

Oracle® Server X5-8 Installation Guide for Oracle VM Server



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Using This Documentation

- **Overview** – This installation guide contains procedures for installing the Oracle VM Server software, and initial software configuration procedures for bringing the Oracle Server X5-8 from Oracle to a configurable and usable state.
- **Audience** – Technicians, system administrators, authorized service providers, and users.
- **Required knowledge** – Experience installing operating systems.

This section describes how to get the latest firmware, software, and documentation for the Oracle Server X5-8. It also provides feedback links and a document change history.

- [“Oracle Server X5-8 Model Naming Convention” on page 7](#)
- [“Getting the Latest Firmware and Software” on page 7](#)
- [“Documentation and Feedback” on page 8](#)
- [“Contributors” on page 8](#)
- [“Change History” on page 8](#)

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

Oracle Server X5-8 Model Naming Convention

The Oracle Server X5-8 name identifies the following:

- X identifies an x86 product.
- The first number, 5, identifies the generation of the server.
- The second number, 8, identifies the maximum number of processors.

Getting the Latest Firmware and Software

Firmware, drivers, and other hardware-related software for each Oracle x86 server are updated periodically.

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

- Oracle System Assistant: This is a factory-installed option for Oracle x86 servers. It has all the tools and drivers you need and resides on a USB drive installed in most servers.
- You can download updates from My Oracle Support: <https://support.oracle.com>
- Physical media request: You can request a DVD that contains any of the downloads (patches) that are available from My Oracle Support. Use the Contact Us link on the support web site.

Documentation and Feedback

| Documentation | Link |
|---|---|
| All Oracle products | http://docs.oracle.com |
| Oracle Server X5-8 | http://www.oracle.com/goto/X5-8/docs-videos |
| Oracle Integrated Lights Out Manager (ILOM). Refer to the Oracle ILOM documentation. | http://www.oracle.com/goto/ILOM/docs |
| Oracle Hardware Management Pack. Refer to the documentation for your supported version of Oracle Hardware Management Pack as listed in the <i>Product Notes</i> . | http://www.oracle.com/goto/ohmp/docs |

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Change History

The following lists the release history of this documentation set:

- July 2015. Initial publication.

About Oracle VM Server Installations

This section contains an overview for installing Oracle VM Server on your Oracle Server X5-8.

| Description | Links |
|---|--|
| Review the Oracle VM Server software installation steps. | “Oracle VM Server Installation Task Map” on page 9 |
| Determine which Oracle VM Server software versions are supported. | “Supported Oracle VM Server Software” on page 10 |
| Review Oracle VM Server installation options. | “Oracle VM Server Installation Options” on page 11 |

Related Information

- [“Installing Oracle VM Server” on page 25](#)

Oracle VM Server Installation Task Map

The following table describes the high-level steps for installing Oracle VM Server.

| Step | Description | Links |
|------|---|--|
| 1. | Install the server hardware and configure the service processor. | <ul style="list-style-type: none">■ “Install the Server into the Rack” in Oracle Server X5-8 Installation Guide■ “Cabling the Server” in Oracle Server X5-8 Installation Guide■ “Connecting to Oracle ILOM” in Oracle Server X5-8 Installation Guide |
| 2. | Review the server product notes. Review the Oracle VM Server versions supported on the server. | <p>“Supported Operating Systems” in Oracle Server X5-8 Product Notes</p> <p>“Supported Oracle VM Server Software” on page 10</p> <p>Oracle Server X5-8 Product Notes at: http://www.oracle.com/goto/X5-8/docs-videos</p> |

| Step | Description | Links |
|------|--|--|
| 3. | Set up a second system with a static IP address on which you can install the Oracle VM Manager. This system must have one of the following operating systems installed: <ul style="list-style-type: none"> ■ Oracle Linux 5 Update 5, 64-bit or subsequent releases ■ Oracle Linux 6, 64-bit or subsequent releases ■ Red Hat Enterprise Linux 5 Update 5, 64-bit or subsequent releases ■ Red Hat Enterprise Linux 6, 64-bit or subsequent releases | <i>Oracle VM Release Notes for Release 3.3, Oracle VM Installation and Upgrade Guide for Release 3.3, and Oracle VM User's Guide for Release 3.3</i> at: http://docs.oracle.com/cd/E50245_01/index.html |
| 4. | Obtain the Oracle VM Server installation media and the Oracle VM documentation. The Oracle VM documentation should be used with the installation procedures in this guide. | <ul style="list-style-type: none"> ■ An ISO image of the Oracle VM Server installation program is available as a download at: https://edelivery.oracle.com/oraclevm If you want to install the Oracle VM Server ISO image from a DVD, burn the Oracle VM Server ISO file to a bootable DVD. ■ The Oracle VM documentation is available at: http://docs.oracle.com/cd/E50245_01/index.html |
| 5. | Set up the boot environment, console, boot media, and installation target that you will use to perform the installation. | “Preparing to Install Oracle VM Server” on page 15 |
| 6. | Install Oracle VM Server and, if necessary, Oracle VM Manager. | For procedures for installing both the Oracle VM Server and the Oracle VM Manager, see “Installing Oracle VM Server” on page 25 . |
| 7. | Perform the post installation tasks, if applicable. | “Post Installation Tasks for Oracle VM Server” on page 34 |

Supported Oracle VM Server Software

The server supports the following Oracle VM Server software.

| VM Software | Edition |
|------------------|---------------|
| Oracle VM Server | Release 3.3.2 |

If you requested that the Oracle VM Server software be preinstalled on the server when you placed your order, Oracle VM Server 3.3 was preinstalled at the factory. If the Oracle VM software is preinstalled on your server, but you do not want to use it, you can install any other supported operating system or virtual machine software on your server.

