





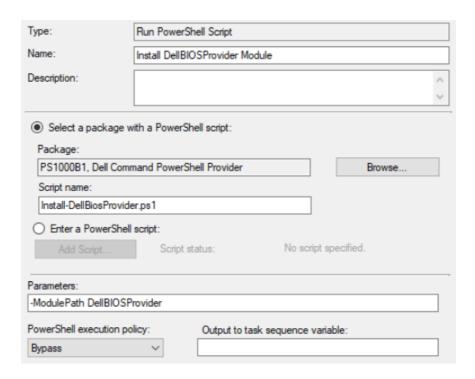
# **DELL Command PowerShell Provider User Guide**

Home » Dell » DELL Command PowerShell Provider User Guide 1

# **Contents** 1 DELL Command PowerShell Provider **2 Product Information 3 Product Information 4 Product Usage Instructions** 5 Dell Command | PowerShell Provider 5.1 Version 2.8.0 5.2 Version 2.7.2 5.3 Version 2.7 **5.4 Version 2.6** 5.5 Version 2.4 5.6 Version 2.3.1 6 Installation, upgrade, and uninstallation instructions 7 Documents / Resources 7.1 References **8 Related Posts**



**DELL Command PowerShell Provider** 



### **Product Information**

# **Specifications:**

• Product Name: Dell Command | PowerShell Provider

• Version: 2.8.0

• Release Date: June 2024

· Compatibility:

• Platforms affected: OptiPlex, Latitude, XPS Notebook, Dell Precision

• Supported Operating Systems: Supports ARM64 processors

### **Product Information**

The Dell Command | PowerShell Provider is a PowerShell module that provides BIOS configuration capability to Dell client systems. It can be installed as plug-in software registered within the Windows PowerShell environment and works for local and remote

systems, even in a Windows preinstallation environment. This module allows better manageability for IT administrators to modify and set BIOS configurations with its native configuration capability.

# **Product Usage Instructions**

### Installation:

- 1. Download the Dell Command | PowerShell Provider version 2.8.0 from the official Dell website.
- 2. Run the installer and follow the on-screen instructions for installation.
- 3. Once installed, the module will be available within the Windows PowerShell environment.

### **Configuring BIOS Settings:**

To configure BIOS settings using Dell Command | PowerShell Provider:

1. Launch Windows PowerShell with administrative privileges.

- 2. Import the Dell Command module using the Import-Module command.
- 3. Set BIOS configurations using the available commands provided by the module.

### FAQ:

- Q: What operating systems are supported by Dell Command | PowerShell Provider?
  - A: Dell Command | PowerShell Provider supports ARM64 processors.
- Q: Can I use Dell Command | PowerShell Provider for remote system management?

A: Yes, Dell Command | PowerShell Provider works for both local and remote systems, providing flexibility for IT administrators.

# 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.

© 2024 Dell Inc. or its subsidiaries. All rights reserved. Dell, EMC, and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

# **Dell Command | PowerShell Provider**

Version 2.8.0

### Release type and definition

Dell Command | PowerShell Provider is a PowerShell module that provides BIOS configuration capability to Dell client systems. Dell Command | PowerShell Provider can be installed as plug-in software. Dell Command | PowerShell Provider is registered within the Windows PowerShell environment and works for local and remote systems, even in a Windows preinstallation environment. This module allows better manageability for IT administrators to modify and set BIOS configurations, with its native configuration capability.

- Version 2.8.0
- Release Date June 2024
- Previous Version 2.7.2

# Compatibility

- · Platforms affected
  - OptiPlex
  - Latitude
  - XPS Notebook
  - Dell Precision

**NOTE:** For more information about the supported platforms, see Compatible Systems section on the Driver Details page for Dell Command | PowerShell Provider.

# · Supported operating systems

Dell Command | PowerShell Provider supports the following operating systems:

- Windows 11 24H2
- Windows 11 23H2
- Windows 11 22H2
- Windows 11 21H2
- Windows 10 20H1
- Windows 10 19H2
- Windows 10 19H1
- Windows 10 Redstone 1
- Windows 10 Redstone 2
- Windows 10 Redstone 3
- Windows 10 Redstone 4
- Windows 10 Redstone 5
- Windows 10 Core (32-bit and 64-bit)
- Windows 10 Pro (64-bit)
- Windows 10 Enterprise (32-bit and 64-bit)
- Windows 10 Preinstallation Environment (32-bit and 64-bit) (Windows PE 10.0)

### What's new in this release

• Supports ARM64 processors.

