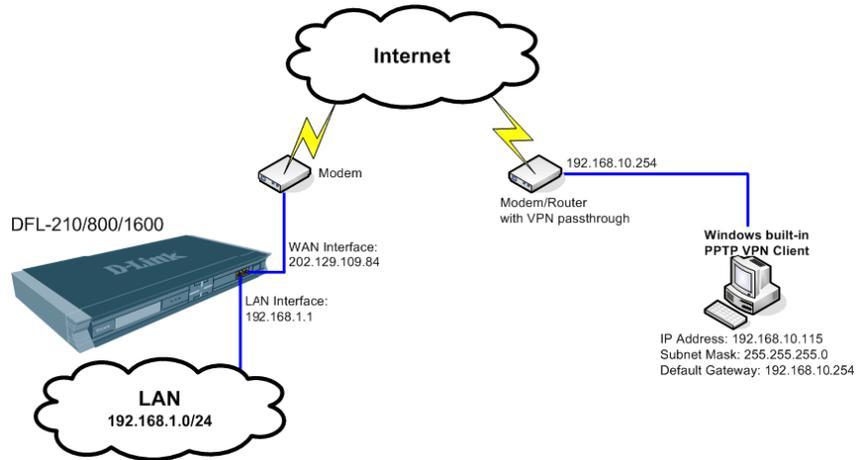


DFL-210, DFL-800, DFL-1600 How To Setup PPTP VPN Between Windows PPTP Client and the Firewall.

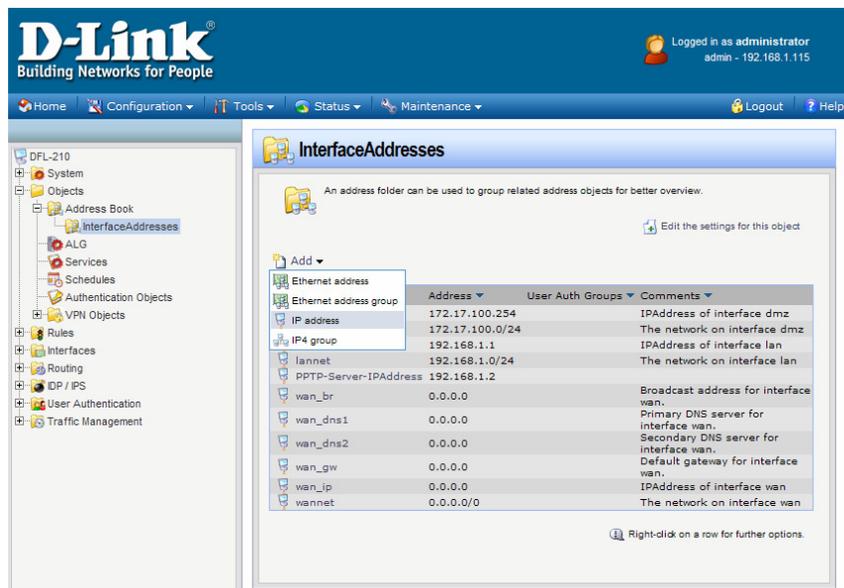
This setup example uses the following network settings:



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.

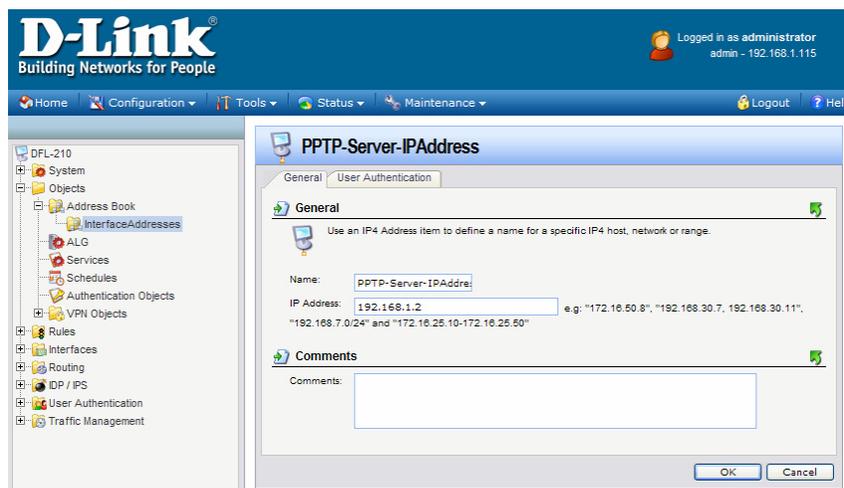
Step 2. In the menu on the left side of the screen select Objects > Address Book > Interface Addresses. Under the InterfaceAddresses menu click on Add > IP address.



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.



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.

IP address

General | User Authentication

General

Use an IP4 Address item to define a name for a specific IP4 host, network or range.

