



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

PS:\>Get-HELP Get-AzNetworkSecurityGroup -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-AzNetworkSecurityGroup

SYNOPSIS

Gets a network security group.

SYNTAX

DESCRIPTION

The Get-AzNetworkSecurityGroup cmdlet gets an Azure network security group.

PARAMETERS

<CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug,

INPUTS

OUTPUTS

---- Example 1: Retrieve an existing network security group ----

```
Get-AzNetworkSecurityGroup -Name nsg1 -ResourceGroupName "rg1"
```

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```

],
    "SourceAddressPrefix": [
        "VirtualNetwork"
    ],
    "DestinationAddressPrefix": [
        "VirtualNetwork"
    ],
    "Access": "Allow",
    "Priority": 65000,
    "Direction": "Inbound",
    "ProvisioningState": "Succeeded",
    "SourceApplicationSecurityGroups": [],
    "DestinationApplicationSecurityGroups": [
        {
            "Name":
                "AllowAzureLoadBalancerInBound",
            "Etag": "W/\u000000000-0000-0000-0000-000000000000\u0022",
            "Id":
                "/subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/rg1/providers/Microsoft.Network/networkSecurityGroups/nsg1/defaultSecurityRules/AllowAzureLoadBalancerInBound",
            "Description": "Allow inbound traffic from azure load balancer",
            "Protocol": "*",
            "SourcePortRange": [
                "*"
            ],
            "DestinationPortRange": [
                "*"
            ],
            "SourceAddressPrefix": [
                "AzureLoadBalancer"
            ],
            "DestinationAddressPrefix": [
                "*"
            ],
            "Access": "Allow",
            "Priority": 65001,
            "Direction": "Inbound",
            "ProvisioningState": "Succeeded",
            "SourceApplicationSecurityGroups":
                [],
            "DestinationApplicationSecurityGroups": [
                {
                    "Name": "DenyAllInBound",
                    "Etag": "W/\u000000000-0000-0000-0000-000000000000\u0022",
                    "Id": "/subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/rg1/providers/Microsoft.Network/networkSecurityGroups/nsg1/defaultSecurityRules/DenyAllInBound",
                    "Description": "Deny all inbound traffic",
                    "Protocol": "*",
                    "SourcePortRange": [
                        "*"
                    ],
                    "DestinationPortRange": [
                        "*"
                    ],
                    "SourceAddressPrefix": [
                        "*"
                    ],
                    "DestinationAddressPrefix": [
                        "*"
                    ],
                    "Access": "Deny",
                    "Priority": 65500,
                    "Direction": "Inbound",
                    "ProvisioningState":

```

```

    "Succeeded",
    "SourceApplicationSecurityGroups": [],
    "DestinationApplicationSecurityGroups": []
  },
  {
    "Name": "AllowVnetOutBound",
    "Etag": "W/\"00000000-0000-0000-0000-000000000000\\\"\"",
    "Id":
"/subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/rg1/providers/Microsoft.Network/networkSecurityGroups/nsg1/defaultSecurityRules/AllowVnetOutBound",
    "Description": "Allow outbound traffic from
all VMs to all VMs in VNET",
    "Protocol": "*",
    "SourcePortRange": [
      "*"
    ],
    "DestinationPortRange": [
      "*"
    ],
    "SourceAddressPrefix": [
      "VirtualNetwork"
    ],
    "DestinationAddressPrefix": [
      "VirtualNetwork"
    ],
    "Access": "Allow",
    "Priority": 65000,
    "Direction": "Outbound",
    "ProvisioningState": "Succeeded",
    "SourceApplicationSecurityGroups": [],
    "DestinationApplicationSecurityGroups": []
  },
  {
    "Name":
"AllowInternetOutBound",
    "Etag": "W/\"00000000-0000-0000-0000-000000000000\\\"\"",
    "Id":
"/subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/rg1/providers/Microsoft.Network/networkSecurityGroups/nsg1/defaultSecurityRules/AllowInternetOutBound",
    "Description": "Allow outbound traffic
from all VMs to Internet",
    "Protocol": "*",
    "SourcePortRange": [
      "*"
    ],
    "DestinationPortRange": [
      "*"
    ],
    "SourceAddressPrefix": [
      "*"
    ],
    "DestinationAddressPrefix": [
      "Internet"
    ],
    "Access": "Allow",
    "Priority": 65001,
    "Direction": "Outbound",
    "ProvisioningState": "Succeeded",
    "SourceApplicationSecurityGroups": [],
    "DestinationApplicationSecurityGroups": []
  },
  {
    "Name":
"DenyAllOutBound",
    "Etag": "W/\"00000000-0000-0000-0000-000000000000\\\"\"",

```