### **Known issues**

Import-Module command is disabled when the Remove-Module command runs on the system.

# Version 2.7.2

# Release type and definition

Dell Command | PowerShell Provider is a PowerShell module that provides BIOS configuration capability to Dell client systems. Dell Command | PowerShell Provider can be installed as plug-in software. Dell Command | PowerShell Provider is registered within the Windows PowerShell environment and works for local and remote systems, even in a Windows preinstallation environment. This module allows better manageability for IT administrators to modify and set BIOS configurations, with its native configuration capability.

- Version 2.7.2
- Release Date March 2024
- Previous Version 2.7.0

# Compatibility

# · Platforms affected

- OptiPlex
- Latitude
- XPS Notebook
- Dell Precision

**NOTE:** For more information about the supported platforms, see Compatible Systems section on the Driver Details page for Dell Command | PowerShell Provider.

# · Supported operating systems

Dell Command | PowerShell Provider supports the following operating systems:

- Windows 11 21H2
- Windows 10 20H1
- Windows 10 19H2
- Windows 10 19H1
- Windows 10 Redstone 1
- Windows 10 Redstone 2
- Windows 10 Redstone 3
- Windows 10 Redstone 4
- Windows 10 Redstone 5
- Windows 10 Core (32-bit and 64-bit)
- Windows 10 Pro (64-bit)
- Windows 10 Enterprise (32-bit and 64-bit)
- Windows 10 Preinstallation Environment (32-bit and 64-bit) (Windows PE 10.0)

#### What's new in this release

- Libxml2 is updated to the latest version.
- Supports the following new BIOS attributes:
  - PlutonSecProcessor
  - InternalDmaCompatibility
  - UefiBtStack
  - ExtIPv4PXEBootTimeout
  - LogoType
  - HEVC
  - HPDSensor
  - Usb4Ports
  - CpuCoreSelect
  - PxeBootPriority
  - ScannerStatus
  - PxButtonsFunction
  - UpDownButtonsFunction
  - ActiveECoresSelect
  - ActiveECoresNumber
  - BypassBiosAdminPwdFwUpdate
  - EdgeConfigFactoryFlag
  - Prestos3
  - NumaNodesPerSocket
  - CameraShutterStatus
  - XmpMemDmb
  - IntelSagv

- CollaborationTouchpad
- FirmwareTpm
- CpuCoreExt
- FanSpdLowerPcieZone
- FanSpdCpuMemZone
- FanSpdUpperPcieZone
- FanSpdStorageZone
- AmdAutoFusing
- M2PcieSsd4
- M2PcieSsd5
- M2PcieSsd6
- M2PcieSsd7
- UsbPortsFront5
- UsbPortsFront6
- UsbPortsFront7
- UsbPortsFront8
- UsbPortsFront9
- UsbPortsFront10
- UsbPortsRear8
- UsbPortsRear9
- UsbPortsRear10
- LimitPanelBri50
- SpeakerMuteLed
- SlimlineSAS0
- SlimlineSAS1
- SlimlineSAS2
- SlimlineSAS3
- SlimlineSAS4
- SlimlineSAS5
- SlimlineSAS6
- SlimlineSAS7
- Itbm
- AcousticNoiseMitigation
- FirmwareTamperDet
- OwnerPassword
- BlockBootUntilChasIntrusionClr
- ExclusiveStoragePort

# **Known issues**

Import-Module command is disabled when the Remove-Module command runs on the system.

### Version 2.7

# Release type and definition

Dell Command | PowerShell Provider is a PowerShell module that provides BIOS configuration capability to Dell

client systems. Dell Command | PowerShell Provider can be installed as plug-in software registered within Windows PowerShell environment and works for local and remote systems, even in a Windows preinstallation environment. This module allows better manageability for IT administrators to modify and set BIOS configurations, with its native configuration capability.

- Version 2.7.0
- Release Date October 2022
- Previous Version 2.6.0

# Compatibility

### · Platforms affected

- OptiPlex
- Latitude
- XPS Notebook
- Dell Precision

NOTE: For more information about the supported platforms, see Compatible Systems section on the Driver Details page for Dell Command | PowerShell Provider.

