We use optional cookies to improve your experience on our websites, such as through social media connections, and to display personalized advertising based on your online activity. If you reject optional cookies, only cookies necessary to provide you the services will be used. You may change your selection by clicking "Manage Cookies" at the bottom of the page. Privacy Statement Third-Party Cookies

Accept

Reject

Manage cookies

# Microsoft Ignite

Nov 19-22, 2024

Register now >



Learn

Discover V Product documentation V Development languages V

Sign in

Microsoft 365

Solutions and architecture V Apps and services V Training V Resources V

**Free Account** 

#### Version

Windows 11 and Windows Server 2022 **PowerShell** 

Q Search

400-0113C1161110011361 VE14001E33

#### Add-DnsClientNrptRule

Clear-DnsClientCache

Get-DnsClient

Get-DnsClientCache

Get-DnsClientDohServerAddress

Get-DnsClientGlobalSetting

Get-DnsClientNrptGlobal Get-DnsClientNrptPolicy

Get-DnsClientNrptRule

Get-DnsClientServerAddress

Register-DnsClient

Remove-DnsClientDohServerAddress

Remove-DnsClientNrptRule

Resolve-DnsName

Set-DnsClient

Set-DnsClientDohServerAddress

Set-DnsClientGlobalSetting

Set-DnsClientNrptGlobal

Set-DnsClientNrptRule

Set-DnsClientServerAddress

- > DnsServer
- > EventTracingManagement
- > FailoverClusters
- > FileServerResourceManager
- > GroupPolicy
- > HardwareCertification
- > HgsAttestation
- > HgsClient
- > HgsDiagnostics
- > HgsKeyProtection
- > HgsServer

Learn / Windows / PowerShell / DnsClient /

# Add-DnsClientNrptRule

Feedback Reference

Module: DnsClient

#### In this article

**Syntax** 

Description

**Examples** 

**Parameters** 

Show 3 more

Adds a rule to the NRPT.

# **Syntax**

PowerShell Copy Add-DnsClientNrptRule [-GpoName <String>] [-DANameServers <String[]>] [-DAIPsecRequired] [-DAIPsecEncryptionType <String>] [-DAProxyServerName <String>] [-DnsSecEnable] [-DnsSecIPsecRequired] [-DnsSecIPsecEncryptionType <String>] [-NameServers <String[]>] [-NameEncoding <String>] [-Namespace] <String[]> [-Server <String>] [-DAProxyType <String>] [-DnsSecValidationRequired] [-DAEnable] [-IPsecTrustAuthority <String>] [-Comment <String>] [-DisplayName <String>] [-PassThru] [-CimSession <CimSession[]>] [-ThrottleLimit <Int32>] [-AsJob] [-WhatIf] [-Confirm] [<CommonParameters>]

Download PDF

# **Description**

The Add-DnsClientNrptRule cmdlet adds a Name Resolution Policy Table (NRPT) rule for the specified namespace.

# **Examples**

## Example 1: Add an NRPT rule to a GPO

```
PowerShell

PS C:\> Add-DnsClientNrptRule -GpoName "TestGPO" -DANameServers "10.0.0.1" -DAIF
```

This command adds an NRPT rule in TestGPO on server host1.com for the namespace dnsnrpt.com.

## Example 2: Add an NRPT rule to configure a server

```
PowerShell

PS C:\> Add-DnsClientNrptRule -Namespace "pqr.com" -NameServers "10.0.0.1"
```

This command adds an NRPT rule that configures the server named 10.0.0.1 as a DNS server for the namespace pgr.com.

# Example 3: Add an NRPT rule to enable DNSSEC queries

```
PowerShell

PS C:\> Add-DnsClientNrptRule -Namespace "pqr.com" -DnsSecEnable
```

This command adds an NRPT rule that enables DNSSEC queries to be sent for the namespace pqr.com.

