Microsoft Windows Server 2019 for Dell EMC PowerEdge Servers

Installation Guide



December 2020 Rev. A02

Notes, cautions, and warnings

(i) 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.

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

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Contents

hapter 1: Introduction	
Chapter 2: Set up preinstalled Microsoft Windows Server 2019 operating system	5
Chapter 3: Installing or reinstalling Microsoft Windows Server 2019	8
Install Windows Server 2019 by using Dell EMC Lifecycle Controller	8
Install Windows Server 2019 by using operating system media	17
Chapter 4: Drive partitioning	27
Master boot record scheme	
GUID partition table scheme	27
Chapter 5: Resources and support	
Operating system support matrix for Dell EMC PowerEdge servers	
Documentation and video resources	
Identifying the series of your PowerEdge servers	
Download drivers and firmware	31
Chapter 6: Contacting Dell Technologies	

Introduction

1

This document provides instructions to install Microsoft Windows Server 2019 operating system for Datacenter, Standard, and the Essentials edition.

(i) NOTE: Unlike previous versions of Windows Server, Microsoft Windows Server 2019 does not support the conversion from Windows Server Core to Server with Desktop Experience and vice versa. For more information, see Installation options for Windows Server 2019.

Set up preinstalled Microsoft Windows Server 2019 operating system

This section provides instructions for completing the setup of the Microsoft Windows Server 2019 Operating System (OS) that is preinstalled on your system.

- **NOTE:** Before you begin, see the documentation that is shipped with the operating system for important product information. For more information about completing the installation, see the documentation included with your software.
- **NOTE:** Before using your system, read the software license agreements that are included with each product that you have ordered.

To set up Windows Server 2019 OS for Datacenter, Standard, and the Essentials edition:

- 1. Connect the keyboard, monitor, mouse, network cable, power cable, and other required peripherals to your system.
- 2. Turn on your system.
- 3. Select the language in which you want to configure the preinstalled OS, and then click Next.
- 4. Select country or region, app language, keyboard layout, and then click Next.

Hi there		
et's get a few basic things out of the way.		
Deutsch		
English		
What's your home country/region?		
United States	~	
What's your preferred app language?		
English (United States)	~	
What keyboard layout would you like to use?		
US	~	
		Novt

Figure 1. Select country or region, app language, and keyboard layout

5. Read the license terms, and then click **Accept** if you agree to the license terms.

(i) NOTE: If you do not accept the license agreement, you cannot proceed with OS installation.



Figure 2. License terms

6. Enter administrator password, reenter to confirm the password, and then click Finish.

NOTE: The password must conform to the password complexity rules. For more information about password complexity rules, see Password Policy.

Customize	e settings				
Type a password for th	e built-in administrator account	that you can use to sign it	n to this computer.		
User name	Administrator				
Password					
Reenter password		•			
Ċ				Back	Finish
			والمتحجب والمتحج		

Figure 3. Customize settings

- 7. In the **Select OS Partition Size** window, move the slider to set an appropriate OS partition size, and then click **Ok**. The minimum partition size recommended:
 - 40 GB—for primary partitions
 - 60 GB—for the Essentials edition