The Oracle VM Server Hardware Compatibility List (HCL) identifies hardware that is compatible with Oracle VM Server. To find the latest Oracle VM Server version supported for the Oracle Server X5-8, go to the following site and search using your server model number:

<http://linux.oracle.com/pls/apex/f?p=117:1:3991604960223967>

Note - If Oracle VM Server was preinstalled, it was installed with the server set to Legacy BIOS boot mode. If you choose to boot the server in UEFI boot mode, the preinstalled image is not accessible and cannot be used. Oracle VM Server does not support UEFI boot mode.

Note - For all late-breaking requirements for the Oracle VM Server software, refer to the latest version of the *Oracle Server X5-8 Product Notes* at <http://www.oracle.com/goto/X5-8/docs-videos>.

Related Information

- “Supported Operating Systems” in *Oracle Server X5-8 Product Notes*
- “Installing Oracle VM Server” on page 25

Oracle VM Server Installation Options

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

| Option | Description |
|------------------|--|
| Multiple servers | You can use Oracle Enterprise Manager Ops Center to install an operating system on multiple servers. For information, go to http://www.oracle.com/technetwork/oem/ops-center/index.html . |
| Single server | <p>Install Oracle VM Server to a single server using one of the following methods:</p> <ul style="list-style-type: none"> ■ Locally: Perform the Oracle VM Server installation with physical access to the server. This option is recommended if you have just completed the physical installation of the server in the rack. ■ Remotely: Perform the Oracle VM Server installation from a remote location. This option uses the Oracle ILOM Remote System Console Plus application to access Oracle System Assistant or to perform a manual Oracle VM Server installation. <p>For information, see <i>Single-Server Installation Methods</i>.</p> |

Single-Server Installation Methods

Select a method for providing the Oracle VM Server installation media. Use the following information to determine the local or remote Oracle VM Server installation that best meets your needs.

| Media Delivery Method | Additional Requirements |
|--|--|
| Local assisted Oracle VM Server installation – Uses Oracle System Assistant. | A monitor, USB keyboard, USB mouse, Oracle System Assistant USB drive, and the Oracle VM Server installer ISO image. For more information, see “Assisted Oracle VM Server Installation” on page 12 . |
| Remote assisted Oracle VM Server installation – Uses Oracle System Assistant. | A remote system with a web browser, access to the Oracle VM Server installer ISO image, and network access to the server management port (NET MGT). For more information, see “Assisted Oracle VM Server Installation” on page 12 . |
| Local Oracle VM Server installation using a DVD drive – Uses a physical DVD drive connected to the server. | A monitor, USB keyboard, USB mouse, DVD drive, and the Oracle VM Server installer ISO image on a DVD. For more information, see “Manual Oracle VM Server Installation” on page 12 . |
| Remote Oracle VM Server installation using a DVD drive or DVD ISO image – Uses a redirected physical DVD drive on a remote system running the Oracle ILOM Remote System Console Plus application. | A remote system with a web browser, an attached physical DVD drive, the Oracle VM Server installer ISO image on a DVD, and network access to the server management port (NET MGT). For more information, see “Manual Oracle VM Server Installation” on page 12 . |
| PXE Image – Uses the server Preboot eXecution Environment (PXE) to launch the Oracle VM installer from a network interface. | A PXE server with the Oracle VM installation image. Note - PXE booting the Oracle VM installation image is not included in this scope of this document. For instructions on PXE booting the Oracle VM installer, refer to the Oracle VM documentation at http://docs.oracle.com/cd/E50245_01/index.html |

Assisted Oracle VM Server Installation

This method involves using Oracle System Assistant. You deliver the Oracle VM Server installation media on either a local or remote DVD drive, USB device, or DVD image. Oracle System Assistant guides the installation process. Your server must support Oracle System Assistant, and it must be installed in the server.

Manual Oracle VM Server Installation

With this method, you deliver the Oracle VM Server distribution media on either a local or remote DVD drive, USB device, or DVD image. The drivers for your server are included with

the Oracle VM Server distribution media. To install Oracle VM Server, use the distribution media's installation wizard.

Preparing to Install Oracle VM Server

This section describes how to prepare your environment for an Oracle VM Server installation.

| Description | Links |
|--|--|
| Access the host console locally or remotely. | “Accessing the Host Console” on page 15 “Accessing Oracle ILOM” in Oracle X5 Series Servers Administration Guide |
| Set the BIOS to optimal defaults, and ensure that the boot mode is set to Legacy BIOS. | “Preparing the Boot Environment” on page 17 “Reset the BIOS Firmware to Default Settings (BIOS)” in Oracle X5 Series Servers Administration Guide |
| Prepare the boot media. | “Preparing the Boot Media” on page 21 |
| Prepare the installation target. | “Preparing the Installation Target” on page 22 |

Related Information

- [“Installing Oracle VM Server on a Single System Using Oracle System Assistant” on page 26](#)
- [“Installing Oracle VM Server on a Single System Manually” on page 30](#)

Accessing the Host Console

To view the Oracle VM Server installation wizard, you must have access to the host console, either locally or remotely. This section provides instructions for viewing graphical output from the host.

