Windows PowerShell Get-Help on Cmdlet 'Set-NetAdapterSriov'

PS:\>Get-HELP Set-NetAdapterSriov -Full

NAME

Set-NetAdapterSriov

SYNOPSIS

Sets the SR-IOV properties of the network adapter, such as the number of virtual functions, and the number of queue pairs for default and non-default VPorts.

SYNTAX

Set-NetAdapterSriov [-Name] <String[]> [-AsJob] [-CimSession <CimSession[]>] [-Confirm] [-Enabled <Boolean>] [-IncludeHidden] [-NoRestart] [-NumVFs <UInt32>]
[-PassThru] [-ThrottleLimit <Int32>] [-WhatIf] [<CommonParameters>]

Set-NetAdapterSriov [-AsJob] [-CimSession <CimSession[]>] [-Confirm] [-Enabled <Boolean>] [-IncludeHidden] -InterfaceDescription <String[]> [-NoRestart] [-NumVFs
<UInt32>] [-PassThru] [-ThrottleLimit <Int32>] [-WhatIf] [<CommonParameters>]

Set-NetAdapterSriov [-AsJob] [-CimSession <CimSession[]>] [-Confirm] [-Enabled <Boolean>] -InputObject <CimInstance[]> [-NoRestart] [-NumVFs <UInt32>] [-PassThru]
[-ThrottleLimit <Int32>] [-WhatIf] [<CommonParameters>]

DESCRIPTION

The Set-NetAdapterSriov cmdlet sets the Single-Root I/O Virtualization (SR-IOV) properties of the network adapter. The properties include the number of virtual

functions, the number of virtual ports (VPorts), and the number of queue pairs for default and non-default VPorts. The enabled state of SR-IOV can also be set with

the cmdlet.

The network adapter for these actions can be specified with the adapter name, interface description, or piped as an input object.

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 PowerShellr

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

-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 SR-IOV is enabled on the network adapter. If set to $True, then SR-IOV is Enabled. If set to $False, then SR-IOV is Disabled.

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`.

The network adapter can be selected using the Name parameter, this parameter, or piped in using the InputObject parameter.

Required? true

Position? named

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-Name <String[]>

Specifies an array of network adapter names.

The network adapter can be selected using this parameter, the InterfaceDescription parameter, or piped in using the InputObject parameter.

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

-NumVFs <UInt32>

Specifies the number of virtual functions that the network adapter exposes for SR-IOV. This is the maximum number of virtual functions that Windows Server 2012

and later allocates 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 PowerShellr 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

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).

INPUTS

Microsoft.Management.Infrastructure.CimInstance#ROOT/StandardCimv2/MSFT_NetAdapterSriovSettingData[]

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_NetAdapterSriovSettingData

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. The output object will have the updated SR-IOV settings.

NOTES

Example 1: Set the number of virtual functions on the specified network adapter

PS C:\> Set-NetAdapterSriov -Name "Ethernet 2" -NumVFs 31

This command sets the number of virtual functions available to 31 on the network adapter named Ethernet 2.

Example 2: Set the number of virtual functions and VPorts on the specified network adapter

PS C:\> Set-NetAdapterSriov -Name "Ethernet 2" -NumVFs 31 -NumQueuePairsForDefaultVPort 2 -NumQueuePairsForNonDefaultVPort 2

This command sets the number of virtual functions to 31. This results in 31 virtual functions and 32 virtual machine queues (VMQ), plus 1 used by the physical

function. Since the number of queue pair is set to 2 for both default and non-default ports, the total number of queue pairs used is 128.

RELATED LINKS

Online Version: https://learn.microsoft.com/powershell/module/netadapter/set-netadaptersriov?view=windowsserver2022-ps&wt.mc_id=ps-gethelp

Disable-NetAdapterSriov

Enable-NetAdapterSriov

Get-NetAdapterSriov

Get-NetAdapterSriovVf