# · Supported operating systems

Dell Command | PowerShell Provider supports the following operating systems:

- Windows 11 21H2
- Windows 10 20H1
- Windows 10 19H2
- Windows 10 19H1
- Windows 10 Redstone 1
- Windows 10 Redstone 2
- Windows 10 Redstone 3
- Windows 10 Redstone 4
- Windows 10 Redstone 5
- Windows 10 Core (32-bit and 64-bit)
- Windows 10 Pro (64-bit)
- Windows 10 Enterprise (32-bit and 64-bit)
- Windows 10 Preinstallation Environment (32-bit and 64-bit) (Windows PE 10.0)

# What's new in this release

Support for the following new BIOS attributes:

# • Support for the following UEFI variables:

In the UEFIvariables category:

ForcedNetworkFlag

# Update for the following attributes:

- MemorySpeed attribute type is changed from String to Enumeration
- MemRAS, PcieRAS, and CpuRAS attribute names are updated.

# **Known issues**

#### Issue:

Import-Module command is disabled when the Remove-Module command runs on the system.

#### Version 2.6

# Release type and definition

Dell Command | PowerShell Provider is a PowerShell module that provides BIOS configuration capability to Dell client systems. Dell Command | PowerShell Provider can be installed as plug-in software registered within Windows PowerShell environment and works for local and remote systems, even in a Windows preinstallation environment. This module allows better manageability for IT administrators to modify and set BIOS configurations, with its native configuration capability.

- Version 2.6.0
- Release Date September 2021
- Previous Version 2.4

# Compatibility

### Platforms affected

- OptiPlex
- Latitude
- XPS Notebook
- Dell Precision

**NOTE**: For more information about the supported platforms, see Compatible Systems section on the Driver Details page for Dell Command | PowerShell Provider.

# · Supported operating systems

Dell Command | PowerShell Provider supports the following operating systems:

- Windows 11 21H2
- Windows 10 20H1
- Windows 10 19H2
- Windows 10 19H1
- Windows 10 Redstone 1
- Windows 10 Redstone 2
- Windows 10 Redstone 3
- Windows 10 Redstone 4
- Windows 10 Redstone 5
- Windows 10 Core (32-bit and 64-bit)
- Windows 10 Pro (64-bit)
- Windows 10 Enterprise (32-bit and 64-bit)
- Windows 10 Preinstallation Environment (32-bit and 64-bit) (Windows PE 10.0)

### What's new in this release

# • Support for the following new BIOS attributes:

- In the Advanced Configuration category:
  - PcieLinkSpeed

- In the Boot Configuration category:
  - MicrosoftUefiCa
- In the Connection category:
  - HttpsBootMode
  - WlanAntSwitch
  - WwanAntSwitch
  - GpsAntSwitch
- In the Integrated Devices category:
  - TypeCDockVideo
  - TypeCDockAudio
  - TypeCDockLan
- In the Keyboard category:
  - RgbPerKeyKbdLang
  - RgbPerKeyKbdColor
- In the Maintenance category:
  - NodeInterleave
- In the Performance category:
  - MultipleAtomCores
  - PcieResizableBar
  - TCCActOffset
- In the Pre Enabled category:
  - CamVisionSen
- In the Secure Boot category:
  - MSUefiCA
- In the Security category:
  - LegacyInterfaceAccess
- In the System Configuration category:
  - IntelGna
  - Usb4CmM
  - EmbUnmngNic
  - ProgramBtnConfig
  - ProgramBtn1
  - ProgramBtn2
  - ProgramBtn3
- In the System Management category:
  - AutoRtcRecovery
  - VerticalIntegration
- In the Virtualization Support category:
  - PreBootDma
  - KernelDma
- Upgraded libxml2 open-source library to the latest version.

**NOTE:** For more information about the newly supported BIOS features, see Support | Dell.

### Release type and definition

Dell Command | PowerShell Provider is a PowerShell module that provides BIOS configuration capability to Dell client systems. Dell Command | PowerShell Provider can be installed as plug-in software registered within Windows PowerShell environment and works for local and remote systems, even in a Windows preinstallation environment. This module allows better manageability for IT administrators to modify and set BIOS configurations, with its native configuration capability.

- Version 2.4.0
- Release Date December 2020
- Previous Version 2.3.1

# Compatibility

- · Platforms affected
  - OptiPlex
  - Latitude
  - XPS Notebook
  - Dell Precision

**NOTE:** For more information about the supported platforms, see Compatible Systems section on the Driver Details page for Dell Command | PowerShell Provider.