Name:

IP Address: e.g. "172.16.50.8", "192.168.30.7, 192.168.30.11", "192.168.7.0/24" and "172.16.25.10-172.16.25.50"

Comments

Comments:

OK Cancel

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

D-Link
Building Networks for People

Logged in as administrator
admin - 192.168.1.115

Home Configuration Tools Status Maintenance Logout Help

DFL-210
System
Objects
Rules
Interfaces
Routing
DP / IPS
User Authentication
Local User Databases
AdminUsers
External User Databases
Accounting Servers
User Authentication Rules
Traffic Management

Local User Databases

Manage the local user databases and user accounts used for authentication purposes.

Add
Local User Database

Name	Comments
AdminUsers	

Right-click on a row for further options.

Under Name type "PPTPserver". Click on OK.

D-Link
Building Networks for People

Logged in as administrator
admin - 192.168.1.115

Home Configuration Tools Status Maintenance Logout Help

DFL-210
System
Objects
Rules
Interfaces
Routing
DP / IPS
User Authentication
Local User Databases
AdminUsers
External User Databases
Accounting Servers
User Authentication Rules
Traffic Management

Local User Database

General

A local user database contains user accounts used for authentication purposes.

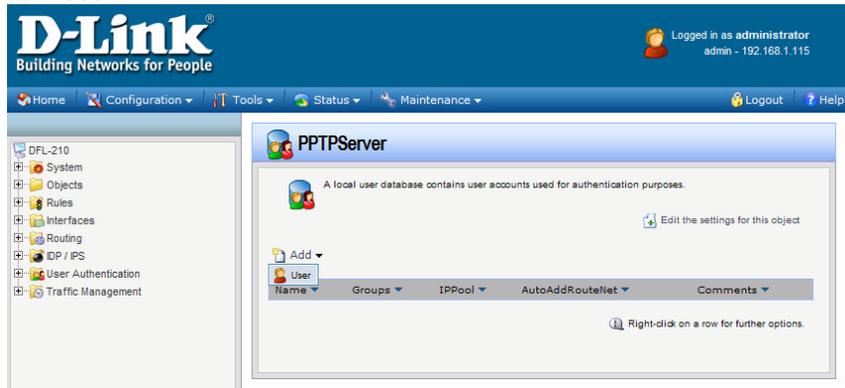
Name:

Comments

Comments:

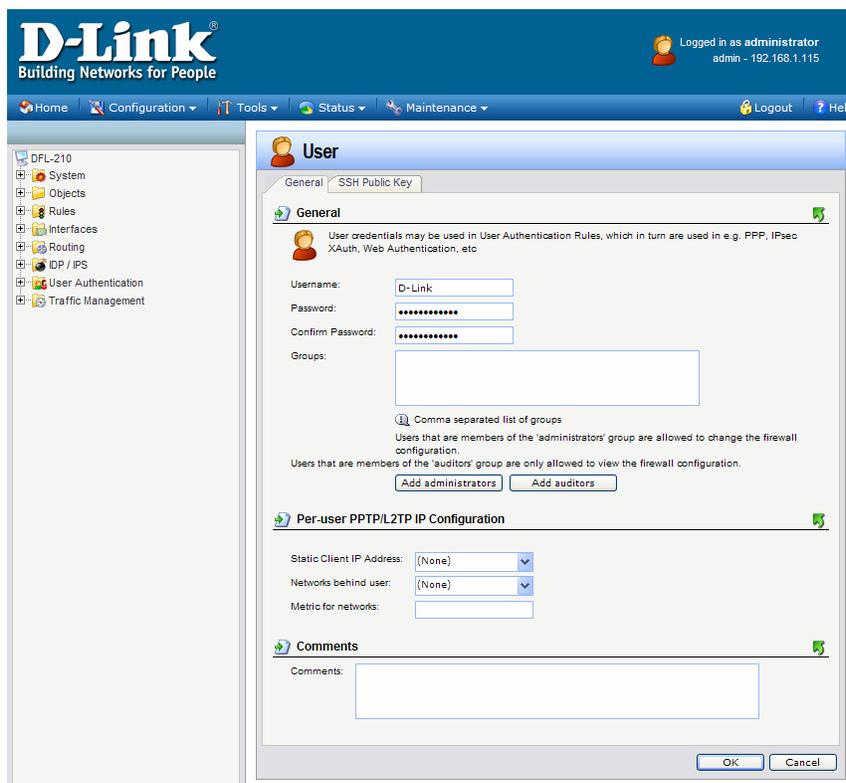
OK Cancel

Step 5. Click on Add > User.

