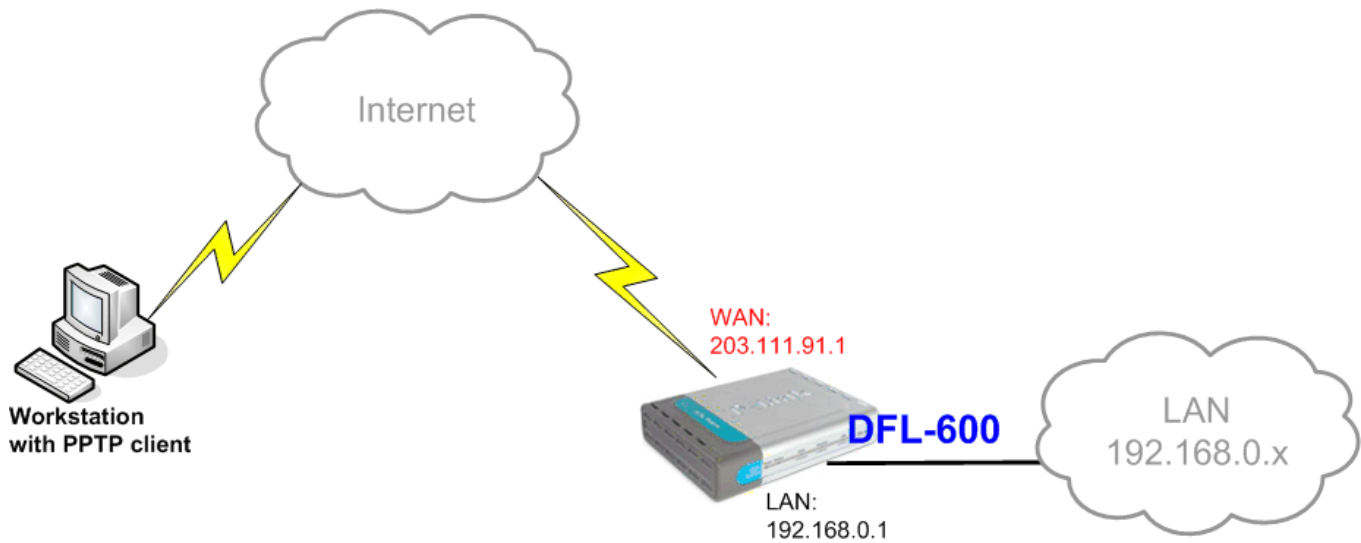


Setting up VPN connection: DFL-600 with Windows PPTP client



DFL-600 (firmware 2.32)

LAN IP: 192.168.0.1 Subnet Mask: 255.255.255.0

WAN IP: 203.111.91.1 Subnet Mask: 255.255.255.252

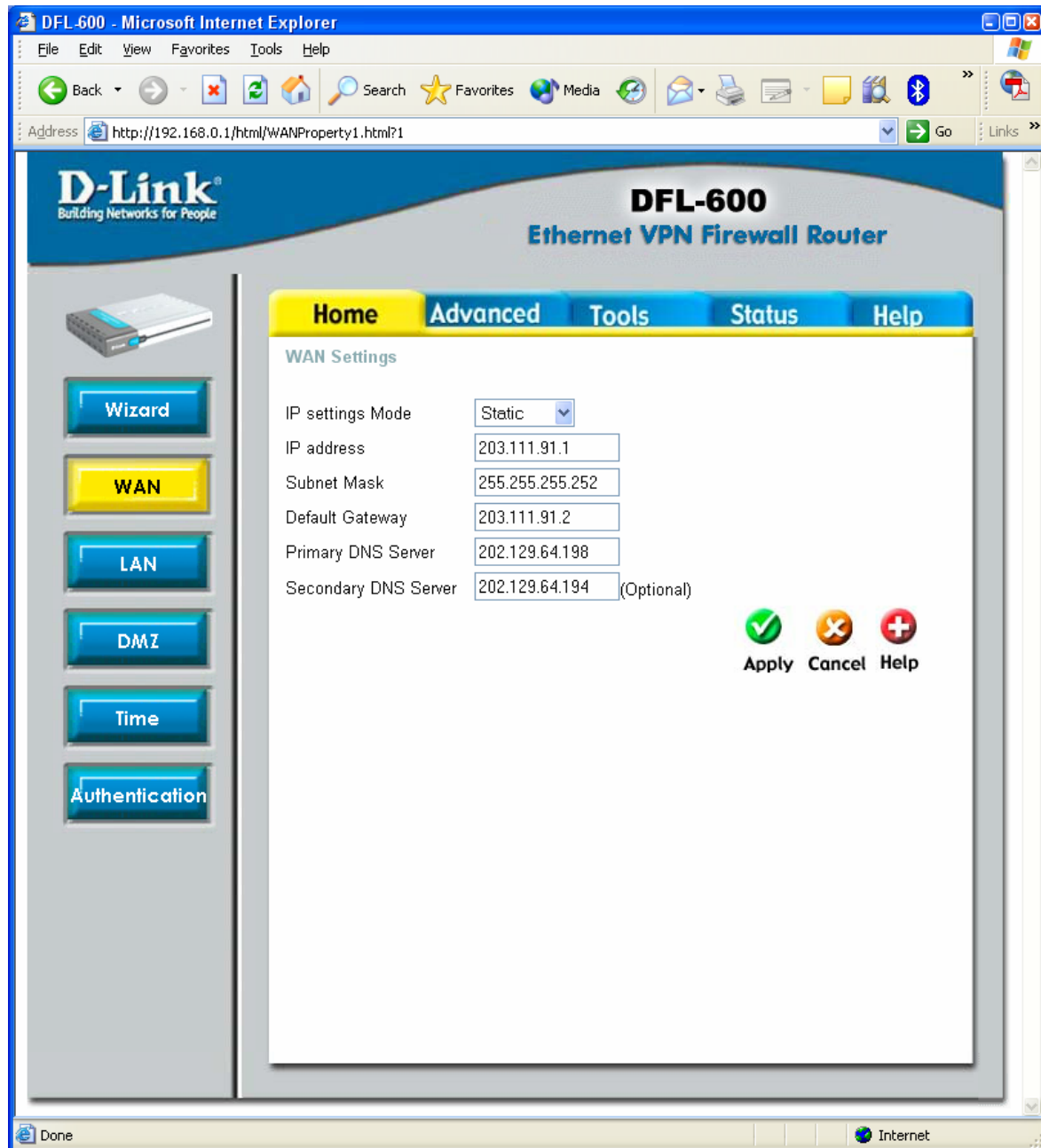
Default Gateway: 203.111.91.2

If you are using DSL-300, DSL-300+, DSL-302G modem or DSL-500, DSL-504, DSL-604+ router please see **Appendix 3** at the end of this document.

Setting up DFL-600

Log into the router's WEB interface and go to Home > LAN. Change the IP address of the LAN port of the router to required IP.

