Sun Server X2-8 (formerly Sun Fire X4800 M2) Server Installation Guide for Virtual Machine Software
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Using This Documentation

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- “Sun Server X2-8 Name Change” on page 5
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- “About This Documentation” on page 7
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Sun Server X2-8 Name Change

The Sun Server X2-8 was formerly named the Sun Fire X4800 M2 server. This former name might still appear in the product. 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, 2, identifies the generation of the server.
- The second number, 8, identifies the number of processors.

Product Downloads

You can find downloads for all Oracle x86 servers and server modules (blades) on Support (MOS). On MOS you can find two type of downloads:

- Software release bundles specific to the rackmount server, server module, modular system (blade chassis), or NEM. These software release bundles include Oracle ILOM, Oracle Hardware Installation Assistant and other platform software and firmware.
- Standalone software common across multiple types of hardware. This includes the Hardware Management Pack and Hardware Management Connectors.
Get Software and Firmware Downloads

1. Go to [http://support.oracle.com](http://support.oracle.com).
3. At the top of the page, click the Patches and Updates tab.
4. In the Patch Search box, click Product or Family (Advanced Search).
5. In the Product ? is field, type a full or partial product name, for example, Sun Server X2-8 until a list of matches is displayed and select the product of interest.
6. In the Release ? is pull-down list, click the Down arrow.
7. In the window that appears, click the triangle (>) by the product folder icon to show the choices and then select the release of interest and click Close.
8. In the Patches Search box, click Search.
   A list of product downloads (listed as patches) appears.
9. Select the Patch name of interest, for example, 12684585, for the Sun Server X2-8 1.0 Firmware.
10. In the right-side pane that appears, click Download.

Documentation and Feedback

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<thead>
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<th>Link</th>
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<td>All Oracle products</td>
<td><a href="http://www.oracle.com/documentation">http://www.oracle.com/documentation</a></td>
</tr>
<tr>
<td>Sun Server X2-8</td>
<td><a href="http://docs.oracle.com/cd/E20815_01/index.html">http://docs.oracle.com/cd/E20815_01/index.html</a></td>
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Provide feedback on this documentation at: [http://www.oracle.com/goto/docfeedback](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, appendices, or section numbering.

You can get a PDF that includes all information about a particular topic subject (such as hardware installation or product notes) by clicking the PDF button on the top of the page.

Change History

The following lists the release history of this documentation set:

- July 2011 – Initial publication.
- October 2011 – Revised for SW1.1.
- January 2012 – Revised for SW1.2.
- April 2012 – Revised to add preinstalled Oracle VM, and additional rack mounting instructions.
- June 2012 – Revised to add the preinstalled Solaris 11 operating system.
- July 2012 – Revised to change name and to add 32 Gb DIMMs.
Installing VMware ESX 4.1

The installation of VMware ESX 4.1 includes the following tasks.

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<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Link</th>
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<tbody>
<tr>
<td>1</td>
<td>Obtain information about your installation.</td>
<td>“How to Obtain VMware Installation and Administration Documentation” on page 10</td>
</tr>
<tr>
<td>2</td>
<td>Identify a specific network interface.</td>
<td>“How to Identify the Network Interface” on page 10</td>
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<tr>
<td>3</td>
<td>Obtain the installation image and burn it to a DVD or copy it onto a server.</td>
<td>“How to Obtain an Image of the Installation File” on page 11</td>
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<tr>
<td>4</td>
<td>Install VMware ESX 4.1.</td>
<td>“How to Install VMware ESX 4.1” on page 11</td>
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<tr>
<td>5</td>
<td>Update VMware ESX 4.1.</td>
<td>“How to Update VMware ESX 4.1” on page 12</td>
</tr>
</tbody>
</table>

Booting options described in this document include local DVD boot using the system console or remote DVD or ISO image file boot using ILOM console redirection. VMware supports other booting options, such as PXE (see the VMware documentation for details).

**Note** – The Sun Server X2-8 was formerly named the Sun Fire X4800 M2 server. This former name might still appear in the product. The name change does not indicate any change in system features or functionality.

Preparing for Installation

Please note the following conditions before installing ESX 4.1:

- If you are going to install your OS on a disk that is part of a RAID array, you must configure the RAID array before installing your OS.
  
  Refer to your disk management documentation for details.

- Systems running ESX/ESXi 4.1 and ESXi 5 support limited numbers of NIC ports. Adding more than the recommended number of ports can cause your system to hang.
For the recommended maximum number of NIC ports for your system, refer to VMware knowledge base article 1026483 at:

http://kb.vmware.com_kb/1020808

- Systems running ESX/ESXi 4.1 support a maximum of 1Tb of memory. Systems running ESXi 5 support a maximum of 2Tb of memory.
  For more information, refer to VMware knowledge base article 1026483 at:
  http://kb.vmware.com_kb/1026483

- At the release of this document, your server supports VMware ESX/ESXi 4.1 Update 1, and ESXi 5. Check the Sun Server X2-8 (formerly Sun Fire X4800 M2) Product Notes for up-to-date information about OS support.