Select an appropriate OS partitio	n size based on your requirements
Amount of physical memory in this serve	r : 16 GB
Minimum possible OS partition size:19	GB
Maximum possible OS partition size:10	020 GB
Best Practices for choosing an O	S partition size:
when you have large system memory	size of the memory as a mage line, but this is not mandatory, especially ony.
-Consider splitting the page file on t -Dell recommends having a minimu -For more information for determining Select your choice of OS partitio	n size
-Consider splitting the page file on t -Dell recommends having a minimu -For more information for determinin Select your choice of OS partitio Min	n size
-Consider splitting the page file on t -Dell recommends having a minimu -For more information for determinin Select your choice of OS partitio Min 19 GB	n size Max 1020 GB
-Consider splitting the page file on t -Dell recommends having a minimu -For more information for determinin Select your choice of OS partitio Min	n size Max 1020 GB
-Consider splitting the page file on t -Dell recommends having a minimu -For more information for determinin Select your choice of OS partitio Min	n 60GB OS partition for Windows Server 2008 R2 and beyond. g the Page file size, refer Microsoft KB article KB2860880.
-Consider splitting the page file on t -Dell recommends having a minimu -For more information for determinin Select your choice of OS partitio Min	n 60GB OS partition for Windows Server 2008 R2 and beyond. g the Page file size, refer Microsoft KB article KB2860880. n size Max Max 1020 GB
-Consider splitting the page file on t -Dell recommends having a minimu -For more information for determinin Select your choice of OS partitio Min	n 60GB OS partition for Windows Server 2008 R2 and beyond. g the Page file size, refer Microsoft KB article KB2860880. n size Max 1020 GB

Figure 4. OS partition size

- 8. Log in to the system after it reboots.
- **9.** Type the administrator password, and then press Enter.

A message is displayed with information about the value added services that are provided with your system.



Figure 5. Notification message

() NOTE: Windows Server 2019 Essentials do not include the Essentials Experience role. Windows Server 2019 Essentials can be configured as a domain controller by installing the Active Directory Domain Services role from the Server Manager. See Get Started with Windows Server 2019.

The preinstalled OS is successfully configured.

NOTE: After you log in to the system, you can use the **Server Manager Dashboard** to configure and manage different roles and features in the OS.

3

Installing or reinstalling Microsoft Windows Server 2019

Use one of the following methods to install the Microsoft Windows Server 2019 OS:

- Install Windows Server 2019 by using Dell EMC Lifecycle Controller
- Install Windows Server 2019 by using operating system media
- **NOTE:** For information about using the Virtual Media function on iDRAC, see Using the Virtual Media function on iDRAC 6, 7, 8 and 9.

Topics:

- Install Windows Server 2019 by using Dell EMC Lifecycle Controller
- Install Windows Server 2019 by using operating system media

Install Windows Server 2019 by using Dell EMC Lifecycle Controller

To install Windows Server 2019 for Standard, Datacenter, and the Essentials edition by using the Lifecycle Controller: (i) NOTE: Ensure that you have the Windows Server 2019 operating system media handy.

NOTE: Installation of Windows Server 2019 by using Dell EMC Lifecycle Controller is supported on the yx3x* PowerEdge servers and later.

*Dell PowerEdge M630 and Dell PowerEdge FC630 do not support the operating system installation using Dell EMC Lifecycle Controller.

- 1. Connect the keyboard, monitor, mouse, and other required peripherals to your system.
- 2. Turn on the system and the connected peripherals.
- 3. When the Dell EMC logo is displayed, press F10, and then select Entering Lifecyle Controller.



Figure 6. Entering Lifecycle Controller

- 4. Press Enter.
- 5. On the Lifecycle Controller page, click OS Deployment.
- 6. On the OS Deployment page, click Deploy OS.



Figure 7. OS Deployment

The **Select Deployment path** page is displayed, which contains the following options:

- Configure RAID First Click to configure a RAID connected to the server.
 NOTE: Configuring RAID is optional if an already-connected virtual disk is present.
- **Go Directly to OS Deployment** Click to launch the operating system deployment wizard and start installing an operating system.
- 7. Select Go Directly to OS Deployment.

	r Helj	•	About		Exit
Select OS Deployment Path	OS Deployment: Deploy OS			_	_
Select an Operating System	Step 1 of 5: Select Deployment path				
Select Installation Mode	Select OS Deployment Path				
Insert OS Media	Go Directly to OS Deployment				
Reboot the System	RAID can be configured prior to OS Deployment; the current wizard will be restarted after the RAID wizard is completed.				

Figure 8. Select Deployment path

If RAID is not yet configured, select **Configure RAID First**, and configure the RAID.