# Example 4: Add an NRPT rule to enable DNSSEC queries for a specified namespace

```
PowerShell

PS C:\> Add-DnsClientNrptRule -Namespace "pqr.com" -DnsSecEnable -NameServers "1
```

This command adds an NRPT rule that enables DNSSEC queries to be sent to DNS server named 10.0.0.1 for the namespace pqr.com.

# Example 5: Add an NRPT rule to send Punycode DNS queries

```
PowerShell

PS C:\> Add-DnsClientNrptRule -Namespace "pqr.com" -NameEncoding "Punycode" -Name

Name : {6a78d8d1-231d-4d1e-bc23-fb593e11a53d}

Version : 2

Namespace : {pqr.com}

IPsecCARestriction :
```

DirectAccessDnsServers DirectAccessEnabled : False DirectAccessProxyType DirectAccessProxyName DirectAccessQueryIPsecEncryption : DirectAccessQueryIPsecRequired : NameServers : 10.1.1.1 DnsSecEnabled : False DnsSecQueryIPsecEncryption : DnsSecQueryIPsecRequired DnsSecValidationRequired : Punycode NameEncoding DisplayName Comment

This command adds an NRPT rule that sends DNS queries encoded in Punycode to DNS server named 10.1.1.1 for the namespace pqr.com.

## **Parameters**

#### -AsJob

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

The cmdlet immediately returns an object that represents the job and then displays the command prompt. You can continue to work in the session while the job completes. To manage the job, use the \*-Job cmdlets. To get the job results, use the Receive-Job cmdlet.

For more information about Windows PowerShell background jobs, see about\_Jobs \( \text{\text{\text{\text{\text{\text{\text{\text{\text{\text{about}}}}}} \).

**Expand table** 

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

#### -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 or Get-CimSession or cmdlet. The default is the current session on the local computer.

**Expand table** 

Туре:	CimSession[]
Aliases:	Session
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	False
Accept wildcard characters:	False

#### -Comment

Stores administrator notes.

#### **Expand table**

Туре:	String
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True
Accept wildcard characters:	False

#### -Confirm

Prompts you for confirmation before running the cmdlet.

#### **Expand table**

Туре:	SwitchParameter
Aliases:	cf
Position:	Named
Default value:	False
Required:	False
Accept pipeline input:	False
Accept wildcard characters:	False

#### -DAEnable

Indicates the rule state for DirectAccess.

#### **Expand table**

Туре:	SwitchParameter
Aliases:	DirectAccessEnabled
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True
Accept wildcard characters:	False

#### -DAIPsecEncryptionType

Specifies the Internet Protocol security (IPsec) encryption setting for DirectAccess. The acceptable values for this parameter are:

- None
- Low
- Medium
- High

#### **Expand table**

Туре:	String
Aliases:	DirectAccessQueryIPSSECEncryption
Accepted values:	, None, Low, Medium, High
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True
Accept wildcard characters:	False

#### -DAIPsecRequired

Indicates that IPsec is required for DirectAccess.

#### **Expand table**

Туре:	SwitchParameter
Aliases:	DirectAccessQueryIPsecRequired
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True
Accept wildcard characters:	False

#### -DANameServers

Specifies an array of DNS servers to query when DirectAccess is enabled.

#### **Expand table**

Туре:	String[]
Aliases:	DirectAccessDnsServers
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True
Accept wildcard characters:	False

#### -DAProxyServerName

Specifies the proxy server to use when connecting to the Internet. This parameter is only applicable if the *DAProxyType* parameter is set to UseProxyName.

Acceptable formats are:

- hostname:port
- IPv4 address:port
- IPv6 address:port

Expand table	e
--------------	---

Туре:	String
Aliases:	DirectAccessProxyName
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True
Accept wildcard characters:	False

#### -DAProxyType

Specifies the proxy server type to be used when connecting to the Internet. The acceptable values for this parameter are:

- NoProxy
- UseDefault
- UseProxyName

#### **Expand table**

Туре:	String
Aliases:	DirectAccessProxyType
Accepted values:	, NoProxy, UseDefault, UseProxyName
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True
Accept wildcard characters:	False

#### -DisplayName

Specifies an optional friendly name for the NRPT rule.