See your VMware documentation for additional limitations.

▼ How to Obtain VMware Installation and Administration Documentation

1. Download or consult documents as required from:

2. Use the information in these documents to plan your installation.

▼ How to Identify the Network Interface

The vSphere 4.1 service console and management interfaces require a network interface. The service console does not automatically use the first interface with a live connection. Instead, it allows you to select one during the installation. It defaults to vmnic0.

Perform the following tasks before beginning the ESX 4.1 installation.

1. Identify the network connector that you will use for the vSphere 4.1 service console and management interface.

2. Ensure that the network connector you select is connected to the correct network.
   Refer to your service manual for information about the network connectors on your server.

See Also “How to Obtain VMware Installation and Administration Documentation” on page 10 for a link to VMware documentation and information about the ESX4.1 service console and management interface.
How to Obtain an Image of the Installation File

Before You Begin
At the release of this document, your server supports VMware ESX/ESXi 4.1 Update 1. Check the Sun Server X2-8 (formerly Sun Fire X4800 M2) Product Notes for up-to-date information about OS support.

1. Download a copy of the VMware ESX 4.1 image (ISO) file from the VMware web site:
   http://downloads.vmware.com

2. Burn a copy of the ISO file to a DVD.
   If you are going to use a remote console, you can either burn the ISO file to a DVD or copy it to the server where you will do the remote installation.

How to Install VMware ESX 4.1

Before You Begin
Obtain the following items before installation:

- The ESX and vCenter Server Installation Guide for VMware.
- A monitor, a USB keyboard, and a mouse connected to rear USB ports of the server (not required if you are installing remotely).
- A copy of the VMware installation file, located in one of the following (bootable) locations:
  - An external USB DVD/CD-ROM drive connected to the server.
  - A DVD/CD-ROM drive, or an ISO file connected through a remote console.

1. Configure the server and boot it from the distribution media as described in “Booting From OS Distribution Media” on page 17.
   The server boots from the distribution media.

2. Choose the interface to work with:
   - To work in graphical mode, press Enter.
   - To work in text mode, at a prompt, select Install ESX in text mode from the menu.

3. Complete the VMware installation.
   Refer to the ESX and vCenter Server Installation Guide to guide you through the installation process.
How to Update VMware ESX 4.1

1. Check the VMware web site to see if any updates are available:
   http://www.vmware.com/support/

2. Download and install any updates as described on the VMware web site.
Installing VMware ESXi 4.1 and ESXi 5 Installable

The VMware ESXi installation includes the following tasks.

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Obtain information about your installation.</td>
<td>&quot;How to Obtain VMware Installation and Administration Documentation&quot; on page 10</td>
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<tr>
<td>2</td>
<td>Obtain the installation image and burn it to a CD or copy it onto a server.</td>
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</tr>
<tr>
<td>3</td>
<td>Install VMware ESXi Installable.</td>
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</tr>
<tr>
<td>4</td>
<td>Update VMware ESXi Installable.</td>
<td>&quot;How to Update VMware ESXi Installable&quot; on page 15</td>
</tr>
</tbody>
</table>

Booting options described in this document include local CD boot using the system console or remote CD or ISO image file boot using ILOM console redirection. VMware supports other booting options, such as PXE (see the VMware documentation for details).

Preparing for Installation

Please note the following conditions before installing ESXi 4.1 and ESXi 5 Installable:

- If you are going to install your OS on a disk that is part of a RAID array, you must configure the RAID array before installing your OS. Refer to your disk management documentation for details.

- Systems running ESX/ESXi 4.1 and ESXi 5 support limited numbers of NIC ports. Adding more than the recommended number of ports can cause your system to hang. For the recommended maximum number of NIC ports for your system, refer to VMware knowledge base article 1026483 at: http://kb.vmware.com/kb/1020808

- Systems running ESX/ESXi 4.1 support a maximum of 1Tb of memory. Systems running ESXi 5 support a maximum of 2Tb of memory.
Preparing for Installation

For more information, refer to VMware knowledge base article 1026483 at:
http://kb.vmware.com/kb/1026483

- At the release of this document, your server supports VMware ESX/ESXi 4.1 Update 1, and ESXi 5. Check the Sun Server X2-8 (formerly Sun Fire X4800 M2) Product Notes for up-to-date information about OS support.

See your VMware documentation for additional limitations.