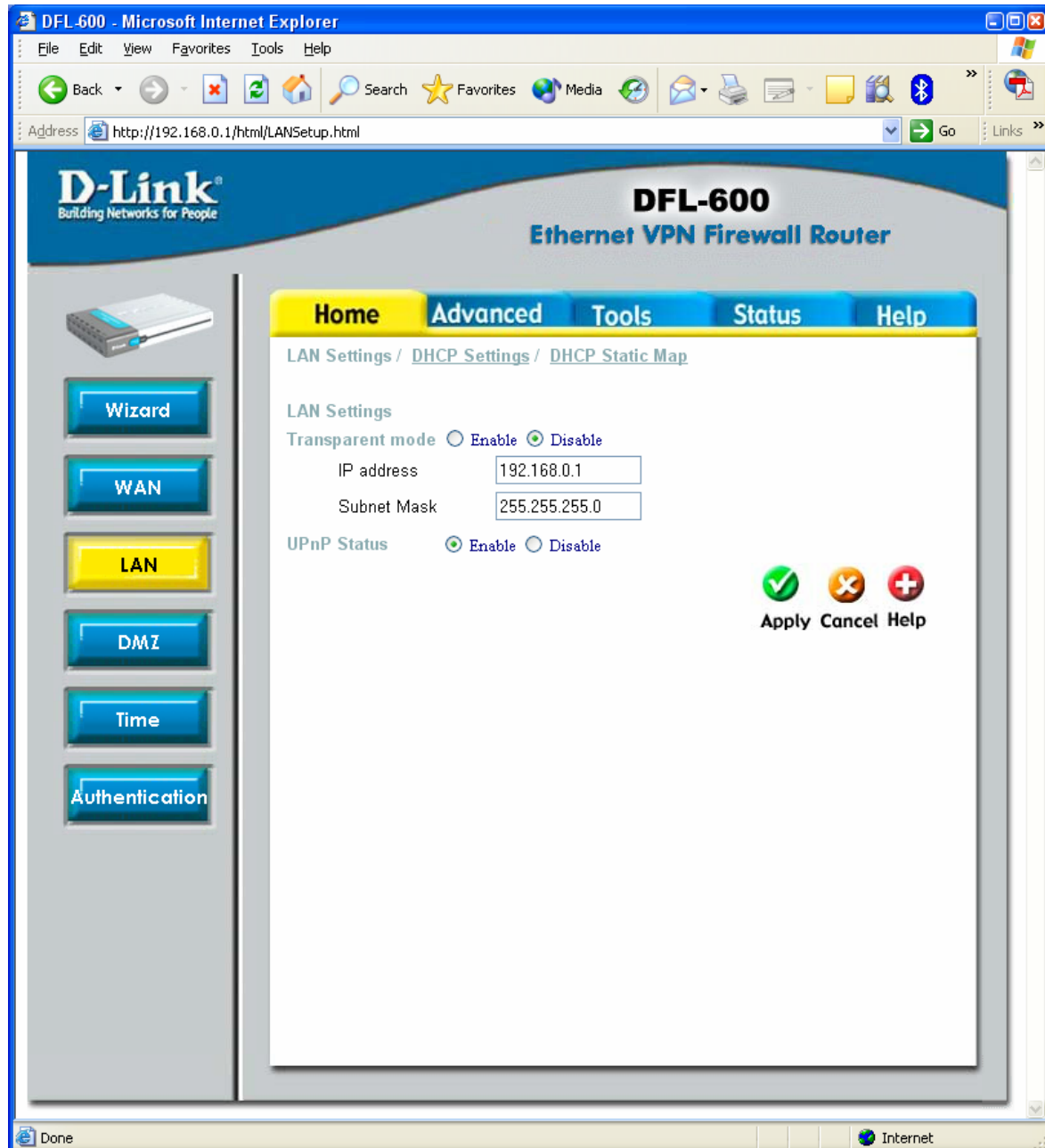
Once you have changed the LAN IP address on the router, make sure your PC has an IP address from the same subnet (192.168.2.x in this example), you may just need to renew IP on your PC or reboot.



Next go to the Home > WAN page, choose the type of connection your ISP requires. In our example it is Static IP Address.

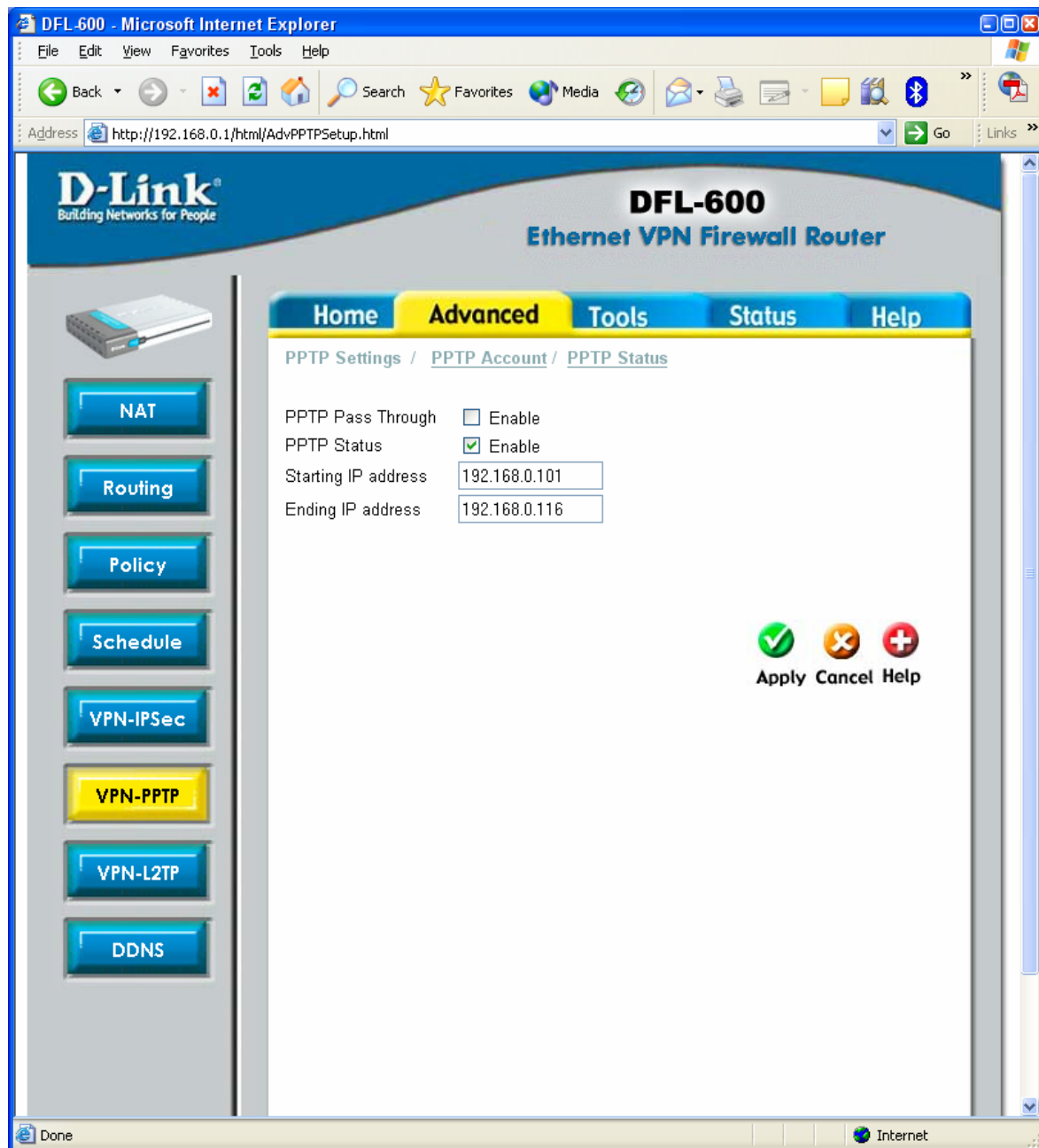
You need to have a static IP address the on WAN port of at least one unit out of two participating in VPN connection. Some PPPoE connections have a static IP as well (in most of such cases you do not have to specify the IP – your ISP will be providing you with the same IP every time you connect).

