



python



PowerShell

FPDF Library  
PDF generator

*Full credit is given to the above companies including the OS that this PDF file was generated!*

### ***PowerShell Get-Help on command 'Copy-NetIPsecRule'***

***PS C:\Users\wahid> Get-Help Copy-NetIPsecRule***

#### NAME

Copy-NetIPsecRule

#### SYNOPSIS

Copies an entire IPsec rule, and the associated filters, to the same or to a different policy store.

#### SYNTAX

```
Copy-NetIPsecRule [-All] [-AsJob] [-CimSession <CimSession[]>] [-Confirm]
[-GPOSession <String>] [-NewGPOSession <String>] [-NewName <String>]
[-NewPolicyStore <String>] [-PassThru] [-PolicyStore <String>] [-ThrottleLimit
<Int32>] [-TracePolicyStore] [-WhatIf] [<CommonParameters>]
```

```
Copy-NetIPsecRule [-AllowSetKey <Boolean[]>] [-AllowWatchKey <Boolean[]>]
[-AsJob] [-CimSession <CimSession[]>] [-Confirm] [-Description <String[]>]
[-DisplayGroup <String[]&;] [-Enabled {True | False}] [-EncryptedTunnelBypass
<Boolean[]>] [-ForwardPathLifetime <UInt32[]>] [-GPOSession <String>] [-Group
<String[]>] [-InboundSecurity {None | Request | Require}] [-KeyModule {Default
| IKEv1 | AuthIP | IKEv2}] [-Machine <String[]>] [-Mode {None | Tunnel |
Transport}] [-NewGPOSession <String>] [-NewName <String>] [-NewPolicyStore
```

<String>] [-OutboundSecurity {None | Request | Require}] [-PassThru] [-Phase1AuthSet <String[]>] [-Phase2AuthSet <String[]>] [-PolicyStore <String>] [-PolicyStoreSource <String[]>] [-PolicyStoreSourceType {None | Local | GroupPolicy | Dynamic | Generated | Hardcoded}] [-PrimaryStatus {Unknown | OK | Inactive | Error}] [-QuickModeCryptoSet <String[]>] [-RemoteTunnelHostname <String[]>] [-RequireAuthorization <Boolean[]>] [-Status <String[]>] [-ThrottleLimit <Int32>] [-TracePolicyStore] [-User <String[]>] [-WhatIf] [<CommonParameters>]

Copy-NetIPsecRule [-AsJob] -AssociatedNetFirewallAddressFilter <CimInstance> [-CimSession <CimSession[]>] [-Confirm] [-GPOSession <String>] [-NewGPOSession <String>] [-NewName <String>] [-NewPolicyStore <String>] [-PassThru] [-PolicyStore <String>] [-ThrottleLimit <Int32>] [-TracePolicyStore] [-WhatIf] [<CommonParameters>]

Copy-NetIPsecRule [-AsJob] -AssociatedNetFirewallInterfaceFilter <CimInstance> [-CimSession <CimSession[]>] [-Confirm] [-GPOSession <String>] [-NewGPOSession <String>] [-NewName <String>] [-NewPolicyStore <String>] [-PassThru] [-PolicyStore <String>] [-ThrottleLimit <Int32>] [-TracePolicyStore] [-WhatIf] [<CommonParameters>]

Copy-NetIPsecRule [-AsJob] -AssociatedNetFirewallInterfaceTypeFilter <CimInstance> [-CimSession <CimSession[]>] [-Confirm] [-GPOSession <String>] [-NewGPOSession <String>] [-NewName <String>] [-NewPolicyStore <String>] [-PassThru] [-PolicyStore <String>] [-ThrottleLimit <Int32>] [-TracePolicyStore] [-WhatIf] [<CommonParameters>]

Copy-NetIPsecRule [-AsJob] -AssociatedNetFirewallPortFilter <CimInstance> [-CimSession <CimSession[]>] [-Confirm] [-GPOSession <String>] [-NewGPOSession <String>] [-NewName <String>] [-NewPolicyStore <String>] [-PassThru] [-PolicyStore <String>] [-ThrottleLimit <Int32>] [-TracePolicyStore] [-WhatIf] [<CommonParameters>]

