Setting up a Windows 98 PPTP VPN

Matthew Hall

matt@ecsc.co.uk

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by Matthew Hall

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Chapter 1. Setting up a Windows 98 PPTP VPN

This document will help you configure a Point-To-Point Tunnelling Protocol (PPTP) Virtual Private Network (VPN) in Windows 98.

A Virtual Private Network (VPN) is used to provide secure, encrypted network communications between a network and a remote host or other remote network over the public Internet. A VPN allows the establishment of an encrypted "tunnel" that protects the flow of network traffic from eavesdroppers.

Requirements

- An internet connection.
- The IP address of the firewall. This should be provided to you by your technical department or system administrator
- A VPN username and password as setup by your network administrator.

Adding a Dial-Up Networking Account

To set up VPN access you first need to set up a Dial Up Networking account. This requires you to install a VPN Adaptor and related software.

Installing the VPN Adaptor

1. Double click on the `My Computer` icon on your desktop:

Figure 1-1. My Computer icon

This will load up a `My Computer` window similar to this:
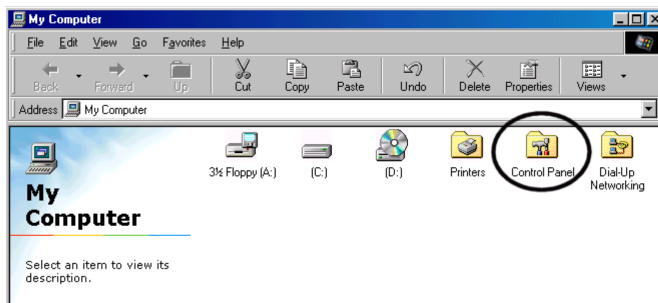

Figure 1-2. My Computer window

2. To install the adaptor you need to double click on the `Control Panel` icon circled above. Once inside the control panel double click on the `Add/Remove Programs` icon:

Figure 1-3. Add/Remove Programs icon
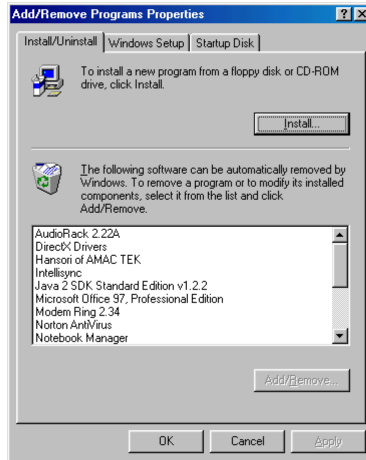
A new window will appear similar to this:

Figure 1-4. Add/Remove Programs window

3. You now need to click on the `Windows Setup` tab. The window will now appear similar to this:
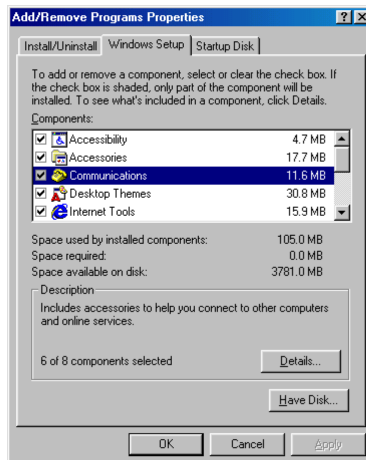

Figure 1-5. Windows Setup tab

4. You now need to click the `Communications` checkbox.

You will then need to click the `Details` button. The window will now appear similar to this:
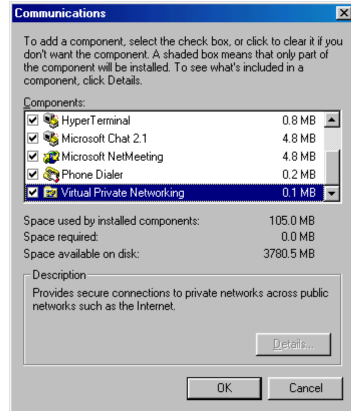
Figure 1-6. Communications Details

5. You now need to scroll down to the bottom of this window until you see the `Virtual Private Networking` option.

   You now need to click the checkbox next to it, and then click the OK button. Windows will begin installing the VPN drivers.

   > **Note:** You may be asked to insert the Windows 98 setup CD at this point.

   Once finished, Windows will ask you to reboot the machine. Click the OK button to restart.

   Once the machine has been rebooted, move on to the next step

Adding your PPTP VPN Account

You will now need to create a VPN account. This is the account you will use to access your remote office network.

1. Double click on the `My Computer` icon on your desktop:

Figure 1-7. My Computer icon

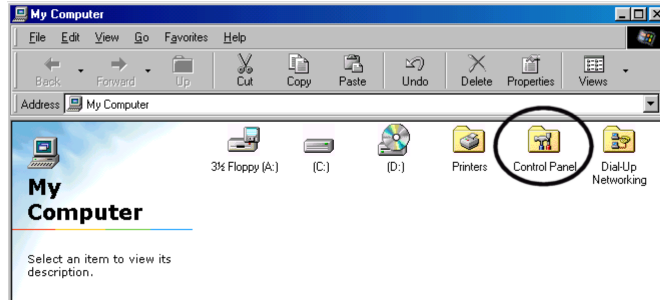This will load up a My Computer window similar to the following:

Figure 1-8. My Computer window

2. You now need to double click on the `Dial up Networking` icon, which will open a new window.

3. You now need to double click on the `Make New Connection` icon:

Figure 1-9. Make New Connection icon

This will open a Connection Wizard in a new window. You will be asked to type a name for your VPN account which can be called whatever you prefer (e.g. "ECSC VPN connection to office"). Once you have completed the above steps you should be able to select `Microsoft VPN Adaptor` in the `Select a Device` field.