After setting up the WAN port click on Apply.



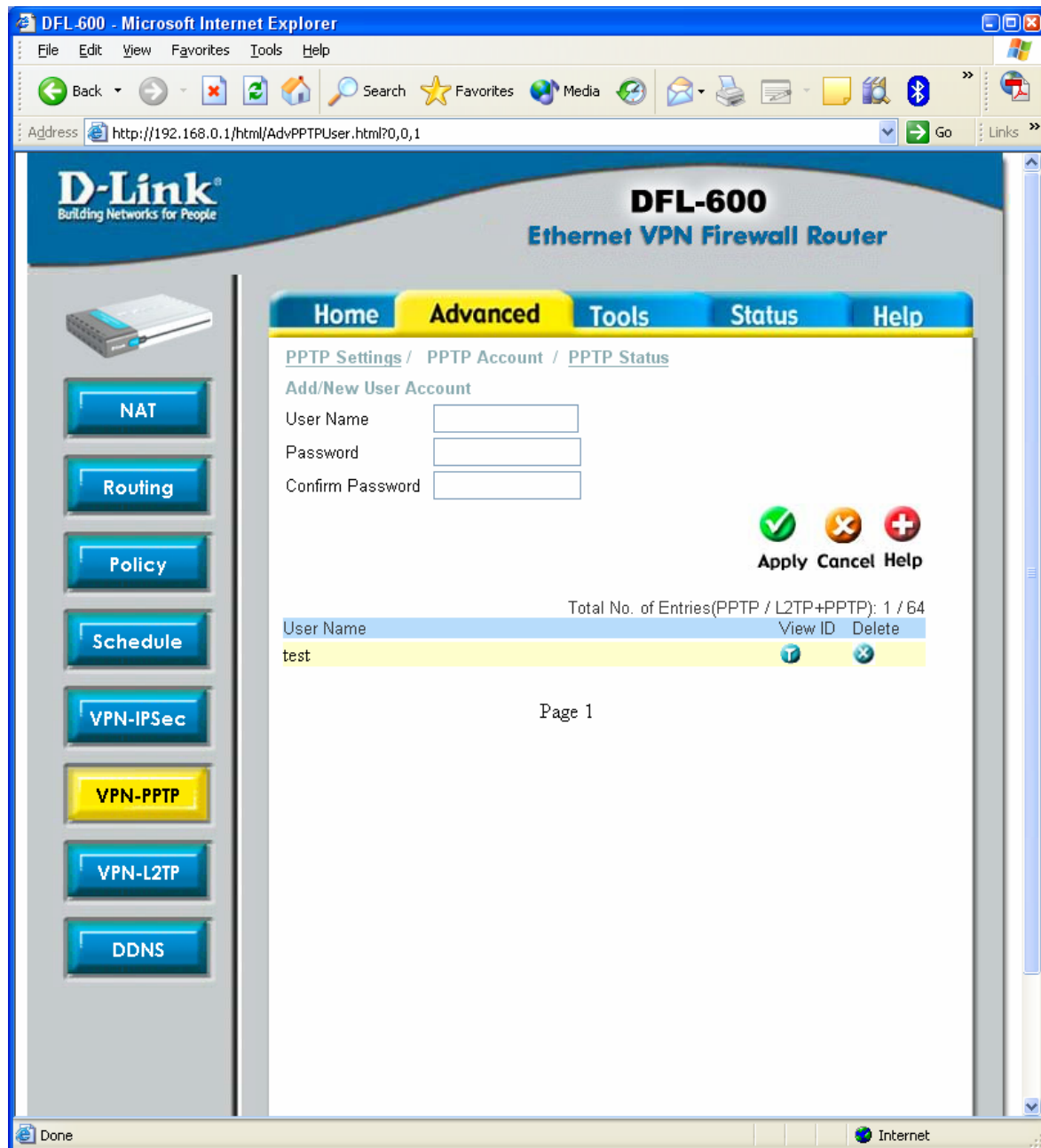
Next make sure you can access the Internet (that will confirm that you have set WAN settings correctly), then log back into the router and go into *Advanced > VPN-PPTP*.

Make sure you have PPTP Status box ticked.
Then click on PPTP Account.



Enter in a User Name and Password and then confirm the password again.
Then Click Apply.

Go into Tools > System and click on Save Settings.



DFL-600 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Favorites Media Print Mail News RSS Bluetooth Links

Address http://192.168.0.1/html/AdvPPTPUser.html?0,0,1 Go

D-Link
Building Networks for People

DFL-600
Ethernet VPN Firewall Router

Home Advanced Tools Status Help

PPTP Settings / PPTP Account / PPTP Status

Add/New User Account

User Name

Password

Confirm Password

  
Apply Cancel Help

Total No. of Entries(PPTP / L2TP+PPTP): 1 / 64

User Name	View ID	Delete
test		

Page 1

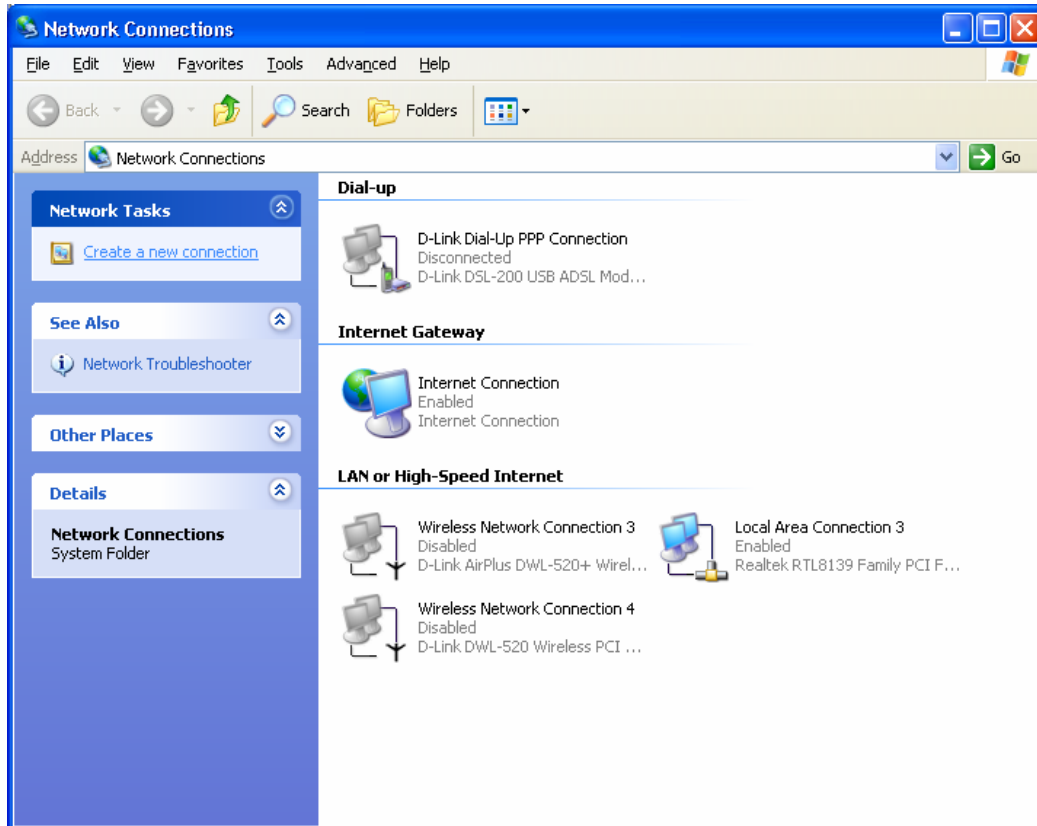
Done Internet

Setting up PPTP connection in Windows

Click on Start > My Network Places, Then click on View Network Connections under the Network tasks on the left hand side.