- [“Access the Host Console Through a Local Graphics Monitor” on page 16](#)
- [“Access the Host Console Through the Oracle ILOM Remote System Console Plus” on page 16](#)

▼ Access the Host Console Through a Local Graphics Monitor

1. **Connect a VGA monitor to the VGA port on the server.**
2. **Connect a USB keyboard and mouse to the USB connectors on the server.**

Related Information

- “Cabling the Server” in *Oracle Server X5-8 Installation Guide*

▼ Access the Host Console Through the Oracle ILOM Remote System Console Plus

The following procedure describes how to access the host console from a remote system through the Oracle ILOM remote console application. To log in to Oracle ILOM remotely, you must know the IP address of the server service processor (SP). For instructions, refer to “Connecting to Oracle ILOM” in *Oracle Server X5-8 Installation Guide*.

1. **On a remote system with network access to the server network management port (NET MGT), open a web browser.**
2. **In the address bar, type the IP address of the server SP, and then press Enter.**
3. **Log in to the Oracle ILOM web interface.**

The default Oracle ILOM user name is root and the default password is changeme.

The Oracle ILOM Summary Information page appears.

4. **In the Actions panel, click the Remote Console Launch button.**

The Oracle ILOM Remote System Console Plus screen appears.

For details, refer to “Log In to Oracle ILOM Using a Remote Ethernet Connection” in *Oracle Server X5-8 Installation Guide*.

Related Information

- Oracle ILOM 3.2 Documentation Library at: <http://www.oracle.com/goto/ILOM/docs>

Preparing the Boot Environment

Before you install Oracle VM Server, ensure that the BIOS settings are configured to support the type of installation you plan to perform. You can change BIOS settings, such as the boot order and boot mode in the BIOS Setup Utility.

The following topics provide specific instructions on how to configure BIOS to support the installation:

- “Verify the BIOS Optimal Defaults” on page 17
- “Set the Boot Mode” on page 19

For more information about UEFI firmware settings, setting UEFI optimal defaults, and changing boot properties, refer to the *Oracle X5 Series Servers Administration Guide* at <http://www.oracle.com/goto/x86AdminDiag/docs>.

UEFI is a specification that defines a software interface between an operating system and platform firmware. UEFI replaces the Basic Input/Output System (BIOS) firmware interface.

▼ Verify the BIOS Optimal Defaults

Note - This procedure is optional. If the server is newly installed and this is the first time that an operating system has been installed, then BIOS is probably configured to its default settings and you do not have to perform this task.

In the BIOS Setup Utility, you can set optimal defaults, as well as view and edit BIOS settings, as needed. By setting optimal defaults, you ensure that the server is operating efficiently with a known-good configuration. You can review the optimal defaults in the *Oracle Server X5-8 Service Manual*.

Any changes you make in the BIOS Setup Utility (using the F2 key) are permanent until the next time you change them.

In addition to using the F2 key to view or edit the BIOS settings, you can use the F8 key during the boot process to specify a temporary boot device. If you use F8 to set a temporary boot device, this change is only in effect for the current system boot. The permanent boot device specified through F2 will be in effect after booting from the temporary boot device.

Before you begin, ensure that the following requirements are met:

- The server is equipped with a hard disk drive (HDD) or solid state drive (SDD).
- The HDD or SDD is properly installed in the server. For instructions, refer to “[Servicing Storage Drives](#)” in *Oracle Server X5-8 Service Manual*.

1. Access the host console.

For instructions, see [“Accessing the Host Console” on page 15](#).

2. Power on or reset the server.

For example, to reset the server, do one of the following:

- **From the local server**, press the Power button on the front panel of the server (for approximately 1 second) to power off the server, and then press the Power button again to power on the server.
- **From the Oracle ILOM web interface**, select Host Management → Power Control, and then select Reset from the Select Action list box.
- **From the Oracle ILOM command-line interface**, type `reset /System`.

The server begins the boot process, and the BIOS screen appears.



Note - The next events occur very quickly; therefore, focused attention is needed for the following steps. Watch carefully for these messages as they appear on the screen for a brief time.

3. When prompted in the BIOS screen, press the F2 key to access the BIOS Setup Utility.

After a few moments, the BIOS Setup Utility appears.

4. Press the F9 key to automatically load the optimal default settings.

A message appears prompting you to continue this operation by selecting OK or to cancel this operation by selecting CANCEL.

5. In the message, highlight ok, and then press Enter.

6. **To save your changes and exit the BIOS Setup Utility, press the F10 key.**

Alternatively, you can select **Save** and **Reset** from the **Save & Exit** menu.

▼ Set the Boot Mode

The server is equipped with Unified Extensible Firmware Interface (UEFI), which supports both legacy BIOS and UEFI boot modes. Legacy BIOS boot mode is enabled by default.

Oracle VM Server *does not* support UEFI boot mode. Therefore, you must ensure that the boot mode is set to legacy BIOS. To determine or change the boot mode, see the following procedure.

