PowerShell Get-Help on command 'Get-NetAdapterRsc'

PS C:\Users\wahid> Get-Help Get-NetAdapterRsc

NAME

Get-NetAdapterRsc

SYNOPSIS

Gets network adapters that support RSC.

SYNTAX

Get-NetAdapterRsc [-AsJob] [-CimSession <CimSession[]>] [-IPv4FailureReason

{NoFailure | NicPropertyDisabled | WFPCompatibility | NDISCompatibility |

ForwardingEnabled | NetOffloadGlobalDisabled | Capability | Unknown}]

[-IPv4OperationalState <Boolean[]>] [-IPv6FailureReason {NoFailure |

NicPropertyDisabled | WFPCompatibility | NDISCompatibility | ForwardingEnabled

| NetOffloadGlobalDisabled | Capability | Unknown}] [-IPv6OperationalState

<Boolean[]>] [-IncludeHidden] -InterfaceDescription <String[]> [-ThrottleLimit

<Int32>] [<CommonParameters>]

Get-NetAdapterRsc [[-Name] <String[]>] [-AsJob] [-CimSession <CimSession[]>]

[-IPv4FailureReason {NoFailure | NicPropertyDisabled | WFPCompatibility |

NDISCompatibility | ForwardingEnabled | NetOffloadGlobalDisabled | Capability

| Unknown}] [-IPv4OperationalState <Boolean[]>] [-IPv6FailureReason {NoFailure

| NicPropertyDisabled | WFPCompatibility | NDISCompatibility |
ForwardingEnabled | NetOffloadGlobalDisabled | Capability | Unknown}]
[-IPv6OperationalState <Boolean[]>] [-IncludeHidden] [-ThrottleLimit <Int32>]
[<CommonParameters>]

DESCRIPTION

The Get-NetAdapterRsc cmdlet gets network adapters that support receive
segment coalescing (RSC). RSC takes multiple packets received within the same
interrupt period and combines the packets into a single large package to be
processed by the network stack. This reduces the processing overhead for
incoming packets and reduces the number of processor cycles that are used,
leading to better scalability.

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).

-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.

-IPv4FailureReason <FailureReason[]>

Specifies the reason that RSC may not be working on IPv4 traffic.

The acceptable values for this parameter are:

- NoFailure

- NicPropertyDisabled

- WFPCompatibility

- NDISCompatibility

- ForwardingEnabled

- NetOffloadGlobalDisabled

-IPv4OperationalState <Boolean[]>

Specifies the state of the TCP/IP protocol driver for RSC. See the

IPv4FailureReason parameter value for more information.

-IPv6FailureReason <FailureReason[]>

Returns the reason that of RSC may not be working on IPv6 traffic.

The acceptable values for this parameter are:

- NoFailure

- NicPropertyDisabled

- WFPCompatibility

- NDISCompatibility

- ForwardingEnabled

- NetOffloadGlobalDisabled

If RSC is desired, then the following actions can be taken:

- NicPropertyDisabled: Run the Enable-NetAdapterRsc cmdlet to enable RSC
on the specified network adapter. - WFPCompatibility: Disable the WFP
filters.

- NDISCompatibility: Upgrade to an NDIS 6.30 driver.

- ForwardingEnabled: Disable forwarding.

- NetOffloadGlobalDisabled: Run the Set-NetOffloadGlobalSetting cmdlet
with the ReceiveSegmentCoalescing parameter set to Enabled.

-IPv6OperationalState <Boolean[]>
   Specifies the state of the TCP/IP protocol driver for RSC. See the
   IPv6FailureReason parameter value for more information.

-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.

-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`.

-Name <String[]>

Specifies an array of network adapter names.

-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.

<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).

Example 1: Get the RSC properties for the specified network adapter

PS C:\> Get-NetAdapterRsc -Name "MyAdapter"

This command gets the RSC properties of the network adapter named MyAdapter.

------- Example 2: Get all RSC capable network adapters -------

PS C:\> Get-NetAdapterRsc -Name "*"

This command gets all of the RSC capable network adapters.

Example 3: Get all RSC capable network adapters that have RSC enabled

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

This command gets all of the RSC capable network adapters that have RSC enabled.

REMARKS

To see the examples, type: "get-help Get-NetAdapterRsc -examples".

For more information, type: "get-help Get-NetAdapterRsc -detailed".

For technical information, type: "get-help Get-NetAdapterRsc -full".

For online help, type: "get-help Get-NetAdapterRsc -online"