You should see a window similar to the one below.

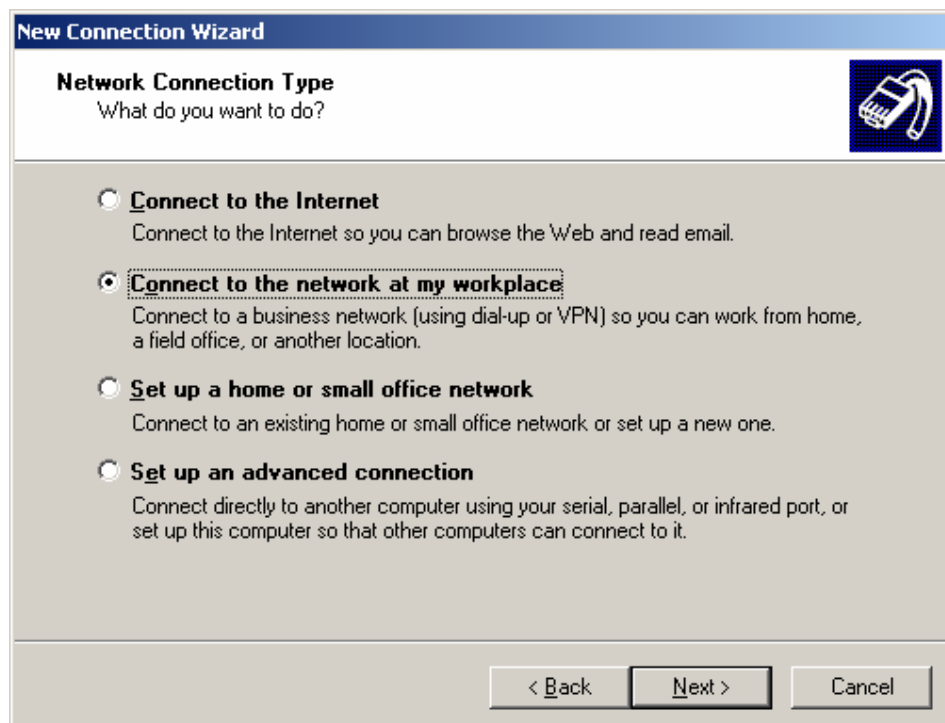
Click on Create a new connection.



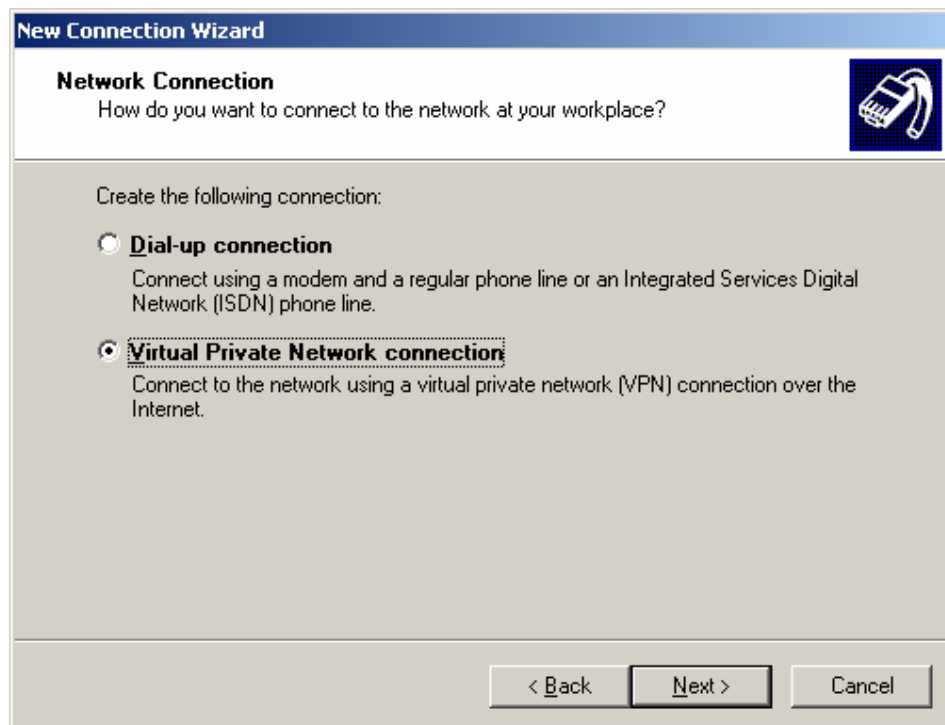
Click on **Next** when you get the Wizard as below.



Then select **Connect to the network at my workplace**.
Click on **Next**.



Click on Virtual Private Network connection, then click on Next.



The image shows a Windows XP-style dialog box titled "New Connection Wizard". The subtitle is "Network Connection". Below the subtitle is the question "How do you want to connect to the network at your workplace?". To the right of the text is a small icon of a computer with a network cable. The main area of the dialog box contains the instruction "Create the following connection:" followed by two radio button options. The first option is "Dial-up connection" with the description "Connect using a modem and a regular phone line or an Integrated Services Digital Network (ISDN) phone line." The second option is "Virtual Private Network connection" with the description "Connect to the network using a virtual private network (VPN) connection over the Internet." The second option is selected. At the bottom of the dialog box are three buttons: "< Back", "Next >", and "Cancel".

New Connection Wizard

Network Connection
How do you want to connect to the network at your workplace?

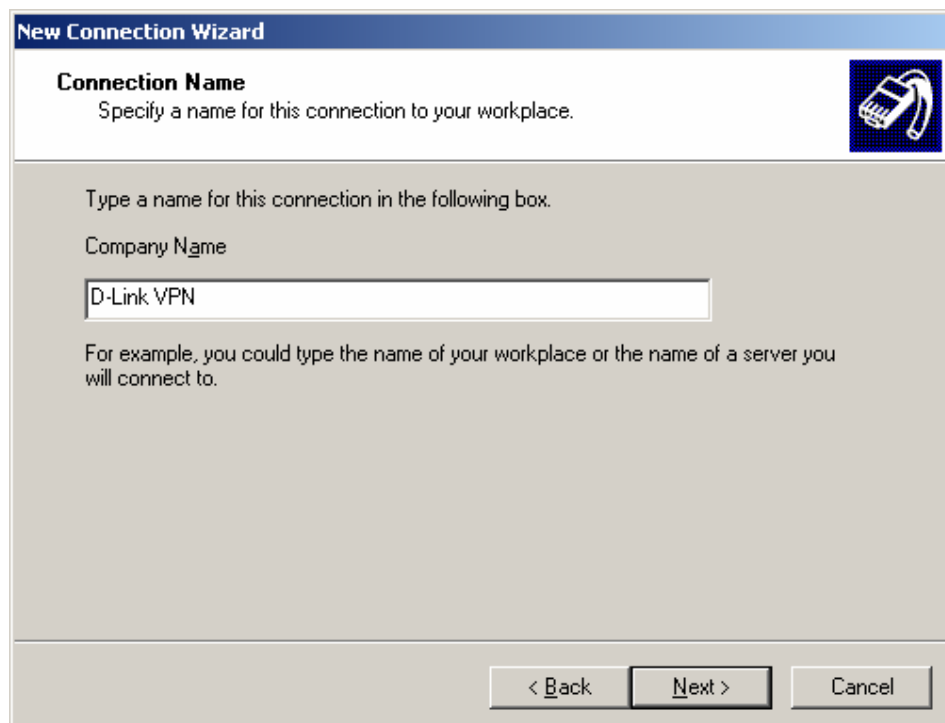
Create the following connection:

☐ **Dial-up connection**
Connect using a modem and a regular phone line or an Integrated Services Digital Network (ISDN) phone line.