Copy-NetIPsecRule [-AsJob] -AssociatedNetFirewallProfile <CimInstance>  
[-CimSession <CimSession[]>] [-Confirm] [-GPOSession <String>] [-NewGPOSession  
<String>] [-NewName <String>] [-NewPolicyStore <String>] [-PassThru]  
[-PolicyStore <String>] [-ThrottleLimit <Int32>] [-TracePolicyStore] [-WhatIf]  
[<CommonParameters>]

Copy-NetIPsecRule [-AsJob] -AssociatedNetIPsecPhase1AuthSet <CimInstance>  
[-CimSession <CimSession[]>] [-Confirm] [-GPOSession <String>] [-NewGPOSession  
<String>] [-NewName <String>] [-NewPolicyStore <String>] [-PassThru]  
[-PolicyStore <String>] [-ThrottleLimit <Int32>] [-TracePolicyStore] [-WhatIf]  
[<CommonParameters>]

Copy-NetIPsecRule [-AsJob] -AssociatedNetIPsecPhase2AuthSet <CimInstance>  
[-CimSession <CimSession[]>] [-Confirm] [-GPOSession <String>] [-NewGPOSession  
<String>] [-NewName <String>] [-NewPolicyStore <String>] [-PassThru]  
[-PolicyStore <String>] [-ThrottleLimit <Int32>] [-TracePolicyStore] [-WhatIf]  
[<CommonParameters>]

Copy-NetIPsecRule [-AsJob] -AssociatedNetIPsecQuickModeCryptoSet <CimInstance>  
[-CimSession <CimSession[]>] [-Confirm] [-GPOSession <String>] [-NewGPOSession  
<String>] [-NewName <String>] [-NewPolicyStore <String>] [-PassThru]  
[-PolicyStore <String>] [-ThrottleLimit <Int32>] [-TracePolicyStore] [-WhatIf]  
[<CommonParameters>]

Copy-NetIPsecRule [-AsJob] [-CimSession <CimSession[]>] [-Confirm]  
-DisplayName <String[]> [-GPOSession <String>] [-NewGPOSession <String>]  
[-NewName <String>] [-NewPolicyStore <String>] [-PassThru] [-PolicyStore  
<String>] [-ThrottleLimit <Int32>] [-TracePolicyStore] [-WhatIf]  
[<CommonParameters>]

Copy-NetIPsecRule [-IPsecRuleName] <String[]> [-AsJob] [-CimSession  
<CimSession[]>] [-Confirm] [-GPOSession <String>] [-NewGPOSession <String>]  
[-NewName <String>] [-NewPolicyStore <String>] [-PassThru] [-PolicyStore

<String>] [-ThrottleLimit <Int32>] [-TracePolicyStore] [-WhatIf]

[<CommonParameters>]

Copy-NetIPsecRule [-AsJob] [-CimSession <CimSession[]>] [-Confirm]

-InputObject <CimInstance[]> [-NewGPOSession <String>] [-NewName <String>]

[-NewPolicyStore <String>] [-PassThru] [-ThrottleLimit <Int32>] [-WhatIf]

[<CommonParameters>]

## DESCRIPTION

The Copy-NetIPsecRule cmdlet copies an IPsec rule and the associated filters to a policy store, making a complete clone. When a new policy store is not specified, it is copied to the same policy store with a new name specified by the user.

This cmdlet gets one or more IPsec rules to be duplicated with the IPsecRuleName parameter (default), the DisplayName parameter, rule properties, or by associated filters or objects. The resulting queried rule is copied to a new policy store using the NewPolicyStore parameter, a new GPO session using the NewGPOSession parameter, or to the same policy store using the NewName parameter. Only one IPsec rule can be copied at a time when copying to the same policy store. This is because only a single IPsec rule can use the unique identifier, or name, specified by the NewName parameter.

