

# VMware vSphere on Dell EMC PowerEdge Systems

## Getting Started Guide

## Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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# Getting started with VMware vSphere

This document helps you in setting up your Dell EMC PowerEdge server and configuring VMware vSphere.

- i** **NOTE:** If you had ordered VMware ESXi with your Dell EMC PowerEdge server, it is preinstalled on your server. The ESXi installer media is required for reinstallation. If you did not order ESXi with your server, you can order the Internal Dual SD Module kit (for supported Dell EMC PowerEdge servers) at [Dell.com/support/home](http://Dell.com/support/home), and then download the ESXi installation media from [Dell.com/support/drivers](http://Dell.com/support/drivers).

## Topics:

- [Important information](#)
- [Download Dell EMC customized ESXi image](#)
- [Configuring ESXi on Dell EMC PowerEdge server](#)

## Important information

For all the Dell EMC PowerEdge servers with factory-installed VMware ESXi operating system:

- Dell EMC PowerEdge 14<sup>th</sup> generation server's username is `root` and password is your Service Tag of your system followed by the character '!'.  
**i** **NOTE:** To locate the Service Tag of your system, see [Locating Service Tag of your system..](#)

- Dell EMC PowerEdge 13<sup>th</sup> generation servers do not have password for the username `root`.

For the Dell EMC PowerEdge servers with factory-installed VMware ESXi operating system on the BOSS-S1 device:

- Dell EMC PowerEdge 14<sup>th</sup> generation servers do not have VMFS datastore enabled by default. Dell EMC recommends that you use the BOSS-S1 device as an OS boot device and vSphere ESXi Logging device. For more information, see [VMware Knowledge Base article 2145210](#).

- i** **NOTE:** Before deploying the system, Dell EMC recommends you to see *VMware vSphere 6 on Dell EMC PowerEdge server Release Notes* at [Dell.com/virtualizationsolutions](http://Dell.com/virtualizationsolutions).

## Download Dell EMC customized ESXi image

To download the Dell EMC customized ESXi image:

- i** **NOTE:** Ensure that you clear the web browser cache before downloading the drivers and firmware.

1. Go to [Dell.com/support/drivers](http://Dell.com/support/drivers).
2. In the **Drivers & Downloads** section, type the Service Tag of your system in the **Enter a Service Tag** box, and then click **Submit**.

**i** **NOTE:** If you do not have the Service Tag, select **Detect PC** to allow the system to automatically detect your Service Tag, or click View products, and then navigate to your product.

3. Click **Drivers & Downloads**.



The drivers that are applicable to your selection are displayed.

4. In the **Operating System** list, select the appropriate VMware version.
5. In the **Category** list, select **Enterprise Solutions**.


The latest Dell EMC VMware ESXi customized images are displayed.

6. Click **Download**.

# Configuring ESXi on Dell EMC PowerEdge server

1. Set up your Dell EMC PowerEdge server.  
For more information, see the *Getting Started Guide* and the *Rack Installation Instructions* that is shipped with your server.
2. Connect the network cables to the appropriate Network Daughter Card (NDC)/ LAN On Motherboard (LOM) Network Interface Card (NIC) connectors.  
For a four-port LOM, connect the VMware management network cable to LOM1 port, the virtual machine network cable to LOM2 port and LOM3 port, and the optional storage network cable to LOM four- port.  
For a two-port LOM, connect the VMware management network cable to LOM1 port and the virtual machine network cable to LOM2 port.
3. Turn on the server.  
The ESXi console loads.
4. Press F2 when the ESXi console is displayed to configure the software.  
Configuring the software includes changing the root password and setting a static IP address.  
 **NOTE:** By default, the server obtains an IP address using the Dynamic Host Configuration Protocol (DHCP).
5. Select **Configure Password** from the main menu to change the root password.  
The root password manages the server on a one-to-one basis.
6. Select **Configure Management Network > IP Configuration > Set static IP address and network configuration** to configure a static IP address.  
 **NOTE:** Record the host IP address.

If you purchased the ESXi hypervisor-based vSphere Standard, Enterprise, Enterprise Plus, Essentials Plus software, or Acceleration kits from Dell EMC, you must have received the Partner Activation Code certificate with the server. To use the ESXi software and receive subscription services, follow the instructions in your Partner Activation Code certificate that comes with the server.

 **NOTE:** By using the VMware software, you are agreeing to the VMware End User License Agreement (EULA) at [vmware.com/downloads/eula](https://www.vmware.com/downloads/eula). For more information about license keys and VMware software licensing configuration, see the *VMware documentation* at [vmware.com/support/pubs](https://www.vmware.com/support/pubs).