☒ **Virtual Private Network connection**
Connect to the network using a virtual private network (VPN) connection over the Internet.

< Back Next > Cancel

Enter a name for your PPTP connection:



The image shows a second screen of the "New Connection Wizard" dialog box. The subtitle is "Connection Name". Below the subtitle is the instruction "Specify a name for this connection to your workplace." To the right of the text is the same computer and network cable icon. The main area of the dialog box contains the instruction "Type a name for this connection in the following box." followed by the label "Company Name" and a text input box containing the text "D-Link VPN". Below the input box is a note: "For example, you could type the name of your workplace or the name of a server you will connect to." At the bottom of the dialog box are three buttons: "< Back", "Next >", and "Cancel".

New Connection Wizard

Connection Name
Specify a name for this connection to your workplace.

Type a name for this connection in the following box.

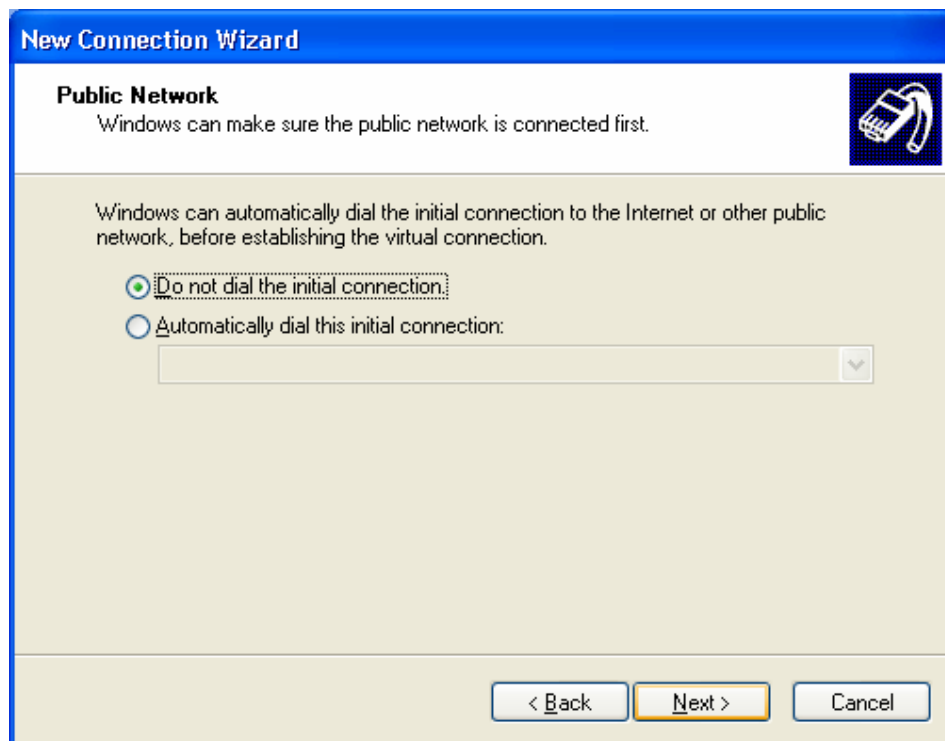
Company Name

D-Link VPN

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

< Back Next > Cancel

Optional step: select Do not dial the initial connection, if you use dial up you can change this later on, Click on Next.



New Connection Wizard

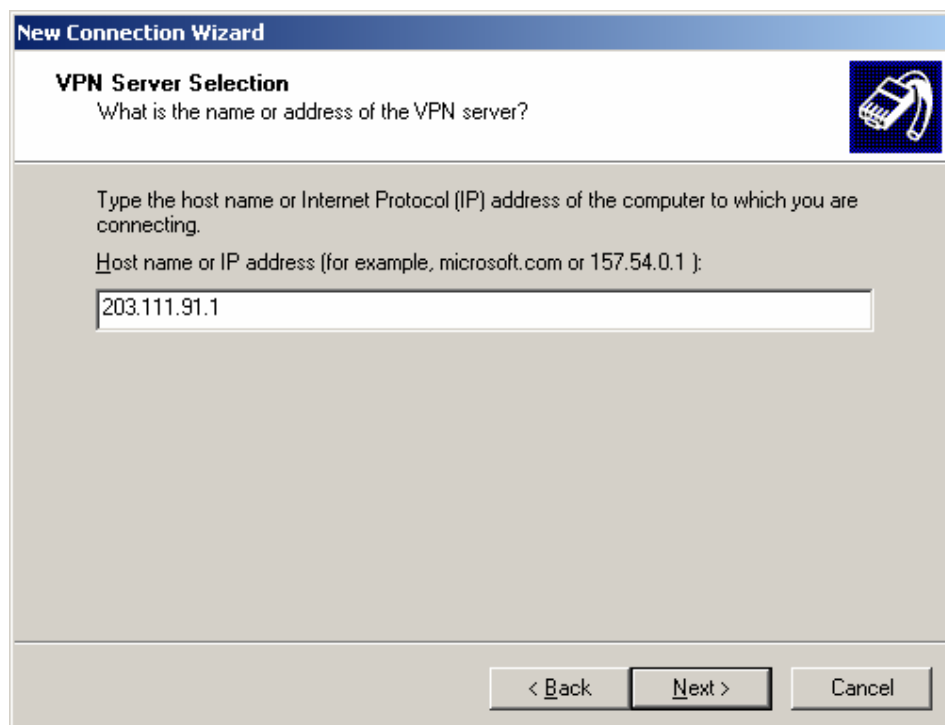
Public Network
Windows can make sure the public network is connected first.

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

Next enter in the public IP address of the VPN server (the one given by ISP). You can find this IP under the status page of the DFL-600 (if you have a router or NAT modem in front of the DFL-600, you need to look up the IP address there).



New Connection Wizard

VPN Server Selection
What is the name or address of the VPN server?

