

# Sun Fire X2270 M2 Server Installation Guide for Oracle® VM



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# Preface

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This preface describes related documentation, available documentation formats, and the process for submitting feedback to Oracle. It also includes a document change history.

- “Related Books” on page 5
- “About This Documentation (PDF and HTML)” on page 7
- “Documentation Comments” on page 7
- “Download Server System Tools and Drivers” on page 7
- “Documents History” on page 8

## Related Books

The following is a list of documents related to Oracle's Sun Fire X2270 M2 server. These and additional support documents are available on the [library page](#) at:

<http://www.oracle.com/pls/topic/lookup?ctx=sfx2270m2&id=homepage>.

Document Group	Document	Description
Sun Fire X2270 M2 Server-Specific Documentation	Sun Fire X2270 M2 Server Product Documentation	Integrated HTML version of all starred (*) documents, including Search and Index.
	<i>Sun Fire X2270 M2 Server Getting Started Guide</i>	Pictorial setup quick reference.
	<i>Sun Fire X2270 M2 Server Installation Guide*</i>	How to install, rack, and configure the server up to initial power-on.
	<i>Sun Fire X2270 M2 Server Product Notes*</i>	Important late-breaking information about the server.
	<i>Sun Installation Assistant 2.3 through 2.4 User's Guide for x64 Servers*</i>	An Oracle tool used to perform an assisted installation of a supported Windows or Linux OS, upgrade firmware (regardless of OS), and other tasks.
	<i>Sun Fire X2270 M2 Server Installation Guide for Oracle Solaris Operating Systems*</i>	How to install the Oracle Solaris OS on your server.

Document Group	Document	Description
	<i>Sun Fire X2270 M2 Server Installation Guide for Oracle VM*</i>	How to install Oracle VM on your server.
	<i>Sun Fire X2270 M2 Server Installation Guide for Linux Operating Systems*</i>	How to install a supported Linux OS on your server.
	<i>Sun Fire X2270 M2 Server Installation Guide for Windows Operating Systems*</i>	How to install supported versions of Microsoft Windows on your server.
	<i>Sun Fire X2270 M2 Server Installation Guide for ESX Software*</i>	How to install supported versions of the ESX OS on your server.
	<i>Integrated Lights Out Manager Supplement for the Sun Fire X2270 M2 Server*</i>	Version-specific supplemental information for your server's Integrated Lights Out Manager.
	<i>Sun Fire X2270 M2 Server Diagnostics Guide*</i>	How to diagnose problems with your server.
	<i>Sun Fire X2270 M2 Server Service Manual*</i>	How to service and maintain your server.
	<i>Sun Fire X2270 M2 Server Safety and Compliance Guide</i>	Safety and compliance information about your server.
Oracle Integrated Controller Disk Management	<i>Sun x64 Server Disk Management Overview</i>	Information about managing your server storage.
x64 Servers Applications and Utilities Reference Documentation	<i>Sun x64 Server Utilities Reference Manual</i>	How to use the available utilities included with your server.
Integrated Lights Out Manager (ILOM) 3.0 Documentation	<i>Oracle Integrated Lights Out Manager (ILOM) 3.0 Feature Updates and Release Notes</i>	Information about new ILOM features.
	<i>Oracle Integrated Lights Out Manager (ILOM) 3.0 Getting Started Guide</i>	Overview of ILOM 3.0.
	<i>Oracle Integrated Lights Out Manager (ILOM) 3.0 Concepts Guide</i>	Conceptual information about ILOM 3.0.
	<i>Oracle Integrated Lights Out Manager (ILOM) 3.0 Web Interface Procedures Guide</i>	How to use ILOM through the web interface.
	<i>Oracle Integrated Lights Out Manager (ILOM) 3.0 CLI Procedures Guide</i>	How to use ILOM through commands.

Document Group	Document	Description
	<i>Oracle Integrated Lights Out Manager (ILOM) 3.0 SNMP and IPMI Procedures Guide</i>	How to use SNMP and IPMI commands.
	<i>Oracle Integrated Lights Out Manager (ILOM) 3.0 Management Protocols Reference Guide</i>	Information about management protocols.

