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

PS:\>Get-HELP Get-NetFirewallSetting -Full

NAME

  Get-NetFirewallSetting

SYNOPSIS

  Retrieves the global firewall settings of the target computer.

SYNTAX

   Get-NetFirewallSetting [-All] [-AsJob] [-CimSession <CimSession[]>] [-GPOSession <String>] [-PolicyStore <String>]

[-ThrottleLimit <Int32>] [<CommonParameters>]

DESCRIPTION

   The Get-NetFirewallSetting cmdlet retrieves the global firewall settings of the target computer. The NetFirewallSetting

object specifies properties that apply to the

  firewall and IPsec settings, no matter which network profile is currently in use. The global configurations include viewing

the active profile, exemptions, specified

  certification validation levels, and user and computer authorization lists.

  To view enforced settings, view the firewall settings from the ActiveStore policy store source.

PARAMETERS

-All [<SwitchParameter>]

Indicates that all of the firewall settings within the specified policy store are retrieved.

   Required?   false

   Position?   named

   Default value   False

   Accept pipeline input?   False

   Accept wildcard characters? false

-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

-GPOSession <String>

Specifies the network GPO from which to retrieve the rules to be retrieved. This parameter is used in the same way as the PolicyStore parameter. When modifying

GPOs in Windows PowerShellr, each change to a GPO requires the entire GPO to be loaded, modified, and saved back. On a busy Domain Controller (DC), this can be a

slow and resource-heavy operation. A GPO Session loads a domain GPO onto the local computer and makes all changes in a batch, before saving it back. This reduces

the load on the DC and speeds up the Windows PowerShell cmdlets. To load a GPO Session, use the Open-NetGPO cmdlet. To save a GPO Session, use the Save-NetGPO

cmdlet.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-PolicyStore <String>

Specifies the policy store from which to retrieve the rules to be retrieved. A policy store is a container for firewall and IPsec policy. The acceptable values
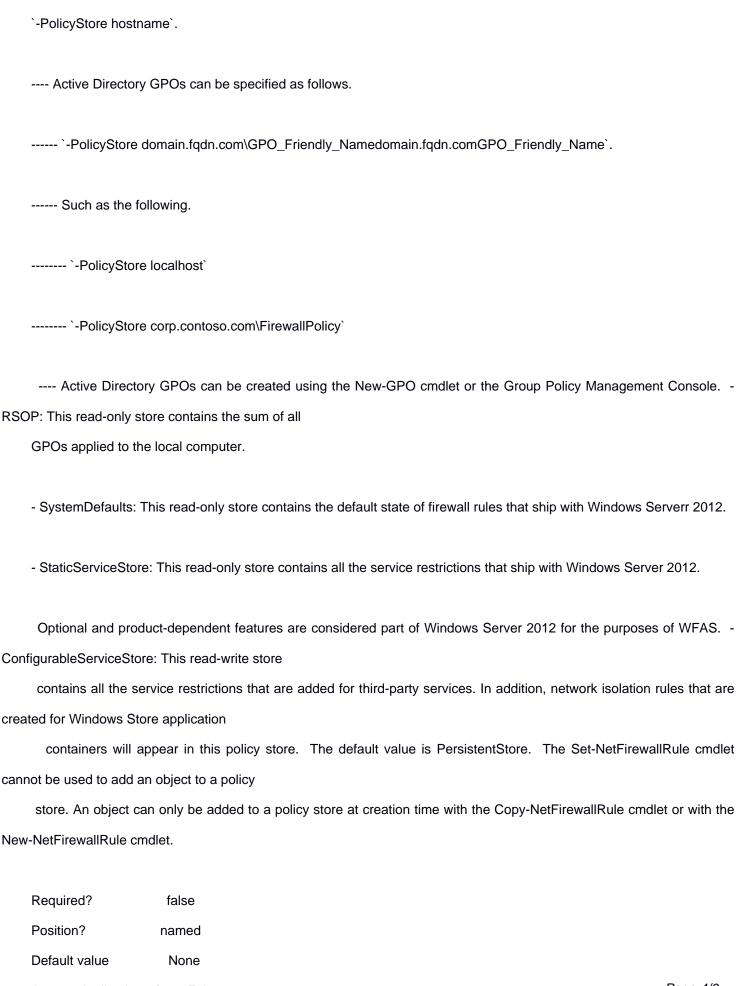
for this parameter are:

- PersistentStore: Sometimes called static rules, this store contains the persistent policy for the local computer. This policy is not from GPOs, and has been

created manually or programmatically (during application installation) on the computer. Rules created in this store are attached to the ActiveStore and activated

on the computer immediately. - ActiveStore: This store contains the currently active policy, which is the sum of all policy stores that apply to the computer.

This is the resultant set of policy (RSOP) for the local computer (the sum of all GPOs that apply to the computer), and the local stores (the PersistentStore, the

static Windows service hardening (WSH), and the configurable WSH). ---- GPOs are also policy stores. Computer GPOs can be specified as follows. ------

`-PolicyStore hostname`.

---- Active Directory GPOs can be specified as follows.

------ `-PolicyStore domain.fqdn.com\GPO_Friendly_Namedomain.fqdn.comGPO_Friendly_Name`.

------ Such as the following.

-------- `-PolicyStore localhost`

-------- `-PolicyStore corp.contoso.com\FirewallPolicy`

---- Active Directory GPOs can be created using the New-GPO cmdlet or the Group Policy Management Console. -RSOP: This read-only store contains the sum of all

GPOs applied to the local computer.

- SystemDefaults: This read-only store contains the default state of firewall rules that ship with Windows Serverr 2012.

- StaticServiceStore: This read-only store contains all the service restrictions that ship with Windows Server 2012.

Optional and product-dependent features are considered part of Windows Server 2012 for the purposes of WFAS. -ConfigurableServiceStore: This read-write store

contains all the service restrictions that are added for third-party services. In addition, network isolation rules that are created for Windows Store application

containers will appear in this policy store. The default value is PersistentStore. The Set-NetFirewallRule cmdlet cannot be used to add an object to a policy

store. An object can only be added to a policy store at creation time with the Copy-NetFirewallRule cmdlet or with the New-NetFirewallRule cmdlet.

Required?   false

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

  Microsoft.Management.Infrastructure.CimInstance#root\StandardCimv2\NetFirewallSetting

     The `Microsoft.Management.Infrastructure.CimInstance` object is a wrapper class that displays Windows Management Instrumentation (WMI) objects. The path after the

     pound sign (`#`) provides the namespace and class name for the underlying WMI object.

NOTES

------------------------- EXAMPLE 1 -------------------------

PS C:\>Get-NetFirewallSetting

This example gets the global firewall settings on the local computer.

------------------------- EXAMPLE 2 -------------------------

PS   C:\>Get-NetFirewallSetting   -PolicyStore   corp.contoso.com/gpo_name | Set-NetFirewallSetting   -Exemptions RouterDiscovery

This example modifies the global firewall settings of a particular GPO policy store. Running this cmdlet without specifying the policy store retrieves the persistent

store.

RELATED LINKS

Online   Version:

https://learn.microsoft.com/powershell/module/netsecurity/get-netfirewallsetting?view=windowsserver2022-ps&wt.mc_id=ps-gethelp

Copy-NetFirewallRule

New-NetFirewallRule

Open-NetGpo

Save-NetGpo

Set-NetFirewallSetting