When copying a rule to a new policy store, the unique name of the set is preserved. This means that if the same set is attempted to be copied twice, then an error is displayed for the second attempt indicating that the object already exists. To overwrite the target set, run the Remove-NetIPsecRule cmdlet first. If it is possible that the object may already exist, then specify the ErrorAction parameter to silently ignore these errors, instead of running the Remove-NetIPsecRule cmdlet.

When copying rules between different policy stores, the authentication and

cryptographic sets referenced in each rule must be copied separately. See the Copy-NetIPsecPhase1AuthSet, Copy-NetIPsecPhase2AuthSet, and Copy-NetIPsecQuickModeCryptoSet cmdlets for more information. When copying an IPsec rule that has associated authentication or cryptographic sets from GPO-A to GPO-B, the newly created authentication and cryptographic set fields of the rule will maintain the IPsecRuleName parameter values of the source. This is desirable because after the sets are copied separately, the sets will be associated with the newly copied rule.

## PARAMETERS

-All [<SwitchParameter>]

Indicates that all of the IPsec rules within the specified policy store are copied.

-AllowSetKey <Boolean[>]

Indicates that matching IPsec rules of the indicated value are copied. This parameter specifies that the IPsec rule allows trusted intermediaries to override keying material. If this parameter is set to True, then the trusted intermediaries are allowed to manipulate the cryptographic keying material used with an IPsec security association (SA). It is possible that when this parameter is True at both ends, the computer will perform arbitration through SA negotiation so that one end sets the key while the other end watches the key. See the AllowWatchKey parameter for more information. The default value is False. This parameter is supported on Windows Server 2012.

-AllowWatchKey <Boolean[>]

Indicates that matching IPsec rules of the indicated value are copied. This parameter specifies that the IPsec rule allows trusted intermediaries to provide notification of changes in keying material. If this parameter is set to True, then the trusted intermediaries are allowed to retrieve the cryptographic keying material associated with an IPsec security

association (SA), and to subscribe for notification of changes. The default value is False. This parameter is supported on Windows Server 2012.

**-AsJob [<SwitchParameter>]**

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

**-AssociatedNetFirewallAddressFilter <CimInstance>**

Gets the IPsec rules that are associated with the given address filter to be copied. A NetFirewallAddressFilter object represents the address conditions associated with a rule. See the Get-NetFirewallAddressFilter cmdlet for more information.

**-AssociatedNetFirewallInterfaceFilter <CimInstance>**

Gets the IPsec rules that are associated with the given interface filter to be copied. A NetFirewallInterfaceFilter object represents the interface conditions associated with a rule. See the Get-NetFirewallInterfaceFilter cmdlet for more information.

**-AssociatedNetFirewallInterfaceTypeFilter <CimInstance>**

Gets the IPsec rules that are associated with the given interface type filter to be copied. A NetFirewallInterfaceTypeFilter object represents the interface conditions associated with a rule. See the Get-NetFirewallInterfaceTypeFilter cmdlet for more information.

**-AssociatedNetFirewallPortFilter <CimInstance>**

Gets the IPsec rules that are associated with the given port filter to be copied. A NetFirewallPortFilter object represents the port conditions associated with a rule. See the Get-NetFirewallPortFilter cmdlet for more information.

**-AssociatedNetFirewallProfile <CimInstance>**

Gets the IPsec rules that are associated with the given firewall profile type to be copied. A NetFirewallProfile object represents the profile conditions associated with a rule. See the Get-NetFirewallProfile cmdlet for more information.

**-AssociatedNetIPsecPhase1AuthSet <CimInstance>**

Gets the IPsec rules that are associated with the given phase 1 authentication set to be copied. A NetIPsecPhase1AuthSet object represents the phase 1 authorization set conditions associated with an IPsec or main mode rule. This parameter sets the methods for main mode negotiation by describing the proposals for computer authentication. See the Get-NetIPsecPhase1AuthSet cmdlet for more information. Alternatively, the Phase1AuthSet parameter can be used for the same purpose, but does not allow the authentication set to be piped into the cmdlet and the set must be specified with the IPsecRuleName parameter.

