Windows PowerShell Get-Help on Cmdlet 'Find-NetRoute'

PS:\>Get-HELP Find-NetRoute -Full

NAME

   Find-NetRoute

SYNOPSIS

  Finds the best local IP address and the best route to reach a remote address.

SYNTAX

     Find-NetRoute [-AsJob] [-CimSession <CimSession[]>] [-InterfaceIndex <UInt32>] [-LocalIPAddress <String>]
-RemoteIPAddress <String> [-ThrottleLimit <Int32>]

  [<CommonParameters>]

DESCRIPTION

   The Find-NetRoute cmdlet finds the best local IP address and the best route to reach a remote address. Specify the remote address to reach. You can also specify an

  interface and a local address to use to reach the remote address.

   For more information about routing, see Chapter 5 - IP Routing (https://technet.microsoft.com/library/bb727001.aspx)in the TechNet library.

PARAMETERS

-AsJob [<SwitchParameter>]

Runs the cmdlet as a background job. Use this parameter to run commands that take a long time to complete.

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

-InterfaceIndex <UInt32>

Specifies an index of a network interface. The cmdlet finds a route for this interface.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-LocalIPAddress <String>

Specifies a local IP address from which to find a route. You can specify a host address or a subnet address. You can also use a wildcard address, such as

0.0.0.0/0 for all IPv4 addresses, ::/0 for all IPv6 addresses, or ANY for all addresses.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-RemoteIPAddress <String>

Specifies a remote IP address to which to find a route. You can specify a host address or a subnet address. You can also use a wildcard address, such as 0.0.0.0/0

for all IPv4 addresses, ::/0 for all IPv6 addresses, or ANY for all addresses

Required?   true

Position?   named

Default value   None

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

NetIPAddress, NetRoute

NOTES

---------- Example 1: Find a local address and route ----------

PS C:\>Find-NetRoute -RemoteIPAddress "10.79.197.200"

IPAddress   : 172.31.234.140

InterfaceIndex   : 3

InterfaceAlias   : Ethernet

AddressFamily   : IPv4

Type   : Unicast

PrefixLength   : 21

PrefixOrigin   : Dhcp

SuffixOrigin   : Dhcp

AddressState   : Preferred

ValidLifetime   : 6.00:10:40

PreferredLifetime : 6.00:10:40

SkipAsSource   : False

PolicyStore   : ActiveStore

Caption   :

Description   :

ElementName   :

InstanceID   : :8:8:8:9:55=55;A<8=;8<=<8;55;

AdminDistance   :

DestinationAddress :

IsStatic   :

RouteMetric   : 0

TypeOfRoute   : 3

AddressFamily   : IPv4

DestinationPrefix : 0.0.0.0/0

InterfaceAlias : Ethernet

InterfaceIndex : 3

NextHop   : 172.31.232.1

PreferredLifetime : 8.00:00:00

Protocol   : NetMgmt

Publish   : No

Store   : ActiveStore

ValidLifetime   : 8.00:00:00

PSComputerName :

ifIndex   : 3

This command finds a NetIPAddress object and NetRoute object to use to access the IP address 10.79.197.200. The

command returns two objects. The first object is the

local IP address. The second object is the local route that includes the selected connectivity path and next hop.

RELATED LINKS

https://learn.microsoft.com/powershell/module/nettcpip/find-netroute?view=windowsserver2022-ps&wt.mc_id=ps-gethelp

Get-NetRoute

New-NetRoute

Remove-NetRoute

Set-NetRoute