- 8. Click Next.
 - The Select an Operating System page is displayed with a list of compatible operating systems.
- 9. From the Available Operating Systems list, select Microsoft Windows Server 2019, and then click Next.

Select OS Deployment Path 🗸	OS Deployment: Deploy OS
Select an Operating System	Step 2 of 5: Select an Operating System
Select Installation Mode	Choose one of the supported boot modes for Operating System installation.
nsert OS Media	O BIOS ● UEFI
Reboot the System	Secure Boot Disabled O Enabled
-	Secure Boot Policy
	Standard O Custom
	Secure Boot Mode: Deployed Mode
	Available Operating Systems
	Microsoft Windows Server 2019
	The Secure Boot protocol applies to the UEFI boot mode. This feature will check for digitally signed OS drivers on every boot. UEFI secure boot mode supports certain Operating Systems versions.

Figure 9. Select an Operating System

() NOTE: If you select **Any Other Operating System** option, ensure that you have prepared the necessary drivers for your system. See www.dell.com/support for more information about operating system installation images and drivers for these operating systems.

- 10. Select whether you want to deploy the operating system in UEFI or BIOS mode, and then click Next.
- 11. On the Select Installation Mode page, select Manual Install, and then click Next.
- 12. Insert the Windows Server 2019 media, and then click Next.





13. A summary of applied settings is displayed on the **Reboot the System** page. Click **Finish** to begin installation.

Select OS Deployment Path 🗸	OS Deployment: Deploy OS	
Select an Operating System 🗸	Step 5 of 5: Reboot the System	
Select Installation Mode 🗸	1. Boot Mode: UEFI	
Insert OS Media 🗸	Secure boot disabled	
Reboot the System	Secure Boot Folicy . Standard Secure Boot Mode: Deployed Mode	
	2. Keep the following media in the system:	
	Microsoft Windows Server 2019	
	3. Selected Installation Mode:	
	Manual Install	
	4. Click Finish to continue with the installation.	
	The system reboots to start the operating system installation. After reboot, you may be prompted to "Press Any Key" to boot to the operating system media and start installation. If a key is not pressed, the system bypasses the installation.	

Figure 11. Reboot the System

If a Windows operating system is already installed on your system, the following message is displayed:

Press any key to boot from CD or DVD

14. After the files are loaded, select the language in which you want to install the operating system.



Figure 12. Select language

15. Select the language, time and currency format, keyboard or input method, and then click Next.

W	Vindows Server 2019	
Langua <u>ge</u> to insta	II: English (United States)	•
Time and currency forma	English (United States)	•
Keyboard or input metho	d: US	-

Figure 13. Select the language, time and currency format, and keyboard or input method

16. Click Install now.

Windows Setup		- 0 2
	Windows Server 2019	
	Install now	

Figure 14. Windows Setup

17. Select the required operating system, and then click Next.

Operating system	Architecture	Date modified
Windows Server 2019 Datacenter	x64	10/9/2018
Vindows Server 2019 Datacenter (Desktop Experience)	х64	10/9/2018
scription: is option installs the full Windows graphical environme	nt. consuming extra d	ive space. It can h
escription: vis option installs the full Windows graphical environme eful if you want to use the Windows desktop or have ar	nt, consuming extra d app that requires it.	ive space. <mark>It ca</mark> n b
escription: is option installs the full Windows graphical environme eful if you want to use the Windows desktop or have ar	nt, consuming extra d app that requires it.	ive space. It can b

Figure 15. Select the operating system you want to install

18. Read the license agreement information. Select the **I accept the license terms** check box, if you agree to the license terms, and then click **Next**.

(i) NOTE: If you do not accept the license agreement, you cannot proceed with operating system installation.