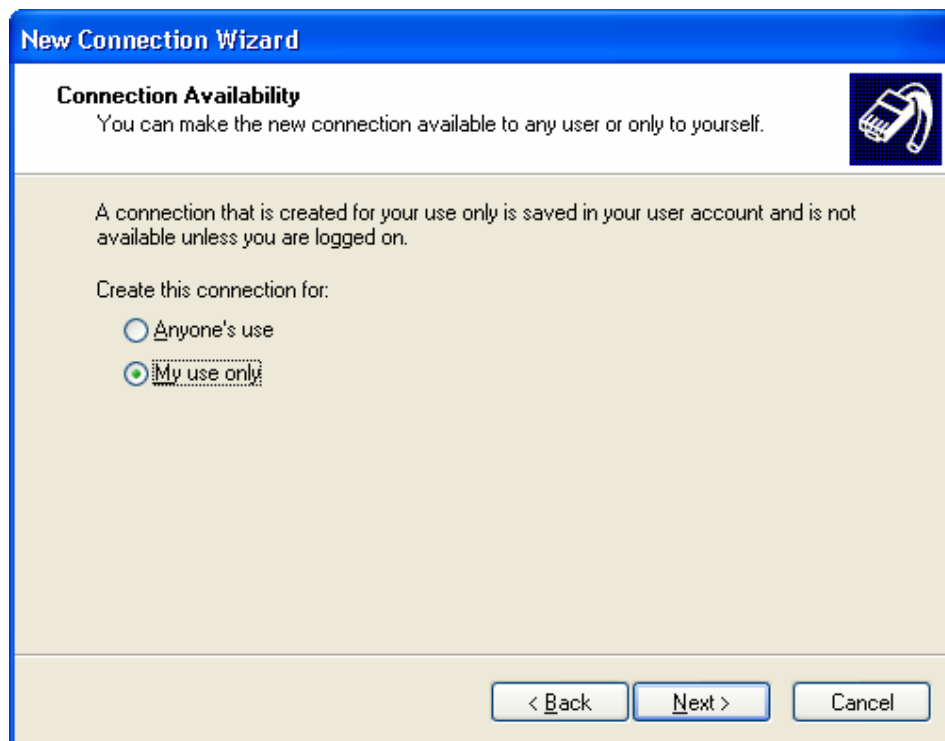
Type the host name or Internet Protocol (IP) address of the computer to which you are connecting.

Host name or IP address (for example, microsoft.com or 157.54.0.1):

203.111.91.1

< Back **Next >** Cancel

Optional step: to make your VPN safer in the home environment click on **My use only**, If you want other people to use this connection, click on **Anyone's use**.



New Connection Wizard

Connection Availability
You can make the new connection available to any user or only to yourself.

A connection that is created for your use only is saved in your user account and is not available unless you are logged on.

Create this connection for:

☐ Anyone's use

☒ My use only

< Back Next > Cancel

To complete the connection Wizard click on **Finish**.



New Connection Wizard

Completing the New Connection Wizard

You have successfully completed the steps needed to create the following connection:

D-Link VPN

- Share with all users of this computer

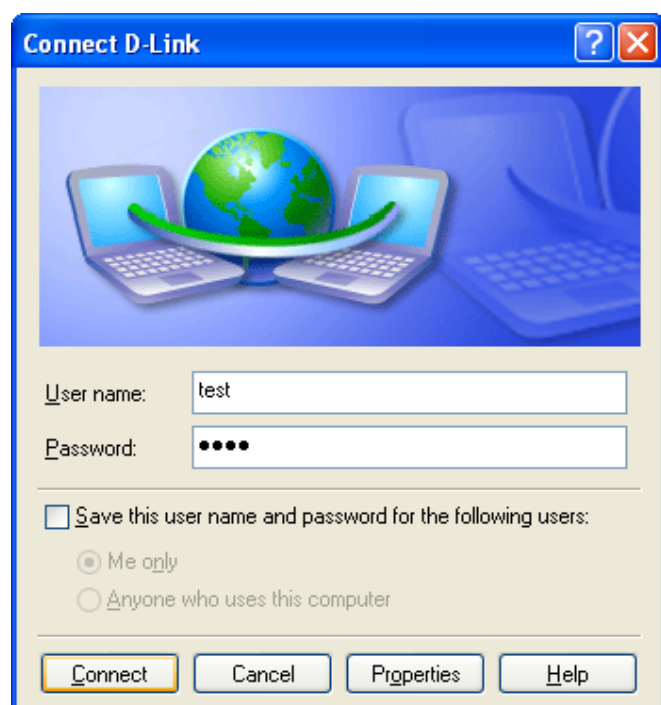
The connection will be saved in the Network Connections folder.

☐ Add a shortcut to this connection to my desktop

To create the connection and close this wizard, click Finish.

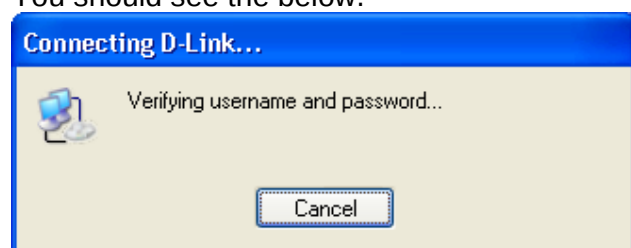
< Back Finish Cancel

Enter in the User name and password that you entered into the PPTP page of the DFL-600, then click connect.



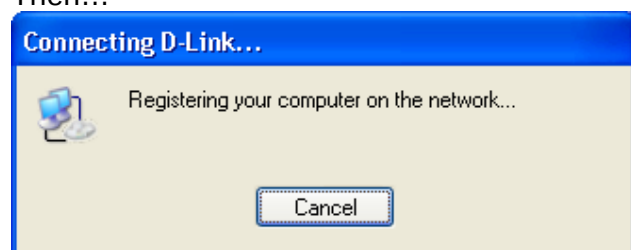
The "Connect D-Link" dialog box features a blue title bar with a question mark and close button. The main area has a blue background with an illustration of two laptops connected by a green arc over a globe. Below the illustration are two input fields: "User name:" containing the text "test" and "Password:" containing four black dots. A checkbox labeled "Save this user name and password for the following users:" is present, with two radio button options: "Me only" (selected) and "Anyone who uses this computer". At the bottom are four buttons: "Connect" (highlighted with a yellow border), "Cancel", "Properties", and "Help".

You should see the below.



