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

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

NAME

Get-NetAdapter

SYNOPSIS

Gets the basic network adapter properties.

SYNTAX

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

Get-NetAdapter [-AsJob] [-CimSession <CimSession[]>] [-IncludeHidden] -InterfaceIndex <UInt32[]> [-Physical] [-ThrottleLimit <Int32>] [<CommonParameters>]

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

DESCRIPTION

The Get-NetAdapter cmdlet gets the basic network adapter properties. By default only visible adapters are returned. To

see the common network adapter properties, pipe

the output into the Format-List cmdlet. To see all the properties, pipe the output to the Format-List cmdlet with the Property parameter specified as the wildcard

character "*". This cmdlet supports multiple views. The default view is as a table. To see more information regarding various network adapter identifiers use the

names view using the Format-Table cmdlet with the View parameter specified as name . To see more information regarding the miniport, device driver, such as driver

date or version use the driver view using the Format-Table cmdlet with the View parameter specified as driver .

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

(/powershell/module/cimcmdlets/new-cimsession) 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

-InterfaceIndex <UInt32[]>

Specifies the network adapter interface index number as an array.

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? False

Accept wildcard characters? false

-Physical [<SwitchParameter>]

Indicates that the cmdlet gets all physical network adapters.

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

<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/NetAdapter

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. CIM_NetworkAdapter class (/windows/win32/cimwin32prov/cim-networkadapter)

NOTES

--------- Example 1: Get all visible network adapters ---------

PS C:\> Get-NetAdapter -Name *

This command gets all of the visible network adapters.

---- Example 2: Get all visible and hidden network adapters ----

PS C:\> Get-NetAdapter -Name * -IncludeHidden

This command gets all of the network adapters.

--------- Example 3: Get all physical network adapters ---------

PS C:\> Get-NetAdapter -Name * -Physical

This command gets all of the physical network adapters.

---- Example 4: Get a network adapter by the specified name ----

PS C:\> Get-NetAdapter -Name "Ethernet 2"

This command gets the network adapter named Ethernet 2.

---- Example 5: Get a network adapter by the specified name ----

PS C:\> Get-NetAdapter -Name "E*2"

This command gets adapters starting with "E" and ending in "2" using wildcard characters.

Example 6: Display the common properties for the specified network adapter

PS C:\> Get-NetAdapter -Name "Ethernet 3" | Format-List -Property *

This command displays the common properties for the network adapter named Ethernet 3 and formats the list using the Format-List cmdlet.

Example 7: Display all properties for the specified network adapter

PS C:\> Get-NetAdapter -Name "Ethernet 6" | Format-List -Property *

This command displays all of the properties for the network adapter named Ethernet 6.

Example 8: Get all network adapters using the interface description that matches a prefix pattern

PS C:\> Get-NetAdapter -Name * -InterfaceDescription "VendorAdapter*"

This command gets all of the network adapters using the interface description that matches the prefix pattern VendorAdapter.

- Example 9: Display parameter values for all network adapters -

PS C:\> Get-NetAdapter -Name "*" -IncludeHidden | Format-List -Property "Name", "InterfaceDescription", "InterfaceName"

This command displays the Name , InterfaceDescription , and InterfaceName parameter values for all network adapters.

Example 10: Get the visible network adapters on the specified server

PS C:\> Get-NetAdapter -Name * -CimSession "Server5"

This command gets the visible network adapters on the server named Server5. The server named Server5 can be a remote computer.

Example 11: Get the visible network adapters and format the output

PS C:\> Get-NetAdapter -Name * | Format-Table -View Driver

This command gets the visible network adapters and formats the output to present driver information.

Example 12: Gets visible network adapters and format the output

PS C:\> Get-NetAdapter -Name * | Format-Table -View Name

This command gets the visible network adapters and formats the output to present various names by which a network adapter can be identified such as the Name ,

InterfaceDescription , and InterfaceName parameter values.

RELATED LINKS

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

Disable-NetAdapter

Enable-NetAdapter

Rename-NetAdapter

Restart-NetAdapter

Set-NetAdapter