▼ How to Obtain VMware Installation and Administration Documentation

1 Navigate to the corresponding VMware documentation site at:

2 Use the information from these documents to plan your installation before proceeding.

▼ How to Obtain an Image of the Installation File

**Before You Begin**
At the release of this document, your server supports vSphere 4.1 Update 1 and vSphere 5. Check the Sun Server X2-8 (formerly Sun Fire X4800 M2) Product Notes for up-to-date information about OS support.

1 Download a copy of the VMware ESXi Installable image (ISO) file from the VMware web site:
   http://www.vmware.com/download/

2 Burn a copy of the ISO file to a CD.
   If you are going to perform the installation using the remote console, you can either burn it to a CD or copy the ISO file to the server that is hosting the remote console session.

▼ How to Install VMware ESXi Installable

**Before You Begin**
Obtain the following items before installation:
- A copy of the VMware ESXi Installable installation documentation.
- A monitor, a USB keyboard, and a mouse connected to rear USB ports of the server (not required if you are using a remote console).
- A copy of the VMware installation file, located in one of the following (bootable) locations:
  - An external USB DVD/CD-ROM drive connected to the server
Preparing for Installation

- A DVD/CD-ROM drive, or an ISO file connected through a remote console

1 Configure the server and boot it from the distribution media as described in “Booting From OS Distribution Media” on page 17.
   The server boots from the distribution media.

2 Complete the VMware installation.
   Refer to the VMware ESXi 4.1 Installable documentation to guide you through the installation process. See “How to Obtain VMware Installation and Administration Documentation” on page 14.

▼ How to Update VMware ESXi Installable

1 Check the VMware web site to see if any updates are available. Go to:
   http://www.vmware.com/support/

2 Download and install any updates as described on the VMware web site.
Booting From OS Distribution Media

This section describes how to boot from an OS distribution media (CD or DVD) or an equivalent ISO file. ESXi ISO is booted from a CD only. This section contains the following topics.

- “How to Boot From OS Media Locally” on page 17
- “How to Boot From OS Distribution Media or ISO File Remotely” on page 18

When you are done, control passes from the BIOS to the OS installation program. Follow the steps in your OS installation guide.

▼ How to Boot From OS Media Locally

1 Connect to the console.
   For more information, refer to "Connecting to the System Console" in Sun Server X2-8 (formerly Sun Fire X4800 M2) Installation Guide.

2 Power on or reset the server.
   BIOS messages appear on the console.

3 Insert the distribution media.
   Additional BIOS messages appear on the console.

4 When you see a message offering a series of selections, press F8.
   Initializing USB Controllers .. Done.
   Press F2 to run Setup (CTRL+E on Remote Keyboard)
   Press F8 for BBS POPUP (CTRL+P on Remote Keyboard)
   Press F12 to boot from the network (CTRL+N on Remote Keyboard)

   After a delay, a menu offers a selection of boot devices as shown in the following example.

   Please select boot device:
   -----------------------------
   USB CD/DVD
   PXE:IBA GE Slot 1000 v1331
   PXE:IBA GE Slot 1001 v1331
   PXE:IBA GE Slot 4100 v1331
Boot From OS Distribution Media

5 **Select CD/DVD from the list.**
Control passes to the OS installation program on the media.

6 **Follow the steps in your vendor’s OS installation guide.**

▶ **How to Boot From OS Distribution Media or ISO File Remotely**

You can boot from the physical media (CD or DVD) or from an equivalent ISO image.

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

2 **Start and configure a remote console session.**
For more information, refer to “Communicating With Oracle ILOM and the System Console” in *Sun Server X2-8 (formerly Sun Fire X4800 M2) Installation Guide*.

a. **Connect to the console.**

b. **When the Remote Console window appears, click the Devices menu and select:**
   - CD-ROM if you are using physical media.
   - CD-ROM Image if you are using an ISO file.

c. **If Keyboard and Mouse are not selected, select them as well.**
Your remote console session is configured.

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.**
   - Initializing USB Controllers .. Done.
   - Press F2 to run Setup (CTRL+E on Remote Keyboard)
   - Press F8 for BBS POPUP (CTRL+P on Remote Keyboard)
   - Press F12 to boot from the network (CTRL+N on Remote Keyboard)
After a delay, a menu offers a selection of boot devices.

Please select boot device:
--------------------------------
Virtual CD/DVD AMI
PXE:IBA GE Slot 1000 v1331
PXE:IBA GE Slot 1001 v1331
PXE:IBA GE Slot 4100 v1331
PXE:IBA GE Slot 4101 v1331
PXE:IBA GE Slot 8100 v1331
PXE:IBA GE Slot 8101 v1331
PXE:IBA GE Slot C100 v1331
PXE:IBA GE Slot C101 v1331
--------------------------------

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 Follow the steps in your vendor’s OS installation guide.