## Getting help

### Topics:

- [Contacting Dell EMC](#)
- [Related information for virtualization solutions](#)
- [Documentation resources](#)
- [Download drivers and firmware](#)
- [Documentation feedback](#)
- [Locating Service Tag of your system](#)

## Contacting Dell EMC

Dell EMC provides several online and telephone-based support and service options. Availability varies by country, region, and product, and some services may not be available in your area.

To contact Dell EMC for sales, technical assistance, or customer service issues, see [www.dell.com/contactdell](http://www.dell.com/contactdell).

If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or the product catalog.

## Related information for virtualization solutions

**Table 1. Related information for virtualization solutions**

If you need information about	See
Dell EMC VMware documentation	<a href="http://www.dell.com/virtualizationsolutions">www.dell.com/virtualizationsolutions</a>
OpenManage documentation	<a href="https://www.dell.com/openmanagemanuals">https://www.dell.com/openmanagemanuals</a>
PowerEdge documentation	<a href="https://www.dell.com/poweredgemanuals">https://www.dell.com/poweredgemanuals</a>
Basic configuration information for running ESXi on a Dell EMC PowerEdge server	Getting Started Guide at <a href="http://www.dell.com/virtualizationsolutions">www.dell.com/virtualizationsolutions</a>
<ul style="list-style-type: none"> <li>• Information about downloading, installing, and configuring ESXi</li> <li>• Supported hardware configurations for running ESXi on a Dell EMC PowerEdge server</li> </ul>	Installation Instructions and Important Information Guide at <a href="http://www.dell.com/virtualizationsolutions">www.dell.com/virtualizationsolutions</a>
PowerEdge servers and compatibility with vMotion	<i>VMware ESXi vMotion Support on Dell EMC PowerEdge Servers Compatibility Matrix</i> at <a href="http://www.dell.com/virtualizationsolutions">www.dell.com/virtualizationsolutions</a>
PowerEdge and PowerVault compatibility information for running ESXi	<i>VMware vSphere on Dell EMC PowerEdge Servers Compatibility Matrix</i> at <a href="http://www.dell.com/virtualizationsolutions">www.dell.com/virtualizationsolutions</a>
Known issues and resolutions	<i>VMware vSphere 6 on Dell EMC PowerEdge Server Release Notes</i> at <a href="http://www.dell.com/virtualizationsolutions">www.dell.com/virtualizationsolutions</a>
ESXi ISO image customization information	<i>VMware ESXi on Dell EMC PowerEdge Systems Image Customization Information</i> at <a href="http://www.dell.com/virtualizationsolutions">www.dell.com/virtualizationsolutions</a>
UEFI Boot order management utility in VMware ESXi 7.0	<a href="http://www.dell.com/support/article/en-us/sln321019">www.dell.com/support/article/en-us/sln321019</a>

**Table 1. Related information for virtualization solutions (continued)**

If you need information about	See
Dell EMC Add-on for VMware vSphere 7.0	<a href="http://www.dell.com/support/article/en-us/sln320956">www.dell.com/support/article/en-us/sln320956</a>
Dell EMC ESXi 7.0 Quick Boot compatibility guide	<a href="http://www.dell.com/support/article/en-us/sln320746">www.dell.com/support/article/en-us/sln320746</a>
VMware vSphere Life Cycle Manager vLCM and Dell EMC integration	<a href="http://downloads.dell.com/manuals/all-products/esuprt_software_int/esuprt_software_virtualization_solutions/vmware-esxi-7x_white-papers3_en-us.pdf">downloads.dell.com/manuals/all-products/esuprt_software_int/esuprt_software_virtualization_solutions/vmware-esxi-7x_white-papers3_en-us.pdf</a>
PVRDMA Deployment and Configuration of QLogic CNA devices in VMware ESXi	<a href="http://downloads.dell.com/manuals/common/vmware_esxi_6x_7x_whitepaper6_en-us.pdf">downloads.dell.com/manuals/common/vmware_esxi_6x_7x_whitepaper6_en-us.pdf</a>
Self-Encrypting Drives in Dell EMC PowerEdge servers with VMware vSphere	<a href="http://downloads.dell.com/manuals/common/vmware_esxi_6x_7x_whitepaper7_en-us.pdf">downloads.dell.com/manuals/common/vmware_esxi_6x_7x_whitepaper7_en-us.pdf</a>
NVMe Hot-Plug on Dell EMC PowerEdge servers running VMware vSphere or vSAN	<a href="http://downloads.dell.com/manuals/common/vmware_esxi_6x_7x_whitepaper9_en-us.pdf">downloads.dell.com/manuals/common/vmware_esxi_6x_7x_whitepaper9_en-us.pdf</a>
Upgrading to Dell EMC vSphere and vSAN version 7.0	<a href="http://downloads.dell.com/manuals/all-products/esuprt_software_int/esuprt_software_virtualization_solutions/vmware-esxi-7x_white-papers8_en-us.pdf">downloads.dell.com/manuals/all-products/esuprt_software_int/esuprt_software_virtualization_solutions/vmware-esxi-7x_white-papers8_en-us.pdf</a>