IMPORTANT NOTICE (followed by LICENSE T	ERMS)
Diagnostic and Usage Information. Microsoft information, which may be associated with you internet, and uses it to help improve your instal experience, and the quality and security of Mic Windows Server has four (4) information collect Enhanced, and Full), and uses the "Enhanced" se Enhanced level includes information required to diagnostic and usage information technologies quality, and application usage and compatibilit issues in the use and performance of the operation	t automatically collects this in organization, over the llation, upgrade, and user rosoft products and services. ction settings (Security, Basic, setting by default. The o: (i) run our anti-malware and s; (ii) understand device ty; and (iii) identify quality ting system and applications.
Choice and Control: Administrators can chang	e the level of information

Figure 16. Applicable notices and license terms

19. In the Which type of installation do you want? window, select Custom: Install Windows only (advanced).

Windows Setup
Which type of installation do you want?
Upgrade: Install Windows and keep files, settings, and applications The files, settings, and applications are moved to Windows with this option. This option is only available when a supported version of Windows is already running on the computer.
<u>Custom: Install Windows only (advanced)</u> The files, settings, and applications aren't moved to Windows with this option. If you want to
make changes to partitions and drives, start the computer using the installation disc. We recommend backing up your files before you continue.

Figure 17. Which type of installation do you want

- 20. In the Where do you want to install Windows? window, select the unallocated space on which you want to install the operating system. To create a partition:
 - a. Click New.

INdiffe		Total size	Free space	Туре
Drive 0	Unallocated Space	232.9 GB	232.9 GB	
4				

Figure 18. Select the unallocated space

b. In the Size box, enter or select the size of the partition in MB, and then click Apply.

Image: Space 232.9 GB Image: Drive 1 Unallocated Space 232.9 GB Image: Drive 1 Unallocated Space 232.9 GB	INdiffe		Total size	Free space Type	
Drive 1 Unallocated Space 232.9 GB 232.9 GB	Drive 0 Una	allocated Space	232.9 GB	232.9 GB	
Refresh Delete Eormat * New	Refresh	Delete	Eormat	* Ngw	

Figure 19. Enter or select the size of the partition

The following message is displayed:

To ensure that all Windows features work correctly, Windows might create additional partition for system files $% \left({{\left[{{\left({{{\left({{{}}}} \right)}}}} \right.}$

c. Click OK.

() NOTE: The recommended minimum partition size for the primary partition is 40 GB and for the Essentials Edition is 60 GB. If you are installing additional memory module on your system, you may require extra primary partition space to accommodate the page file and hibernation file. During installation, a recommended partition size is displayed on the screen based on the memory size of your system. Follow the instructions on the screen. If you select **Core installation**, you require less disk space for the primary partition.

	Name	Total size	Free space	Туре
8	Drive 0 Unallocated Space	232.9 GB	232.9 GB	
	Windows Setup		1	
	To ensure that all Windo additional partitions for	ows features work correc system files.	tly, Windows m	night create
- Dafe	To ensure that all Windo additional partitions for	ws features work correc system files.	tly, Windows m	night create

Figure 20. Windows might create additional partitions for system files

21. Select the newly created operating system partition, and then click **Next**.

	Name		Total size	Free space	Туре
ø	Drive 0 Part	ition 1: Recovery	499.0 MB	482.0 MB	Recovery
a	Drive 0 Part	ition 2	100.0 MB	95.0 MB	System
	Drive 0 Part	ition 3	16.0 MB	16.0 MB	MSR (Reserved
-	Drive 0 Part	ition 4	232.3 GB	232.3 GB	Primary
¢	Drive 1 Una	llocated Space	232.9 GB	232.9 GB	
t Refr	esh	X Delete	Eormat	₩ N <u>e</u> w	
Load	l driver	Extend			

Figure 21. Enter or select the size of the partition

The system reboots after the operating system is installed.

