 v1331                    │
│                                               │
│                                               │
│                                               │
│                                               │
│                                               │
│        ↑ and ↓ to move selection              │
│        ENTER to select boot device            │
│        ESC to boot using defaults             │
└─────────────────────────────────────────────┘
```

5   Select a boot device from the list.

To boot from a physical CD/DVD or from an ISO image, select CD/DVD.

Control passes to the OS installation program on the media.

6   Do one of the following at the boot prompt, depending on which type of interface you want to use:

- **For text mode, type the following command: `boot: linux text`.**

- **For graphic mode, press Enter at the boot prompt.**

For additional information, refer to the Oracle Linux 5 installation article on the web at:

http://www.oracle-base.com/
articles/linux/OracleEnterpriseLinux5Installation.php

Note – If you already have an operating system besides Linux installed (for example, the Solaris OS), it will appear as a partition during the installation process. If you choose to install Oracle Linux on that partition, it will overwrite the OS. If you wish to preserve the partition, you must install Oracle Linux on a different partition.

Next Steps   Proceed to "How to Install Required Drivers" on page 18

▼ How to Install Oracle Linux From a PXE Image

This procedure describes how to prepare your server to boot from a PXE image, and how to initiate the request to download the boot image file from the PXE/DHCP server. This causes it to install the boot image on your server module.

Note – Before you configure your server to install Oracle Linux from a PXE server, you need to configure your network to support a PXE server.

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1. **Download the Linux driver package from the web site:**

   http://www.oracle.com/goto/x6275m2

2. **Add the drivers to the PXE image.**

   For a list of required drivers, see "Obtaining Drivers" on page 13.

3. **Connect the PXE client to the same network as the PXE server, and power on the PXE client.**

   The PXE client is the target server module node to which you are installing the Oracle Linux OS.

4. **During the BIOS POST, press the F12 key and select the network interface of your choice.**

   The PXE client connects to the PXE server and obtains an IP address from the DHCP server.

5. **At the boot: prompt, type the label of the Oracle Linux image on the PXE server.**

   The install image is downloaded onto the target Sun Blade X6275 M2 server module.

6. **Follow the system prompts to install or configure your operating system.**

See Also   "How to Update the Oracle Linux Operating System" on page 18

▼ How to Install Required Drivers

Before You Begin   Obtain the required drivers. For details, see "Obtaining Drivers" on page 13.

1. **If you are using a physical CD/DVD, insert it into the drive.**

2. **Mount the CD/DVD or the ISO image.**

3. **Navigate to the Oracle Linux directory.**

4. **Follow the instructions in the readme files.**

▼ How to Update the Oracle Linux Operating System

Use this procedure to update Oracle Linux to the latest OS.

> **Note –** If your system is on a publicly accessible network, updating your system can help to improve security.

Before You Begin You must already have Oracle Linux installed on your server.

- **Choose a method for updating your Oracle Linux operating system:**

  - **For Oracle Unbreakable Linux Network (ULN) installations, create local yum repositories and configure yum and up2date to install update packages from them.**

    See http://www.oracle.com/technetwork/topics/linux/whatsnew/index.html

  - **For Oracle Linux installations without Unbreakable Linux Network support, use the Oracle Public yum server and a yum client to install updates.**

    See http://public-yum.oracle.com/

    > **Note –** This yum server is offered without support of any kind. If you require errata, security patches, and other updates, you should use Oracle Unbreakable Linux Network (ULN) available from the online store, or your sales representative.

Installing Red Hat Enterprise Linux

This section provides procedures for installing Red Hat Enterprise Linux (RHEL) onto a Sun Blade X6275 M2 server module.

The minimum supported version of RHEL for your server is RHEL 5.5 64-bit. For the latest list of supported operating systems, see `http://www.oracle.com/goto/x6275m2`.

This section contains the following sections:

Installation Overview

The following list provides an outline of the installation procedure. For details, see the actual procedures.

1. Complete the procedures in "Preparing to Install an OS" on page 9.

2. Obtain a copy of the media, or the equivalent ISO file, from `https://access.redhat.com/downloads/`.

   A RHEL account is required to download ISO images.

