



python



PowerShell

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### **PowerShell Get-Help on command 'Add-VpnConnection'**

**PS C:\Users\wahid> Get-Help Add-VpnConnection**

#### **NAME**

Add-VpnConnection

#### **SYNOPSIS**

Adds a VPN connection to the Connection Manager phone book.

#### **SYNTAX**

```
Add-VpnConnection [-Name] <String> [[-UseWinlogonCredential]]  
[[[-EapConfigXmlStream] <XmlElement>] [-ServerAddress] <String> [[-TunnelType]  
{Pptp | L2tp | Sstp | Ikev2 | Automatic}] [[-EncryptionLevel] {NoEncryption |  
Optional | Required | Maximum | Custom}] [[-AuthenticationMethod] {Pap | Chap  
| MSChapv2 | Eap | MachineCertificate}] [[-SplitTunneling]]  
[[[-AllUserConnection]] [[-L2tpPsk] <String>] [[-RememberCredential]] [-AsJob]  
[-CimSession <CimSession[]>] [-Confirm] [-DnsSuffix <String>] [-Force]  
[-IdleDisconnectSeconds <UInt32>] [-MachineCertificateEKUFilter <String[]>]  
[-MachineCertificateIssuerFilter <X509Certificate2>] [-PassThru] [-ServerList  
<CimInstance[]>] [-ThrottleLimit <Int32>] [-WhatIf] [<CommonParameters>]
```

```
Add-VpnConnection [-Name] <String> [-PlugInApplicationID] <String>  
[-ServerAddress] <String> [[-SplitTunneling]] [[-RememberCredential]] [-AsJob]
```

```
[-CimSession <CimSession[]>] [-Confirm] [-CustomConfiguration <XmlElement>]
[-DnsSuffix <String>] [-Force] [-IdleDisconnectSeconds <UInt32>] [-PassThru]
[-ServerList <CimInstance[]>] [-ThrottleLimit <Int32>] [-WhatIf]
[<CommonParameters>]
```

## DESCRIPTION

The Add-VpnConnection cmdlet adds a VPN connection with the specified parameters to the Connection Manager phone book. If errors occur when you create the VPN profile, the cmdlet returns the error information.

## PARAMETERS

**-AllUserConnection** [<SwitchParameter>]

Indicates that the cmdlet adds the VPN connection to the global phone book entries.

**-AsJob** [<SwitchParameter>]

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

**-AuthenticationMethod** <String[]>

Specifies the authentication method to use for the VPN connection.

**-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/?LinkId=227967>) or [Get-CimSession](<https://go.microsoft.com/fwlink/?LinkId=227966>) cmdlet. The default is the current session on the local computer.

**-Confirm** [<SwitchParameter>]

Prompts you for confirmation before running the cmdlet.

**-CustomConfiguration <XmlDocument>**

Specifies an XML document that allows vendors to specify custom configuration information.

**-DnsSuffix <String>**

Specifies the DNS suffix of the VPN connection.

**-EapConfigXmlStream <XmlDocument>**

Specifies the contents of the EAP XML configuration file, which includes the EAP method ID.

**-EncryptionLevel <String>**

Specifies the encryption level for the VPN connection.

**-Force [<SwitchParameter>]**

Indicates that the pre-shared key (PSK) value is supplied over an insecure channel, if L2TP is used.

**-IdleDisconnectSeconds <UInt32>**

Specifies the time, in seconds, before an idle connection is closed.

**-L2tpPsk <String>**

Specifies the value of the PSK to be used for L2TP authentication. If this parameter is not specified, a certificate is used for L2TP.

**-MachineCertificateEKUFilter <String[]>**

Specifies an array of enhanced key usage (EKU) filters for Internet Key Exchange version 2 (IKEv2) machine certificate selection.

**-MachineCertificateIssuerFilter <X509Certificate2>**

Specifies the X509 certificate of the issuer filter for IKEv2 machine certificate selection.

**-Name <String>**

Specifies the name of this VPN connection profile.

**-PassThru [<SwitchParameter>]**

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

**-PlugInApplicationID <String>**

Specifies the identifier for a third party application.

**-RememberCredential [<SwitchParameter>]**

Indicates that the credentials supplied at the time of first successful connection are stored in the cache.

**-ServerAddress <String>**

Specifies the address of the remote VPN server to which the client connects. You can specify the address as a URL, an IPv4 address, or an IPv6 address.

**-ServerList <CimInstance[]>**

Specifies an array of VPN servers. The VPN client can connect to these servers.

**-SplitTunneling [<SwitchParameter>]**

Indicates that the cmdlet enables split tunneling for this VPN connection profile. When you enable split tunneling, traffic to destinations outside the intranet does not flow through the VPN tunnel. If you do not specify this parameter, split tunneling is disabled.

**-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.

-TunnelType <String>

Specifies the type of tunnel used for the VPN connection.

-UseWinlogonCredential [<SwitchParameter>]

Indicates that MSCHAPv2 or EAP MSCHAPv2 is used as the authentication method, and that Windows logon credentials are used automatically when connecting with this VPN connection profile.

-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>).

