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

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

NAME

Get-NetAdapterChecksumOffload

SYNOPSIS

Gets the various checksum offload settings from network adapters that support these checksum offloads.

SYNTAX

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

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

DESCRIPTION

The Get-NetAdapterChecksumOffload cmdlet gets the various checksum offload settings. Physical network adapters have various checksum offloads in which the checksum

calculations occur in the network adapter and not in the main processor. This reduces processor utilization and can increase network throughput. This cmdlet gets the

various checksum offload settings, including IPv4, TCPv4, TCPv6, UDPv4, and UDPv6.

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 description. For a physical network adapter this is typically the vendor's name 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_NetAdapterChecksumOffloadSettingData

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: Get the checksum offload properties of the specified network adapter

```
PS C:\> Get-NetAdapterChecksumOffload -Name "MyAdapter"
```

This command gets the state of checksum offload properties of the network adapter named MyAdapter.

Example 2: Get the checksum offload properties of the specified network adapter and display them

```
PS C:\> $NetworkAdapterC01 = Get-NetAdapterChecksumOffload -Name "MyAdapter"
PS C:\> $NetworkAdapterC01.ChecksumOffloadHardwareCapabilities
```

The first command gets the state of checksum offload properties from the network adapter named MyAdapter and stores the result in the variable named

$NetworkAdapterC01.

The second command displays the checksum offload hardware capabilities of the network adapter stored in the $NetworkAdapterC01.

RELATED LINKS

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

Disable-NetAdapterChecksumOffload

Enable-NetAdapterChecksumOffload

Set-NetAdapterChecksumOffload