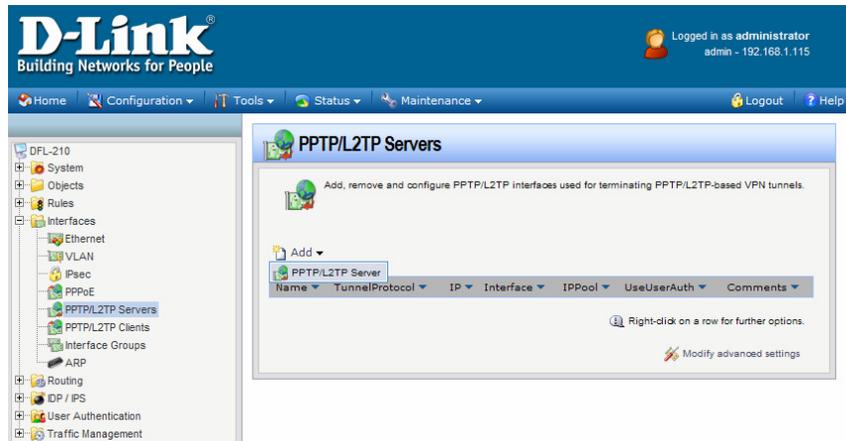


Enter in a Username (this is the username the client will be using to connect via VPN), in our example we used "D-Link".

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



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



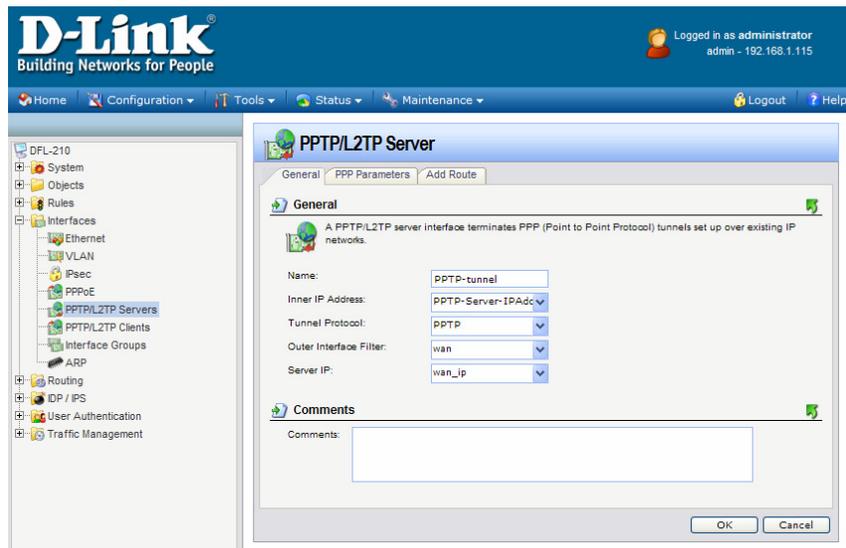
Under Name enter "PPTP-tunnel".

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

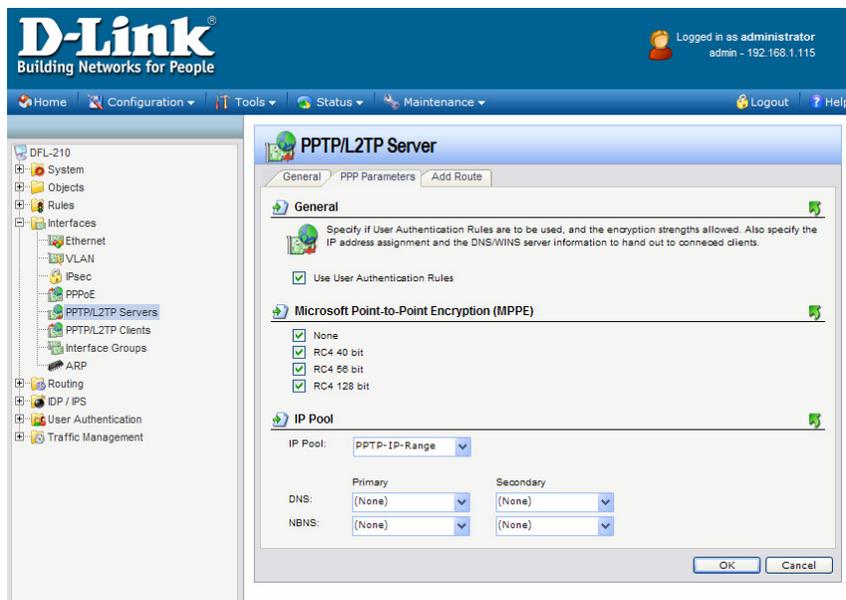
Under Tunnel Protocol select "PPTP".

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

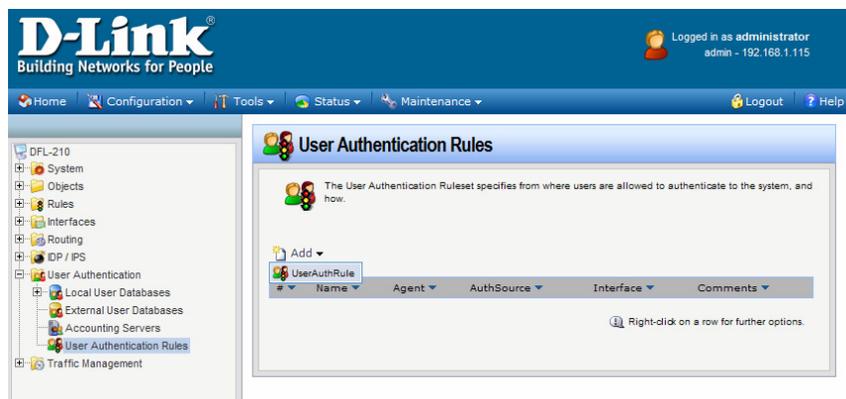
Under Server IP select "WAN_IP" (if your Firewall is set with PPPoE on the WAN port, select "ip_wan").



