## Microsoft Windows Server 2012 For Dell PowerEdge Systems Important Information Guide



## Notes, Cautions, and Warnings

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

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. 尒

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# Contents

Notes, Cautions, and Warnings	
1 Important Information	5
Overview	5
Minimum Supported BIOS, System Firmware, And RAID Controller Driver Versions	5
Dell Systems Management Support For Windows Server 2012	5
Dell Value-Adds	5
Multilingual Operating System Media For Windows Server 2012	5
Pre-Installed Virtual Hard Disks (VHDx)	6
Enhanced Logging Of Hardware Events In The Windows Event Logs	6
Utility To Switch System Between A Graphical User Interface (GUI) And Server Core Mode	6
Dell Support For Storage Spaces	7
Known Issues And Resolutions	7
Matrox Video Device In 11th And 12th Generation PowerEdge Systems	7
Inbox Drivers Not Available For Devices	7
Crash Dump Initialization Failed	7
Interactive Service Detection Service Disabled	7
WoW64 Feature Cannot Be Removed	8
TPM Error Logged In Event Viewer	8
System Unresponsive When Installing Dell MD Storage Software	8
Yellow Bang Seen On The Broadcom BCM 5708c Or BCM 5709c NetXtreme II GigE LOM	8
Unable To Update iDRAC6 And iDRAC7 Firmware Using Internet Explorer 10 Browser	8
No Korean Language Support In OpenManage 7.1 SBUU	9

## Important Information

### **Overview**

This document provides important information about Microsoft Windows Server 2012 for Dell PowerEdge systems.

CAUTION: During initial configuration of your system, it is recommended that you download and install the latest patches, hotfixes, and service packs from support.microsoft.com.

### Minimum Supported BIOS, System Firmware, And RAID Controller **Driver Versions**

For the list of minimum supported BIOS, system firmware and RAID controller driver version, see en.community.dell.com/ techcenter/os-applications/w/wiki/3868.dell-bios-support-for-windows-server-2012.aspx



NOTE: Dell PowerEdge RAID Controller (PERC) S100, PERC S110, and PERC S300 software RAID adapters are not supported with Windows Server 2012.

## **Dell Systems Management Support For Windows Server 2012**

The Dell Systems Management version 7.1 provides limited support for Windows Server 2012, while the Dell Systems Management version 7.2 provides complete support and carries the latest drivers for Windows Server 2012. To install your operating system with Dell Systems Management, use the Dell Systems Management Tools and Documentation media.



NOTE: For more information on Dell Systems Management, see the Dell OpenManage documentation at support.dell.com/manuals. For installing your operating system using the Dell Systems Management Tools and Documentation media, see Installing Microsoft Windows Server 2012 on support.dell.com/manuals.

## Dell Value-Adds

The following section lists the additional value-adds provided when the product is shipped.

### Multilingual Operating System Media For Windows Server 2012

With Windows Server 2012 release, Dell systems are shipped with a multilingual operating system interface that provides a list of languages. When you power on your system for the first time or re-install the operating system using the Dell provided media, you can select the required language.

With the new multilingual operating system media, you have the flexibility to re-install the operating system in any language of your choice.

To deploy the operating system using the multilingual DVD media:

1. Boot to the operating system media.

The Language Selection screen is displayed.

2. Select the language of your choice and proceed.



NOTE: Simplified Chinese and Traditional Chinese are provided in separate DVDs.

### Pre-Installed Virtual Hard Disks (VHDx)

If you select **enable hyper-v role** at **dell.com**, you are provided with a pre-installed operating system virtual hard disk (VHDx) file. You can use the VHDx file with Hyper-V to create virtual machines (VMs) on the physical system, subject to Microsoft's normal licensing restrictions (two for Standard and unlimited for Datacenter). For more information on the terms of licensing, see the *End User License Agreement* shipped with your product

To activate the VM created using the sysprepped VHDx file, use the virtual product key on the Certificate of Authenticity (COA) sticker afixed on the system. You can perform security updates using standard methods before placing the system into production.



**NOTE:** It is recommended that you create a backup copy of the VHDx file. Dell does not provide a replacement file in case of loss or damage. The file located at **C:\Dell\_OEM\VHD** allows you to select the appropriate language during the setup process. If required, the VHDx can be converted from dynamic to fixed type.

For more information on VHD/VHDx files and how to use these files as part of a Hyper-V configuration, see the article *Windows Server 2012: Convert VHD to VHDX using Hyper-V Manager* at **blogs.technet.com** and the article *Hyper-V Virtual Hard Disk Format Overview* at **technet.microsoft.com** or other relevant articles at **support.microsoft.com**.

### Enhanced Logging Of Hardware Events In The Windows Event Logs

For additional monitoring, the system is configured to retrieve hardware events from the BMC System Event Log. These events provide hardware related information within the Windows event logs.

**NOTE:** This option is not available with the Windows Server 2012 Essentials and the Windows Server 2012 Foundation editions.

Select the **Hardware Events Log** located under the **Applications and Services Logs** in the Windows Event Viewer to view the hardware events. This feature requires the Windows Event Collector service to be started and managed from the Subscriptions folder in Event Viewer.

For more information about the event log hardware logging feature, see the article *How to configure event subscription* to pull BMC SEL events into the event logs in Windows Server 2008 at support.microsoft.com.

### Utility To Switch System Between A Graphical User Interface (GUI) And Server Core Mode

A PowerShell module **DellTools.psm1** is located in the **C:\Dell\_OEM** folder to assist with common tasks. The module includes a function that allows you to configure your system in **Server with a GUI** mode and then convert to **Server Core** mode and place the system in production. Also, it can be used to switch back to GUI for configuration and troubleshooting.