**-AssociatedNetIPsecPhase2AuthSet <CimInstance>**

Gets the IPsec rules that are associated, via the pipeline, with the input phase 2 authentication set to be copied. A NetIPsecPhase1AuthSet object represents the phase 2 authorization set conditions associated with a rule. See the Get-NetIPsecPhase2AuthSet cmdlet for more information. Alternatively, the Phase2AuthSet parameter can be used for the same purpose, but does not allow the authentication set to be piped into the cmdlet and the set must be specified with the IPsecRuleName parameter.

**-AssociatedNetIPsecQuickModeCryptoSet <CimInstance>**

Gets the IPsec rules that are associated, via the pipeline, with the input quick mode cryptographic set to be copied. A NetIPsecQuickModeCryptoSet object represents a quick mode cryptographic set that contains cryptographic proposals. This parameter specifies parameters for the quick mode negotiation as well as dictating the cryptographic proposals that should be proposed during the exchange. This is only associated with IPsec rules. See the Get-NetIPsecQuickModeCryptoSet cmdlet for more information.

Alternatively, the QuickModeCryptoSet parameter can be used for the same purpose, but does not allow the cryptographic set to be piped into the cmdlet and the set must be specified with the IPsecRuleName parameter.

**-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.

**-Confirm [<SwitchParameter>]**

Prompts you for confirmation before running the cmdlet.

**-Description <String[]>**

Specifies that matching IPsec rules of the indicated description are copied. Wildcard characters are accepted. This parameter provides information about the IPsec rule. This parameter specifies a localized, user-facing description of the object.

**-DisplayGroup <String[]>**

Specifies that only matching firewall rules of the indicated group association are copied. Wildcard characters are accepted. The Group parameter specifies the source string for this parameter. If the value for this parameter is a localizable string, then the Group parameter contains an indirect string. Rule groups can be used to organize rules by influence and allows batch rule modifications. Using the Set-NetIPsecRule cmdlet, if the group name is specified for a set of rules or sets, then all of the rules or sets in that group receive the same set of modifications. It is good practice to specify the Group parameter value with a universal and world-ready indirect @FirewallAPI name. This parameter cannot be specified upon object creation using the New-NetIPsecRule cmdlet, but can be modified using dot-notation and the Set-NetIPsecRule cmdlet.



-DisplayName <String[]>

Specifies that only matching IPsec rules of the indicated display name are copied. Wildcard characters are accepted. Specifies the localized, user-facing name of the IPsec rule being created. When creating a rule this parameter is required. This parameter value is locale-dependent. If the object is not modified, this parameter value may change in certain circumstances. When writing scripts in multi-lingual environments, the IPsecRuleName parameter should be used instead, where the default value is a randomly assigned value. This parameter cannot be set to All.

-Enabled <Enabled[]>

Specifies that matching IPsec rules of the indicated state are copied. This parameter specifies that the rule object is administratively enabled or administratively disabled. The acceptable values for this parameter are:

- True: Specifies the rule is currently enabled.

- False: Specifies the rule is currently disabled.

A disabled rule will not actively modify computer behavior, but the management construct still exists on the computer so it can be re-enabled.

-EncryptedTunnelBypass <Boolean[]>

Indicates that matching IPsec rules of the specified value are copied. This parameter specifies the encapsulation state for network traffic sent to a tunnel end point that is already IPsec protected. If this parameter is set to True, then the network traffic sent to a tunnel end point that is already IPsec protected does not have to be encapsulated again. This option can improve network performance in the case where network traffic that is already end-to-end protected by other IPsec rules. The default value is False. This parameter is only supported on firstref\_server\_7 and Windows Server 2012.

**-ForwardPathLifetime <UInt32[]>**

Specifies that matching IPsec rules of the specified path lifetime value are copied. This parameter specifies the session key lifetime for an IPsec rule, in minutes. The acceptable values for this parameter are: 78 through 172799. The default value is 0 minutes. When managing a GPO, the default setting is NotConfigured. This parameter is case sensitive and NotConfigured can only be specified using dot-notation. This parameter is supported on Windows Server 2012.

**-GPOSession <String>**

Specifies the network GPO from which to retrieve the rules to be copied. This parameter is used in the same way as the PolicyStore parameter. When modifying GPOs in Windows PowerShell, 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.