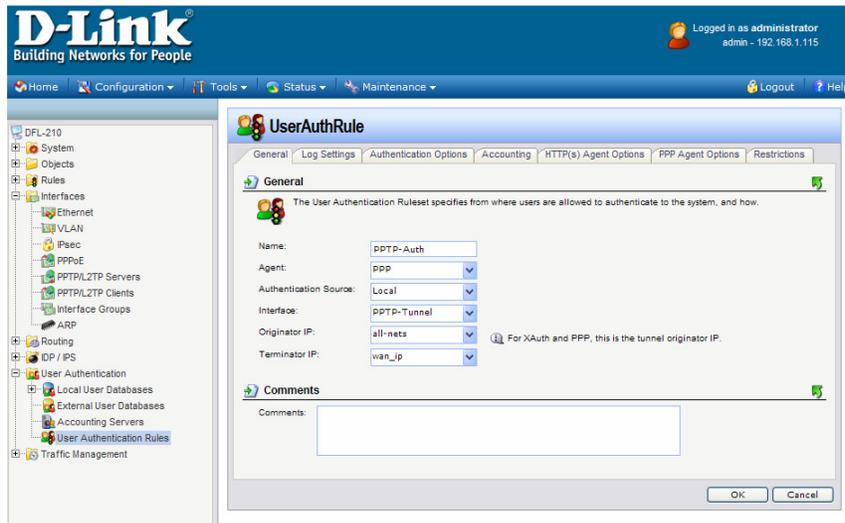
Click on the “PPP Parameters” tab.
Under IP Pool make sure the “PPTP-IP-Range” option is selected (see Step 3). Click on OK.



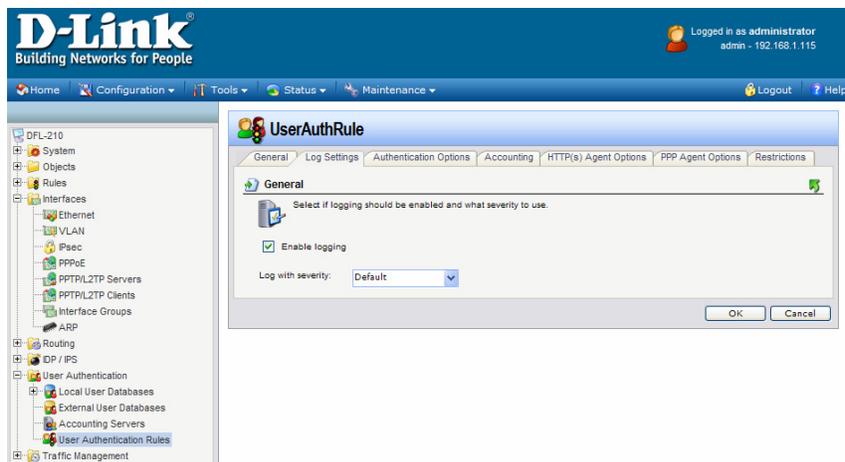
Step 7. Go to User Authentication > User Authentication Rules. Click on Add > UserAuthRule.



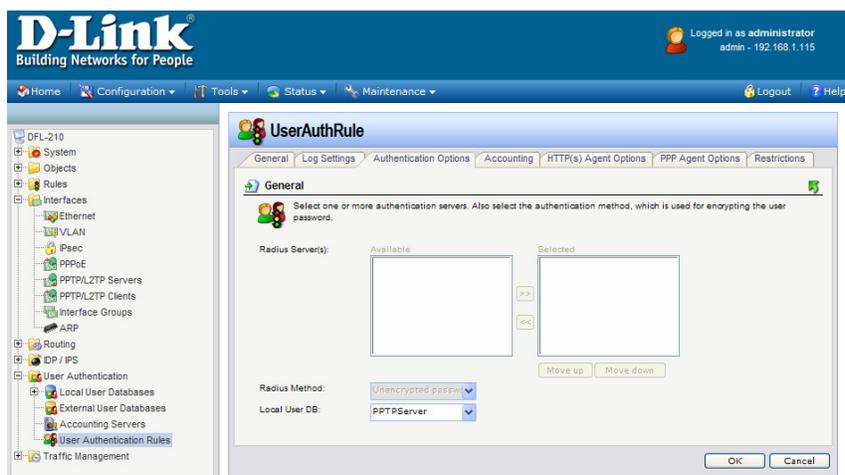
Under Name enter “PPTP-Auth”.
Under Agent select “PPP”.
Under Authentication Source select “Local”.
Under Interface select “PPTP-Tunnel”.
Under Originator IP select “all-nets”.
Under Terminator IP select “wan_ip” (if your Firewall is set with PPPoE on the WAN port, select “all-nets” or “ip_wan”).