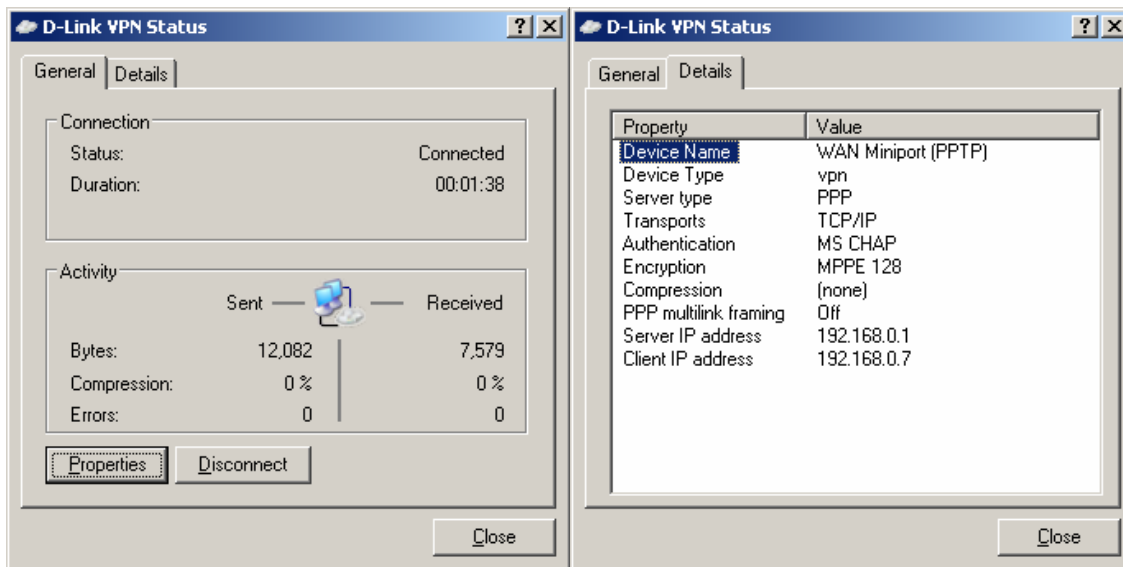
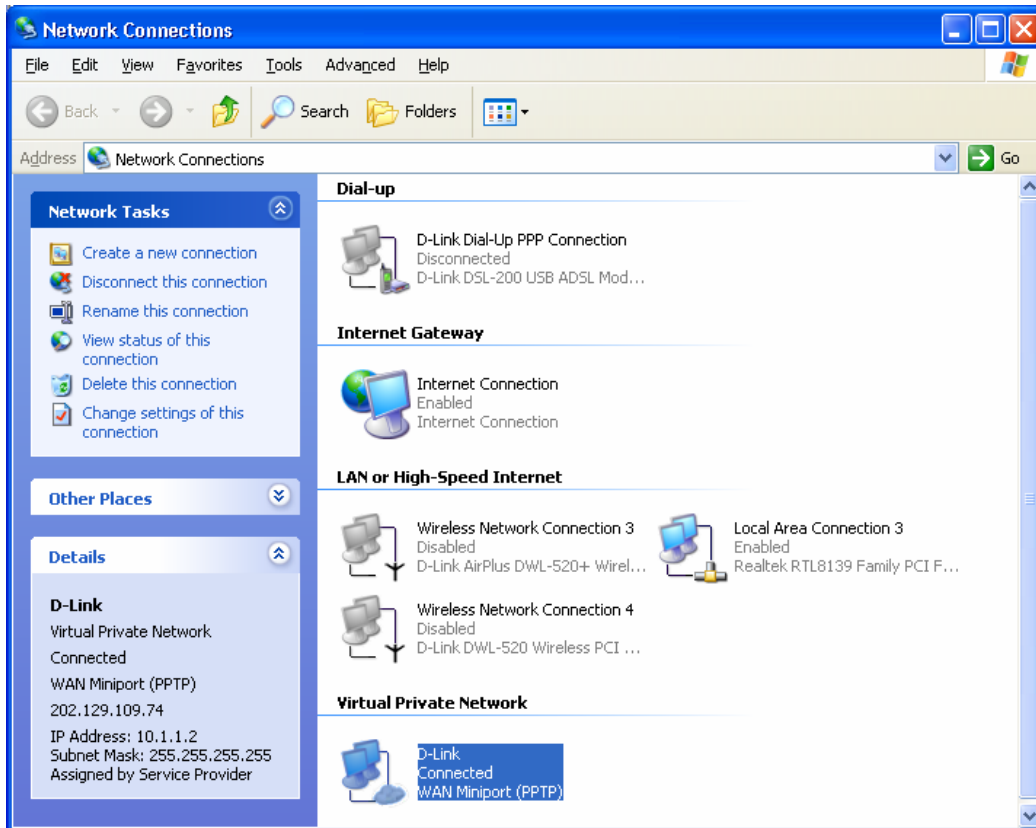
The "Connecting D-Link..." dialog box has a blue title bar. The main area has a light beige background with a small computer icon on the left and the text "Verifying username and password..." in the center. A "Cancel" button is located at the bottom right.

Then...



The "Connecting D-Link..." dialog box has a blue title bar. The main area has a light beige background with a small computer icon on the left and the text "Registering your computer on the network..." in the center. A "Cancel" button is located at the bottom right.

Once the PPTP connection is established you should see a window similar to the one below. The Virtual Private Network icon is now blue, and says “Connected”



You can check your IP settings and VPN connectivity:

```
Command Prompt
C:\>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    IP Address. . . . . : 203.111.91.2
    Subnet Mask . . . . . : 255.255.255.252
    Default Gateway . . . . . : 203.111.91.1

PPP adapter {546DB0F7-AD1F-4C9C-A975-FBA8DB211EE0}:

    Connection-specific DNS Suffix  . : 
    IP Address. . . . . : 192.168.0.7
    Subnet Mask . . . . . : 255.255.255.255
    Default Gateway . . . . . : 192.168.0.7

C:\>ping 192.168.0.149

Pinging 192.168.0.149 with 32 bytes of data:

Reply from 192.168.0.149: bytes=32 time=4ms TTL=128
Reply from 192.168.0.149: bytes=32 time=6ms TTL=128
Reply from 192.168.0.149: bytes=32 time=4ms TTL=128
Reply from 192.168.0.149: bytes=32 time=3ms TTL=128

Ping statistics for 192.168.0.149:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
```

Appendix 1.

How to test your VPN connection.

Make sure that computers on both locations can access the Internet.

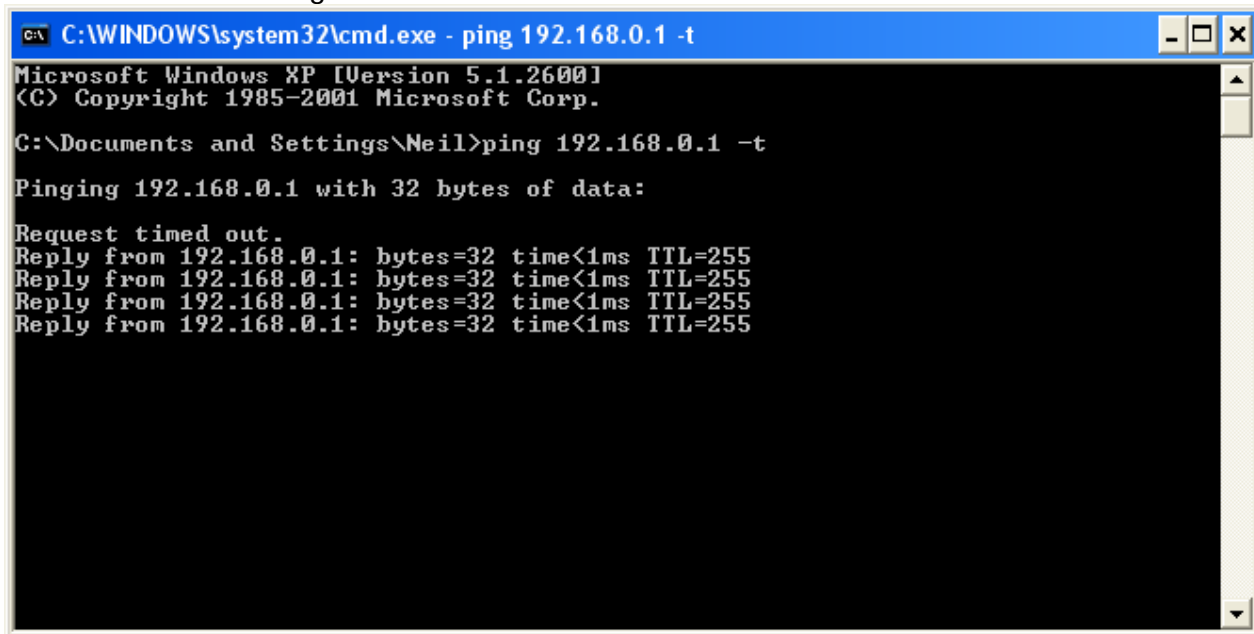
The make sure that you are on the XP's location with the PPTP connection.

The go to Start > Run, type *command* and click on OK.