**-Group <String[]>**

Specifies that only matching IPsec rules of the indicated group association are copied. Wildcard characters are accepted. This parameter specifies the source string for the DisplayGroup parameter. If the DisplayGroup parameter value is a localizable string, then this parameter contains an indirect string. Rule groups can be used to organize rules by influence and allows batch rule modifications. Using the Set-NetIPsecRule cmdlets, if the group name is specified for a set of rules or sets, then all of the rules or sets in that group receive the same set of modifications. It is good practice to specify this parameter value with a universal and world-ready indirect @FirewallAPI name. The DisplayGroup parameter cannot be specified upon object creation using the

New-NetIPsecRule cmdlet, but can be modified using dot-notation and the Set-NetIPsecRule cmdlet.

`-IPsecRuleName <String[]>`

Specifies that only matching IPsec rules of the indicated name are copied. Wildcard characters are accepted. This parameter acts just like a file name, in that only one rule with a given name may exist in a policy store at a time. During group policy processing and policy merge, rules that have the same name but come from multiple stores being merged, will overwrite one another so that only one exists. This overwriting behavior is desirable if the rules serve the same purpose. For instance, all of the firewall rules have specific names, so if an administrator can copy these rules to a GPO, and the rules will override the local versions on a local computer. GPOs can have precedence. So if an administrator has a different or more specific rule with the same name in a higher-precedence GPO, then it overrides other rules that exist. The default value is a randomly assigned value. When the defaults for main mode encryption need to be overridden, specify the customized parameters and set this parameter, making it the new default setting for encryption.

`-InboundSecurity <SecurityPolicy[]>`

Specifies that matching IPsec rules of the indicated security policy are copied. This parameter determines the degree of enforcement for security on inbound traffic. The acceptable values for this parameter are:

- None: No authentication is requested or required for connections that match the rule. It specifies that the local computer does not attempt authentication for any network connections that match this rule. This option is typically used to grant IPsec exemptions for network connections that do not need to be protected by IPsec, but would otherwise match other rules that could cause the connection to be dropped. - Request: Authentication is requested for connections that match the rule. The local computer attempts to authenticate any inbound network connections that

match this rule, but allows the connection if the authentication attempt is not successful. - Require: Authentication is required for connections that match the rule. If the authentication is not successful, then the inbound network traffic is discarded.

The default value is None. When the OutboundSecurity parameter is also specified, the following configurations are valid: InboundSecurity \ OutboundSecurity = None\None, Request\None, Request\Request, Require\Request, or Require\Require.

-InputObject < CimInstance[] >

Specifies the input object that is used in a pipeline command.

-KeyModule < KeyModule[] >

Specifies that matching IPsec rules of the indicated key module are copied. This parameter specifies which keying modules to negotiate. The acceptable values for this parameter are: Default, AuthIP, IKEv1, or IKEv2.

- Default: Equivalent to both IKEv1 and AuthIP. Required in order for the rule to be applied to computers running Windows versions prior to nextref\_server\_7. - AuthIP: Supported with phase 2 authentication.

- IKEv1: Supported with pre-shared key (PSK), Certificates, and Kerberos.

- IKEv2: Not supported with Kerberos, PSK, or NTLM.

The default value is Default. There are authentication and cryptographic methods that are only compatible with certain keying modules. This is a very advanced setting intended only for specific interoperability scenarios. Overriding this parameter value may result in traffic being sent in plain-text if the authorization and cryptographic settings are not supported by the keying modules. Windows versions prior to Windows Server 2012 only support the Default configuration.

-Machine <String[]>

Specifies that matching IPsec rules of the indicated computer accounts are copied. This parameter specifies that only network packets that are authenticated as incoming from or outgoing to a computer identified in the list of computer accounts (SID) match this rule. This parameter value is specified as an SDDL string.

-Mode <IPsecMode[]>

Specifies that matching IPsec rules of the indicated mode are copied. This parameter specifies the type of IPsec mode connection that the IPsec rule defines. The acceptable values for this parameter are: None, Transport, or Tunnel. The default value is Transport.