22. Enter administrator password, reenter to confirm the password, and then click Finish.

Customize	e settings			
Type a password for the	ne built-in administrator acco	unt that you can use to sign in to t	his computer.	
User name				
Password				
Reenter password	•••••	*		
Ģ				Finish

Figure 22. Customize settings

23. After the system reboots, press Ctrl+Alt+Delete to log in to the system.

24. Type the administrator password, and then press Enter.

(i) NOTE: Windows Server 2019 Essentials do not include the Essentials Experience role. Windows Server 2019 Essentials can be configured as a domain controller by installing the Active Directory domain services role from Server Manager. For more information, see Get Started with Windows Server 2019.

The operating system is successfully installed.

It is recommended that you install the latest hotfixes and security updates from Microsoft after installing Windows Server 2019. You can install these hotfixes and security updates by downloading them or by using the Windows updates available for your system.

Dell Technologies recommends that you install hotfixes and security update, 1D, or newer form Microsoft on your system by using Windows update, or by downloading the latest updates after installing the operating system.

Install Windows Server 2019 by using operating system media

(i) NOTE: Ensure that you have the Microsoft Windows Server 2019 operating system media handy.

(i) NOTE: Microsoft Windows Server 2019 installation by using operating system media is supported in BIOS and UEFI modes.

- 1. Connect a keyboard, monitor, mouse, and other required peripherals to your system.
- 2. Turn on your system and the connected peripherals.
- 3. Press F2 to go to the System Setup page.

Entering System Setup
F10 = Lifecycle Controller (Config
iDRAC, Update FW, Install OS)
F11 = Boot Manager
F12 = PXE Boot

Figure 23. System Setup

4. On the System Setup page, click System BIOS, and then click Boot Settings.

System Setup	
System Setup Main Menu	
System BIOS	
iDRAC Settings	
Device Settings	

Figure 24. System Setup Main Menu

5. Ensure that **UEFI** is selected as the Boot Mode.

System BIOS		
System BIOS Settings • Boot Settings		
Boot Mode	O BIOS	• UEFI
Boot Sequence Retry	Enabled	O Disabled
Hard-Disk Failover	O Enabled	Disabled
Generic USB Boot	O Enabled	Disabled
Hard-disk Drive Placeholder	O Enabled	Disabled
UEFI Boot Settings		

Figure 25. Boot Settings

(i) NOTE: For yx4x PowerEdge servers and later, UEFI is the default boot mode.

NOTE: The PowerEdge servers are represented using the generic naming convention. To identify the range of server models, see Identifying the series of your PowerEdge servers.

6. Click UEFI Boot Settings, and then click UEFI Boot Sequence.

System BIOS	
System BIOS Settings • Boot Settings • UEFI Boot Settings	
UEFI Boot Sequence	
Embedded SATA Port Disk A: Windows Boot Manager	
PXE Device 1: Embedded NIC 1 Port 1 Partition 1	

Figure 26. System BIOS

7. In the Change Order window, ensure that Virtual Optical Drive: Virtual CD is selected as your boot device, and then click OK.

Change Order	
Use arrow keys to select an item. Use +/- to position the item in the list.	
Virtual Optical Drive: Virtual CD	- +
AHCI Controller in Slot 5: Windows Boot Manager	
Unavailable: XenServer	
PXE Device 1: Embedded NIC 1 Port 1 Partition 1	_
Cancel	ok

Figure 27. Change Order

- 8. Click Back.
- **9.** Click **Finish**, and then click **Yes**. The updates are saved.
- 10. Click Finish to exit the System Setup page, and then click Yes to reboot the system.
- **11.** Insert the Microsoft Windows Server 2019 media into the DVD drive. When the system starts to read the media, the following message is displayed:

Loading files

I a Windows operating system is already installed on your system, the following message is displayed:

Press any key to boot from the ${\rm CD}/{\rm DVD}$

12. After the files are loaded, select the language in which you want to install the OS.



Figure 28. Select language

13. Select the language, time and currency format, keyboard or input method, and then click Next.

Windows Server* 20)19
Language to install: English (United States)	<u>-</u>
Time and currency format: English (United States)	•
Keyboard or input method: US	•