## Technical support resources


- [vmware.com/support](http://vmware.com/support)
- [www.dell.com/support/home](http://www.dell.com/support/home)
- [Dell.com/services](http://Dell.com/services)

## Discussion forums

- [Communities.vmware.com/community/vmtn](http://Communities.vmware.com/community/vmtn)
- Dell Virtualization
- Wikis, Forums, Blogs, and Videos
- Dell Community

## Knowledge base

- [kb.vmware.com/kb](http://kb.vmware.com/kb)

 **NOTE:** For more information that is related to the VMware ESXi installation on Dell EMC PowerEdge servers, go to [Dell Virtualization](#).



## Virtualization videos for Dell EMC PowerEdge servers

All the supported virtualization videos for Dell EMC PowerEdge servers are available in the [Supported Operating Systems for Dell PowerEdge servers](#) playlist.

**Table 2. Virtualization videos for Dell EMC PowerEdge servers**

Video title	Links
Downloading the Dell EMC customized ESXi image from support site	<a href="http://www.youtube.com/watch?v=YnVxtkAkYTI">www.youtube.com/watch?v=YnVxtkAkYTI</a>
Downloading Dell EMC customized ESXi image from VMware website	<a href="http://www.youtube.com/watch?v=TnWyuyxuk5k">www.youtube.com/watch?v=TnWyuyxuk5k</a>

**Table 2. Virtualization videos for Dell EMC PowerEdge servers (continued)**

Video title	Links
Operating system Deployment (VMware ESXi)—Installing Using CD/DVD	<a href="http://www.youtube.com/watch?v=-EbufUS86zA">www.youtube.com/watch?v=-EbufUS86zA</a>
Enabling and Configuring Fault Resilient Memory on Dell EMC PowerEdge servers	<a href="http://www.youtube.com/watch?v=retSh-XIsK0">www.youtube.com/watch?v=retSh-XIsK0</a>
OS Deployment (VMware ESXi)—Installing on BOSS S1 device	<a href="http://www.youtube.com/watch?v=TB1loXpFFME">www.youtube.com/watch?v=TB1loXpFFME</a>
OS Deployment (VMware ESXi)—Installing on IDSDM	<a href="http://www.youtube.com/watch?v=EC-Xntg5mgw">www.youtube.com/watch?v=EC-Xntg5mgw</a>
To enable UEFI Secure Boot on VMware ESXi for Dell EMC's yx3x PowerEdge servers  <b>NOTE:</b> This video is applicable to VMware ESXi 6.5.x and later.	<a href="http://www.youtube.com/watch?v=LI9qIF9qV9I">www.youtube.com/watch?v=LI9qIF9qV9I</a>
To enable UEFI Secure Boot on VMware ESXi for Dell EMC's yx4x PowerEdge servers  <b>NOTE:</b> This video is applicable to VMware ESXi 6.5.x and later.	<a href="http://www.youtube.com/watch?v=ZZB_XyV0enY">www.youtube.com/watch?v=ZZB_XyV0enY</a>

## Documentation resources

This section provides information about the documentation resources for your server.

**Table 3. Additional documentation resources for your server**

Task	Document	Location
Setting up your server	For information about installing the server into a rack, see the rack documentation included with your rack solution or the <i>Getting Started Guide</i> that is shipped with your server.	<a href="https://www.dell.com/poweredgemanuals">https://www.dell.com/poweredgemanuals</a>
	For information about turning on the server and the technical specifications of your server, see the <i>Getting Started Guide</i> that is shipped with your server.	<a href="https://www.dell.com/poweredgemanuals">https://www.dell.com/poweredgemanuals</a>
Configuring your server	For information about the iDRAC features, configuring and logging in to iDRAC, and managing your server remotely, see the <i>Integrated Dell Remote Access Configuration Tool User's Guide</i> .	<a href="https://www.dell.com/idracmanuals">https://www.dell.com/idracmanuals</a>
	For information about installing the operating system, see operating system documentation.	<a href="https://www.dell.com/operatingsystemmanuals">https://www.dell.com/operatingsystemmanuals</a>
	For information about understanding Remote Access Controller Admin (RACADM) subcommands and supported RACADM interfaces, see the <i>iDRAC RACADM CLI Guide</i> .	<a href="https://www.dell.com/idracmanuals">https://www.dell.com/idracmanuals</a>
	For information about updating drivers and firmware, see	<a href="http://www.dell.com/support/drivers">www.dell.com/support/drivers</a>

