



python



PowerShell

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PowerShell Get-Help on command 'New-EapConfiguration'

PS C:\Users\wahid> Get-Help New-EapConfiguration

NAME

New-EapConfiguration

SYNOPSIS

Generates an XML file with the specified EAP configuration.

SYNTAX

```
New-EapConfiguration [-Peap] [[-VerifyServerIdentity]]  
[[-TunneledEapAuthMethod] <XmlDocument>] [-AsJob] [-CimSession <CimSession[]>]  
[-Confirm] [-EnableNap] [-FastReconnect <Boolean>] [-ThrottleLimit <Int32>]  
[-WhatIf] [<CommonParameters>]
```

```
New-EapConfiguration [-Tls] [[-VerifyServerIdentity]] [-AsJob] [-CimSession  
<CimSession[]>] [-Confirm] [-ThrottleLimit <Int32>] [-UserCertificate]  
[-WhatIf] [<CommonParameters>]
```

```
New-EapConfiguration [-Ttls] [[-TunneledEapAuthMethod] <XmlDocument>] [-AsJob]  
[-CimSession <CimSession[]>] [-Confirm] [-ThrottleLimit <Int32>]  
[-TunneledNonEapAuthMethod {Pap | Chap | MSChap | MSChapv2}]  
[-UseWinlogonCredential] [-WhatIf] [<CommonParameters>]
```

New-EapConfiguration [-AsJob] [-CimSession <CimSession[]>] [-Confirm]
[-ThrottleLimit <Int32>] [-UseWinlogonCredential] [-WhatIf]
[<CommonParameters>]

DESCRIPTION

The New-EapConfiguration cmdlet creates an XML file with the specified EAP configuration. You use this cmdlet to create the EAP XML configuration file for EAP authentication that is then used by the Set-VpnConnection cmdlet or the Add-VpnConnection cmdlet. If errors happen during the generation of the XML file, the error information is returned.

PARAMETERS

-AsJob [<SwitchParameter>]

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

-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.

-EnableNap [<SwitchParameter>]

Indicates that the cmdlet enables Network Access Protection (NAP) for PEAP.

-FastReconnect <Boolean>

Specifies whether to enable FastReconnect in the current PEAP configuration. Specify either \$True or \$False.

-Peap [<SwitchParameter>]

Indicates that PEAP is used as the authentication method.

-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.

-Tls [<SwitchParameter>]

Indicates that EAP-TLS, either smart card based or user certificate based, is used as the authentication method.

-Ttls [<SwitchParameter>]

Indicates that TTLS is used as the authentication method.

-TunneledEapAuthMethod <XmlDocument>

Specifies the configuration XML for tunneled EAP, EAP-TTLS, or PEAP authentication.

-TunneledNonEapAuthMethod <String>

Specifies the simple EAP-TTLS client authentication methods. The acceptable values for this parameter are:

- Pap

- Chap

- MSChap

- MSCHApv2

-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 the VPN connection profile.

-UserCertificate [<SwitchParameter>]

Indicates that a user certificate is used for authentication. This parameter is used with EAP-TLS. If this parameter is not specified, a smart card authentication is used.

-VerifyServerIdentity [<SwitchParameter>]

Indicates that server identity validation is performed for the VPN connection. This parameter is used with PEAP, and EAP-TLS with tunneled EAP client authentication.

-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).

----- Example 1: Create a default EAP configuration object -----

```
PS C:\> $A = New-EapConfiguration
```

This command creates a default EAP configuration object, and stores it in the

variable named \$A. You can use the XML configuration object stored in the variable when you create a VPN connection or change the configuration of a VPN connection.

--- Example 2: Create a customized EAP configuration object ---

```
PS C:\> $A = New-EapConfiguration -UseWinlogonCredential
```

This command creates an EAP configuration object, customized by the UseWinlogonCredential parameter, and stores it in the variable named \$A. By specifying the UseWinlogonCredential parameter, the EAP configuration object is configured to use MSCHAPv2 as the authentication method, and that Windows logon credentials are used automatically when connecting with the VPN connection profile.