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



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



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



Under Name enter “PPTP-Allow”.

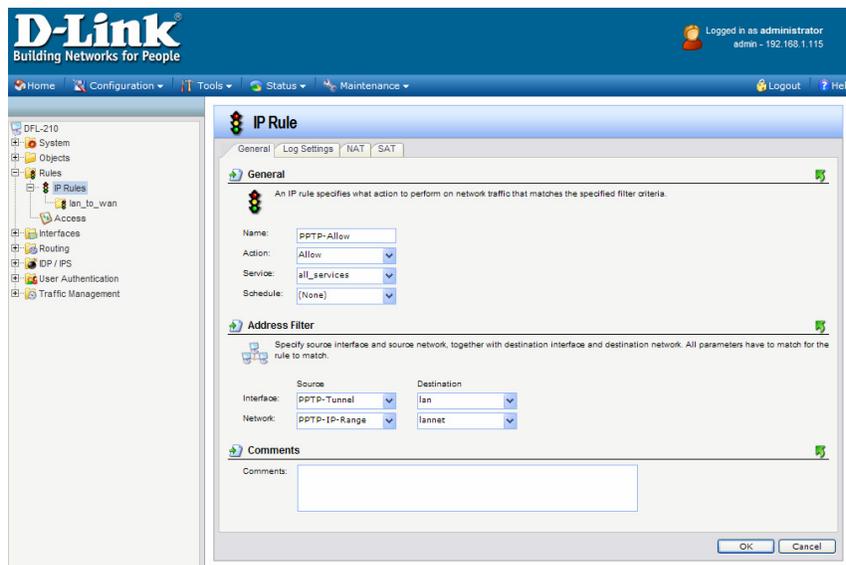
Under Action select “Allow”.

Under Services select “all_services”.

Under Address Filter:

Set Source Interface to “PPTP-Tunnel” and Source Network to “PPTP-IP-Range”.

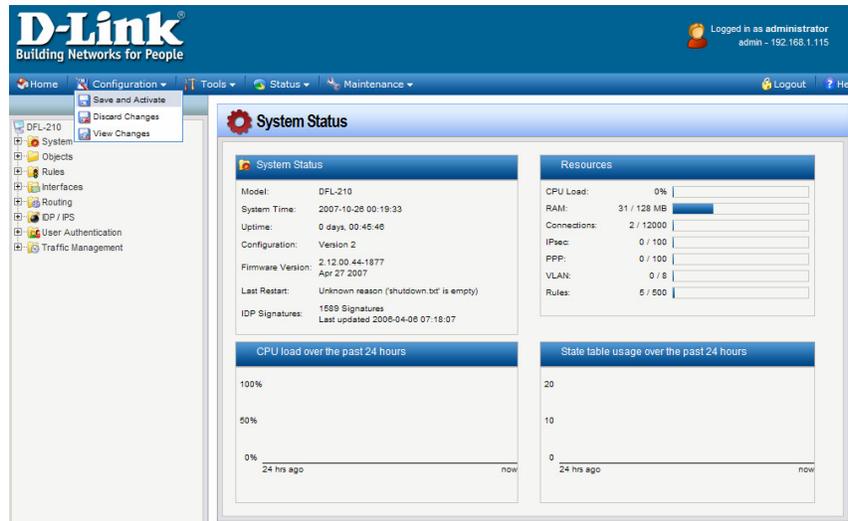
Set Destination Interface to “LAN” and Destination Network to “lannet”.



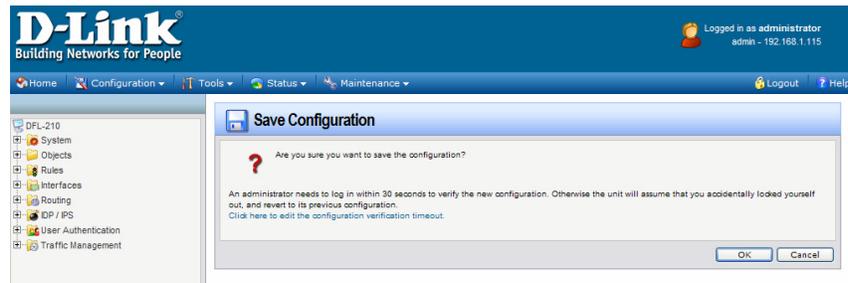
Click on Log Setting tab and enable logging.

Click on OK when done.

Step 9. Save the new configuration. In the top menu bar click on Configuration and select “Save and Activate”.



