



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

PS: \>Get-HELP Get-AzNetworkWatcherTopology -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

Get-AzNetworkWatcherTopology

SYNOPSIS

Gets a network level view of resources and their relationships in a resource group.

SYNTAX

```
Get-AzNetworkWatcherTopology [-DefaultProfile
<Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] -Location
<System.String>
-TargetResourceGroupName <System.String> [<CommonParameters>]
```

```
Get-AzNetworkWatcherTopology [-DefaultProfile
<Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] -NetworkWatcher
<Microsoft.Azure.Commands.Network.Models.PSNetworkWatcher> -TargetResourceGroupName <System.String>
```

[<CommonParameters>]

Get-AzNetworkWatcherTopology

[-DefaultProfile

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

<System.String> -ResourceGroupName <System.String> -TargetResourceGroupName <System.String>

[<CommonParameters>]

DESCRIPTION

The Get-AzNetworkWatcherTopology cmdlet a network level view of resources and their relationships in a resource group. Note: If resources from multiple regions

reside in the resource group, only the resources in the same region as the Network Watcher will be included in the JSON output.

PARAMETERS

-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

-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

-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

-TargetResourceGroupName <System.String>

The resource group name.

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.PSTopology

NOTES

Keywords: azure, azurearm, arm, resource, management, manager, network, networking, network watcher, topology, view

----- Example 1: Get an Azure Topology -----

```
$networkWatcher = Get-AzNetworkWatcher -Name NetworkWatcher_westcentralus -ResourceGroupName  
NetworkWatcherRG
```

Get-AzNetworkWatcherTopology -NetworkWatcher \$networkWatcher -TargetResourceGroupName testresourcegroup

Id : e33d80cf-4f76-4b8f-b51c-5bb8eba80103

CreatedDateTime : 0/00/0000 9:21:51 PM

LastModified : 0/00/0000 4:53:29 AM

TopologyResources : [

```
{
  "Name": "testresourcegroup-vnet",
  "Id":
```

```
"/subscriptions/bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb/resourceGroups/testresourcegroup/providers/Microsoft.Network/
virtualNetworks/testresourcegroup-vnet",
```

```
  "Location": "westcentralus",
```

```
  "TopologyAssociations": [
```

```
    {
      "Name": "default",
```

```
      "ResourceId":
```

```
"/subscriptions/bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb/resourceGroups/testresourcegroup/providers/Microsoft.Network/
virtualNetw
```

```
orks/testresourcegroup-vnet/subnets/default",
```

```
    "AssociationType": "Contains"
```

```
  }
```

```
]
```

```
},
```

```
{
```

```
  "Name": "default",
```

```
  "Id":
```

```
"/subscriptions/bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb/resourceGroups/testresourcegroup/providers/Microsoft.Network/
virtualNetworks/testres
```

```
ourcegroup-vnet/subnets/default",
```

```
  "Location": "westcentralus",
```

```
  "TopologyAssociations": []
```

```
},
```

```

{
  "Name": "VM0",
  "Id":
"/subscriptions/bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb/resourceGroups/testresourcegroup/providers/Microsoft.Compute
/virtualMachines/VM0",
  "TopologyAssociations": [
    {
      "Name": "vm0131",
      "ResourceId":
"/subscriptions/bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb/resourceGroups/testresourcegroup/providers/Microsoft.Network/
networkInterfaces/vm0131",
      "AssociationType": "Contains"
    }
  ],
  {
    "Name": "vm0131",
    "Id":
"/subscriptions/bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb/resourceGroups/testresourcegroup/providers/Microsoft.Network/
networkInterfaces/vm0131",
    "Location": "westcentralus",
    "TopologyAssociations": [
      {
        "Name": "VM0",
        "ResourceId":
"/subscriptions/bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb/resourceGroups/testresourcegroup/providers/Microsoft.Compute
/virtualMachines/VM0",
        "AssociationType": "Associated"
      },
      {

```

"Name": "VM0-nsg",

"ResourceId":

"/subscriptions/bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb/resourceGroups/testresourcegroup/providers/Microsoft.Network/
networkSecurityGroups/VM0-nsg",

"AssociationType": "Associated"

},

{

"Name": "default",

"ResourceId":

"/subscriptions/bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb/resourceGroups/testresourcegroup/providers/Microsoft.Network/
virtualNetw

orks/testresourcegroup-vnet/subnets/default",

"AssociationType": "Associated"

},

{

"Name": "VM0-ip",

"ResourceId":

"/subscriptions/bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb/resourceGroups/testresourcegroup/providers/Microsoft.Network/
publicIPAddresses/VM0-ip",

"AssociationType": "Associated"

}

]

},

{

"Name": "VM0-nsg",

"Id":

"/subscriptions/bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb/resourceGroups/testresourcegroup/providers/Microsoft.Network/
networkSecurityGroups/VM0-nsg",

"Location": "westcentralus",

"TopologyAssociations": [

```

{
  "Name": "default-allow-rdp",
  "ResourceId":
"/subscriptions/bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb/resourceGroups/testresourcegroup/providers/Microsoft.Network/
networkSecurityGroups/VM0-nsg/securityRules/default-allow-rdp",
  "AssociationType": "Contains"
}
],
{
  "Name": "default-allow-rdp",
  "Id":
"/subscriptions/bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb/resourceGroups/testresourcegroup/providers/Microsoft.Network/
networkSecurityGroups/VM0-nsg/securityRules/default-allow-rdp",
  "Location": "westcentralus",
  "TopologyAssociations": []
},
{
  "Name": "VM0-ip",
  "Id":
"/subscriptions/bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb/resourceGroups/testresourcegroup/providers/Microsoft.Network/
publicIPAddresses/VM0-ip",
  "Location": "westcentralus",
  "TopologyAssociations": [
{
  "Name": "vm0131",
  "ResourceId":
"/subscriptions/bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb/resourceGroups/testresourcegroup/providers/Microsoft.Network/
networkInterfaces/vm0131",

```

```
        "AssociationType": "Associated"
    }
]
}
```

In this example we run the `Get-AzNetworkWatcherTopology` cmdlet on a resource group that contains a VM, Nic, NSG, and public IP.

RELATED LINKS

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

`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