## About This Documentation (PDF and HTML)

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

## Documentation Comments

Oracle is interested in improving product documentation and welcomes your comments and suggestions. You can submit comments by going to this link:

<http://www.oracle-surveys.com/se.ashx?s=25113745587BE578>

### ▼ Download Server System Tools and Drivers

Patches and the Tools and Drivers CD/DVD ISO image file for your server are now available by from My Oracle Support (MOS). Use this procedure to access server-specific downloads on MOS.

- 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 Fire X2270 M2) until a match appears.

- 6 In the Release field, select the release from the drop-down list.**  
Expand the folders to see the component offerings.
- 7 Click Search.**  
A list of updates (patches) appears.
- 8 To select a patch, click the check boxes next to the patch name (you can select more than one patch).**  
A popup action panel appears. The panel contains several action options.
- 9 To download the update, click Download in the popup panel.**  
The download begins automatically.

## Documents History

- May 2010, initial publication
- June 2010, collection refresh, revisions to –11
- March 2011, *Product Notes* document updated for document errata and SW v1.1.0 and SW v1.2.0 releases. *Windows Operating System Installation Guide* revised for document errata. *Oracle Solaris Operating System Installation Guide* revised for document errata. Service Manual revised for document errata.
- September 2011, *Product Notes* and *OS Installation Guides* updated for SW v1.3.0 release.



# Installing Oracle VM

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Oracle VM is a virtualization environment platform that enables users to create and manage virtual machines (VMs). These VMs exist on the same physical server but behave like independent physical servers. Each virtual machine created with Oracle VM has its own virtual CPUs, operating system, network interfaces, and storage.

Oracle VM is comprised of the following components:

- **Oracle VM Server:** A lightweight, secure virtualization environment based on Xen hypervisor, and used to run virtual machines and the Oracle VM agent.
- **Oracle VM Agent:** Installed on Oracle VM Server, it communicates with Oracle VM Manager and includes a Web Services API for managing the Oracle VM Server, server pools, and resources. This is included in the Oracle VM Manager installation.
- **Oracle VM Manager:** A web application which acts as the user interface for creating and managing your virtual machines. This includes virtual machine creation (including templates), life cycle management (deploying, migrating and deleting), and resource management (ISO files, templates and shared storage resources).

The following table provides an outline of the Oracle VM installation:

Step	Description	Link
1	Review up-to-date information about the server hardware and software, including supported versions of operating systems.	<a href="#">Sun Fire X2270 M2 Server Product Notes</a>
2	Check system requirements.	<a href="#">“System Requirements” on page 10</a>
3	Review installation method options.	<a href="#">“Installation Options” on page 11</a>
4	Obtain the installation images and burn them to a DVD or copy them onto the corresponding servers.	<a href="#">“How to Obtain Oracle VM Software” on page 11</a>
5	Install Oracle VM Server and OVM Agent.	<a href="#">“How to Install Oracle VM Server and Oracle VM Agent” on page 11</a>
6	Install Oracle VM Manager.	<a href="#">“How to Install Oracle VM Manager” on page 12</a>

Step	Description	Link
7	Create shared storage, a server pool, and virtual machines.	<a href="#">“Creating and Managing VM Resources” on page 13</a>

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## Supported Operating Systems

For the most up-to-date information about the server, including a listing of supported versions of operating systems, refer to *Sun Fire X2270 M2 Server Product Notes*.

## System Requirements

Before you install Oracle VM, you must meet the following requirements:

- For the system that will be running Oracle VM Server, you must start out with a clean installation (no preinstalled OS or firmware-level RAID volumes).
- The system that will be running Oracle VM Manager must have one of the following operating systems installed:
  - Oracle Enterprise Linux Release 4.5 or later
  - Red Hat Enterprise Linux Release 4 or later
- You must have an Oracle VM media set or equivalent ISO images for VM Server and VM Manager.

The ISO images can be used for remote installation or for creating installation CDs.