-NewGPOSession <String>

Specifies the new GPO session for one or more IPsec rules.

-NewName <String>

Specifies the new name for one or more IPsec rules.

-NewPolicyStore <String>

Specifies the policy store for one or more IPsec rules.

-OutboundSecurity <SecurityPolicy[]>

Specifies that matching IPsec rules of the indicated security policy are copied. This parameter determines the degree of enforcement for security on outbound traffic. The acceptable values for this parameter are:

- None: No authentication is requested or required for connections that match the rule. It specifies that the local computer does not attempt authentication for any network connections that match this rule. This option is typically used to grant IPsec exemptions for network connections that do not need to be protected by IPsec, but would otherwise match other

rules that could cause the connection to be dropped. - Request: Authentication is requested for connections that match the rule. The local computer attempts to authenticate any outbound network connections that match this rule, but allows the connection if the authentication attempt fails. - Require: Authentication is required for connections that match the rule. If the authentication is not successful, then the outbound network traffic is discarded.

The default value is None. When the InboundSecurity parameter is also specified, the following configurations are valid: InboundSecurity / OutboundSecurity = None\None, Request\None, Request\Request, Require\Request, or Require\Require.

#### -PassThru [<SwitchParameter>]

Returns an object representing the item with which you are working. By default, this cmdlet does not generate any output.

#### -Phase1AuthSet <String[]>

Gets the IPsec rules that are associated with the given phase 1 authentication set to be copied. This parameter specifies, by name, the phase 1 authentication set that is associated to the IPsec rule. A NetIPsecPhase1AuthSet object represents the phase 1 authentication set conditions associated with an IPsec or main mode rule. This parameter sets the methods for main mode negotiation by describing the proposals for computer authentication. See the Get-NetIPsecPhase1AuthSet cmdlet for more information. Alternatively, the AssociatedNetIPsecPhase1AuthSet parameter can be used for the same purpose, but is used to pipe the input set into the rule. When specifying authentication sets, the IPsecRuleName parameter value of the authentication set must be used. The object cannot be directly passed into this cmdlet. Each authentication set must be created in the policy store for the associated IPsec rule. If a particular set applies to multiple IPsec rules in different policy stores (GPOs), then the set must be duplicated for each of those stores (so that policies

can be updated without linking issues). See the Copy-NetFirewallRule, Copy-NetIPsecMainModeCryptoSet, Copy-NetIPsecMainModeRule, Copy-NetIPsecPhase1AuthSet, Copy-NetIPsecPhase2AuthSet, and Copy-NetIPsecQuickModeCryptoSet cmdlets and this cmdlet for more information.

#### -Phase2AuthSet <String[]>

Gets the IPsec rules that are associated with the given phase 2 authentication set to be copied. This parameter specifies, by name, the phase 2 authentication set that is associated to the IPsec rule. A NetIPsecPhase1AuthSet object represents the phase 1 authorization set conditions associated with an IPsec or main mode rule. This parameter sets the methods for main mode negotiation by describing the proposals for computer authentication. See the Get-NetIPsecPhase2AuthSet cmdlet for more information. Alternatively, the AssociatedNetIPsecPhase2AuthSet parameter can be used for the same purpose, but is used to pipe the input set into the rule. When specifying authentication sets, the IPsecRuleName parameter value of the authentication set must be used. The object cannot be directly passed into this cmdlet. Each authentication set must be created in the policy store for the associated IPsec rule. If a particular set applies to multiple IPsec rules in different policy stores (GPOs), the set must be duplicated for each of those stores (so that policies can be updated without linking issues). See the Copy-NetFirewallRule, Copy-NetIPsecMainModeCryptoSet, Copy-NetIPsecMainModeRule, Copy-NetIPsecPhase1AuthSet, Copy-NetIPsecPhase2AuthSet, and Copy-NetIPsecQuickModeCryptoSet cmdlets and this cmdlet for more information.

#### -PolicyStore <String>

Specifies the policy store from which to retrieve the rules to be copied. 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 Server 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-NetIPsecRule 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 this cmdlet or with the New-NetIPsecRule cmdlet.