Figure 29. Select language, time and currency format, and keyboard or input method

14. Click Install now.



Figure 30. Windows Setup

15. Select the required OS, and then click Next.

Operating system	Architecture	Date modified
Windows Server 2019 Datacenter	х64	10/9/2018
Windows Server 2019 Datacenter (Desktop Experience)	хб4	10/9/2018
escription:		
escription: his option installs the full Windows graphical environm seful if you want to use the Windows desktop or have a	ent, consuming extra di n app that requires it.	ive space. It can b
escription: his option installs the full Windows graphical environm seful if you want to use the Windows desktop or have a	ent, consuming extra do n app that requires it.	ive space. It can b

Figure 31. Select the operating system you want to install

16. Read the license agreement information. Select the I accept the license terms check box if you agree to the license terms, and then click Next.

(i) NOTE: If you do not accept the license agreement, you cannot proceed with OS installation.



Figure 32. Applicable notices and license terms

17. In the Which type of installation do you want? window, select Custom: Install Windows only (advanced).



Figure 33. Types of installation

18. In the Where do you want to install Windows? window, select the unallocated space where you want to install the OS. To create a partition:

a. Click New.

		Total size	Free space	Туре
Drive 0 Una	llocated Space	232.9 GB	232.9 GB	
	*Delete	Format	* New	
Refresh	Delete	Territore		

Figure 34. Select the location to install

b. In the Size box, enter or select the size of the partition in MB, and then click Apply.

rvame		Total size	Free space	Туре
Drive 0 Una	allocated Space	232.9 GB	232.9 GB	
	Societ Space	2223 00	22.3 00	
and the second se	X Delete	Format	+ New	
** Refresh	\ Meiere			

Figure 35. Select the size of the partition

The following message is displayed:

c. Click OK.

INOTE: The recommended minimum partition size of the primary partition for Standard and Datacenter Edition is 40 GB and for the Essentials Edition is 60 GB. If you are installing additional memory module on your system, you may require extra primary partition space to accommodate the page file and the hibernation file. During installation, a recommended partition size is displayed on the screen based on the memory size of your system. Follow the instructions on the screen. If you select **Core installation**, you may require less disk space for the primary partition. For information about drive partitioning, see Drive partitioning.

	Name	Total size	Free space	Туре
SP.	Drive 0 Unallocated Space	232.9 GB	232.9 GB	
P	Windows Setup			2
	To ensure that all Windo additional partitions for	ws features work correc system files.	tly, Windows m	night create
Refr	To ensure that all Windo additional partitions for	ws features work correc system files.	tly, Windows m	ight create

Figure 36. Windows might create additional partitions for system files

19. Select the newly created operating system partition, and then click Next.

	Name		Total size	Free space	Туре
	Drive 0 Parti	tion 1: Recovery	499.0 MB	482.0 MB	Recovery
	Drive 0 Parti	tion 2	100.0 MB	95.0 MB	System
	Drive 0 Parti	tion 3	16.0 MB	16.0 MB	MSR (Reserved)
-	Drive 0 Parti	tion 4	232.3 GB	232.3 GB	Primary
ø,	Drive 1 Unal	located Space	232.9 GB	232.9 GB	
f <u>R</u> efr	esh	X Delete	Eormat	₩ N <u>e</u> w	
Load	driver	Extend			

Figure 37. Select the newly created operating system partition

The system reboots after the operating system is installed.

