Windows PowerShell Get-Help on Cmdlet 'Enable-NetAdapterQos'

PS:\>Get-HELP Enable-NetAdapterQos -Full

NAME

Enable-NetAdapterQos

SYNOPSIS

Enables QoS on the network adapter, specifically DCB.

SYNTAX

Enable-NetAdapterQos [-Name] <String[]> [-AsJob] [-CimSession <CimSession[]>] [-Confirm] [-IncludeHidden] [-NoRestart] [-PassThru] [-ThrottleLimit <Int32>] [-WhatIf]

[<CommonParameters>]

Enable-NetAdapterQos [-AsJob] [-CimSession <CimSession[]>] [-Confirm] [-IncludeHidden] -InterfaceDescription <String[]> [-NoRestart] [-PassThru] [-ThrottleLimit

<Int32>] [-WhatIf] [<CommonParameters>]

Enable-NetAdapterQos [-AsJob] [-CimSession <CimSession[]>] [-Confirm] -InputObject <CimInstance[]> [-NoRestart] [-PassThru] [-ThrottleLimit <Int32>] [-WhatIf]

[<CommonParameters>]

DESCRIPTION

The Enable-NetAdapterQos cmdlet enables quality of service (QoS) on a network adapter. The QoS features, which include traffic class bandwidth allocation and priority

based flow control, are specified in the IEEE data center bridging (DCB) standard. When QoS is enabled and the computer is configured to not accept configurations

from a remote device, the computer sends the network adapter the user-generated configurations for the QoS features. For more information about the configuring the

computer not to accept configurations from a remote device, see the Set-NetQosDcbxSetting cmdlet. Otherwise, the network adapter enables the QoS features based on

either the factory default configurations or what it receives from the remote device.

To configure traffic class bandwidth allocation and priority based flow control on the computer, you can use the New-NetQosTrafficClass and the

Enable-NetQosFlowControl cmdlets.

Some switches expect end stations, such as computers running Windows Serverr 2012 or later, to accept configurations from the switches. If the switches detect a

mismatched configuration through the data center bridging exchange (DCBX) protocol, then the switches disable the DCB functionalities. To overcome this limitation,

users can disable DCBX on either the switches or the network adapters and manually configure the features on either end.

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

-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

-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

-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_NetAdapterQosSettingData[]

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 input object is a list of network adapter objects, such as output from

the Get-NetAdapter cmdlet.

OUTPUTS

Microsoft.Management.Infrastructure.CimInstance#ROOT/StandardCimv2/MSFT_NetAdapterQosSettingData

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 contains QoS capabilities and configurations on a network

adapter. The output object is returned only when the PassThru parameter is specified.

NOTES

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

PS C:\> Enable-NetAdapterQos -Name "DCBNIC1"

This command enables QoS on a network adapter named DCBNIC1 and restarts the network adapter.

Example 2: Enable QoS on all network adapters that support QoS

This command gets all network adapters that support QoS, enables QoS on all of them, and restarts the network adapter.

PS C:\> $NetAdapter1 = Get-NetAdapterQos -Name "*"

PS C:\> Enable-NetAdapterQos -InputObject $NetAdapter1

This command is a version of the cmdlet that gets all network adapters that support QoS and enables QoS on all of them via the pipeline, then restarts the network

adapter.

PS C:\> Get-NetAdapterQos -Name "*" | Enable-NetAdapterQos

RELATED LINKS

Online Version:

https://learn.microsoft.com/powershell/module/netadapter/enable-netadapterqos?view=windowsserver2022-ps&wt.mc_id=ps-gethelp

Disable-NetAdapterQos

Get-NetAdapter

Get-NetAdapterQos