Click on OK to confirm the new settings activation:

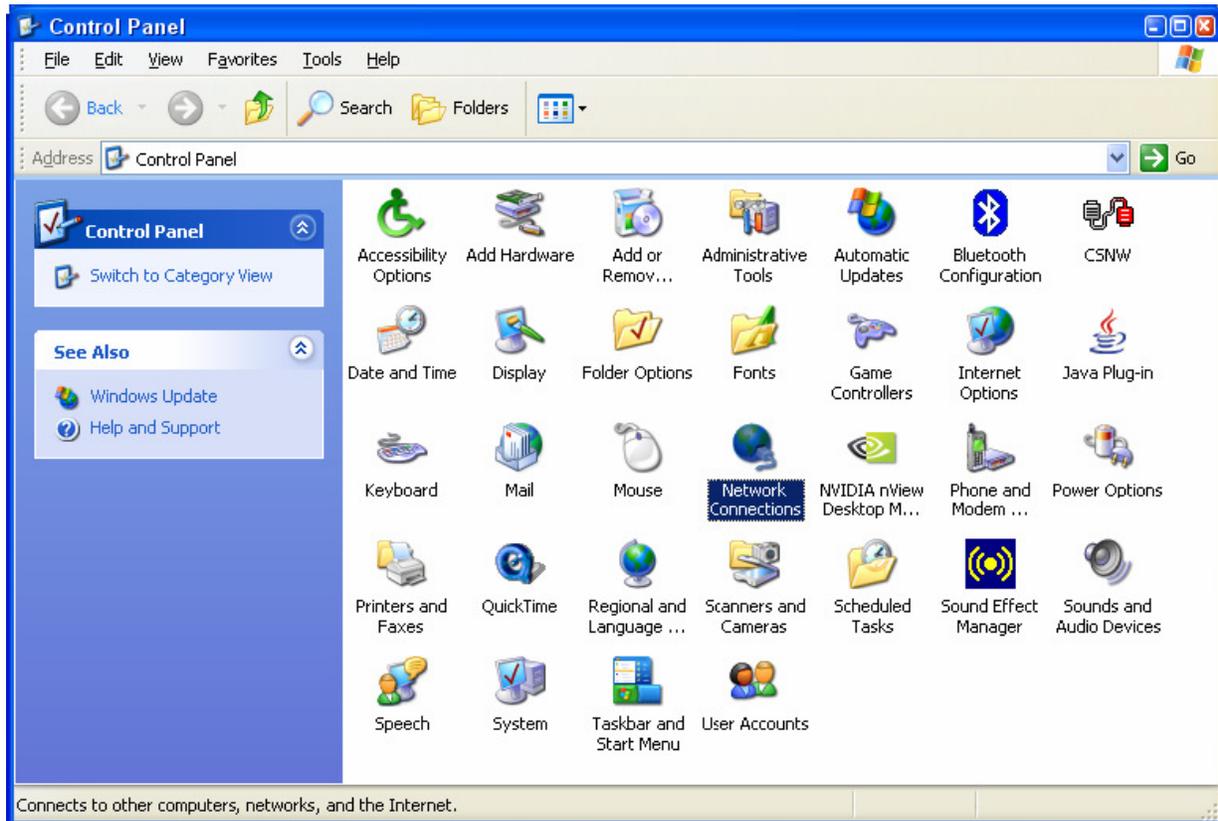


Wait 15 seconds for the Firewall to apply the new settings.

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.

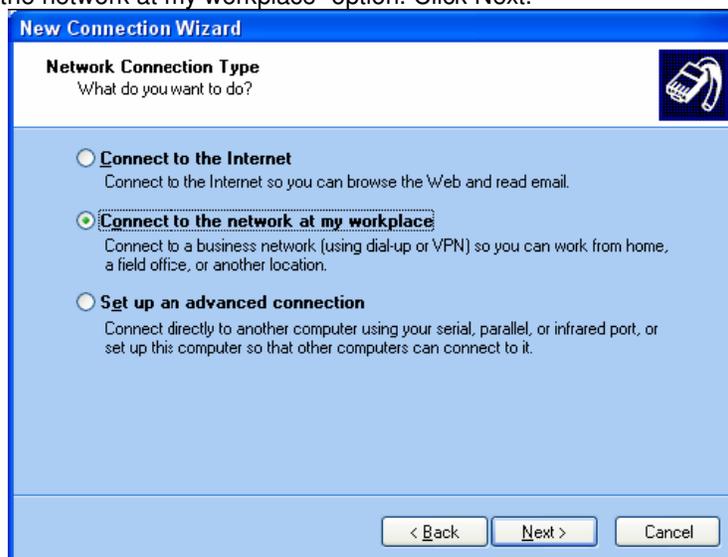
Go to Start > Control Panel > Network Connections.