3. If you have not already done so, obtain a copy of the Sun Blade X6275 M2 Linux driver package from:

   `http://www.oracle.com/goto/x6275m2`

4. Install the OS and the Oracle Linux driver package.

   - For information about installing RHEL from the distribution media, see "How to Install the OS From the Distribution Media" on page 22.
   - For information about installing RHEL from a PXE server, see "How to Install RHEL From a PXE Image" on page 23.

5. Update the software. See "How to Update RHEL" on page 24.

RHEL Installation and Administration Documentation

Before you install the RHEL software on a Sun Blade X6275 M2 server module, consult the following documentation at `http://www.redhat.com/docs/manuals/enterprise/`.

TABLE 2 Sources for RHEL Documentation

Document	Description
Release Notes	Contains late-breaking information about system requirements and system configuration for your version of the RHEL software.
Installation Guide	Brief printed guide containing useful information to assist you during the installation of RHEL.
Deployment Guide	Information about deploying, configuring, and administering your system.
LVM Administrator's Guide	Information about administering Logical Volume Manager (LVM) to create logical storage volumes.
Cluster Administration	Information about configuring and managing a cluster environment.
Virtualization Guide	Information about configuring and administering a virtual server.

▼ How to Install the OS From the Distribution Media

RHEL provides both a text mode and an easy-to-use graphic interface for installing and configuring the operating system. At the boot prompt, you can select the interface that you want to use. Both options are shown later in this section.

1. **Connect your CD/DVD drive.**

   If you are using a CD/DVD drive connected to the USB:

   a. **Connect the USB CD/DVD drive into the USB port of the multiport cable.**

   b. **Insert the first distribution CD/DVD into the CD/DVD drive connected to the server module.**

      If you are using an RKVM, mount the CD/DVD drive or an equivalent ISO image using RKVM, as described in "Accessing the Host Console Through ILOM" in *Sun Blade X6275 M2 Server Module Installation Guide*.

2. **Power on the system.**

   a. **Press F8 during POST to access the BBS pop-up menu.**

      A boot device list appears.

   b. **Select the CD/DVD drive from the boot list.**

- If you are connecting over USB, select USB CD/DVD.
- If you are connecting over an RKVM, select Virtual CD/DVD .

  The server boots from the selected media and displays a `boot:` menu.

3 **At the boot prompt, select one of the following:**

- For text mode, type the following command:

  `boot:` **`linux text`**

- For graphical mode, press Enter.

4 **Refer to the installation documentation to guide you through the remainder of the installation process.**

See http://www.redhat.com/docs/.

5 **Install the drivers.**

For details, see "Obtaining Drivers" on page 13.

6 **Update the operating system. See"How to Update RHEL" on page 24.**

▼ How to Install RHEL From a PXE Image

This procedure describes how to prepare your server to boot from a PXE image, and how to initiate the request to download the boot image file from the Preboot Execution Environment (PXE)/DHCP server. This causes PXE to install the boot image on your server module.

Note – Before you configure your server to install RHEL from a PXE server, you need to configure your network to support a PXE server.

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1 **Download the Sun Blade X6275 M2 Linux driver package from the Oracle web site:**

http://www.oracle.com/goto/x6275m2

2 **Add the drivers to the PXE image.**

For information about required drivers, see "Obtaining Drivers" on page 13.

3 **Connect the PXE client to the same network as the PXE server, and power on the PXE client.**

The PXE client is the target server module node to which you are installing the RHEL OS.

4 **During the BIOS POST, press the F12 key and select the network interface of your choice.**

The PXE client connects to the PXE server and attempts to obtain an IP address from the DHCP server.

5   At the boot prompt, type the label of the RHEL image on the PXE server.

The install image is downloaded onto the target Sun Blade X6275 M2 server module node.

6   Follow the system prompts to install or configure your operating system.

7   Update the operating system files.

See "How to Update RHEL" on page 24.

▼ How to Install Required Drivers

Before You Begin   Obtain the required drivers. For details, see "Obtaining Drivers" on page 13.

