



## ***Windows PowerShell Get-Help on Cmdlet 'Restart-PcsvDevice'***

***PS:\>Get-HELP Restart-PcsvDevice -Full***

### NAME

Restart-PcsvDevice

### SYNOPSIS

Restarts a remote hardware device.

### SYNTAX

```
Restart-PcsvDevice [-TargetAddress] <String> [-Credential] <PSCredential> [-ManagementProtocol] {WSMan | IPMI}
[[-Port] <UInt16>] [-AsJob] [-Authentication {Default |
    Basic | Digest}] [-CimSession <CimSession[]>] [-Confirm] [-PassThru] [-SkipCACheck] [-SkipCNCheck]
[-SkipRevocationCheck] [-ThrottleLimit <Int32>] [-TimeoutSec
    <UInt32>] [-UseSSL] [-WhatIf] [<CommonParameters>]
```

```
Restart-PcsvDevice [-AsJob] [-CimSession <CimSession[]>] [-Confirm] -InputObject <CimInstance[]> [-PassThru]
[-ThrottleLimit <Int32>] [-WhatIf] [<CommonParameters>]
```

```
Restart-PcsvDevice [-AsJob] [-CimSession <CimSession[]>] [-Confirm] [-PassThru] [-ThrottleLimit <Int32>] [-TimeoutSec
    <UInt32>] [-WhatIf] [<CommonParameters>]
```

## DESCRIPTION

The Restart-PcsvDevice cmdlet restarts a device remotely by using Web Services for Management (WS-Management) or Intelligent Platform Management Interface (IPMI). The

cmdlet restarts the device if the current state of the device is enabled, or starts the device if the current state is other than enabled. If you specify a device

that is a Baseboard Management Controller (BMC), the cmdlet restarts the system that the BMC manages, and not the BMC.

## PARAMETERS

-AsJob [<SwitchParameter>]

Runs the cmdlet as a background job. Use this parameter to run commands that take a long time to complete.

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

-Authentication <Authentication>

Specifies an authentication method to use for devices managed by WS-Management. Do not specify this parameter for devices managed by using IPMI. The acceptable

values for this parameter are:

- Basic

- Digest

- Default

uses Basic authentication.

Required? false  
Position? named  
Default value None  
Accept pipeline input? True (ByPropertyName)  
Accept wildcard characters? false

**-CimSession <CimSession[]>**

Runs the cmdlet in a remote session or on a remote computer. Enter a computer name or a session object, such as the output of a New-CimSession

(<https://go.microsoft.com/fwlink/p/?LinkId=227967>) or

[Get-CimSession](<https://go.microsoft.com/fwlink/p/?LinkId=227966>)cmdlet. The default is the current session on the local computer.

Required? false  
Position? named  
Default value None  
Accept pipeline input? False  
Accept wildcard characters? false

**-Confirm [<SwitchParameter>]**

Prompts you for confirmation before running the cmdlet.

Required? false  
Position? named  
Default value False  
Accept pipeline input? False  
Accept wildcard characters? false

**-Credential <PSCredential>**

Specifies a PSCredential object based on a user name and password. To obtain a PSCredential object, use the

Get-Credential cmdlet. For more information, type

`Get-Help Get-Credential`. This parameter specifies the credential for the remote hardware device.

Required?	true
Position?	2
Default value	None
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

-InputObject <CimInstance[]>

Specifies the input object that is used in a pipeline command.

Required?	true
Position?	named
Default value	None
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

-ManagementProtocol <ManagementProtocol>

Specifies a management protocol used to communicate with a device. The acceptable values for this parameter are:

- WSMAN

- IPMI

Specify WSMAN for WS-Management devices that represent information by using Systems Management Architecture for Server Hardware (SMASH), Desktop and mobile

Architecture for System Hardware (DASH) or Physical Computer System View profiles. Refer to your hardware documentation for supported management protocols.

Required?	true
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Position? 3  
Default value None  
Accept pipeline input? True (ByPropertyName)  
Accept wildcard characters? false

**-PassThru [<SwitchParameter>]**

Returns an object representing the item with which you are working. By default, this cmdlet does not generate any output.

Required? false  
Position? named  
Default value False  
Accept pipeline input? False  
Accept wildcard characters? false

**-Port <UInt16>**

Specifies a port on the remote computer to use for the management connection. If you do not specify a port, the cmdlet uses the following default ports:

- IPMI and WSMAN over HTTP. Port 623. - WSMAN over HTTPS. Port 664

Required? false  
Position? 4  
Default value None  
Accept pipeline input? True (ByPropertyName)  
Accept wildcard characters? false

**-SkipCACheck [<SwitchParameter>]**

Indicates that the client connects by using HTTPS without validating that a trusted CA signed the server certificate.

Do not specify this parameter unless you can establish trust in another way, such as if the remote computer is part of a network that is physically secure and

isolated, or if the remote computer is a trusted host in a Windows Remote Management (WinRM) configuration. Do not

specify this parameter if you specify a value

of IPMI for the ManagementProtocol parameter.

Required? false

Position? named

Default value False

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

#### -SkipCNCheck [<SwitchParameter>]

Indicates that the certificate common name of the server does not need to match the host name of the server.

Specify this parameter only for managing devices by using WS-Management over HTTPS. Be sure to specify this parameter only for trusted computers. Do not specify

this parameter if you specify a value of IPMI for the ManagementProtocol parameter.