**-PolicyStoreSource <String[]>**

Specifies that IPsec rules matching the indicated policy store source are copied. This parameter contains a path to the policy store where the rule originated if the object is retrieved from the ActiveStore with the TracePolicyStoreSource option set. This parameter value is automatically generated and should not be modified. The monitoring output from this parameter is not completely compatible with the PolicyStore parameter. This parameter value cannot always be passed into the PolicyStore parameter. Domain GPOs are one example in which this parameter contains only the GPO name, not the domain name.

**-PolicyStoreSourceType <PolicyStoreType[]>**

Specifies that IPsec rules that match the indicated policy store source type are copied. This parameter describes the type of policy store where the rule originated if the object is retrieved from the ActiveStore with the TracePolicyStoreSource option set. This parameter value is automatically generated and should not be modified. The acceptable values for this parameter are:

- Local: The object originates from the local store.

- GroupPolicy: The object originates from a GPO.

- Dynamic: The object originates from the local runtime state.

This policy store name is not valid for use in cmdlets, but may appear when monitoring active policy. - Generated: The object was generated automatically. This policy store name is not valid for use in cmdlets, but may appear when monitoring active policy. - Hardcoded: The object was hard-coded. This policy store name is not valid for use in cmdlets, but may appear when monitoring active policy.

-PrimaryStatus <PrimaryStatus[]>

Specifies that IPsec rules that match the indicated primary status are copied. This parameter specifies the overall status of the rule.

- OK: Specifies that the rule will work as specified.

- Degraded: Specifies that one or more parts of the rule will not be enforced.

- Error: Specifies that the computer is unable to use the rule at all.

See the Status and StatusCode fields of the object for more detailed status information.

-QuickModeCryptoSet <String[]>

Specifies that matching IPsec rules of the specified quick mode cryptographic set are copied. This parameter specifies the quick mode cryptographic set to be associated with the IPsec rule. A

NetIPsecMainModeCryptoSet object represents quick mode cryptographic conditions associated with an IPsec rule. This parameter sets the methods for quick mode negotiation by describing the proposals for encryption. See the New-NetIPsecQuickModeCryptoSet cmdlet for more information.

Alternatively, the AssociatedNetIPsecQuickModeCryptoSet parameter can be

used for the same purpose, but is used to pipe the input set into the rule. When specifying authentication sets, the IPsecRuleName parameter value of the authentication set must be used. The object cannot be directly passed into this cmdlet. Each authentication set must be created in the policy store for the associated IPsec rule. If a particular set applies to multiple IPsec rules in different policy stores (GPOs), the set must be duplicated for each of those stores (so that policies can be updated without linking issues). See the Copy-NetFirewallRule, Copy-NetIPsecMainModeCryptoSet, Copy-NetIPsecMainModeRule, Copy-NetIPsecPhase1AuthSet, Copy-NetIPsecPhase2AuthSet, and Copy-NetIPsecQuickModeCryptoSet cmdlets and this cmdlet for more information.

**-RemoteTunnelHostname <String[]>**

Specifies that matching IPsec rules of the specified second end point tunnel host name are copied. Specifies a fully qualified DNS name that resolves to a list of remote tunnel end points. This parameter is supported on Windows Server 2012. This parameter can only be used with multiple remote tunnel end points. Specifying this parameter prevents a non-asymmetric tunnel mode IPsec rule from being created. Rule creation will fail when a single remote tunnel end point and this parameter are specified, or when remote tunnel end point is Any and this parameter is specified.

**-RequireAuthorization <Boolean[]>**

Indicates that matching IPsec rules of the specified value are copied. Specifies the given value for an IPsec rule. If this parameter is set to True, then enforcement of authorization is allowed for end points. This parameter is supported on nextref\_server\_7 and Windows Server 2012.

**-Status <String[]>**

Specifies that IPsec rules that match the indicated status are copied. This parameter describes the status message for the specified status code

value. The status code is a numerical value that indicates any syntax, parsing, or runtime errors in the rule or set. This parameter value should not be modified.