20. Enter administrator password, and reenter to confirm the password, and then click Finish.

Customize	e settings		
Type a password for th	e built-in administrator acco	unt that you can use to sign i	n to this computer.
User name	Administrator		
Password	•••••		
Reenter password		~	

Figure 38. Customize settings

- $\ensuremath{\textbf{21.}}\xspace{0.5ex} \ensuremath{\mathsf{Alt+Delete}}\xspace{0.5ex} \ensuremath{\mathsf{tot}}\xspace{0.5ex} \ensuremath{\mathsf{tot}}\xspace{0.5e$
- $\ensuremath{\textbf{22}}.$ Type the administrator password, and then press Enter.
 - () NOTE: Windows Server 2019 Essentials do not include the Essentials Experience role. Windows Server 2019 Essentials can be configured as a domain controller by installing the Active Directory Domain Services role from **Server Manager**. See Get Started with Windows Server 2019.

The OS is successfully installed.

(i) **NOTE:** After you log in to the system, you can use the **Server Manager Dashboard** to configure and manage different roles and features in the OS.

It is recommended that you install the latest hotfixes and security updates from Microsoft after installing Microsoft Windows Server 2019. You can install these hotfixes and security updates by downloading them or by using the Windows updates available for your system.

Dell EMC recommends that you install hotfixes and security update "1D" or newer form Microsoft on your system by using Windows update, or by downloading the latest updates after installing the operating system.

Drive partitioning

Drive partitioning enables you to divide a hard drive disk space into multiple Virtual Drives (VDs). Each VD is called a partition. There are two types of partition schemes:

- Master Boot Record scheme
- GUID Partition Table scheme

The main considerations for selecting between the partition schemes are:

- Hard drive disk space
- Operating system version
- Software installed or to be installed in the operating system

Topics:

- Master boot record scheme
- GUID partition table scheme

Master boot record scheme

Most of the operating systems use the Master Boot Record (MBR) legacy partition scheme. The total data storage space of a computer hard drive is divided into a maximum of four primary partitions.

The MBR partition scheme is used across older versions of the Microsoft operating systems. MBR partitioning scheme supports a volume size lesser than 2 TB.

For more information about partitions and volumes, see the Partitions and Volumes section at www.technet.microsoft.com.

GUID partition table scheme

GUID Partition Table (GPT) scheme is a new standard for the layout of the partition table on a hard drive. It is part of the extensible firmware interface (EFI) standard, which is a replacement for the system BIOS.

NOTE: It is recommended that you use the GPT partition scheme as it is more flexible, supports larger hard drive sizes, and has some features and recovery mechanisms that are not available in the MBR partition scheme.

For more information about partitions and volumes, see the Partitions and Volumes section at <u>www.technet.microsoft.com</u>. For information about GPT, see the Windows and GPT FAQ section at <u>www.microsoft.com</u>.

Resources and support

Topics:

- Operating system support matrix for Dell EMC PowerEdge servers
- Documentation and video resources
- Identifying the series of your PowerEdge servers
- Download drivers and firmware

Operating system support matrix for Dell EMC PowerEdge servers

Windows Server operating system can be installed only on selected Dell EMC PowerEdge servers. For the list of Dell EMC PowerEdge servers and supported operating systems, see Microsoft Server operating systems supported on specific PowerEdge models at Dell.com/ossupport.

Documentation and video resources

Task	Description	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</i> document that is shipped with your server.	https://www.dell.com/poweredgemanuals
	For information about turning on the server and the technical specifications of your server, see the <i>Getting Started</i> document that is shipped with your server.	https://www.dell.com/poweredgemanuals
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 Controller User's Guide</i> .	https://www.dell.com/idracmanuals
	For information about installing the operating system, see the operating system documentation.	https://www.dell.com/operatingsystemmanuals
	For information about understanding Remote Access Controller Admin (RACADM) subcommands and supported RACADM interfaces, see the <i>RACADM Command Line</i> <i>Reference Guide for iDRAC.</i>	https://www.dell.com/idracmanuals

