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

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

NAME

    Get-NetAdapterQos

SYNOPSIS

    Gets the QoS properties of the network adapter, specifically DCB settings.

SYNTAX

        Get-NetAdapterQos [-AsJob] [-CimSession <CimSession[]>] [-IncludeHidden] -InterfaceDescription <String[]>
[-ThrottleLimit <Int32>] [<CommonParameters>]

    Get-NetAdapterQos [[-Name] <String[]>] [-AsJob] [-CimSession <CimSession[]>] [-IncludeHidden] [-ThrottleLimit <Int32>]
[<CommonParameters>]

DESCRIPTION

    The Get-NetAdapterQos cmdlet gets quality of service (QoS) capabilities and runtime configurations of a DCB-capable
network adapter. If QoS is disabled, then this

    cmdlet only gets the hardware QoS capabilities of the network adapter. If QoS is enabled, then this cmdlet gets the

operational traffic class and flow control

configurations in addition. If the network adapter supports the DCB Exchange protocol and is connected to a switch that also supports the protocol, then this cmdlet

can also return the QoS configurations on the switch.

If a network adapter does not support QoS, specifically DCB, then this cmdlet does not return any information.

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

-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

-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?   false

Position?   0

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 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

  <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

  None

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.

NOTES

Example 1: Display hardware QoS capabilities and runtime configurations for network adapters where QoS is enabled

PS C:\> Get-NetAdapterQos -Name "*" | Where-Object -FilterScript { $_.Enabled }

Name   : DCBADAPTER1

Enabled   : True

Capabilities   :   Hardware   Current

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MacSecBypass   : NotSupported NotSupported

DcbxSupport   : IEEE   None

NumTCs(Max/ETS/PFC) : 8/8/8   8/8/8

OperationalTrafficClasses : TC TSA   Bandwidth Priorities

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0 ETS   40 0-3,5-7

1 ETS   60 4

OperationalFlowControl   : Priority 4 Enabled

OperationalClassifications : Not Available

This command displays the hardware QoS capabilities and the runtime QoS configurations for a network adapter on which QoS is enabled.

Example 2: Display hardware QoS capabilities for network adapters where QoS is disabled

PS C:\> Get-NetAdapterQos -Name "*" | Where-Object -FilterScript { $_.Enabled -Eq "False" }

Name   : DCBADAPTER1

Enabled   : False

```
Capabilities :              Hardware    Current

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MacSecBypass        : NotSupported NotSupported

DcbxSupport        : None        None

NumTCs(Max/ETS/PFC) : 8/8/8      0/0/0
```

This command displays only the hardware QoS capabilities for a network adapter on which QoS is disabled.

RELATED LINKS

Disable-NetAdapterQos

Enable-NetAdapterQos

Set-NetAdapterQos