If you type in the below then hit enter.

ping 192.168.0.1 -t (or the LAN IP address of the DFL-600)

You should see messages similar to the one below:



```
C:\WINDOWS\system32\cmd.exe - ping 192.168.0.1 -t
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Neil>ping 192.168.0.1 -t

Pinging 192.168.0.1 with 32 bytes of data:

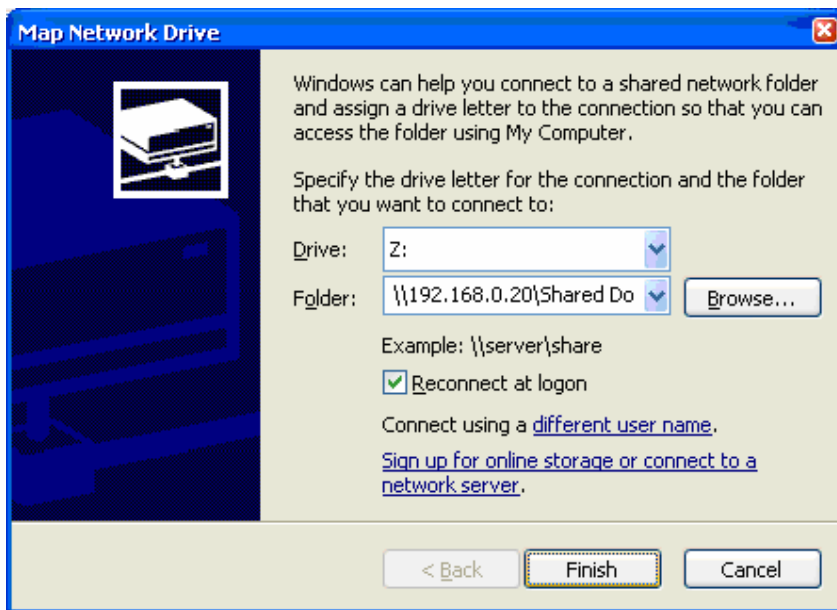
Request timed out.
Reply from 192.168.0.1: bytes=32 time<1ms TTL=255
Reply from 192.168.0.1: bytes=32 time<1ms TTL=255
Reply from 192.168.0.1: bytes=32 time<1ms TTL=255
Reply from 192.168.0.1: bytes=32 time<1ms TTL=255
```

If you see a message saying Reply from... that means that VPN tunnel has been established successfully and you can communicate with remote network via VPN.

Appendix 2

Connecting to remote computers/drives via VPN

You can map remote computers' drives 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. Or use the methods described above.

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

Appendix 3

**Note to DSL-300, DSL-300+, DSL-302G modems users
And DSL-500, DSL-504, DSL-604+ users.**

If you are using **DSL-300** to connect your DFL-600 to the Internet please avoid using **192.168.1.x** addresses on your networks as it is the temporary subnet used by the modem.

If you are using **DSL-300+** to connect your DFL-600 to the Internet please avoid using **192.168.0.x** addresses on your networks as it is the temporary subnet used by the modem. Also note that DSL-300+ links to the MAC address of the device connected to it directly. So if you configured the modem while it was connected to your PC directly or to another router, you will need to reconfigure it while it is connected to your DI-804HV. Here are the steps:

1. Connect the DSL-300+ modem to the WAN port of your DFL-600.
2. Set WAN port on DFL-600 to "Dynamic IP" and set LAN port to subnet different from 192.168.0.x (e.g. 192.168.3.1)
3. Renew IP address on your computer so it will be on 192.168.3.x subnet and log into the DSL-300+ using your Internet browser: <http://192.168.0.1>
4. In the DSL-300+ interface select **Account Management**. Put a tick next to your account and click on Delete.
5. Select **Account Configuration** and reconfigure the modem according to your ISP requirements. Click on OK to save settings.

If you are using **DSL-500, DSL-504, DSL-604+** router to connect your DFL-600 to the Internet please avoid using **192.168.0.x** addresses on your networks as it is the default LAN subnet used by the routers. You may change it to a different subnet (e.g. 192.168.33.1) if you wish, under **Configuration > Ethernet IP**.

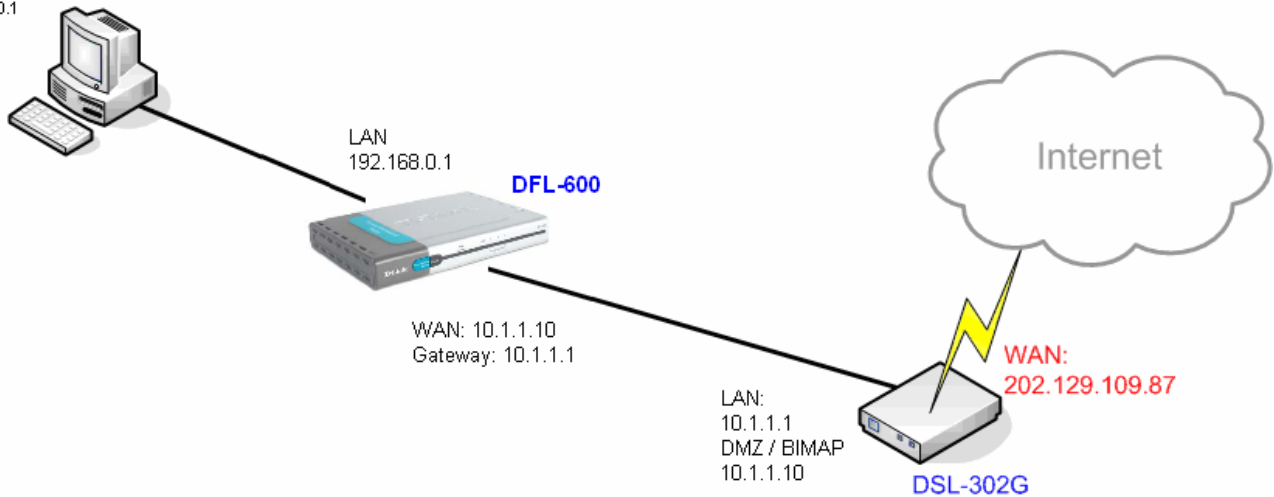
Note that you need to enable VPN pass-through on the router. Or go to **NAT Configuration** and enable **DMZ**: specify the IP address of the WAN port of DFL-600 there.

DFL-600 WAN port should be set with static IP from the same subnet as DSL-xxx LAN port. Default Gateway should be set as DSL-xxx LAN port IP address.

Please keep in mind that with DSL-xxx routers with NAT enabled your public IP address will be located on the WAN port of DSL-xxx router. WAN port of DFL-600 will have private IP address. When setting up **Remote Gateway** in VPN you will need to use public IPs on DSL-xxx routers' WAN ports, e.g. 202.129.109.87 (see example with DSL-302G below).

With **DSL-302G** the setup is similar. This modem uses **10.1.1.1** address on LAN.

WorkStation A:
192.168.0.10
Gateway:
192.168.0.1



In order to enable VPN traffic pass-through in this modem you need to do the following:
Log into the modem's WEB interface and select **WAN > NAT**. Under **NAT Options** select **NAT Rule Entry**. Click on **Add** button.
Under **Rule Flavor** select **BIMAP**. Set **Rule ID** as next number in the rules table (in our case it is 2). **IF Name** = **ALL**. **Local Address** will be the IP on the WAN port of your DFL-600 which is connected to this modem. **Global address** leave as 0.0.0.0:

NAT Rule - Add

NAT Rule Information				
Rule Flavor:	BIMAP ▼			
Rule ID:	2			
IF Name:	ALL ▼			
Local Address:	10	1	1	10
Global Address:	0	0	0	0
Submit Cancel Help				

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Then click on **Submit** to apply the settings.

When setting up **Remote Gateway** in **VPN** you will need to use public IP on DSL-302G's WAN port.