- Review the release notes for the Oracle VM software. The documentation set can be found at: [http://download.oracle.com/docs/cd/E15458\\_01/index.htm](http://download.oracle.com/docs/cd/E15458_01/index.htm)
- DVD-ROM drive.

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**Note** – If you are installing remotely, the DVD-ROM drive, keyboard, mouse, and monitor are connected to the local system instead of the server. Also, you can use an ISO image instead of an actual DVD/CD-ROM.

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- USB keyboard and mouse.
- Monitor.
- While configuring an OS for a networked server, it might be necessary to provide the logical names (assigned by the OS) and the physical name (MAC address) of each network interface being used on the Oracle VM server.

# Installation Options

You can install Oracle VM locally or remotely.

- A local installation takes place on the target machine where the application is being installed. It requires a media set on CDs or DVDs.
- A remote installation uses the Oracle Integrated Lights Out Manager (ILOM) JavaRConsole program. It uses the local machine to remotely install the application on the target machine. It allows you to install from a media set on CDs or DVDs, or from equivalent ISO images.

To set up a remote installation, see “[How to Connect to the System Console Remotely Using the ILOM Web Interface](#)” in *Sun Fire X2270 M2 Server Installation Guide*.

For information about connecting a system console, see “[Connecting to the System Console](#)” in *Sun Fire X2270 M2 Server Installation Guide*.

## ▼ How to Obtain Oracle VM Software

- 1 **Download the Oracle VM software from the web at:**

<http://www.oracle.com/virtualization>

- 2 **If you plan on installing the software at the system, burn the ISO images to CDs.**

You should have a Oracle VM Manager CD, and a bootable Oracle VM Server CD.

## ▼ How to Install Oracle VM Server and Oracle VM Agent

**Before You Begin** Refer to the “[System Requirements](#)” on page 10.

- 1 **Connect to your server console.**

See “[Connecting to the System Console](#)” in *Sun Fire X2270 M2 Server Installation Guide* for details.

- 2 **Insert your Oracle VM Server distribution DVD or access the ISO image distribution media for the method you chose in step 1.**

- 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).



**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 Enter the following command at the boot prompt: Enter**

**7 Follow the prompts to install the software.**

Oracle VM Server and OVM Agent are installed.

For additional information refer to the Oracle VM Server installation documentation at:

[http://download.oracle.com/docs/cd/E15458\\_01/index.htm](http://download.oracle.com/docs/cd/E15458_01/index.htm)

## ▼ How to Install Oracle VM Manager

**Before You Begin** You can use the Integrated Lights Out Manager (ILOM) to install software using either a CD/DVD or an ISO image mounted on a remote system. The remote console feature allows you to use the keyboard, mouse, video, and storage of the remote system as if it were connected to the server where you are installing the operating system. Once the remote console session is configured, the server can boot from the remotely mounted distribution media (either a CD/DVD or equivalent ISO file).

**1 If you are not already the root user, use the su command and enter the root password.**

**2 Insert and mount the Oracle VM Manager CD.**

**3 Navigate to the root of the CD:**

```
# cd /mnt
```

**4 Run the installation script:**

```
# sh ./runInstaller.sh
```

**5 Follow the prompts to install the software.**

For additional information refer to the Oracle VM Manager installation documentation at:

[http://download.oracle.com/docs/cd/E15458\\_01/index.htm](http://download.oracle.com/docs/cd/E15458_01/index.htm)

## Creating and Managing VM Resources

After installing Oracle VM Server (with Oracle VM Agent) and Oracle VM Manager, you can create and manage virtual resources. For example, you can:

- Create a shared storage repository. For fault tolerance, multiple virtual machines using this storage can be setup in a clustered configuration. Options for your shared storage:
  - OCFS2 (Oracle Cluster File System) using the iSCSI (Internet SCSI) network protocol
  - OCFS2 using SAN (Storage Area Network)
  - NFS (Network File System)
  - Partition with multipath failover
- Create a server pool for your virtual machines.
- Create your virtual machines in the server pool.



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