



## ***Windows PowerShell Get-Help on Cmdlet 'Set-NetAdapterVmq'***

***PS:\>Get-HELP Set-NetAdapterVmq -Full***

### NAME

Set-NetAdapterVmq

### SYNOPSIS

Sets the VMQ properties of a network adapter.

### SYNTAX

```
Set-NetAdapterVmq [-Name] <String[]> [-AsJob] [-BaseProcessorGroup <UInt16>] [-BaseProcessorNumber <Byte>]
[-CimSession <CimSession[]>] [-Confirm] [-Enabled
<Boolean>] [-IncludeHidden] [-MaxProcessorNumber <Byte>] [-MaxProcessors <UInt32>] [-NoRestart] [-NumaNode
<UInt16>] [-PassThru] [-ThrottleLimit <Int32>] [-WhatIf]
[<CommonParameters>]
```

```
Set-NetAdapterVmq [-AsJob] [-BaseProcessorGroup <UInt16>] [-BaseProcessorNumber <Byte>] [-CimSession
<CimSession[]>] [-Confirm] [-Enabled <Boolean>] [-IncludeHidden]
-InterfaceDescription <String[]> [-MaxProcessorNumber <Byte>] [-MaxProcessors <UInt32>] [-NoRestart] [-NumaNode
<UInt16>] [-PassThru] [-ThrottleLimit <Int32>]
[-WhatIf] [<CommonParameters>]
```

```
Set-NetAdapterVmq [-AsJob] [-BaseProcessorGroup <UInt16>] [-BaseProcessorNumber <Byte>] [-CimSession
<CimSession[]>] [-Confirm] [-Enabled <Boolean>] -InputObject
<CimInstance[]> [-MaxProcessorNumber <Byte>] [-MaxProcessors <UInt32>] [-NoRestart] [-NumaNode <UInt16>]
[-PassThru] [-ThrottleLimit <Int32>] [-WhatIf]
[<CommonParameters>]
```

## DESCRIPTION

The Set-NetAdapterVmq cmdlet sets the virtual machine queue (VMQ) properties of a network adapter. VMQ is a scaling networking technology for Hyper-V switch that

improves network throughput by distributing processing of network traffic for multiple virtual machines among multiple processors. A thorough familiarity with VMQ and

dynamic VMQ is highly recommended before changing any default values with this cmdlet.

## PARAMETERS

**-AsJob** [<SwitchParameter>]

Runs the cmdlet as a background job. Use this parameter to run commands that take a long time to complete. The cmdlet immediately returns an object that

represents the job and then displays the command prompt. You can continue to work in the session while the job completes. To manage the job, use the ``*-Job``

cmdlets. To get the job results, use the Receive-Job (<https://go.microsoft.com/fwlink/?LinkID=113372>) cmdlet. For more information about Windows PowerShell

background jobs, see about\_Jobs (<https://go.microsoft.com/fwlink/?LinkID=113251>).

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

**-BaseProcessorGroup** <UInt16>

Specifies the processor group to be used by VMQ. Support for systems that have more than 64 logical processors is

based on the concept of a processor group, which

is a static set of up to 64 logical processors. Processor groups are numbered starting with 0. Computers with fewer than 64 logical processors always have a single group, Group 0.

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

**-BaseProcessorNumber <Byte>**

Specifies the starting processor to be used within the processor group for VMQ. Support for systems that have more than 64 logical processors is based on the

concept of a processor group, which is a static set of up to 64 logical processors. Processor groups are numbered starting with 0. Computers with fewer than 64

logical processors always have a single group, Group 0. A logical processor is identified by a group number, using the BaseProcessorGroup parameter, and a group-relative processor number, using this parameter.

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

**-Enabled <Boolean>**

Indicates whether VMQ is enabled or disabled. The acceptable values for this parameter are: \$True or \$False.

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

**-IncludeHidden [<SwitchParameter>]**

Indicates that the cmdlet includes both visible and hidden network adapters in the operation. By default only visible network adapters are included. If a wildcard character is used in identifying a network adapter and this parameter has been specified, then the wildcard string is matched against both hidden and visible network adapters.

Required?	false
Position?	named

Default value            False  
Accept pipeline input?    False  
Accept wildcard characters? false

**-InputObject <CimInstance[]>**

Specifies the input to this cmdlet. You can use this parameter, or you can pipe the input to this cmdlet.

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

**-InterfaceDescription <String[]>**

Specifies an array of network adapter interface descriptions. For a physical network adapter this is typically the name of the vendor of the network adapter followed by a part number and description, such as `Contoso 12345 Gigabit Network Device`.

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

**-MaxProcessorNumber <Byte>**

Specifies the largest processor number in the group.

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

#### **-MaxProcessors <UInt32>**

Specifies the maximum number of processors used by VMQ for load balancing network transmissions.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

#### **-Name <String[]>**

Specifies an array of network adapter names.

Required? true

Position? 0

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

#### **-NoRestart [<SwitchParameter>]**

Indicates that the cmdlet does not restart the network adapter after completing the operation. Many advanced properties require restarting the network adapter before the new settings take effect.

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

#### **-NumaNode <UInt16>**

Specifies the preferred non-uniform memory access (NUMA) node for the affinity of the VMQs allocated on this network adapter.

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

**-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

**-WhatIf [<SwitchParameter>]**

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

Required?	false
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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).

#### INPUTS

Microsoft.Management.Infrastructure.CimInstance#ROOT/StandardCimv2/MSFT\_NetAdapterVmqSettingData[]

The `Microsoft.Management.Infrastructure.CimInstance` object is a wrapper class that displays Windows Management Instrumentation (WMI) objects. The path after the pound sign (`#`) provides the namespace and class name for the underlying WMI object.

#### OUTPUTS

Microsoft.Management.Infrastructure.CimInstance#ROOT/StandardCimv2/MSFT\_NetAdapterVmqSettingData

The `Microsoft.Management.Infrastructure.CimInstance` object is a wrapper class that displays Windows Management Instrumentation (WMI) objects. The path after the pound sign (`#`) provides the namespace and class name for the underlying WMI object.

#### NOTES

---- Example 1: Enable VMQ on the specified network adapter ----

PS C:\> Set-NetAdapterVmq -Name "MyAdapter" -Enabled \$True



This command enables VMQ on the network adapter named MyAdapter. The Enable-NetAdapterVmq cmdlet is the preferred cmdlet to perform this operation.

## RELATED LINKS

Online

Version:

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

Disable-NetAdapterVmq

Enable-NetAdapterVmq

Get-NetAdapterVmq

Get-NetAdapterVmqQueue