See VPN authentication options

(/windows/security/identity-protection/vpn/vpn-authentication)and Add connectivity profiles

(/windows/configuration/wcd/wcd-connectivityprofiles#vpn-1)to learn more about VPN authentication methods.

- Example 3: Create a TLS customized EAP configuration object -

```
PS C:\> $A = New-EapConfiguration -Tls -VerifyServerIdentity -UserCertificate
```

This command creates a customized EAP configuration object and stores it in the variable named \$A. The EAP configuration object is customized by specifying the following parameters:

- The Tls parameter, which indicates that this configuration object uses EAP-TLS - The VerifyServerIdentity parameter, which indicates that the identity of the server to which the client connects is validated - The UserCertificate parameter, which indicates that the EAP-TLS authentication method uses a user certificate.

- Example 4: Create a TTLS customized EAP configuration object -

```
PS C:\> $A = New-EapConfiguration -Ttls
```

This command creates an EAP configuration object, customized by the Ttls parameter to use the TTLS authentication method. The configuration object is stored in the variable named \$A.

Example 5: Create a TTLS EAP configuration object with MSCHAPv2 as the client authentication method

```
PS C:\> $A = New-EapConfiguration -Ttls -TunneledNonEapAuthMethod "MSChapv2"  
-UseWinlogonCredential
```

This command creates a new EAP configuration object and stores it in the variable named \$A. The EAP configuration object is customized by specifying the following parameters:

- The Ttls parameter, which indicates that this configuration object uses TTLS as the authentication method
- The TunneledNonEapAuthMethod parameter with the MSChapv2 value, which specifies that MSCHAPv2 is used as the specific client authentication method
- The UseWinlogonCredential parameter, which indicates that Windows logon credentials are used automatically when connecting with the VPN connection profile that uses this EAP configuration object.

Example 6: Create an EAP configuration object and use it as input

This command creates an EAP configuration object configured to use an EAP-TLS authentication method and to verify the server identity. The configuration object is stored in a variable named \$B.

```
PS C:\>$B = New-EapConfiguration -Tls -VerifyServerIdentity
```

This command creates an EAP configuration object configured to use the TTLS authentication method, and specifies the *TunneledEapAuthMethod* parameter to use the EapConfigXmlStream created by the first EAP configuration object as the tunnel EAP authentication method.

```
PS C:\>$A = New-EapConfiguration -Ttls -TunneledEapAuthMethod  
$B.EapConfigXmlStream
```

This set of commands creates an EAP configuration object customized with a TTLS authentication method which uses EAP-TLS as the tunneled client authentication method.

Example 7: Create an EAP configuration object that uses PEAP authentication

```
PS C:\> $A = New-EapConfiguration -Peap
```

This command creates an EAP configuration object customized by the Peap parameter to use the PEAP authentication method. The configuration object is stored in a variable named \$A.

Example 8: Create a customized EAP configuration object and use it as input

This command creates the EAP configuration object and stores it in the variable named \$B. The EAP configuration object is customized to use the TLS authentication method by the *Tls* parameter, and configured to verify the identity of the server by the *VerifyServerIdentity* parameter. This command implicitly configures a smart card to be used for authentication.

```
PS C:\>$B = New-EapConfiguration -Tls -VerifyServerIdentity
```

This command uses the *EapConfigXmlStream* method of the EAP configuration object created in the previous command to specify the value for the *TunneledEapAuthMethod* parameter. This command also specifies that PEAP is the authentication method, as specified by the *Peap* parameter; that NAP is enabled for PEAP, as specified by the *EnableNap* parameter; and that *FastReconnect* is enabled, as specified by the *FastReconnect* parameter.

```
PS C:\>$a = New-EapConfiguration -Peap -EnableNap -FastReconnect $True  
-VerifyServerIdentity -TunneledEapAuthMethod $b.EapConfigXmlStream
```

This set of commands creates an EAP configuration object customized with the TLS authentication method, and then uses its EapConfigXmlStream object as the

tunneled authentication method.

REMARKS

To see the examples, type: "get-help New-EapConfiguration -examples".

For more information, type: "get-help New-EapConfiguration -detailed".

For technical information, type: "get-help New-EapConfiguration -full".

For online help, type: "get-help New-EapConfiguration -online"