The detailed steps on using this add-in is provided at the first boot of your system.

For security reasons, PowerShell script execution policy is set to *restricted* by default and must be modified to allow scripts to run on the system. It is recommended to set the execution policy back to *restricted* after completing your scripts. For more information about how to change the execution policy, see the article *Set-ExecutionPolicy* at **technet.microsoft.com** or other related articles at **support.microsoft.com**.

- To use the provided module, at an elevated Windows PowerShell command prompt, type the following command and then press <Enter>: Import-Module -Name C:\Dell OEM\DellTools.psm1
- To view the list of available commands, type the following command and then press <Enter>: Get-Command -Module DellTools
- To convert from Server with a GUI mode to Server Core mode, type the following command and then press <Enter>: et-GUI -Mode Core



NOTE: This script must be tested with all your applications and supported Server Core roles before using it in a production environment.



NOTE: This script is not available with Windows Server 2012 Foundation and Windows Server 2012 Essentials editions.

### **Dell Support For Storage Spaces**

It is not recommended that you configure Storage Spaces on your Dell hardware as it is currently not supported.

CAUTION: Using Storage Spaces on unsupported hardware increases the risk of data loss because hardware failure notifications and hardware failover may not occur as expected.

### **Known Issues And Resolutions**

This section contains information about general issues, resolutions, and their workaround applicable to Microsoft Windows Server 2012.

### Matrox Video Device In 11th And 12th Generation PowerEdge Systems

Dell PowerEdge 11th and 12th generation servers are shipped with an onboard Matrox video device. For enhanced display on your server, it is recommended that you use the latest graphics driver from support.dell.com

#### Inbox Drivers Not Available For Devices

Description:	Inbox drivers are not available on these devices:
	<ul> <li>PCIe SSD in the 12th generation of PowerEdge systems</li> <li>PCI Simple Communication Controller for the Intel Romley Chipset device in the 12th generation of PowerEdge systems</li> </ul>
	Broadcom 57800 up to two 10Gb BT
	<ul> <li>Broadcom 57810 up to two 1Gb and 10Gb BT rNDC</li> </ul>
Resolution:	For latest available drivers, see <b>en.community.dell.com/techcenter/os-applications/w/wiki/</b> 3872.dell-out-of-box-driver-support-for-windows-server-2012.aspx
	Download these drivers from <b>Drivers and Downloads</b> section at <b>support.dell.com</b> .

#### Crash Dump Initialization Failed

Description:	An error <b>Crash dump initialization failed!</b> is logged in the Event Viewer.
Resolution:	This is working as designed.

### Interactive Service Detection Service Disabled

**Description:** Interactive Service Detection Service is disabled by default in Windows Server 2012. **Resolution:** Enable Interactive Service Detection Service by editing the registry. To edit the registry, see msdn.microsoft.com/en-us/library/windows/desktop/ms683502(v=vs.85).aspx.

### WoW64 Feature Cannot Be Removed

Description:	The Windows 32-bit on Windows 64-bit (WoW64) feature cannot be removed from the Windows Server 2012 full operating system installation.
Resolution:	By default, the WoW64 feature is installed along with the full operating system installation. On removal of this installation, the server configuration changes from the full operating system installation to server core installation.

### TPM Error Logged In Event Viewer

Description:	Trusted Platform Module (TPM) error logged in the Event Viewer. This error exists until the TPM is provisioned.
Resolution:	This error occurs as TPM certificate is not available in the NVRAM. After the TPM endorsement key is created and initialized, the error does not appear on startup.

### System Unresponsive When Installing Dell MD Storage Software

Description:	PowerEdge systems are unresponsive when installing the Dell MD Storage software for the Dell PowerVault MD32xx family.
Resolution:	Upgrade to the latest version of the MD Storage software for Windows Server 2012 available at the <b>Drivers and Downloads</b> section at <b>support.dell.com</b> .

### Yellow Bang Seen On The Broadcom BCM 5708c Or BCM 5709c NetXtreme II GigE LOM

Description:	After you complete the iSCSI-based Windows Server 2012 installation on a Dell system, installed with either of the Broadcom NetXtreme II GigE controllers, you see a yellow bang in the device manager.
Resolution:	To fix the yellow bang:
	1. Uninstall the network drivers. 2. To rescan, run the <b>Scan for hardware changes</b> for Windows Device Manager.
	The Device manager rescans and finds these devices. It automatically installs the drivers for the devices as these are native to the operating system.

### Unable To Update iDRAC6 And iDRAC7 Firmware Using Internet Explorer 10 Browser

Description:	Using the built-in Internet Explorer 10 browser, you cannot update or flash the iDRAC6 and iDRAC7 firmware on Dell systems. The firmware update becomes unresponsive at the File upload in Progress screen.
Resolution:	Following are the workarounds:
	<ul> <li>To upgrade the firmware, set the Internet Explorer 10 browser to run in Internet Explorer 10 compatibility mode.</li> </ul>

• To flash the firmware, use web browsers like Internet Explorer 7 and above, Mozilla Firefox or Google Chrome.

This will be fixed in the iDRAC code of the next firmware release.

### No Korean Language Support In OpenManage 7.1 SBUU

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Description:There is no option to install Windows Server 2012 operating system in Korean language using<br/>the OpenManage (OM) 7.1. System Built And Update Utility (SBUU) DVD.

**Resolution:** Korean language support will be added to the next release of OpenManage. For now, you can install the operating system manually without using OpenManage 7.1.