1   If you are using a physical CD/DVD, insert it into the drive.

2   Mount the CD/DVD or the ISO image.

3   Navigate to the RHEL directory.

4   Follow the instructions in the readme files.

▼ How to Update RHEL

Because software is constantly being updated, your distribution media might not contain the most up-to-date versions of the operating system.

Follow this procedure after your operating system is installed.

● **After completing the basic installation setup, perform the following post-installation tasks:**

a.   Configure your system for automatic updates.

Refer to the Red Hat documentation for more information.

b.   If required, download and install the latest errata and bug fixes for your RHEL release.

For more information, refer to the Red Hat documentation.

Installing the SLES Operating System

This section provides instructions for installing the SuSE Linux Enterprise Server (SLES) onto a Sun Blade X6275 M2 server module.

The minimum supported versions of SLES are SLES 10 SP3 64-bit and SLES 11 SP1 64-bit. For the latest list of supported operating systems, see http://www.oracle.com/goto/x6275m2.

There are three methods for installing the SLES 10 SP2 and SLES 11 OS onto your server. They include:

- Using the SLES distribution CD or DVD in a local CD/DVD drive.
- Using the SLES distribution CD/DVD in a remote CD/DVD drive, or an equivalent ISO file. You can access either using the ILOM's remote console application.
- Using a Preboot Execution Environment (PXE) image stored on a PXE server on your local network or from an image stored elsewhere on your network.

For a list of supported operating systems, see "Things You Must Decide" on page 10.

This section contains the following sections:

Installation Overview

The following list provides an outline of the installation procedure, including prerequisites. For installation details, see the actual procedures.

1. Verify that you have completed the prerequisites in "Preparing to Install an OS" on page 9.

2. Verify that you have the correct release files and documentation:

   - SLES CD/DVD set or equivalent ISO file.

   - *SUSE Linux Enterprise Server 10 Installation and Administration Guide* or *SUSE Linux Enterprise Server 11 Installation and Administration Guide.*

- **For SLES 10 only:** Obtain a copy of the Sun Blade X6275 M2 Linux driver package from the Oracle web site:

  http://www.oracle.com/goto/x6275m2

  These drivers are required for the Intel e1000e network interface. Refer to the README file in the package for more details.

3. Install the SLES software and the Linux driver package. See either:
   - "Installing the SLES OS From the Distribution Media" on page 27.
   - "Installing SLES From a PXE Server" on page 28.
4. Update the SLES OS. See "Updating the SLES Operating System" on page 29.

SLES Installation and Configuration Documentation

Table 3 lists resources to help you install SLES onto your server. These documents are located at:

http://www.novell.com/documentation/sles10/

http://www.novell.com/documentation/sles11/

TABLE 3 SLES Installation Resources

Document	Description
Installation Quick Start	Provides information about a quick install of SLES.
Release Notes	Provides late-breaking release-specific information about the SLES version on your distribution CD/DVDs.
Deployment Guide	Provides information about installation and deployment of the server.
Administration Guide	Provides information for a SLES server that is in operation.
Linux Audit Self Start	Provides initial information about enabling call auditing for the first time.
Security Guide	Provides information about security administration for a SLES system.
High Availability Extension Guide	Provides administration information for high availability Linux clusters.
Administration Guide	Provides administration information for the SLES server.
Virtualization with Xen Administration Guide	Provides overview information installation procedures about virtualization on the SLES server.
AppArmor Quick Start Guide	Provides information about configuring AppArmor profiles.
Novell Customer Center	Provides user information about managing your Novell products.

TABLE 3	SLES Installation Resources	*(Continued)*
Document	**Description**
SLES Library	Provides a library of white papers.

Installing the SLES OS From the Distribution Media

SLES provides an easy-to-use graphical interface for installing and configuring the operating system. Whether you are using distribution CD/DVDs to install SLES from a locally attached CD/DVD drive or from an ISO file on a remote CD/DVD drive attached using RKVM, the installation procedure is fundamentally the same.