----- Example 1: Add a VPN connection -----

```
PS C:\> Add-VpnConnection -Name "Test1" -ServerAddress "10.1.1.1" -PassThru
```

Name	:	Test1
ServerAddress	:	10.1.1.1
AllUserConnection	:	False
Guid	:	{4B308E9B-C225-42CB-8158-307193429591}
TunnelType	:	Automatic
AuthenticationMethod	:	{MsChapv2}
EncryptionLevel	:	Required

```
L2tpIPsecAuth      : Certificate
UseWinlogonCredential : False
EapConfigXmlStream   :
ConnectionStatus     : Disconnected
NapState            : NotConnected
RememberCredential   : False
SplitTunneling       : False
```

This command adds a VPN connection named Test1 to the server with an IP address 10.1.1.1. By specifying the PassThru parameter, you can see the configuration of the VPN connection object.

Example 2: Add a VPN connection with an alternate authentication method

```
PS C:\> Add-VpnConnection -Name "Test3" -ServerAddress "10.1.1.1" -TunnelType
"Pptp" -EncryptionLevel "Required" -AuthenticationMethod MSChapv2
-UseWinlogonCredential -SplitTunneling -AllUserConnection -RememberCredential
-PassThru
```

```
Name          : Test3
ServerAddress  : 10.1.1.1
AllUserConnection : True
Guid          : {76746D4E-D72A-467D-A11F-3D4D9075F50D}
TunnelType    : Pptp
AuthenticationMethod : {MsChapv2}
EncryptionLevel : Required
L2tpIPsecAuth   :
UseWinlogonCredential : True
EapConfigXmlStream   :
ConnectionStatus     : Disconnected
NapState            : NotConnected
RememberCredential   : True
SplitTunneling       : True
```

This command adds a VPN connection named Test3 to the server with an IP address 10.1.1.1. This connection uses the MSCHAPv2 authentication method, as specified by the AuthenticationMethod parameter. Additional parameters specify that the connection:

- Uses the Windows logon credentials (the UseWinlogonCredential parameter)
- Uses split tunneling (the SplitTunneling parameter)
- Is stored in the global phone book (the AllUserConnection parameter)
- Caches the credentials used for the first successful connection (the RememberCredential parameter)

By specifying the PassThru parameter, you can see the configuration of the VPN connection object.

- Example 3: Add a VPN connection that uses EAP authentication -

```
PS C:\> Add-VpnConnection -Name "Test4" -ServerAddress "10.1.1.1" -TunnelType  
"L2tp" -EncryptionLevel "Required" -AuthenticationMethod Eap -SplitTunneling  
-AllUserConnection -L2tpPsk "password" -Force -RememberCredential -PassThru
```

```
Name      : Test4  
ServerAddress      : 10.1.1.1  
AllUserConnection    : True  
Guid      : {1D423FF3-E3D4-404A-B052-DB9130656D29}  
TunnelType      : L2tp  
AuthenticationMethod : {Eap}  
EncryptionLevel    : Required  
L2tpIPsecAuth     : Psk  
UseWinlogonCredential : False  
EapConfigXmlStream   : #document  
ConnectionStatus    : Disconnected  
NapState      : NotConnected  
RememberCredential  : True  
SplitTunneling     : True
```

This command adds a VPN connection named Test4 to the server with an IP address of 10.1.1.1. This connection uses the default EAP authentication method, as specified by the AuthenticationMethod parameter. The pre-shared key for the connection is specified by the L2tpPsk parameter. Additional parameters specify that the connection:

- Uses split tunneling (the SplitTunneling parameter)
- Is stored in the global phone book (the AllUserConnection parameter)
- Caches the credentials used for the first successful connection (the RememberCredential parameter)

By specifying the PassThru parameter, you can see the configuration of the VPN connection object.

Example 4: Add a VPN connection that uses a custom EAP authentication method

```
PS C:\> $A = New-EapConfiguration  
PS C:\> Add-VpnConnection -Name "Test5" -ServerAddress "10.1.1.1" -TunnelType  
"L2tp" -EncryptionLevel "Required" -AuthenticationMethod Eap -SplitTunneling  
-AllUserConnection -RememberCredential -EapConfigXmlStream  
$A.EapConfigXmlStream -PassThru
```

```
Name      : Test5  
ServerAddress      : 10.1.1.1  
AllUserConnection   : True  
Guid      : {CF9F624F-D7DF-48BA-BD4B-D4E34AE05148}  
TunnelType      : L2tp  
AuthenticationMethod : {Eap}  
EncryptionLevel    : Required  
L2tpIPsecAuth     : Certificate  
UseWinlogonCredential : False  
EapConfigXmlStream  : #document  
ConnectionStatus    : Disconnected  
NapState      : NotConnected  
RememberCredential  : True
```

```
SplitTunneling      : True
```

This set of commands adds a VPN connection using a custom EAP authentication method. For more information about custom EAP authentication methods, see the New-EapConfiguration cmdlet.

Example 5: Add a VPN connection that uses already generated EAP XML configuration

```
PS C:\> $EAPXml = Get-Content -Path C:\eap-config.xml  
PS C:\> Add-VpnConnection -Name "Test6" -ServerAddress "10.1.1.1" -TunnelType  
"L2tp" -EncryptionLevel "Required" -AuthenticationMethod Eap -SplitTunneling  
-AllUserConnection -RememberCredential -EapConfigXmlStream $EAPXml
```

This set of commands adds a VPN connection using an already generated EAP XML configuration. For more information about how to generate EAP XML configuration, see EAP Configuration (/windows/client-management/mdm/eap-configuration).

## REMARKS

To see the examples, type: "get-help Add-VpnConnection -examples".

For more information, type: "get-help Add-VpnConnection -detailed".

For technical information, type: "get-help Add-VpnConnection -full".

For online help, type: "get-help Add-VpnConnection -online"