Required? false

Position? named

Default value False

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

#### -SkipRevocationCheck [<SwitchParameter>]

Indicates that the cmdlet skips the revocation check of server certificates. Do not specify this parameter if you specify a value of IPMI for the

ManagementProtocol parameter.

Be sure to specify this parameter only for trusted computers.

Required? false

Position? named

Default value False

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

**-TargetAddress <String>**

Specifies the name or IP address of the management port on the remote hardware device. For server hardware, this is typically a dedicated Baseboard Management

Controller (BMC) IP address. For other devices, like network switches, this is the IP address of their management port. For desktop and mobile devices, the BMC sometimes shares the same IP address as the computer.

Required? true

Position? 1

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

**-ThrottleLimit <Int32>**

Specifies the maximum number of concurrent operations that can be established to run the cmdlet. If this parameter is omitted or a value of `0` is entered, then

Windows PowerShell calculates an optimum throttle limit for the cmdlet based on the number of CIM cmdlets that are running on the computer. The throttle limit applies only to the current cmdlet, not to the session or to the computer.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

**-TimeoutSec <UInt32>**

Specifies how long to wait, in seconds, for a response from the remote hardware device. After this period, the cmdlet abandons the connection attempt.

Required? false

Position?                named  
Default value            None  
Accept pipeline input?    True (ByPropertyName)  
Accept wildcard characters? false

#### -UseSSL [<SwitchParameter>]

Indicates that the server connects to the target computer by using SSL. WS-Management encrypts all content transmitted over the network. Specify this parameter to

use the additional protection of HTTPS instead of HTTP. If you specify this parameter and SSL is not available on the connection port, the command fails.

Required?                false  
Position?                named  
Default value            False  
Accept pipeline input?    True (ByPropertyName)  
Accept wildcard characters? false

#### -WhatIf [<SwitchParameter>]

Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required?                false  
Position?                named  
Default value            False  
Accept pipeline input?    False  
Accept wildcard characters? false

#### <CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see [about\\_CommonParameters \(https://go.microsoft.com/fwlink/?LinkID=113216\)](https://go.microsoft.com/fwlink/?LinkID=113216).



System.String

System.Management.Automation.PSCredential

Microsoft.PowerShell.Cmdletization.GeneratedTypes.PcsvDevice.ManagementProtocol

System.UInt16

Microsoft.PowerShell.Cmdletization.GeneratedTypes.PcsvDevice.Authentication

System.Management.Automation.SwitchParameter

System.UInt32

Microsoft.Management.Infrastructure.CimInstance[]

## OUTPUTS

Microsoft.Management.Infrastructure.CimInstance

Microsoft.Management.Infrastructure.CimInstance#root/Microsoft/Windows/HardwareManagement/MSFT\_PCSVDevice

The cmdlet only returns an MSFT\_PCSVDevice object if you specify the PassThru parameter.

## NOTES

----- Example 1: Restart a remote IPMI hardware device -----

```
PS C:\> $Credential = Get-Credential Admin
```

```
PS C:\> Restart-PCSVDevice -TargetAddress 10.0.0.29 -ManagementProtocol IPMI -Credential $Credential
```

Confirm

Are you sure you want to perform this action?

Performing operation 'Changing state of machine' on Target '10.10.0.29'.

[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend [?] Help (default is "Y"): Y

This example restarts an IPMI device remotely.

The first command uses the Get-Credential cmdlet to create a credential, and then stores it in the \$Credential variable.

The cmdlet prompts you for a user name and

password. For more information, type `Get-Help Get-Credential`.

The second command connects with the target computer that has the IP address 10.0.0.29 by using the IPMI management protocol. The command specifies the credential

object stored in the \$Credential variable. The command prompts the user for confirmation because restarting the system can cause a loss of unsaved state.

Example 2: Restart an IPMI device remotely by using an object variable

```
PS C:\> $Credential = Get-Credential Admin
```

```
PS C:\> Get-PcsvDevice -TargetAddress 10.0.0.29 -ManagementProtocol IPMI -Credential $Credential |  
Restart-PcsvDevice -Confirm $False
```

This example restarts an IPMI device remotely by using an object variable to specify the device.

The first command uses the Get-Credential cmdlet to create a credential, and then stores it in the \$Credential variable.

The cmdlet prompts you for a user name and password. For more information, type ``Get-Help Get-Credential``.

The second command uses the `Get-PcsvDevice` cmdlet to connect with the target computer that has the IP address 10.0.0.29 by using the IPMI management protocol and the credential object stored in the `$Credential` variable. The command gets the remote device object and passes the object to the `Restart-PcsvDevice` cmdlet by using the pipeline operator. The `Restart-PcsvDevice` cmdlet restarts the remote device. The command sets the `Confirm` parameter to `$False` so the cmdlet does not prompt the user for confirmation to restart the device.

## RELATED LINKS

Online

Version:

[https://learn.microsoft.com/powershell/module/pcsvdevice/restart-pcsvdevice?view=windowsserver2022-ps&wt.mc\\_id=ps-gethelp](https://learn.microsoft.com/powershell/module/pcsvdevice/restart-pcsvdevice?view=windowsserver2022-ps&wt.mc_id=ps-gethelp)

[Get-PcsvDevice](#)

[Start-PcsvDevice](#)

[Stop-PcsvDevice](#)