L2TP Over IPSEC VPN - Split Tunneling

X support.zyxel.eu/hc/en-us/articles/360001121480

When connecting an L2TP tunnel with a Windows client, by default, all internet traffic will go through this tunnel. To spare bandwidth and therefore keep the internet traffic out of the L2TP tunnel follow the guide below.

On Windows PCs, we need to uncheck "**Use default gateway on remote network"** and add routing on CMD. Please follow the steps below.

You can implement the split tunnel configuration by following the steps below.

1. Right Click on your network connection icon in your taskbar and click on **"Open Network & Internet settings"**:



2. In the next window, click on "Change adapter options":

← Settings	- 🗆 X
යි Home	Status
Find a setting ρ	Network status
Network & Internet	□— Ū — ⊕
🔁 Status	Ethernet 2 zyeu.zyxel.eu
<i>i</i> ∕‰ Wi-Fi	You're connected to the Internet
문 Ethernet	metered connection or change other properties.
ଙ୍ଗ Dial-up	Change connection properties
% VPN	Show available networks
ත්ත Airplane mode	Change your network settings
⁽⁽ ր) Mobile hotspot	Change adapter options
🕒 Data usage	 View network adapters and change connection settings.
Proxy	For the networks you connect to, decide what you want to share.
	Network troubleshooter Diagnose and fix network problems.

3. Right-click the VPN connection adapter and click "Properties"



- 4. Switch to Networking-Tab, select "Internet Protocol Version 4 (TCP/IPv4)" and click "Properties"
- 5. In "Internet Protocol Version 4 (TCP/IPv4) Properties", click "Advanced"

EU L	2TP VPN Prope	erties						
General	Options Sec	urity Networki	ing Sharing					
This co	onnection uses t	he following iter	ns:					
	Internet Protoc	ol Version 6 (TC	CP/IPv6)					
	File and Protoc	ol Version 4 (TC Sharing for Mic	:P/IPv4) rosoft Network	s				
	 Client for Microsoft Networks 							
	Install			montion				
	rinstali	Uninsid		ropenies				
Desc	ription							
Tran wide	smission Contro area network p	I Protocol/Interr rotocol that pro	net Protocol. Th vides communi	ne default cation				
acro	ss diverse interc	connected netw	orks.					

Internet Protocol Version 4 (TCP/IPv4) Properties							
General							
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.							
Obtain an IP address automatically	y						
O Use the following IP address:							
IP address:							
Obtain DNS server address autom Use the following DNS server add Preferred DNS server.	natically Iresses:						
Alternate DNS server:	· · ·						
	Advanced						
	OK Cancel						

6. In "Advanced TCP/IP Settings" "IP Settings"-tab, uncheck "Use default gateway on remote network".

Advanced TCP/IP Settings	Х
IP Settings DNS WINS	
This checkbox only applies when you are connected to a local network and a dial-up network simultaneously. When checked, data that cannot be sent on the local network is forwarded to the dial-up network.	
Automatic metric	
OK Canc	el

7. Create route(s) based on your needs for your VPN connection in PowerShell.

Example with 192.168.1.0/24 as remote subnet and "Zyxel VPN" as VPN connection name:

Add-VpnConnectionRoute -ConnectionName "Zyxel VPN" -DestinationPrefix "192.168.1.0/24" -PassThru



You have now successfully activated split tunnelling on the VPN connection and also add an additional route through the VPN.

Copyright © 2021 - Zyxel Support Campus EMEA. All Rights Reserved..