Table 1. Additional documentation and video resources for your server

Table 1. Additional	documentation and	video resources	for your server	(continued)
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Task	Description	Location
	For information about updating drivers and firmware, see the "Download drivers and firmware" section in this document.	www.dell.com/support/drivers
Managing your server	For information about server management software offered by Dell, see the <i>Dell</i> EMC OpenManage Systems Management Overview Guide.	https://www.dell.com/openmanagemanuals
	For information about setting up, using, and troubleshooting OpenManage, see the Dell EMC OpenManage Server Administrator User's Guide.	https://www.dell.com/openmanagemanuals
	For information about installing, using, and troubleshooting Dell EMC OpenManage Essentials, see the Dell EMC OpenManage Essentials User's Guide.	https://www.dell.com/openmanagemanuals
	For information about installing and using Dell EMC System E- Support Tool (DSET), see the Dell EMC System E-Support Tool (DSET) User's Guide.	https://www.dell.com/supportassist
	For understanding the features of Dell EMC Lifecycle Controller (LCC), see the Dell EMC Lifecycle Controller User's Guide.	https://www.dell.com/idracmanuals
	For information about partner programs enterprise systems management, see the OpenManage Connections Enterprise Systems Management documents	https://www.dell.com/ OMConnectionsEnterpriseSystemsManagement
	For information about connections and client systems management, see the OpenManage Connections Client Systems Management documentation.	https://www.dell.com/omconnectionsclient
	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 CMC User's Guide.	https://www.dell.com/cmcmanuals
Working with the Dell EMC PowerEdge RAID controllers	For information about understanding the features of the Dell EMC PowerEdge RAID controllers (PERC) and deploying	www.dell.com/storagecontrollermanuals

Table 1. Additional documentation and video resources for your server (continued)

Task	Description	Location
	the PERC cards, see the Storage controller documentation.	
Understanding event and error messages	For information about checking the event and error messages generated by the system firmware and agents that monitor server components, see the Dell EMC Event and Error Messages Reference Guide.	https://www.dell.com/openmanagemanuals
Installing MS Windows Server OS in UEFI Mode using Lifecycle Controller		www.youtube.com/watch?v=3uCuQKNIQpY
Manually installing MS Windows Server OS in UEFI Mode		www.youtube.com/watch?v=T7UpmwS5Ba4

Identifying the series of your PowerEdge servers

The PowerEdge series of servers are divided into different categories based on their configuration. They are referred as YX2X, YX3X, YX4X, YX4XX, or YX5XX series of servers. The structure of the naming convention is described below:

The letter Y denotes the character in the server model number. The character denotes the form factor of the server. The form factors are listed below:

- C- Cloud
- F- Flexible
- M or MX- Modular
- R- Rack
- T- Tower

The letter X denotes the numbers in the server model number. The number denotes multiple characteristics about the server. They are listed as follows:.

- The first digit (X) denotes the value stream or class of the server.
 - 1-5—iDRAC basic
 - 6-9—iDRAC Express
- The second digit denotes the series of the server. It is retained in the server naming convention and does not replace the letter X.
 - o O-series 10
 - 1-series 11
 - o 2-series 12
 - o 3—series 13
 - 4—series 14
 - 5—series 15
- The last digit (X) always denotes the make of the processor as described below:
 - o 0-Intel
 - o 5-AMD

NOTE: For servers that use an AMD processor, the model number is made up of four digits instead of three. The third digit (X) denotes the number of processor sockets that the series of server supports.

- 1-one socket server
- 2-two socket server

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YX3X servers	YX4X servers	YX4XX servers	YX5XX servers
PowerEdge M630	PowerEdge M640	PowerEdge R6415	PowerEdge R6515
PowerEdge M830	PowerEdge R440	PowerEdge R7415	PowerEdge R7515
PowerEdge T130	PowerEdge R540	PowerEdge R7425	PowerEdge R6525

Table 2. PowerEdge servers naming convention and examples

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.
- In the Drivers & Downloads section, enter the Service Tag of your system in the Enter a Dell Service Tag, Dell 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.

Contacting Dell Technologies

Dell Technologies 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 for sales, technical support, or customer service issues, see https://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.