1. **Access the host console.**

For instructions, see [“Accessing the Host Console” on page 15](#).

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

For example, to reset the server, do one of the following:

- **From the local server,** press the Power button on the front panel of the server (for approximately 1 second) to power off the server, and then press the Power button again to power on the server.
- **From the Oracle ILOM web interface,** select Host Management → Power Control, and then select Reset from the Select Action list box.
- **From the Oracle ILOM command-line interface,** type `reset /System`.

The server begins the boot process, and the BIOS screen appears.



```
Copyright (C) 2015, Oracle and/or its affiliates. All rights reserved.
Version 2.17.1245. Copyright (C) 2015 American Megatrends, Inc.
BIOS Date: 04/10/2015 16:06:53 Ver: 36010200
Press F2 to run Setup (CTRL+E on serial keyboard)
Press F8 for BBS Popup (CTRL+P on serial keyboard)
Press F12 for network boot (CTRL+N on serial keyboard)
Press F9 to start Oracle System Assistant (CTRL+O on serial keyboard)
Boot Mode = Legacy
```

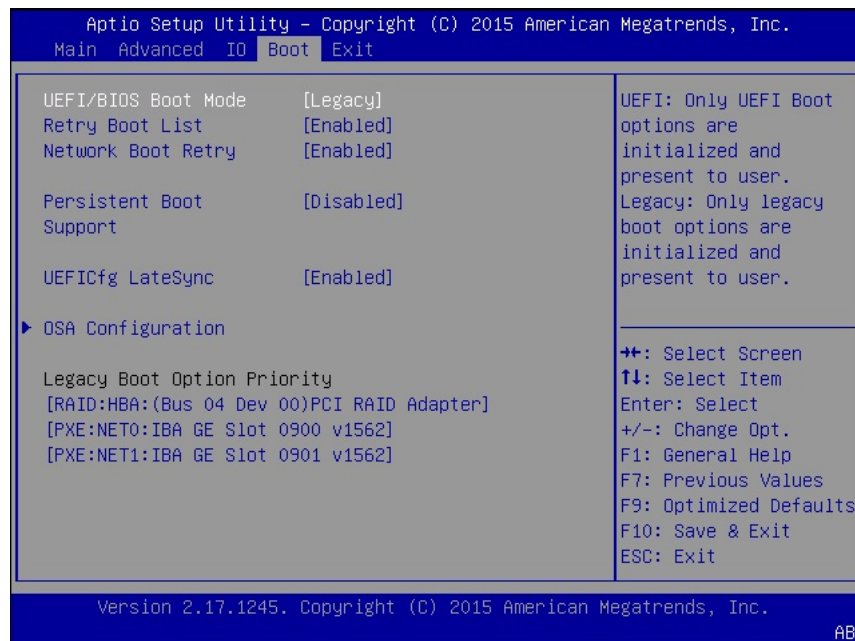
Note - The next events occur very quickly; therefore, focused attention is needed for the following steps. Watch carefully for these messages as they appear on the screen for a brief time.

3. When prompted in the BIOS screen, press the F2 key to access the BIOS Setup Utility.

After a few moments, the BIOS Setup Utility appears.

4. In the BIOS Setup Utility, use the arrow keys to navigate to the Boot menu.

The Boot menu appears. The UEFI/BIOS Boot Mode field displays the current boot mode.



Note - The options in the boot order list differ depending on the storage drive configuration and whether you have enabled the Persistent Boot Support feature. For more information about Persistent Boot Support, refer the *Oracle X5 Series Servers Administration Guide* at <http://www.oracle.com/goto/x86AdminDiag/docs>.

5. To change the boot mode, do the following:

- a. **Select the UEFI/BIOS Boot Mode field, and then press Enter.**

- b. Select your preferred boot mode, and then press Enter.

Note - Oracle VM does not support UEFI boot mode.

6. Press the F10 key to save your changes and exit the BIOS Setup Utility.

Preparing the Boot Media

The Oracle VM Server installer image must be accessible to the server, either locally or remotely. The following sections describe how to prepare the Oracle VM Server installer boot media:

- “Set Up the Boot Media for a Local Installation” on page 21
- “Set Up the Boot Media for a Remote Installation” on page 21

▼ Set Up the Boot Media for a Local Installation

1. On a system with a DVD burner, download the Oracle VM Server installer ISO image from the Oracle Software Delivery Cloud web site at <https://edelivery.oracle.com/oraclevm>.

2. Burn the ISO image to a DVD.

3. Insert the Oracle VM Server installation DVD into a DVD drive attached to the server.

Attach a DVD drive to a server USB port, and then insert the installation media into the drive.

For information about how to attach local devices to the server, refer to “Cabling the Server” in *Oracle Server X5-8 Installation Guide*.

▼ Set Up the Boot Media for a Remote Installation

1. On a remote system with network access to the server network management port (NET MGT), download the Oracle VM Server installer ISO image from the Oracle Software Delivery Cloud web site at <https://edelivery.oracle.com/oraclevm>.