#### **Expand table**

Туре:	String
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True
Accept wildcard characters:	False

#### -DnsSecEnable

Enables Domain Name System Security Extensions (DNSSEC) on the rule.

**Expand table** 

Type: SwitchParameter

Aliases:	DnsSecEnabled
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True
Accept wildcard characters:	False

#### -DnsSecIPsecEncryptionType

Specifies the IPsec tunnel encryption settings.

רח	Farman al	ء امامه
	Expand	table

Туре:	String
Aliases:	DnsSecQueryIPsecEncryption
Accepted values:	, None, Low, Medium, High
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True
Accept wildcard characters:	False

#### -DnsSecIPsecRequired

Indicates the DNS client must set up an IPsec connection to the DNS server.

#### Expand table

Туре:	SwitchParameter
Aliases:	DnsSecQueryIPsecRequired
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True
Accept wildcard characters:	False

#### -DnsSecValidationRequired

Indicates that DNSSEC validation is required.

### **Expand table**

Туре:	SwitchParameter
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True

Accept wildcard characters:	False	
'		

#### -GpoName

Specifies the name of the Group Policy Object (GPO).

- If this parameter and the *Server* parameter are specified, then the NRPT rule is added in the GPO of domain. The *Server* parameter specifies the domain controller (DC).
- If neither this parameter nor the *Server* parameter is specified, then the NRPT rule is added for local client computer.
- If this parameter is specified and the *Server* parameter is not specified, then the DC of the domain specified by this parameter value is found and NRPT rule is added to the GPO.
- If this parameter is not specified and the *Server* parameter is specified, then an error is displayed.

#### **Expand table**

Туре:	String
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True
Accept wildcard characters:	False

#### -IPsecTrustAuthority

Specifies the certification authority to validate the IPsec channel.

### **Expand table**

Туре:	String
Aliases:	IPsecCARestriction
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True
Accept wildcard characters:	False

#### -NameEncoding

Specifies the encoding format for host names in the DNS query. The acceptable values for this parameter are:

- Disable
- Utf8WithMapping
- Utf8WithoutMapping
- Punycode

**Expand table** 

Туре:	String
Accepted values:	Disable, Utf8WithMapping, Utf8WithoutMapping, Punycode

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

#### -NameServers

Specifies the DNS servers to which the DNS query is sent when DirectAccess is disabled.

63	Expand	table
( )	LAPana	tabic

Туре:	String[]
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True
Accept wildcard characters:	False

#### -Namespace

Specifies the DNS namespace.

#### **Expand table**

Туре:	String[]
Position:	1
Default value:	None
Required:	True
Accept pipeline input:	True
Accept wildcard characters:	False

#### -PassThru

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

### **Expand table**

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

#### -Server

Specifies the server hosting the GPO. This parameter is only applicable with the *GpoName* parameter.

Expand table

Туре:	String
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	True
Accept wildcard characters:	False

#### -ThrottleLimit

Specifies the maximum number of concurrent operations that can be established to run the cmdlet. If this parameter is omitted or a value of ø 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.

**Expand table** 

Туре:	Int32
Position:	Named
Default value:	None
Required:	False
Accept pipeline input:	False
Accept wildcard characters:	False

#### -WhatIf

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

**Expand table** 

Туре:	SwitchParameter
Aliases:	wi
Position:	Named
Default value:	False
Required:	False
Accept pipeline input:	False
Accept wildcard characters:	False

# **Inputs**

#### CimInstance

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.

## Outputs

#### **CimInstance**

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.

The DnsClientNrptRule object contains all of the properties of the DNS client NRPT rule.

## **Related Links**

- Get-DnsClientNrptGlobal
- Get-DnsClientNrptPolicy
- Get-DnsClientNrptRule
- Remove-DnsClientNrptRule
- Set-DnsClientNrptGlobal
- Set-DnsClientNrptRule

## **Feedback**

Provide product feedback ☑