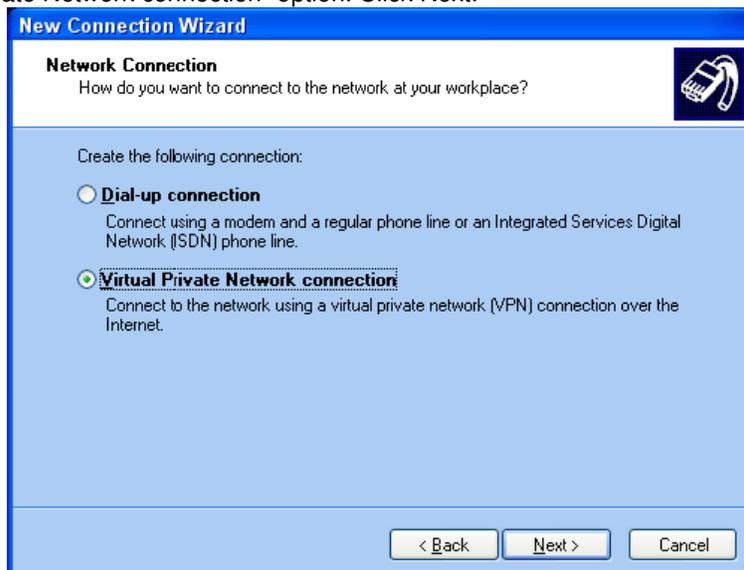
Click on Create New Connection. Follow the prompts in the New Connection Wizard.



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



Select the “Virtual Private Network connection” option. Click Next.



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.

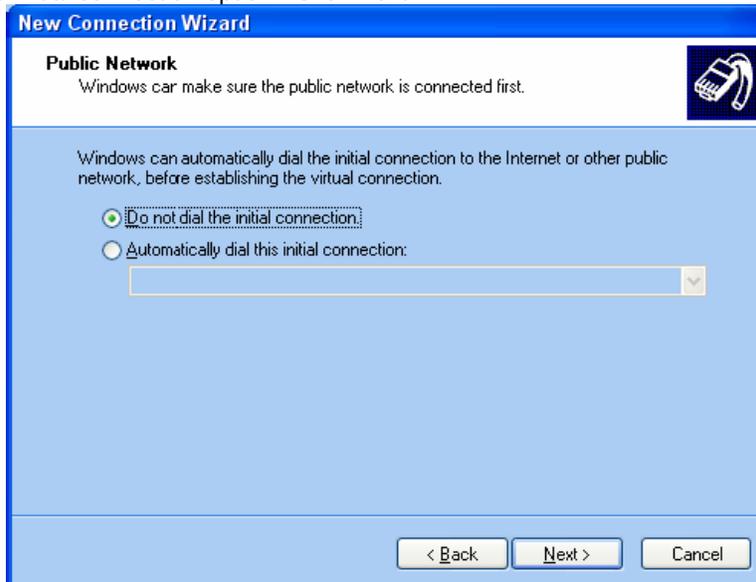
Company Name

My PPTP Connection

For example, you could type the name of your workplace or the name of a server you will connect to.

< Back Next > Cancel

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



New Connection Wizard

Public Network
Windows can make sure the public network is connected first.

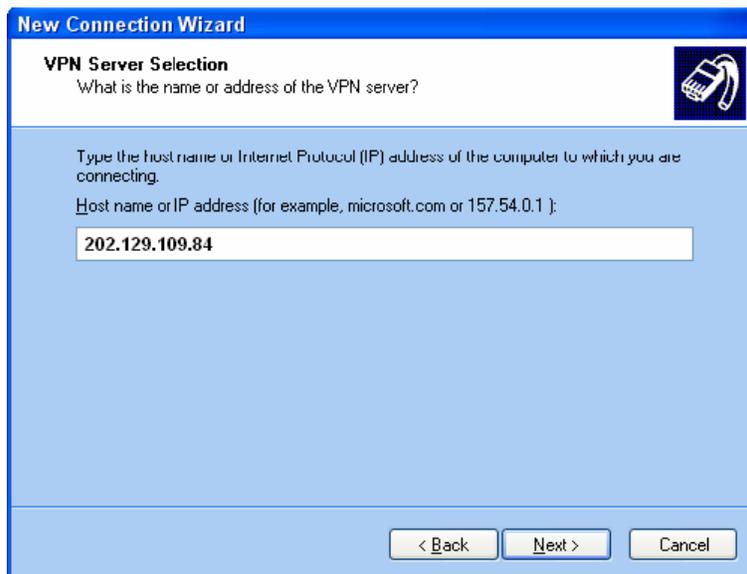
Windows can automatically dial the initial connection to the Internet or other public network, before establishing the virtual connection.

Do not dial the initial connection.

Automatically dial this initial connection:

< Back Next > Cancel

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.