```

"Id":
"/subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/rg1/provider
rs/Microsoft.Network/networkSecurityGroups/nsg1/defaultSecurityRules/DenyAllOutBound",
"Description": "Deny all outbound traffic",
    "Protocol": "*",
    "SourcePortRange": [
    ],
    "DestinationPortRange": [
    ],
    "SourceAddressPrefix": [
    ],
    "DestinationAddressPrefix": [
    ],
    "Access": "Deny",
    "Priority": 65500,
    "Direction": "Outbound",
    "ProvisioningState":
    "Succeeded",
    "SourceApplicationSecurityGroups": [],
"DestinationApplicationSecurityGroups": []
    }
  ] NetworkInterfaces
  : [] Subnets
  : []

```

This command returns contents of Azure network security group "nsg1" in resource group "rg1"

Example 2: List existing network security groups using filtering `powershell Get-AzNetworkSecurityGroup -Name nsg*`

```

output Name : nsg1 ResourceGroupName : rg1 Location : eastus Id :
/subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/rg1/provider
s/Microsoft.Network/networkSecurityGroups/nsg1 Etag
: W/"00000000-0000-0000-0000-000000000000" ResourceGuid
00000000-0000-0000-0000-000000000000 ProvisioningState :
Succeeded Tags : FlushConnection : False SecurityRules : [] DefaultSecurityRules : [
{
    "Name": "AllowVnetInBound",
    "Etag":
"W/"00000000-0000-0000-0000-000000000000\"",
    "Id": "/subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/rg1/provider
rs/Microsoft.Network/networkSecurityGroups/nsg1/defaultSecurityRules/AllowVnetInBound",
"Description": "Allow inbound traffic from
all VMs in VNET",
    "Protocol": "*",
    "SourcePortRange": [

```

```
[{"Name": "AllowAzureLoadBalancerInBound", "Access": "Allow", "Priority": 65000, "Direction": "Inbound", "ProvisioningState": "Succeeded", "SourceApplicationSecurityGroups": [], "DestinationApplicationSecurityGroups": [{"Name": "AzureLoadBalancer"}], "Etag": "W/\r\n00000000-0000-0000-0000-000000000000\r\n", "Id": "/subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/rg1/providers/Microsoft.Network/networkSecurityGroups/nsg1/defaultSecurityRules/AllowAzureLoadBalancerInBound", "Description": "Allow inbound traffic from azure load balancer", "Protocol": "*", "SourcePortRange": [ "*" ], "DestinationPortRange": [ "*" ], "SourceAddressPrefix": [ "*" ], "DestinationAddressPrefix": [ "*" ]}, {"Name": "DenyAllInBound", "Access": "Deny", "Priority": 65001, "Direction": "Inbound", "ProvisioningState": "Succeeded", "SourceApplicationSecurityGroups": [], "DestinationApplicationSecurityGroups": [{"Name": "AzureLoadBalancer"}], "Etag": "W/\r\n00000000-0000-0000-0000-000000000000\r\n", "Id": "/subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/rg1/providers/Microsoft.Network/networkSecurityGroups/nsg1/defaultSecurityRules/DenyAllInBound", "Description": "Deny all inbound traffic", "Protocol": "*", "SourcePortRange": [ "*" ], "DestinationPortRange": [ "*" ], "SourceAddressPrefix": [ "*" ], "DestinationAddressPrefix": [ "*" ]}], [{"Page": 0, "TotalPages": 12}]
```

```

        "Priority": 65500,
        "Direction": "Inbound",
        "ProvisioningState":
    "Succeeded",
    "SourceApplicationSecurityGroups": [],
    "DestinationApplicationSecurityGroups": []
    },
    {
        "Name": "AllowVnetOutBound",
        "Etag": "W/\\"00000000-0000-0000-0000-000000000000\\\"",
        "Id":
        "/subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/rg1/providers/Microsoft.Network/networkSecurityGroups/nsg1/defaultSecurityRules/AllowVnetOutBound",
        "Description": "Allow outbound traffic from
        all VMs to all VMs in VNET",
        "Protocol": "*",
        "SourcePortRange": [
            "*",
            "DestinationPortRange": [
                "*"
            ],
            "SourceAddressPrefix": [
                "VirtualNetwork"
            ],
            "DestinationAddressPrefix": [
                "VirtualNetwork"
            ],
            "Access": "Allow",
            "Priority": 65000,
            "Direction": "Outbound",
            "ProvisioningState": "Succeeded",
            "SourceApplicationSecurityGroups": [],
            "DestinationApplicationSecurityGroups": []
            },
            {
                "Name":
                "AllowInternetOutBound",
                "Etag": "W/\\"00000000-0000-0000-0000-000000000000\\\"",
                "Id":
                "/subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/rg1/providers/Microsoft.Network/networkSecurityGroups/nsg1/defaultSecurityRules/AllowInternetOutBound",
                "Description": "Allow outbound traffic
                from all VMs to Internet",
                "Protocol": "*",
                "SourcePortRange": [
                    "*",
                    "DestinationPortRange": [
                        "*"
                    ],
                    "SourceAddressPrefix": [
                        "*"
                    ],
                    "DestinationAddressPrefix": [
                        "Internet"
                    ],
                    "Access": "Allow",
                    "Priority": 65001,
                    "Direction": "Outbound",
                    "ProvisioningState": "Succeeded",
                    "SourceApplicationSecurityGroups": [],

```

