



Windows PowerShell Get-Help on Cmdlet 'Test-AzNetworkWatcherIPFlow'

PS:\>Get-HELP Test-AzNetworkWatcherIPFlow -Full

WARNING: The names of some imported commands from the module 'Microsoft.Azure.PowerShell.Cmdlets.Network' include unapproved verbs that might make them less discoverable.

To find the commands with unapproved verbs, run the Import-Module command again with the Verbose parameter. For a list of approved verbs, type Get-Verb.

NAME

Test-AzNetworkWatcherIPFlow

SYNOPSIS

Returns whether the packet is allowed or denied to or from a particular destination.

SYNTAX

```

Test-AzNetworkWatcherIPFlow [-AsJob] [-DefaultProfile
<Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] -Direction {Inbound |
Outbound} -LocalIPAddress <System.String> -LocalPort <System.String> -Location <System.String> -Protocol {TCP |
UDP} -RemoteIPAddress <System.String> [-RemotePort
<System.String>] [-TargetNetworkInterfaceId <System.String>] -TargetVirtualMachineId <System.String>
[<CommonParameters>]

```

<Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] -Direction {Inbound | Outbound} -LocalIpAddress <System.String> -LocalPort <System.String> -NetworkWatcher <Microsoft.Azure.Commands.Network.Models.PSNetworkWatcher> -Protocol {TCP | UDP} -RemoteIpAddress <System.String> [-RemotePort <System.String>] [-TargetNetworkInterfaceId <System.String>] -TargetVirtualMachineId <System.String> [<CommonParameters>]

Test-AzNetworkWatcherIPFlow [-AsJob] [-DefaultProfile

<Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] -Direction {Inbound | Outbound} -LocalIpAddress <System.String> -LocalPort <System.String> -NetworkWatcherName <System.String> -Protocol {TCP | UDP} -RemoteIpAddress <System.String> [-RemotePort <System.String>] -ResourceGroupName <System.String> [-TargetNetworkInterfaceId <System.String>] -TargetVirtualMachineId <System.String> [<CommonParameters>]

DESCRIPTION

The Test-AzNetworkWatcherIPFlow cmdlet, for a specified VM resource and a packet with specified direction using local and remote, IP addresses and ports, returns whether the packet is allowed or denied.

PARAMETERS

-AsJob <System.Management.Automation.SwitchParameter>

Run cmdlet in the background

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

-DefaultProfile <Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>

The credentials, account, tenant, and subscription used for communication with azure.

Required? false
Position? named
Default value None
Accept pipeline input? False
Accept wildcard characters? false

-Direction <System.String>

Direction.

Required? true
Position? named
Default value None
Accept pipeline input? False
Accept wildcard characters? false

-LocalIPAddress <System.String>

Local IP Address.

Required? true
Position? named
Default value None
Accept pipeline input? True (ByPropertyName)
Accept wildcard characters? false

-LocalPort <System.String>

Local Port.

Required? true
Position? named
Default value None
Accept pipeline input? True (ByPropertyName)
Accept wildcard characters? false

-Location <System.String>

Location of the network watcher.

Required? true

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-NetworkWatcher <Microsoft.Azure.Commands.Network.Models.PSNetworkWatcher>

The network watcher resource.

Required? true

Position? named

Default value None

Accept pipeline input? True (ByValue)

Accept wildcard characters? false

-NetworkWatcherName <System.String>

The name of network watcher.

Required? true

Position? named

Default value None

Accept pipeline input? True (ByValue)

Accept wildcard characters? false

-Protocol <System.String>

Protocol.

Required? true

Position? named

Default value None
Accept pipeline input? False
Accept wildcard characters? false

-RemoteIPAddress <System.String>

Remote IP Address.

Required? true
Position? named
Default value None
Accept pipeline input? True (ByPropertyName)
Accept wildcard characters? false

-RemotePort <System.String>

Remote port.

Required? false
Position? named
Default value None
Accept pipeline input? True (ByPropertyName)
Accept wildcard characters? false

-ResourceGroupName <System.String>

The name of the network watcher resource group.

Required? true
Position? named
Default value None
Accept pipeline input? True (ByPropertyName)
Accept wildcard characters? false

-TargetNetworkInterfaceId <System.String>

Target network interface Id.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

-TargetVirtualMachineId <System.String>

The target virtual machine ID.

Required?	true
Position?	named
Default value	None
Accept pipeline input?	True (ByPropertyName)
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

Microsoft.Azure.Commands.Network.Models.PSNetworkWatcher

System.String

OUTPUTS

Microsoft.Azure.Commands.Network.Models.PSIPFlowVerifyResult

NOTES

Keywords: azure, azurerm, arm, resource, management, manager, network, networking, network watcher, flow, ip

----- Example 1: Run Test-AzNetworkWatcherIPFlow -----

```
$nw = Get-AzResource | Where-Object {$_.ResourceType -eq "Microsoft.Network/networkWatchers" -and $_.Location -eq "WestCentralUS" }
```

```
$networkWatcher = Get-AzNetworkWatcher -Name $nw.Name -ResourceGroupName $nw.ResourceGroupName
```

```
$VM = Get-AzVM -ResourceGroupName testResourceGroup -Name VM0
```

```
$Nics = Get-AzNetworkInterface | Where-Object { $vm.NetworkProfile.NetworkInterfaces.Id -contains $_.Id }
```

```
Test-AzNetworkWatcherIPFlow -NetworkWatcher $networkWatcher -TargetVirtualMachineId $VM.Id -Direction Outbound -Protocol TCP -LocalIpAddress
```

```
$nics[0].IpConfigurations[0].PrivateIpAddress -LocalPort 6895 -RemoteIpAddress 204.79.197.200 -RemotePort 80
```

Gets the Network Watcher in West Central US for this subscription, then gets the VM and it's associated Network Interfaces. Then for the first Network Interface,

runs Test-AzNetworkWatcherIPFlow using the first IP from the first Network Interface for an outbound connection to an IP on the internet.

RELATED LINKS

Online Version: <https://learn.microsoft.com/powershell/module/az.network/test-aznetworkwatcheripflow>

New-AzNetworkWatcher

Get-AzNetworkWatcher

Remove-AzNetworkWatcher

Get-AzNetworkWatcherNextHop

Get-AzNetworkWatcherSecurityGroupView

Get-AzNetworkWatcherTopology
Start-AzNetworkWatcherResourceTroubleshooting
New-AzNetworkWatcherPacketCapture
New-AzPacketCaptureFilterConfig
Get-AzNetworkWatcherPacketCapture
Remove-AzNetworkWatcherPacketCapture
Stop-AzNetworkWatcherPacketCapture
New-AzNetworkWatcherProtocolConfiguration
Test-AzNetworkWatcherIPFlow
Test-AzNetworkWatcherConnectivity
Stop-AzNetworkWatcherConnectionMonitor
Start-AzNetworkWatcherConnectionMonitor
Set-AzNetworkWatcherConnectionMonitor
Set-AzNetworkWatcherConfigFlowLog
Remove-AzNetworkWatcherConnectionMonitor
New-AzNetworkWatcherConnectionMonitor
Get-AzNetworkWatcherTroubleshootingResult
Get-AzNetworkWatcherReachabilityReport
Get-AzNetworkWatcherReachabilityProvidersList
Get-AzNetworkWatcherFlowLogStatus
Get-AzNetworkWatcherConnectionMonitorReport
Get-AzNetworkWatcherConnectionMonitor