**-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 PowerShell 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.

**-TracePolicyStore [<SwitchParameter>]**

Specifies that the name of the source GPO is queried and set to the PolicyStoreSource parameter value.

**-User <String[]>**

Specifies that matching IPsec rules of the indicated user accounts are copied. This parameter specifies that only network packets that are authenticated as incoming from or outgoing to a user identified in the list of user accounts match this rule. This parameter value is specified as an SDDL string.

**-WhatIf [<SwitchParameter>]**

Shows what would happen if the cmdlet runs. The cmdlet is not run.

**<CommonParameters>**

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see [about\\_CommonParameters \(https://go.microsoft.com/fwlink/?LinkID=113216\)](https://go.microsoft.com/fwlink/?LinkID=113216).

```
PS C:\>Copy-NetIPsecRule -DisplayName "IPsec Rule" -NewName "Alternate IPsec Rule"
```

This example copies an IPsec rule, found by specifying the localized name, to the current policy store under a new unique identifier.

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

```
PS C:\>Copy-NetIPsecRule -Group "Telnet Management" -Enabled False  
-PolicyStore domain.contoso.com\GPO_name -NewPolicyStore  
domain.contoso.com\new_gpo
```

This example copies a group of IPsec rules that are currently disabled to a new Policy Store.

----- EXAMPLE 3 -----

```
PS C:\>$nfwProfile = Get-NetFirewallProfile -Profile Domain -PolicyStore  
domain.contoso.com\GPO_name
```

```
PS C:\>Copy-NetIPsecRule -InputObject $nfwProfile -NewPolicyStore  
domain.example.com\new_gpo
```

This is an alternate way to perform the same using only the pipeline.

```
PS C:\>Get-NetFirewallProfile -Profile Domain -PolicyStore  
domain.contoso.com\GPO_name | Copy-NetIPsecRule -NewPolicyStore  
domain.example.com\new_gpo
```

This example copies all domain IPsec rules to a new policy store.

----- EXAMPLE 4 -----

```
PS C:\>$mMrule = Get-NetIPsecMainModeRule -DisplayName "Main Mode Rule: P1Auth  
+ Crypto" -PolicyStore domain.contoso.com\GPO_name
```

```
PS C:\>Copy-NetIPsecPhase1AuthSet -InputObject $mMrule -NewPolicyStore  
domain.contoso.com\new_GPO)
```

```
PS C:\>Copy-NetIPsecMainModeCryptoSet -InputObject $mMrule -NewPolicyStore  
domain.contoso.com\new_GPO)
```

```
PS C:\>Set-NetIPsecMainModeRule -InputObject $mMrule -Phase1AuthSet  
$copiedCryptoSet.Name
```

The following cmdlets accomplish the same task but take advantage of caching the GPO to apply the changes locally.

```
PS C:\>$mMrule = Get-NetIPsecMainModeRule -DisplayName "Main Mode Rule: P1Auth  
+ Crypto" -PolicyStore domain.contoso.com\GPO_name
```

```
PS C:\>$newGPO = Open-NetGPO -PolicyStore domain.contoso.com\new_GPO
```

```
PS C:\>Copy-NetIPsecPhase1AuthSet -InputObject $mMrule -GPOSession $newGPO
```

```
PS C:\>Copy-NetIPsecMainModeCryptoSet -InputObject $mMrule -GPOSession $newGPO
```

```
PS C:\>Copy-NetIPsecMainModeRule -InputObject $mMrule -GPOSession $newGPO
```

```
PS C:\>Save-NetGPO -GPOSession $newGPO
```

This example copies an entire IPsec main mode rule and the associated authentication and cryptographic sets to a new policy store. There is no need to link the newly copied sets to the newly copied rule since the set fields of the rule maintain the IPsecRuleName parameter value of the source.

#### REMARKS

To see the examples, type: "get-help Copy-NetIPsecRule -examples".

For more information, type: "get-help Copy-NetIPsecRule -detailed".

For technical information, type: "get-help Copy-NetIPsecRule -full".

For online help, type: "get-help Copy-NetIPsecRule -online"