```

"DestinationApplicationSecurityGroups": [],
    },
    {
        "Name":
        "DenyAllOutBound",
        "Etag": "W/\\"00000000-0000-0000-0000-000000000000\\\"",
        "Id":
        "/subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/rg1/providers/
        Microsoft.Network/networkSecurityGroups/nsg1/defaultSecurityRules/DenyAllOutBound",
        "Description": "Deny all outbound traffic",
        "Protocol": "*",
        "SourcePortRange": [
            "*"
        ],
        "DestinationPortRange": [
            "*"
        ],
        "SourceAddressPrefix": [
            "*"
        ],
        "DestinationAddressPrefix": [
            "*"
        ],
        "Access": "Deny",
        "Priority": 65500,
        "Direction": "Outbound",
        "ProvisioningState":
        "Succeeded",
        "SourceApplicationSecurityGroups": [],
        "DestinationApplicationSecurityGroups": []
    }
] NetworkInterfaces : [] Subnets : [] ``

```

This command returns contents of Azure network security groups that start with "nsg"

PARAMETERS

-DefaultProfile The credentials, account, tenant, and subscription used for communication with Azure.

```

``yaml Type: Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer Parameter
Sets: (All) Aliases: AzContext, AzureRmContext,
AzureCredential

```

Required: False Position: Named Default value: None Accept pipeline input: False Accept wildcard characters: False ``

-ExpandResource The resource reference to be expanded.

```

``yaml Type: System.String Parameter Sets: Expand Aliases:

```

characters: False ```

-Name Specifies the name of the network security group that this cmdlet gets.

```yaml Type: System.String Parameter Sets: NoExpand Aliases: ResourceName

Required: False Position: Named Default value: None Accept pipeline input: True (ByPropertyName) Accept wildcard characters: True ```

```yaml Type: System.String Parameter Sets: Expand Aliases: ResourceName

Required: True Position: Named Default value: None Accept pipeline input: True (ByPropertyName) Accept wildcard characters: True ```

-ResourceGroupName Specifies the name of the resource group that the network security group belongs to.

```yaml Type: System.String Parameter Sets: NoExpand Aliases:

Required: False Position: Named Default value: None Accept pipeline input: True (ByPropertyName) Accept wildcard characters: True ```

```yaml Type: System.String Parameter Sets: Expand Aliases:

Required: True Position: Named Default value: None Accept pipeline input: True (ByPropertyName) Accept wildcard characters: True ```

CommonParameters This cmdlet supports the common parameters: -Debug, -ErrorAction, -ErrorVariable, -InformationAction, -InformationVariable, -OutVariable, -OutBuffer, -PipelineVariable, -Verbose, -WarningAction, and -WarningVariable. For more information, see [about_CommonParameters](<http://go.microsoft.com/fwlink/?LinkID=113216>).

INPUTS

System.String

OUTPUTS

Microsoft.Azure.Commands.Network.Models.PSNetworkSecurityGroup

NOTES

RELATED LINKS

[New-AzNetworkSecurityGroup](./New-AzNetworkSecurityGroup.md)

[Remove-AzNetworkSecurityGroup](./Remove-AzNetworkSecurityGroup.md)

[Set-AzNetworkSecurityGroup](./Set-AzNetworkSecurityGroup.md)

PARAMETERS

-DefaultProfile The credentials, account, tenant, and subscription used for communication with Azure.

```yaml Type: Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer Parameter  
Sets: (All) Aliases: AzContext, AzureRmContext,  
AzureCredential

Required: False Position: Named Default value: None Accept pipeline input: False Accept wildcard characters: False ```

### -ExpandResource The resource reference to be expanded.

```yaml Type: System.String Parameter Sets: Expand Aliases:

Required: True Position: Named Default value: None Accept pipeline input: True (ByPropertyName) Accept wildcard
characters: False ```

-Name The resource name.

```yaml Type: System.String Parameter Sets: NoExpand Aliases: ResourceName

Required: False Position: Named Default value: None Accept pipeline input: True (ByPropertyName) Accept wildcard characters: True ```

```yaml Type: System.String Parameter Sets: Expand Aliases: ResourceName

Required: True Position: Named Default value: None Accept pipeline input: True (ByPropertyName) Accept wildcard characters: True ```

-ResourceGroupName The resource group name.

```yaml Type: System.String Parameter Sets: NoExpand Aliases:

Required: False Position: Named Default value: None Accept pipeline input: True (ByPropertyName) Accept wildcard characters: True ```

```yaml Type: System.String Parameter Sets: Expand Aliases:

Required: True Position: Named Default value: None Accept pipeline input: True (ByPropertyName) Accept wildcard characters: True ```

CommonParameters This cmdlet supports the common parameters: -Debug, -ErrorAction, -ErrorVariable, -InformationAction, -InformationVariable, -OutVariable, -OutBuffer, -PipelineVariable, -Verbose, -WarningAction, and -WarningVariable. For more information, see [about_CommonParameters](<http://go.microsoft.com/fwlink/?LinkID=113216>).

INPUTS

OUTPUTS

NOTES

RELATED LINKS

RELATED LINKS

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