• Supported operating systems

Dell Command | PowerShell Provider supports the following operating systems:

- Windows 10 Redstone 1
- Windows 10 Redstone 2
- Windows 10 Redstone 3
- Windows 10 Redstone 4
- Windows 10 Redstone 5
- Windows 10 19H1
- Windows 10 19H2
- Windows 10 20H1
- Windows 10 Core (32-bit and 64-bit)
- Windows 10 Pro (64-bit)
- Windows 10 Enterprise (32-bit and 64-bit)
- Windows 8.1 Enterprise (32-bit and 64-bit)
- Windows 8.1 Professional (32-bit and 64-bit)
- Windows 7 Professional SP1 (32-bit and 64-bit)
- Windows 7 Ultimate SP1 (32-bit and 64-bit)
- Windows 10 Preinstallation Environment (32-bit and 64-bit) (Windows PE 10.0)
- Windows 8.1 Preinstallation Environment (32-bit and 64-bit) (Windows PE 5.0)
- Windows 7 SP1 Preinstallation Environment (32-bit and 64-bit) (Windows PE 3.1)
- Windows 7 Preinstallation Environment (32-bit and 64-bit) (Windows PE 3.0)

### What's new in this release

Support for the following new BIOS attributes:

- In the Performance category:
  - thermal management
- In the Maintenance category:
  - MicrocodeUpdateSupport
- In the Security category:
  - DisPwdJumper
  - NVMePwdFeature
  - NonAdminPsidRevert
  - SafeShutter
  - IntelTME
- In the Video category:
  - HybridGraphics
- In the Integrated Devices category:
  - PCleBifurcation
  - DisUsb4Pcie
  - VideoPowerOnlyPorts
  - TypeCDockOverride
- In the Connection category:
  - HTTPsBoot
  - HTTPsBootMode
- In the Keyboard category:
  - DeviceHotkeyAccess
- In the System Configuration category:
  - PowerButtonOverride

### **Known issues**

Issue: After the setup password is set in XPS 9300, Dell Precision 7700, and Dell Precision 7500 series systems, you cannot set the system password.

### Version 2.3.1

# **Release Type and Definition**

Dell Command | PowerShell Provider is a PowerShell module that provides BIOS configuration capability to Dell client systems. Dell Command | PowerShell Provider can be installed as plug-in software registered within Windows PowerShell environment and works for local and remote systems, even in a Windows preinstallation environment. This module allows better manageability for IT administrators to modify and set BIOS configurations, with its native configuration capability.

- Version 2.3.1
- Release Date August 2020
- Previous Version 2.3.0

### Compatibility

- · Platforms affected
  - OptiPlex

- Latitude
- Internet of Things
- XPS Notebook
- Precision

NOTE: For more information about the supported platforms, refer Supported Platforms list.

# Supported Operating Systems

Dell Command | PowerShell Provider supports the following operating systems:

- Windows 10 Redstone 1
- Windows 10 Redstone 2
- Windows 10 Redstone 3
- Windows 10 Redstone 4
- Windows 10 Redstone 5
- Windows 10 19H1
- Windows 10 Core (32-bit and 64-bit)
- Windows 10 Pro (64-bit)
- Windows 10 Enterprise (32-bit and 64-bit)
- Windows 8.1 Enterprise (32-bit and 64-bit)
- Windows 8.1 Professional (32-bit and 64-bit)
- Windows 7 Professional SP1 (32-bit and 64-bit)
- Windows 7 Ultimate SP1 (32-bit and 64-bit)
- Windows 10 Preinstallation Environment (32-bit and 64-bit) (Windows PE 10.0)
- Windows 8.1 Preinstallation Environment (32-bit and 64-bit) (Windows PE 5.0)
- Windows 7 SP1 Preinstallation Environment (32-bit and 64-bit) (Windows PE 3.1)
- Windows 7 Preinstallation Environment (32-bit and 64-bit) (Windows PE 3.0)

### What's new in this release

Support for NVMe HDD password.