**Table 3. Additional documentation resources for your server (continued)**

Task	Document	Location
	<p><a href="#">Download drivers and firmware</a> topic in this document.</p>	
Managing your server	<p>For information about server management software offered by Dell EMC, see the Dell EMC <i>Systems Management Overview Guide</i>.</p>	<p><a href="https://www.dell.com/openmanagemanuals">https://www.dell.com/openmanagemanuals</a></p>
	<p>For information about setting up, using, and troubleshooting OpenManage, see the Dell EMC <i>OpenManage Server Administrator User's Guide</i>.</p>	<p><a href="https://www.dell.com/openmanagemanuals">https://www.dell.com/openmanagemanuals</a></p>
	<p>For information about installing, using, and troubleshooting Dell EMC OpenManage Essentials, go to <a href="http://www.dell.com/openmanagemanuals">www.dell.com/openmanagemanuals</a> &gt; <i>OpenManage Essentials User's Guide</i>.</p>	<p><a href="https://www.dell.com/openmanagemanuals">https://www.dell.com/openmanagemanuals</a></p>
	<p>For information about installing and using Dell SupportAssist, see the Dell EMC <i>SupportAssist Enterprise User's Guide</i>.</p>	<p><a href="https://www.dell.com/serviceabilitytools">https://www.dell.com/serviceabilitytools</a></p>
	<p>For understanding the features of Dell EMC Lifecycle Controller (LC), see the <i>Lifecycle Controller User's Guide</i>.</p>	<p><a href="https://www.dell.com/idracmanuals">https://www.dell.com/idracmanuals</a></p>
	<p>For information about partner programs enterprise systems management, see the <i>OpenManage Connections Enterprise Systems Management</i> documents.</p>	<p><a href="https://www.dell.com/esmmanuals">https://www.dell.com/esmmanuals</a></p>
	<p>For information about viewing inventory, performing configuration, and monitoring tasks, remotely turning on or off servers, and enabling alerts for events on servers and components using the Dell EMC Chassis Management Controller (CMC), see the <i>Chassis Management Controller User's Guide</i> .</p>	<p><a href="https://www.dell.com/esmmanuals">https://www.dell.com/esmmanuals</a></p>
Working with the Dell EMC PowerEdge RAID controllers	<p>For information about understanding the features of the Dell EMC PowerEdge RAID controllers (PERC) and deploying the PERC cards, see the Storage controller documentation.</p>	<p><a href="http://www.dell.com/storagecontrollermanuals">www.dell.com/storagecontrollermanuals</a></p>
Understanding event and error messages	<p>For information about checking the event and error messages generated by the system firmware and agents that</p>	<p><a href="http://www.dell.com/openmanagemanuals">www.dell.com/openmanagemanuals</a></p>

**Table 3. Additional documentation resources for your server (continued)**

Task	Document	Location
	monitor server components, see the Dell EMC Event and Error Messages Reference Guide.	
Troubleshooting your system	For information about identifying and troubleshooting the PowerEdge server issues, see the <i>PowerEdge Servers Troubleshooting Guide</i> .	<a href="https://www.dell.com/poweredgemanuals">https://www.dell.com/poweredgemanuals</a>
Configuring Dell PowerEdge VRTX shared storage for VMware vSphere environment	For information on configuring Dell PowerEdge VRTX shared storage for VMware vSphere environment, see Dell EMC White papers.	<a href="#">Configuring Dell PowerEdge VRTX shared storage for VMware vSphere Environment</a>

## Download drivers and firmware

It is recommended that you download and install the latest BIOS, drivers, and systems management firmware on your system. Ensure that you clear the web browser cache before downloading the drivers and firmware.

1. Go to [www.dell.com/support/drivers](http://www.dell.com/support/drivers).
2. In the **Drivers & Downloads** section, enter the Service Tag of your system in the **Enter a Dell Service Tag, Dell EMC Product ID, or Model** text box, and then click the right arrow button.

 **NOTE:** If you do not have the Service Tag, click **Detect PC** to allow the system to automatically detect your Service Tag.

3. Click **Drivers & Downloads**.  
A list of applicable downloads is displayed.
4. Download the drivers or firmware to a USB drive, CD, or DVD.

## Documentation feedback

You can rate the documentation or write your feedback on any of our Dell EMC documentation pages and click **Send Feedback** to send your feedback.

## Locating Service Tag of your system

Your system is identified by a unique Express Service Code and Service Tag number. The Express Service Code and Service Tag are found on the front or back of the system by pulling out the information tag. Alternatively, the information may be on a sticker on the chassis of the system. This information is used by Dell EMC to route support calls to the appropriate personnel.