DFL-210, DFL-800, DFL-1600 How To Setup PPTP VPN Between Windows PPTP Client and the Firewall.

This setup example uses the following network settings:



Firewall Setup

Step 1. Log into the Firewall by opening Internet Explorer and typing the LAN address of the Firewall. In our example we are using 192.168.1.1. Enter Username and Password which you specified during the initial setup of the Firewall.

Step 2. In the menu on the left side of the screen select Objects > Address Book > Interface Addresses. Under the InterfaceAddresses menu click on Add > IP address.

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i System Coljects Coljects	An address folde	r can be used to group related address of	ojects for better overview.
InterfaceAddresses			Edit the settings for this object
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and Routing	PPTP-Server-IPAdd	ress 192,168,1,2	
IDP / IPS User Authentication	🦞 wan_br	0.0.0.0	Broadcast address for interface wan.
S Traffic Management	🗟 wan_dns1	0.0.0.0	Primary DNS server for interface wan.
	🖓 wan_dns2	0.0.0.0	Secondary DNS server for interface wan.
	🗟 wan_gw	0.0.0.0	Default gateway for interface
	wan ip	0.0.0.0	IPAddress of interface wan
		0.0.0/0	The network on interface you

Under Name type "PPTP-Server-IPAddress".

Under IP Address enter 192.168.1.2 (This is the IP address that the PPTP Client will use as a gateway to the internal network. It can be any IP as soon as it is within the range of the addresses used on your private LAN and not conflicting with any IP addresses on your LAN).

Click on OK when done.

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PL-210 Image: System Image	PPTP-Server-IPAddress General User Authentication Image: Constraint of the server of	* host, network or range. 2 16 50 8", "192 168 30.7, 192 168 30.11",

Step 3. Add another IP address.

Under Name enter "PPTP-IP-Range".

Under IP Address enter 192.168.1.200–192.168.1.250 (this is the range of IP addresses the PPTP VPN clients will get when they connect). Note that these addresses should be in the same subnet as the LAN subnet (Only when the firewall has Firmware 2.12 or later, early versions please update to the latest). Click on OK when done.

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General		1 3
Use :	an IP4 Address item to define a name for a specific IP4 host, network or range.	
Name:	PPTP-IP-range	
IP Address:	192.168.1.200-192.168.1.250 e.g: "172.16.50.8", "192.168.30.7, 192.1	68.30.11", "192.168.7.0/24" and "172.16.25.10-
Comment	, IS	<u>5</u>
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		-
		OK Cancel

Step 4. Go to User Authentication > Local User Databases. Click on Add > Local User Database.



Under Name type "PPTPserver". Click on OK.

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Step 5. Click on Add > User.



Enter in a Username (this is the username the client will be using to connect via VPN), in our example we used "D-Link".

Then enter a password and confirm it. Click on OK when done. You can add several users if necessary.

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Step 6. Go to Interfaces > PPTP/L2TP Servers. Click on Add > PPTP/L2TP Server.

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Under Name enter "PPTP-tunnel".

Under Inner IP Address select "PPTP-Server-IPAddress" (this is the one created earlier in Step 2). Under Tunnel Protocol select "PPTP".

Under Outer Interface Filter select "WAN" (if your Firewall is set with PPPoE on the WAN port, select "Any"). Under Server IP select "WAN_IP" (if your Firewall is set with PPPoE on the WAN port, select "ip_wan").

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Click on the "PPP Parameters" tab.

Under IP Pool make sure the "PPTP-IP-Range" option is selected (see Step 3). Click on OK.



Step 7. Go to User Authentication > User Authentication Rules. Click on Add > UserAuthRule.

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Under Name enter "PPTP-Auth".

Under Agent select "PPP".

Under Authentication Source select "Local".

Under Interface select "PPTP-Tunnel".

Under Originator IP select "all-nets".

Under Terminator IP select "wan_ip" (if your Firewall is set with PPPoE on the WAN port, select "all-nets" or "ip_wan").

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Click on the Log Settings tab and tick "Enable logging".

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Click on the Authentication Options tab. Under Local User DB select "PPTPserver" (see Step 4). Click on OK when done.

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Step 8. Go to Rules > IP Rules. Click on Add > IP Rule.



Under Name enter "PPTP-Allow". Under Action select "Allow". Under Services select "all_servicess". Under Address Filter: Set Source Interface to "PPTP-Tunnel" and Source Network to "PPTP-IP-Range". Set Destination Interface to "LAN" and Destination Network to "lannet".

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		Source	Destination		
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	Network:	PPTP-IP-Range	✓ lannet	~	
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Click on Log Setting tab and enable logging. Click on OK when done. Step 9. Save the new configuration. In the top menu bar click on Configuration and select "Save and Activate".

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a meriaces a Routing ≩ DP / PS ⊈ User Authentication ⊗ Traffic Management	Model: DFL-210 System Time: 2007-10-26 00-19-33 Uptime: 0 days, 00.45 46 Configuration: Version 2 212.00.44-1877 Apr.27 22007 Last Restart: Unknown reason (shukdown txf is empty) IDP Signatures: 1589 Signatures Last Quotade 2000-04-06 07.18:07	CPULoad: 0% RAN: 3 / 1/28 MB Connections: 2 / 12000 IPaec 0 / 100 PPP: 0 / 100 VLAN: 0 / 8 Rules: 5 / 500
	CPU load over the past 24 hours	State table usage over the past 24 hours
	50%	10
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Click on OK to confirm the new settings activation:

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C DFL-210 C	Save Configuration Are you sure you want to save the configuration? Are you sure you want to save the configuration? An administrator needs to log in within 30 seconds to verify the new configuration. Otherwise the unit will assume to out, and revert to its previous configuration. Click here to edit the configuration verification timeout.	hat you accidentally locked yourse	If

Wait 15 seconds for the Firewall to apply the new settings.