▼ How to Install SLES From the Distribution Media

1 Connect your CD/DVD drive.

- **If you are using a CD/DVD drive connected to the USB:**

  a. **Connect the USB CD/DVD drive to the USB port of the multiport cable for the corresponding node.**

  b. **Insert the first SLES distribution CD/DVD into the CD/DVD drive connected to the server module.**

- **If you are using an RKVM, mount the CD/DVD drive or an equivalent ISO image using RKVM, as described in "Accessing the Host Console Through ILOM" in** *Sun Blade X6275 M2 Server Module Installation Guide***.**

2 Power on the system.

  a. **Press F8 during POST to access the BBS pop-up menu.**

  A boot device list appears.

  b. **Select the CD/DVD drive from the boot list.**

  - If you are connecting over a physical USB CD/DVD drive, select USB CD/DVD.
  - If you are connecting over an RKVM, select Virtual CD/DVD.

  The server boots from the selected media and displays a boot menu.

3 Follow the installation instructions provided in the *SUSE Linux Enterprise Server 10 Installation and Administration Guide* **to complete the installation of the system software.**

> **Note –** Make sure your installation includes the development tools. You need them later to install the drivers.

4 Install the drivers.

For details, see "Obtaining Drivers" on page 13.

5 Update the OS, as described in "Updating the SLES Operating System" on page 29.

Installing SLES From a PXE Server

This procedure describes the final step of installing the SLES boot image on your Sun Blade X6275 M2 server module.

▼ How to Install SLES From a PXE Server

Before You Begin   Before you configure your server to install SLES from a Preboot Execution Environment (PXE) server, you need to do the following:

- Configure your network to support a PXE server.
- Install a SLES image on that PXE server.

1 Download the Sun Blade X6275 M2 Linux driver package from the Oracle web site:

http://www.oracle.com/goto/x6275m2

2 Add the drivers to the PXE image.

For a list of required drivers, see "Obtaining Drivers" on page 13.

3 Connect the PXE client to the same network as the PXE server.

The PXE client is the target Sun Blade X6275 M2 server module to which you are installing the RHEL OS.

4 During the BIOS POST, press the F8 key and select the NIC interface of your choice.

The PXE client connects to the PXE server and attempts to obtain an IP address from the DHCP server.

5 At the boot: prompt, type the label you gave the image when you installed the image on the PXE server.

The install image is downloaded onto the target Sun Blade X6275 M2 server module.

6   **When you are prompted at the boot prompt, type the label you gave the image when you installed the SLES image on the PXE server.**

For information about how to configure SLES, refer to the *SUSE Linux Enterprise Server 10 Installation and Administration Guide* or to the *SUSE Linux Enterprise Server 11 Installation and Administration Guide* on the SLES distribution media.

7   **Perform an online software update to update the operating system files.**

Updating the SLES Operating System

The operating system installation media shipping with SLES software might not contain the most up-to-date versions of the software. Since the media was released, there might have been many updates to the SLES operating system that you should install. This procedure describes how to update the operating system on your Sun Blade X6275 M2 server module after you have installed it from a PXE server or from distribution CD/DVDs.

▼ **How to Configure Your SLES Operating System to Work With a Proxy Server**

Before You Begin   If you are behind a network firewall and need to use a proxy server to access the Internet, you must configure YaST with the correct proxy information.

1   **Open the YaST utility.**

2   **Select the Network Services tab on the left, and then the Proxy screen on the right. Enter the correct proxy URLs in both the HTTP and HTTPS fields.**

Note – For the online update service to function correctly through a network HTTP proxy, the following additional configuration step must be performed.

3   **Exit the YaST utility and enter the following command:**

    rug set-prefs proxy-url *proxy URL*

where *proxy URL* is the fully qualified URL of your proxy server (for example, http://proxy.yourdomain:3128/).

▼ **How to Update Your SLES Operating System Online**

1   **Log in as the superuser.**

2   **Type the following command to run the YaST Online Update:**

    # you

3   **Register with the Novell Customer Center. Select the Software tab on the left, and then select Novell Customer Center Configuration and follow the directions.**

Use your Novell Customer Center user name and password, as well as a SLES product activation code.

4   **Once registered, select the Online Update tab to perform the software update.**