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

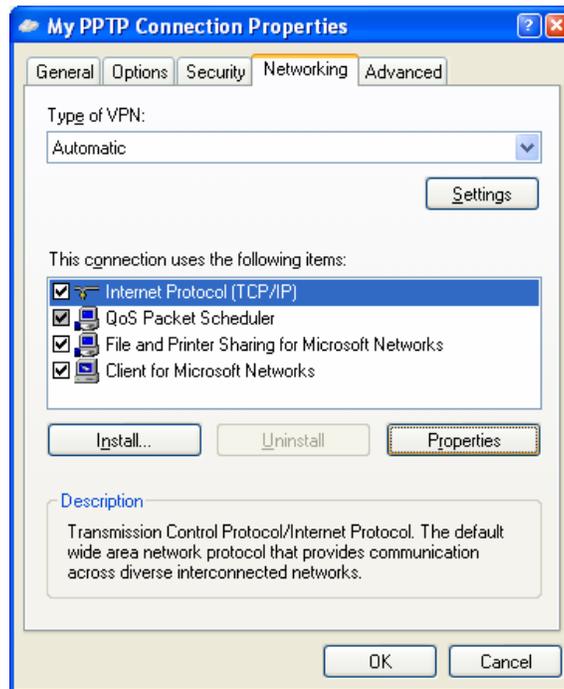
To establish a VPN connection: make sure you have access to the Internet. Make sure the modem or the router you are using to connect to the Internet supports VPN passthrough. Make sure that the range of IP addresses (subnet) you are using on this LAN is different from the range used on remote LAN (e.g. 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.

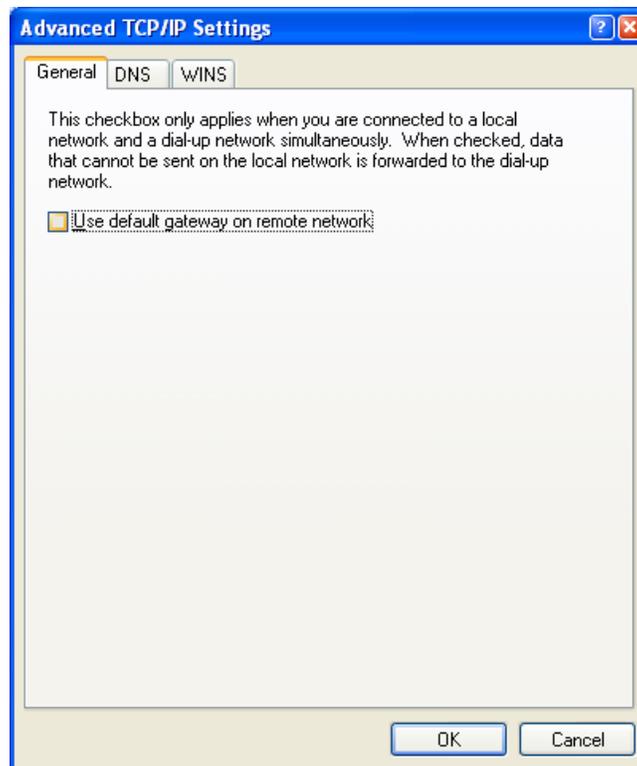


Please note that with its default settings a PPTP connection in Windows is used as remote gateway for all traffic. Hence you may lose the ability to browse the Internet sites when the PPTP connection is established. To avoid this problem do the following:

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

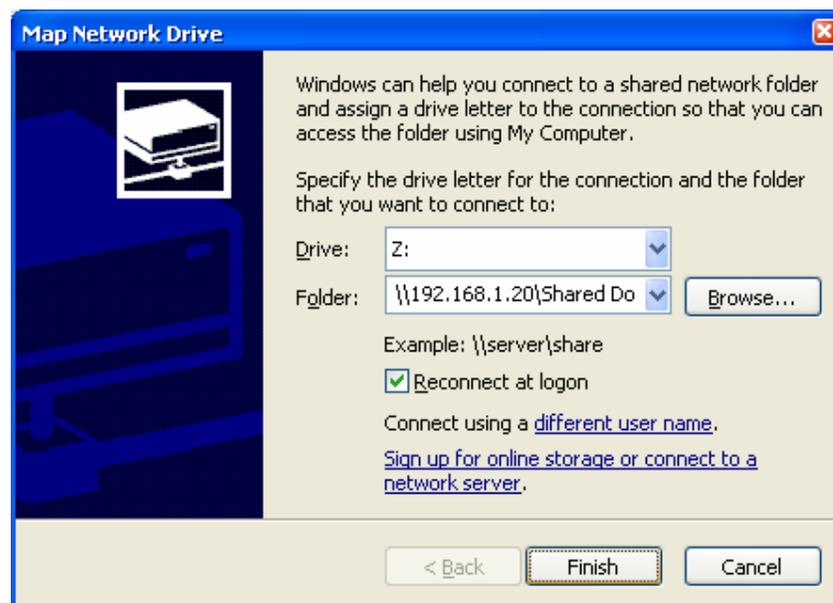


Highlight the Internet Protocol (TCP/IP) and click on Properties. Then click on the Advanced... button. Deselect the "Use default gateway on remote network" option. Click on OK in each window to apply the setting. Reconnect your PPTP connection.



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):



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.