Windows PPTP Client Setup

To setup your remote client for PPTP VPN connection you can use Windows built-in PPTP client. We will use Windows XP as an example.

Go to Start > Control Panel > Network Connections.



Click on Create New Connection. Follow the prompts in the New Connection Wizard.



Select the "Connect to the network at my workplace" option. Click Next.

New Connection Wizard			
Network Connection Type What do you want to do?	Ś		
Connect to the Internet Connect to the Internet so you can brow	ise the Web and read email.		
Connect to the network at my workplace			
Connect to a business network (using dial-up or VPN) so you can work from home, a field office, or another location.			
Set up an advanced connection	O Set up an advanced connection		
Connect directly to another computer using your serial, parallel, or infrared port, or set up this computer so that other computers can connect to it.			
	< <u>B</u> ack <u>N</u> ext > Cancel		

Select the "Virtual Private Network connection" option. Click Next.

New Connection Wizard
Network Connection How do you want to connect to the network at your workplace?
Create the following connection: • Dial-up connection Connect using a modem and a regular phone line or an Integrated Services Digital Network (ISDN) phone line. • <u>Virtual Private Network connection</u> Connect to the network using a virtual private network (VPN) connection over the Internet.
< <u>B</u> ack <u>N</u> ext > Cancel

Give the connection a name, e.g. My PPTP Connection. Click Next.

New Connection Wizard
Connection Name Specify a name for this connection to your workplace.
Type a name for this connection in the following box. Company N <u>a</u> me
My PPTP Connection
For example, you could type the name of your workplace or the name of a server you will connect to.
< <u>B</u> ack <u>N</u> ext> Cancel

Select "Do not dial the initial connection option". Click Next.

New Connection Wizard	
Public Network Windows car make sure the public network is connected first.	Ŋ
Windows can automatically dial the initial connection to the Internet or other public network, before establishing the virtual connection.	
Automatically dat this initial connection:	
<pre></pre>	el

On the VPN Server Selection page under "Host name or IP address" enter the public IP address that the remote VPN Firewall is getting from the ISP. If you have got a router or a modem with NAT in front of the VPN firewall, use the public IP address on the modem's WAN port. Note that the router/modem will need to support VPN passthrough. Click Next.

New Connection Wizard
VPN Server Selection What is the name or address of the VPN server?
Type the host name or Internet Protocol (IP) address of the computer to which you are connecting. <u>H</u> ost name or IP address (for example, microsoft.com or 157.54.0.1):
202.129.109.84
<u>≺Back</u> Next≻ Cancel

Continue with the Connection Wizard and click on Finish when done.

To establish a VPN connection: make sure you have access to the Internet. Make sure the modem or the router you are using to connect to the Internet supports VPN passthrough. Make sure that the range of IP addresses (subnet) you are using on this LAN is different from the range used on remote LAN (e.g. if remote LAN is using 192.168.1.x, you can not use 192.168.1.x on your LAN).

Double-click on the PPTP connection icon that you created earlier and enter the username and password as it was set in the VPN Firewall (see Step 5 of the Firewall Setup).

Click on Connect. After verifying username and password your computer should establish a PPTP connection.

Connect My P	PTP Connection 🔹 💽 🔀		
C			
<u>U</u> ser name:	D-LINK		
<u>P</u> assword:	•••••		
<u>Save this user name and password for the following users:</u>			
 Me only Anyone who uses this computer 			
<u>C</u> onnect	Cancel Properties Help		

Please note that with its default settings a PPTP connection in Windows is used as remote gateway for all traffic. Hence you may lose the ability to browse the Internet sites when the PPTP connection is established. To avoid this problem do the following:

Open your PPTP connection dialog. Click on the Properties button. Select the Networking tab.

My PPTP Connection Properties			
General Options Security Networking Advanced			
Typ <u>e</u> of VPN:			
Automatic 💌			
<u>S</u> ettings			
This connection uses the following items:			
 ✓ S — Internet Protocol (TCP/IP) ✓ OS Packet Scheduler ✓ ● File and Printer Sharing for Microsoft Networks ✓ ● Client for Microsoft Networks 			
Install Uninstall Properties			
Description			
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.			
OK Cancel			

Highlight the Internet Protocol (TCP/IP) and click on Properties. Then click on the Advanced... button. Deselect the "Use default gateway on remote network" option. Click on OK in each window to apply the setting. Reconnect your PPTP connection.

Advanced TCP/IP Settings	? 🔀
General 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.	
Use default gateway on remote network	
OK Car	ncel

Notes

In order to connect to shared resources via a VPN tunnel you can map remote computers' drives and folders by opening Windows Explorer and going to Tools > Map Network Drive (you need to specify the IP address of the computer on remote network and the name of the shared folder):

Map Network Drive			
	Windows can help you connect to a shared network folder and assign a drive letter to the connection so that you can access the folder using My Computer. Specify the drive letter for the connection and the folder that you want to connect to:		
	<u>D</u> rive:	Z:	~
	F <u>o</u> lder:	\\192.168.1.20\Shared Do	Browse
		Example: \\server\share	
	Reconnect at logon		
	Connect using a <u>different user name</u> .		
		Sign up for online storage or o network server.	<u>connect to a</u>
		< Back Finish	Cancel

Alternatively you can do Search > Computers or People > Computer on Network > specify the IP address of the computer you are trying to connect to.

If you do not see computers in My Network Places or My Network Neighbourhood you may need to enable NetBIOS over TCP/IP in Windows.

Note that firewall/antivirus software installed on your or remote computer may stop you from accessing remote network.