### **Fixes**

- The PSPath displayed is incorrect. While running the gi .\SystemInformation | fl \* command, PSPath is displayed as DellBIOSProvider\DellSmbiosProv::DellBIOS:\SystemInformation. Change DellBIOS to DellSMBIOS.
- Error message could not find the path was displayed due to / during auto completion of the category name in the systems running Windows 8 and later.
  - You cannot navigate to the location after using auto completion for the category name.
    - Success message was part of console and must be handled separately.
  - Success message is now displayed as part of the verbose switch during a set operation.
    - Unable to set KeyboardIllumination attribute to 100 percent using Dell Command | PowerShell Provider.
  - KeyboardIllumination attribute can be set as Bright (100%).
    - Dell Command | PowerShell Provider displays the MemoryTechnology attribute as TBD on some systems with the latest memory technology such as DDR4, LPDDR, LPDDR2, LPDDR3, or LPDDR4.

- MemoryTechnology attribute is now displayed on the platforms with the latest technology such as DDR4,
   LPDDR, and so on.
  - HTCapable attribute displays No even if the attribute is supported in few systems.
- HTCapable attribute now displays the accurate information.

#### **Known Issues**

Issue: After the setup password has been set in XPS 9300, Dell Precision 7700, and Dell Precision 7500 series, these platforms do not allow you to set the system password.

# Installation, upgrade, and uninstallation instructions

# **Prerequisites**

Before installing Dell Command | PowerShell Provider, ensure that you have the following system configuration: **Table 1.** Supported software

Supported soft ware	Supported versions	Additional information
.net framework	4.8 or later.	.NET Framework 4.8 or later must be available.
Operating syste ms	Windows 11, Windows 10, Windows Red Stone RS1, RS2, RS3, RS4 , RS5, RS6, 19H1, 19H2, and 20H1	Windows 10 or later versions must be available. Windows 11 is required for ARM operating systems.
Windows Manag ement Framewor k (WMF)	WMF 3.0, 4.0, 5.0, a nd 5.1	WMF 3.0/4.0/5.0 and 5.1 must be available.
Windows Power Shell	3.0 and later	See Installing Windows PowerShell and Configuring Windows Powe rShell.
SMBIOS	2.4 and later	The target system is a Dell-manufactured system with System Mana gement Basic Input Output System (SMBIOS) version 2.4 or later.  NOTE: To identify the SMBIOS version of the system, click Start > Run, and run the msinfo32.exe file. Check for the SMBIOS version in the System Summary page.
Microsoft Visual C+ + redistributable	2015, 2019 and 2022	2015, 2019, and 2022 must be available.  NOTE: Microsoft Visual C++ redistributable ARM64 is required for A RM64 systems.

# **Installing Windows PowerShell**

Windows PowerShell is natively included with Windows 7 and later operating systems.

**NOTE:** Windows 7 natively includes PowerShell 2.4. This can be upgraded to 3.0 to meet the software requirements for using Dell command | PowerShell Provider.

# **Configuring Windows PowerShell**

Ensure that you have Administrative privileges on the Dell business client system.

By default Windows PowerShell has its ExecutionPolicy set to Restricted. To run the Dell Command |
 PowerShell Provider cmdlets and functions, ExecutionPolicy must be changed to RemoteSigned at a minimum.
 To apply the ExecutionPolicy, run Windows PowerShell with Administrator privileges, and run the following command within the PowerShell console:

Set-ExecutionPolicy RemoteSigned -force

**NOTE:** If there are more restrictive security requirements, set the ExecutionPolicy to AllSigned. Run the following command within the PowerShell console: Set-ExecutionPolicy AllSigned -Force.

**NOTE:** If using an ExecutionPolicy based process, run Set-ExecutionPolicy each time a Windows PowerShell console is opened.

• To run Dell Command | PowerShell Provider remotely, you must enable PS remoting on the remote system. To initiate remote commands, check system requirements and configuration requirements by running the following command:

PS C:> Get-Help About\_Remote\_Requirements

# Installation process

For information about installation, uninstallation, and upgrade of Dell Command | PowerShell Provider, see the Dell Command | PowerShell Provider 2.4.0 User's Guide at <a href="Dell.com">Dell.com</a>.

# **Importance**

**RECOMMENDED:** Dell recommends applying this update during your next scheduled update cycle. The update contains feature enhancements or changes that will help keep your system software current and compatible with other system modules

(firmware, BIOS, drivers and software).

### **Contacting Dell**

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues, go to dell.com.

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

### **Documents / Resources**



# References

User Manual

Manuals+, Privacy Policy