Click the `Next` button once you are finished.

4. At the last screen you will be able to enter the address of the VPN server. This will be the external IP address of the firewall.
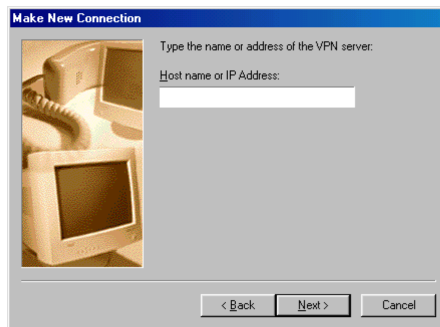

Figure 1-10. VPN Connection external IP address entry

Click the `Next` button once you are finished.

5. The window will now show that you have successfully created your VPN account:

Figure 1-11. New VPN Connection Configuration Window

Click the `Finish` button once you are finished.

The window will now show your new VPN Account:

Figure 1-12. New VPN Account

Configuring your new VPN Account

After adding your VPN account, you will need to reconfigure the account as the default settings do not use the same encryption settings as the ECSC firewall.

1. You will now need to configure your VPN Account to log on to the server.

   You now need to right click on the new connection which you have just created, and then click on the `Properties` as shown below:
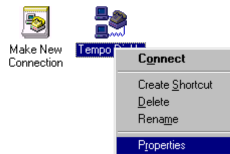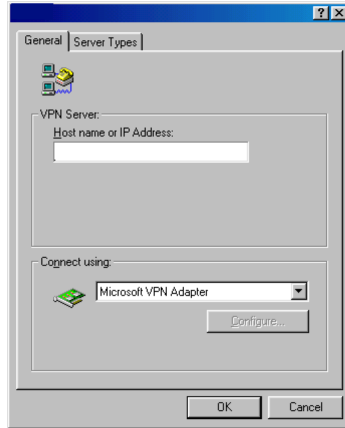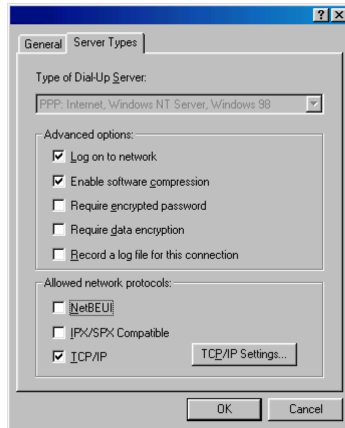

Figure 1-13. Account Properties icon

2. A new window will appear similar to this:

Figure 1-14. Account Properties window

You now need to click on the `Server Types` tab:

Figure 1-15. Server Types Tab

In this tab, you need to make sure the `NetBEUI` and the `IPX/SPX Compatible Network` protocol checkboxes are unchecked (ie. not ticked).

Once you have done this click the `OK` button which will return you to the main window:

Figure 1-16. Dial Up Networking window

Connecting to your PPTP VPN

You will have now successfully created and configured your VPN account. To con-

nect to your remote office over this encrypted tunnel, you will need to initiate the connection from your PC, and login with your username and password.

1. To connect to your network using your VPN Account you will need to double click on the icon for the new VPN Account you configured earlier.

Figure 1-17. VPN Account icon

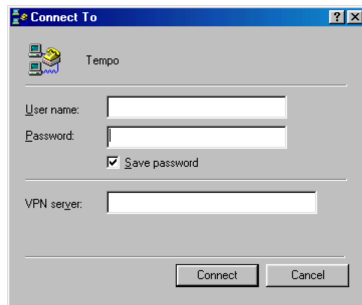2. A login dialog window will appear similar to this:

Figure 1-18. Login Dialog

You now need to enter your Username and Password into the dialog, and then click the `Connect` button.

A new dialog window will appear which will update itself to show you the current status of the logon attempt:
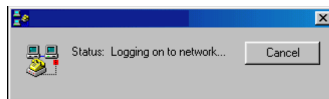

Figure 1-19. Connection in-progress dialog

Once password verification has completed a new dialog window will appear similar to this:
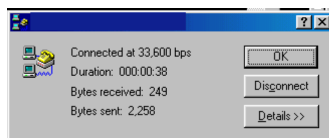

Figure 1-20. Connection established dialog

Clicking the `OK` button will hide the dialog whilst the VPN is connected. To disconnect, select something and click disconnect. FIXME (err, what happens here?)

You are now connected to your office network over the Internet via the firewall. When using this secure encrypted tunnel, you may notice varying connection speed due

to congestion or latency due to traffic having to be encrypted by your computer's processor.

Whilst connected, you may also not be able to access the world wide web as usual due to traffic being routed to your office network by default.

Even though you are connected to your remote office network by a strong encryption method; no encryption is completely secure, and you should not transport sensitive documents over an insecure public network like the internet at any time.

Disconnecting from your VPN account

1. When you have finished your session, right click on the VPN icon in the taskbar.
2. Click Disconnect.