Alternatively, you can do either of the following:

- **Burn the installation image to a DVD, and then insert the installation media into a DVD drive attached to the remote system.**
 - **Download the installation image to another location on the network, and then redirect the image to the server service processor using NFS or Samba protocol.**

For instructions on redirecting the ISO image from another location on the network, refer to the Oracle ILOM Remote Device section in the *Oracle ILOM Administrator's Guide for Configuration and Maintenance*, or to the More Details link in the Oracle ILOM Remote Control → Host Storage Device web interface page.
2. **Launch the Oracle ILOM Remote System Console Plus on the remote system.**

For instructions, see [“Access the Host Console Through the Oracle ILOM Remote System Console Plus” on page 16](#).
 3. **In the KVMS menu of the Oracle ILOM Remote System Console Plus application, select Storage.**

The Storage Devices dialog box appears.
 4. **In the Storage Devices dialog box, perform the following steps:**
 - a. **Deselect SSL Enabled, and then click Add.**

The Add Storage Devices dialog box appears.
 - b. **Browse to the ISO image, select it, and then click Select.**

The image file appears in the Storage Devices dialog box.
 - c. **Select the ISO image, and then click Connect.**

The ISO image is mounted to the remote console and can be used to perform the OS installation.

Preparing the Installation Target

Before you boot the Oracle VM Server installer, select and prepare an installation target:

- [“Installation Target Options” on page 23](#)
- [“Set Up a Local Storage Drive \(HDD, SSD, or RAID Volume\) as the Installation Target” on page 23](#)
- [“Set Up a Fibre Channel Storage Area Network Device as the Installation Target” on page 24](#)

Installation Target Options

With the exception of the embedded Oracle System Assistant USB flash drive (which is reserved for Oracle System Assistant), you can install the software on any of the storage drives installed in the server. Hard disk drives (HDDs), solid state drives (SSDs), and RAID volumes are valid installation targets for Oracle VM Server.

For servers equipped with a Fibre Channel PCIe host bus adapter (HBA), you can choose to install the operating system to an external Fibre Channel storage device.

Note - NVMe drives are not supported on servers running the Oracle VM software. If your server is equipped with NVMe drives, you have to install either the Oracle Solaris or Oracle Linux operating system to use them.

Important: Internal, Embedded Oracle System Assistant USB Flash Drive Should Not Be Used as a Boot or Storage Drive

The server ships with an embedded Oracle System Assistant USB flash drive. This drive contains Oracle System Assistant, device drivers, and firmware for Oracle ILOM, BIOS, and supported IO devices. During the installation of all supported operating systems, this USB flash drive is detected as a SCSI disk with a single partition that is read/write capable and is displayed as `Oracle_SSM` in the list of drives. You should be careful not to overwrite this device when performing any of the following operations:

- Operating system installations
- Disk or partition formatting operations
- General disk, partition or file system maintenance

In the event that this USB flash drive is overwritten, the original contents can be restored. To restore the contents of the USB flash drive, obtain the Oracle System Assistant recovery and ISO update image and use it to perform a restore operation.

For instructions for downloading the Oracle System Assistant recovery and ISO update image and restoring the Oracle System Assistant flash drive, refer to the *Oracle X5 Series Servers Administration Guide* at <http://www.oracle.com/goto/x86AdminDiag/docs>.

▼ Set Up a Local Storage Drive (HDD, SSD, or RAID Volume) as the Installation Target

1. Ensure that the target hard disk drive (HDD) or solid state drive (SSD) is properly installed and powered on.

For more information about installing and powering on a HDD or SSD, refer to “[Servicing Storage Drives](#)” in *Oracle Server X5-8 Service Manual* .

2. Ensure that the target drives are configured to suit your environment.

By default, each physical drive on the server is configured as a logical RAID 0 volume. To implement an alternative configuration, refer to the following resources:

- “[Configure Storage Drives for OS Installation](#)” in *Oracle Server X5-8 Installation Guide*
- *Oracle X5 Series Servers Administration Guide* at <http://www.oracle.com/goto/x86AdminDiag/docs>

▼ Set Up a Fibre Channel Storage Area Network Device as the Installation Target

1. Ensure that the PCIe host bus adapter (HBA) is properly installed in the server.

For more information about installing a PCIe HBA option, refer to “[Servicing PCIe Cards and the Dual PCIe Card Carriers \(DPCCs\)](#)” in *Oracle Server X5-8 Service Manual* .

2. Ensure that the storage area network (SAN) is installed and configured to make the storage device visible to the host on the server.

For instructions, refer to the documentation supplied with the Fibre Channel HBA.

Installing Oracle VM Server

This section provides instructions for installing Oracle VM Server onto the server.

| Description | Links |
|---|---|
| Preinstallation requirements. | “Before You Begin” on page 25 |
| Using Oracle System Assistant to install Oracle VM. | “Installing Oracle VM Server on a Single System Using Oracle System Assistant” on page 26 |
| Using media to install the Oracle VM software on a single server. | “Installing Oracle VM Server on a Single System Manually” on page 30 |
| Performing post installation tasks. | “Post Installation Tasks for Oracle VM Server” on page 34 |

Before You Begin

Ensure that the following requirements are met:

- You have prepared the boot environment. For more information, see [“Preparing the Boot Environment” on page 17](#).
- You have access to the host console. For more information, see [“Accessing the Host Console” on page 15](#).
- You have prepared the boot media. For more information, see [“Preparing the Boot Media” on page 21](#).
- You have selected the installation target and ensured that it is properly installed. For more information, see [“Preparing the Installation Target” on page 22](#).
- Two systems with static IP addresses have been set up:
 - One system to install Oracle VM Server.
 - One system for Oracle VM Manager with one of the following:
 - Oracle Linux 5 Update 5, 64-bit or subsequent releases
 - Oracle Linux 6, 64-bit or subsequent releases
 - Red Hat Enterprise Linux 5 Update 5, 64-bit or subsequent releases
 - Red Hat Enterprise Linux 6, 64-bit or subsequent releases

- You have reviewed the additional preinstallation tasks and requirements in the *Oracle VM Installation and Upgrade Guide for Release 3.3* at http://docs.oracle.com/cd/E50245_01/index.html.
- You have access to the Oracle VM installation documentation. The Oracle VM Release 3.3 Documentation Library is available at http://docs.oracle.com/cd/E50245_01/index.html.

Installing Oracle VM Server on a Single System Using Oracle System Assistant

The Oracle System Assistant Install OS task is the recommended method for installing Oracle VM Server.

- [“Install Oracle VM Server Using Oracle System Assistant” on page 26](#)

▼ Install Oracle VM Server Using Oracle System Assistant

Before you begin, review the installation prerequisites in [“Before You Begin” on page 25](#).

1. **Ensure that the installation media is available to boot.**
For instructions, see [“Preparing the Boot Media” on page 21](#).
2. **To launch Oracle System Assistant directly from the Oracle ILOM web interface (recommended), perform the following steps; otherwise, proceed to the next step.**
 - a. **On a remote system with network access to the server network management port (NET MGT), open a web browser.**
 - b. **In the address bar, type the IP address of the server service processor, and then press Enter.**
 - c. **Log in to the Oracle ILOM web interface.**

The Oracle ILOM Summary Information page appears.

ORACLE Integrated Lights Out Manager v3.2.5.12

NAVIGATION: Chassis View, System Information, Summary (selected), Processors, Memory, Power, Cooling, Storage, Networking, PCI Devices, Firmware, Open Problems (0), System Log, Remote Control, Host Management, System Management, Power Management, ILOM Administration, Site Map.

Summary Information

View system summary information. You may also change power state and view system status and fault information. [More details...](#)

General Information

| | |
|--------------------------|----------------------|
| System Type | Rack Mount |
| Model | ORACLE SERVER X5-8 |
| QPart ID | Q11159 |
| Part Number | 0FM-X441-36 |
| Serial Number | 00000-00-12345 |
| Component Model | ORACLE SERVER X5-8 |
| Component Part Number | 000-0000-00 |
| Component Serial Number | 0000CNW000 |
| System Identifier | OS-WIN-X5-8-P1-0-004 |
| System Firmware Version | 3.2.5.12 |
| Primary Operating System | Not Available |
| Host Primary MAC Address | |
| ILOM Address | |
| ILOM MAC Address | |

Actions

Power State: ☒ ON

Locator Indicator: ☒ OFF

Oracle System Assistant Version: 1.0.0.84274

System Firmware Update

Remote Console

Status

Overall Status: ☒ OK Total Problem Count: 0

| Subsystem | Status | Details | Inventory |
|------------|--|--|--|
| Processors | <input checked="" type="checkbox"/> OK | Processor Architecture: x86 64-bit Processor Summary: Eight Intel Xeon Processor E7 V3 Series | Processors: 8 / 8 (Installed / Maximum) |
| Memory | <input checked="" type="checkbox"/> OK | Installed RAM Size: 176 GB | DIMMs: 11 / 192 (Installed / Maximum) |
| Power | <input checked="" type="checkbox"/> OK | Permitted Power Consumption: 3754 watts Actual Power Consumption: 541 watts | PSUs: 4 / 4 (Installed / Maximum) |
| Cooling | <input checked="" type="checkbox"/> OK | Inlet Air Temperature: 26 °C Exhaust Air Temperature: Not Supported | Chassis Fans: 16 / 16 (Installed / Maximum) PSU Fans: Not Supported |
| Storage | <input type="checkbox"/> Not Available | Installed Disk Size: Not Available Disk Controllers: Not Available | Internal Disks: 1 / 8 (Installed / Maximum) |
| Networking | <input checked="" type="checkbox"/> OK | | Ethernet NICs: 2 (Installed) |

- d. In the Actions panel on the Oracle ILOM Summary Information page, click the Oracle System Assistant Launch button.

The Oracle System Assistant System Overview screen appears.

ORACLE System Assistant PLATFORM SOFTWARE RELEASE 1.0.0

System Information, Configure Network, Get Updates, Update Firmware, Configure Hardware, Install OS, Preferences, Advanced Tasks.

System Overview | System Inventory

Product Name: ORACLE SERVER X5-8
 Serial Number: 0000CNW000
 System Type: Rack Mount
 System Identifier: OS-WIN-X5-8-P1-0-004
 BIOS Version: 37010400
 BIOS Mode: Legacy
 ILOM Version: 3.2.5.12 r100103
 ILOM IP Address:
 ILOM MAC Address:
 Host IP Address:
 Host MAC Address: (net0)

- e. Proceed to [Step 4](#).

