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# PowerShell Get-Help on command 'Enable-NetAdapterChecksumOffload'

PS C:\Users\wahid> Get-Help Enable-NetAdapterChecksumOffload

#### NAME

Enable-NetAdapterChecksumOffload

### **SYNOPSIS**

Enables checksum offloads on the network adapter.

### **SYNTAX**

Enable-NetAdapterChecksumOffload [-Name] <String[]> [-AsJob] [-CimSession <CimSession[]>] [-Confirm] [-IncludeHidden] [-IpIPv4] [-NoRestart] [-PassThru] [-TcpIPv4] [-TcpIPv6] [-ThrottleLimit <Int32>] [-UdpIPv4] [-UdpIPv6] [-WhatIf] [<CommonParameters>]

Enable-NetAdapterChecksumOffload [-AsJob] [-CimSession <CimSession[]>]
[-Confirm] [-IncludeHidden] -InterfaceDescription <String[]> [-IpIPv4]
[-NoRestart] [-PassThru] [-TcpIPv4] [-TcpIPv6] [-ThrottleLimit <Int32>]
[-UdpIPv4] [-UdpIPv6] [-WhatIf] [<CommonParameters>]

Enable-NetAdapterChecksumOffload [-AsJob] [-CimSession <CimSession[]>] [-Confirm] -InputObject <CimInstance[]> [-IpIPv4] [-NoRestart] [-PassThru] [-TcpIPv4] [-TcpIPv6] [-ThrottleLimit <Int32>] [-UdpIPv4] [-UdpIPv6] [-WhatIf]

#### **DESCRIPTION**

The Enable-NetAdapterChecksumOffload cmdlet enables checksum offloads on the network adapter. When specified IPv4, TCPv4, or TCPv6 can be enabled in transmission, receive, or both directions. By default all checksums are enabled in both directions. 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 enables the various checksum offload settings, including IPv4, TCPv4, TCPv6, UDPv4, and UDPv6. Checksum offloading is also required for other stateless offloads to work including receive side scaling (RSS), receive segment coalescing (RSC), and large send offload (LSO).

### **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.

# -Confirm [<SwitchParameter>]

Prompts you for confirmation before running the cmdlet.

# -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.

# -InputObject <CimInstance[]>

Specifies the input to this cmdlet. You can use this parameter, or you can pipe the input to this cmdlet.

# -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`.

### -IpIPv4 [<SwitchParameter>]

Indicates that this cmdlet enables checksum offload for IPv4 traffic.

## -Name <String[]>

Specifies an array of network adapter names.

### -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.

Returns an object representing the item with which you are working. By default, this cmdlet does not generate any output.

## -TcpIPv4 [<SwitchParameter>]

Indicates that the cmdlet enables checksum offload for TCP IPv4 traffic.

## -TcpIPv6 [<SwitchParameter>]

Indicates that the cmdlet enables checksum offload for TCP IPv6 traffic.

#### -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.

### -UdpIPv4 [<SwitchParameter>]

Indicates that the cmdlet enables checksum offload for UDP IPv4 traffic.

# -UdpIPv6 [<SwitchParameter>]

Indicates that the cmdlet enables checksum offload for UDP IPv6 traffic.

## -WhatIf [<SwitchParameter>]

Shows what would happen if the cmdlet runs. The cmdlet is not run.

#### <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).

PS C:\> Enable-NetAdapterChecksumOffload -Name "\*" -TcpIPv4 -UdpIPv4 -IpIPv4

This command enables all IPv4 checksum offloads on all visible network adapters and restarts the network adapters.

Example 2: Enable all checksum offloads on all network adapters

PS C:\> Enable-NetAdapterChecksumOffload -Name "\*"

This command enables all checksum offloads on all visible network adapters and restarts the network adapters.

#### **REMARKS**

To see the examples, type: "get-help Enable-NetAdapterChecksumOffload -examples".

For more information, type: "get-help Enable-NetAdapterChecksumOffload -detailed".

For technical information, type: "get-help Enable-NetAdapterChecksumOffload -full".

For online help, type: "get-help Enable-NetAdapterChecksumOffload -online"