3. **To launch Oracle System Assistant using the Oracle ILOM Remote System Console Plus and BIOS, perform the following steps:**

a. **From the Oracle ILOM Summary Information page, click the Remote Console Launch button.**

The Oracle ILOM Remote System Console Plus window appears.

b. **Reset or power on the server.**

For example, to reset the server, do one of the following:

- **From the local server**, press the Power button on the front panel of the server (for approximately 1 second) to power off the server, and then press the Power button again to power on the server.
- **From the Oracle ILOM web interface**, select Host Management → Power Control, and then select Reset from the Select Action list box.
- **From the Oracle ILOM command-line interface**, type `reset /System`.

The server begins the boot process, and the BIOS screen appears in the Oracle ILOM Remote System Console Plus window.



Note - The next events occur very quickly; therefore, focused attention is needed for the following steps. Watch carefully for these messages as they appear on the screen for a brief time. You might want to enlarge the size of your screen to eliminate scroll bars.

c. **Press the F9 key.**

The Oracle System Assistant System Overview screen appears.

4. **In the navigation pane, click the Get Updates button to update the Oracle System Assistant software.**

This action ensures that the server has the latest software release package installed before you begin the operating system installation.

Note - Server web access is required to access remote updates for Oracle System Assistant.

5. **Click the Update Firmware button to update the server firmware.**

This action ensures that the server has the latest firmware and BIOS before you begin the operating system installation.

6. **Click the Install OS button to install Oracle VM Server.**

The Install Operating System screen appears.

7. **From the Supported OS drop-down list, select Oracle VM Server.**

8. **In the Select Your Install Media Location section of the screen, select the location of the installation media.**

This is the location of the installation DVD or the ISO installation image.

Note - Oracle System Assistant does not support Preboot eXecution Environment (PXE) installations. To perform a PXE installation of Oracle VM Server, refer to the Oracle VM Server documentation at http://docs.oracle.com/cd/E50245_01/index.html.

9. **In the Boot Disk portion of the screen, select the installation target.**
10. **Click Installation Details.**
The Installation Details dialog box appears.
11. **In the Installation Details dialog, deselect any items that you do not want to install.**

Note - The Oracle VM and Drivers options are mandatory and cannot be deselected.

12. **At the bottom of the Install Operating System screen, click the Install OS button.**
13. **To confirm your selection of boot device, click Yes.**
To change boot devices, click No, and select another device.
14. **Follow the prompts until the installation is finished.**
The server boots.

Installing Oracle VM Server on a Single System Manually

This section provides information about installing Oracle VM Server 3.3 for x86 (64-bit) software.

- [“Install Oracle VM Server Manually Using Local or Remote Media” on page 30](#)

▼ Install Oracle VM Server Manually Using Local or Remote Media

Before you begin, review the installation prerequisites in [“Before You Begin” on page 25](#).

1. **Access the host console.**

For instructions, see [“Accessing the Host Console” on page 15](#).

2. Ensure that the installation media is available to boot.

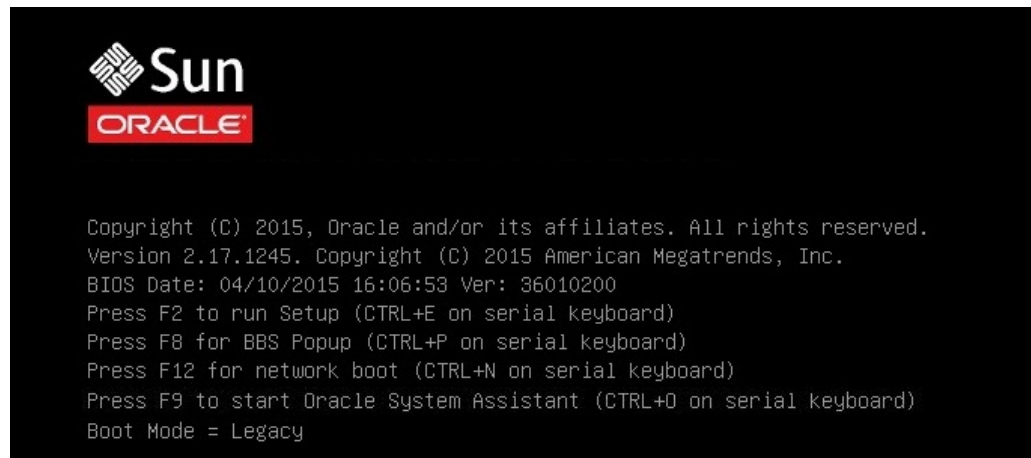
For instructions, see [“Preparing the Boot Media” on page 21](#).

3. Power on or reset the server.

For example, to reset the server, do one of the following:

- **From the local server,** press the Power button on the front panel of the server (for approximately 1 second) to power off the server, and then press the Power button again to power on the server.
- **From the Oracle ILOM web interface,** select Host Management → Power Control, and then select Reset from the Select Action list box.
- **From the Oracle ILOM command-line interface,** type `reset /System`.

The server begins the boot process.



Note - The next events occur very quickly; therefore, focused attention is needed for the following steps. Watch carefully for these messages as they appear on the screen for a brief time. You might want to enlarge the size of your screen to eliminate scroll bars.

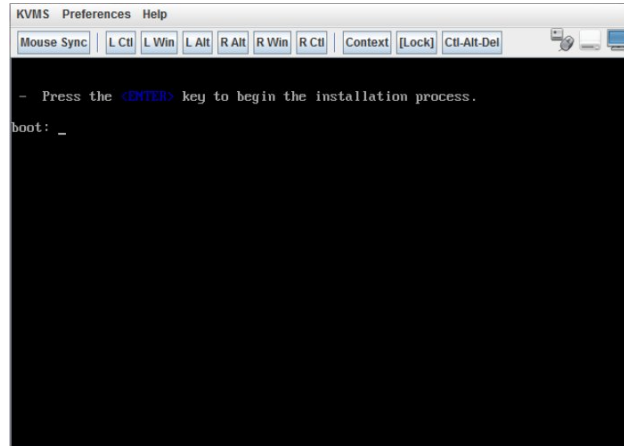
4. In the BIOS screen, press the F8 key to specify a temporary boot device for the Oracle VM Server installation.

The Please Select Boot Device menu appears.

5. In the Please Select Boot Device menu, select either the external or virtual DVD device as the boot device, and then press Enter.

The device strings listed in the Boot Device menu are in the following format: *device type, slot indicator, and product ID string*.

After a few seconds, the splash screen for Oracle VM Server appears.



6. Press Enter to begin the installation.

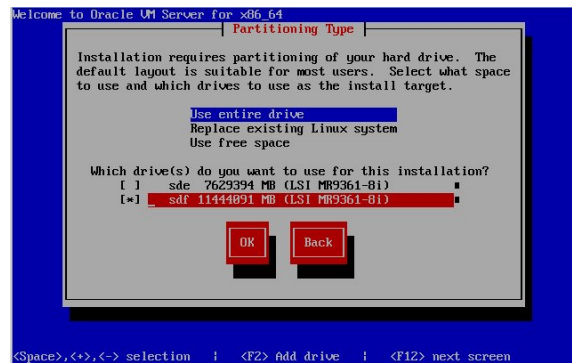
If you do not press a key, after one minute, the installer automatically starts. The installer is only available in text mode.

7. Refer to the *Oracle VM Installation and Upgrade Guide for Release 3.3* at http://docs.oracle.com/cd/E50245_01/index.html.

The *Oracle VM Installation and Upgrade Guide for Release 3.3* provides step-by-step instructions for installing Oracle VM.

8. Follow the on-screen prompts to install Oracle VM Server and Oracle VM Server Agent.

9. As you progress through the on-screen prompts, the Partitioning Type screen appears.



Note - Although the next step is described in the *Oracle VM Installation and Upgrade Guide for Release 3.3* at: http://docs.oracle.com/cd/E50245_01/index.html, it is included here because you must exercise caution when you select the drive onto which to install Oracle VM Server.

10. In the Partitioning Type screen, do the following:

a. Select one of following partition layouts:

- Use entire drive
- Replace existing Linux system
- Use free space

b. Select the drive(s) you want to use for the installation.



Caution - In the Partitioning Type screen, the Oracle SSM drive is the Oracle System Assistant USB flash drive. You might have to scroll to the bottom of the screen to see this drive. You should *never* select the Oracle SSM drive as the software installation drive. Installing Oracle VM Server to the Oracle SSM drive will overwrite the Oracle System Assistant software and Oracle System Assistant will have to be restored. For instructions for restoring Oracle System Assistant, see the *Oracle X5 Series Servers Administration Guide* at <http://www.oracle.com/goto/x86AdminDiag/docs>.

c. Select OK to continue the installation.

11. **To complete the installation, refer to the Oracle VM installation documentation and follow the instructions.**

Refer to the *Oracle VM Installation and Upgrade Guide for Release 3.3* at http://docs.oracle.com/cd/E50245_01/index.html.

Note - The Oracle VM installation will require two passwords: one for the root Oracle VM Server account and one for the Oracle VM Agent.

12. **After completing the installation of Oracle VM Server and Oracle VM Agent, do one of the following:**

- If you *do not* have an Oracle VM Manager configured to manage the Oracle VM Server, you will need to install it before proceeding to “[Post Installation Tasks for Oracle VM Server](#)” on page 34.

For instructions for installing Oracle VM Manager, refer to the *Oracle VM Installation and Upgrade Guide for Release 3.3* at http://docs.oracle.com/cd/E50245_01/index.html.

- If you already have an Oracle VM Manager configured to manage the Oracle VM Server, proceed to “[Post Installation Tasks for Oracle VM Server](#)” on page 34.

Post Installation Tasks for Oracle VM Server

After completing Oracle VM Server software installation, review the following post installation tasks and, if necessary, perform the tasks that are applicable to your system.

- “[Update Oracle VM Server Software](#)” on page 34
- “[Manage Oracle VM Server Resources](#)” on page 34

Update Oracle VM Server Software

The Oracle VM Server installation media might not contain the most up-to-date versions of the software. If necessary, update the Oracle VM Server software with the latest updates. For download instructions, go to this web site:

<https://edelivery.oracle.com/oraclevm>

Manage Oracle VM Server Resources

To learn how to configure, access, and manage Oracle VM Server resources, refer to the Oracle VM Release 3.3 Documentation Library at:

http://docs.oracle.com/cd/E50245_01/index.html

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