

How to make a VPN connection to our servers from Windows XP

Windows XP can only make a Point-To-Point Tunneling Protocol (PPTP) type of VPN connection to our servers. This requires TCP Port 1723 to be open on any firewalls the connection has to pass through. Port 1723 isn't used for anything else and so this port can sometimes be blocked, either by design or accidentally, which will prevent the VPN from connecting.

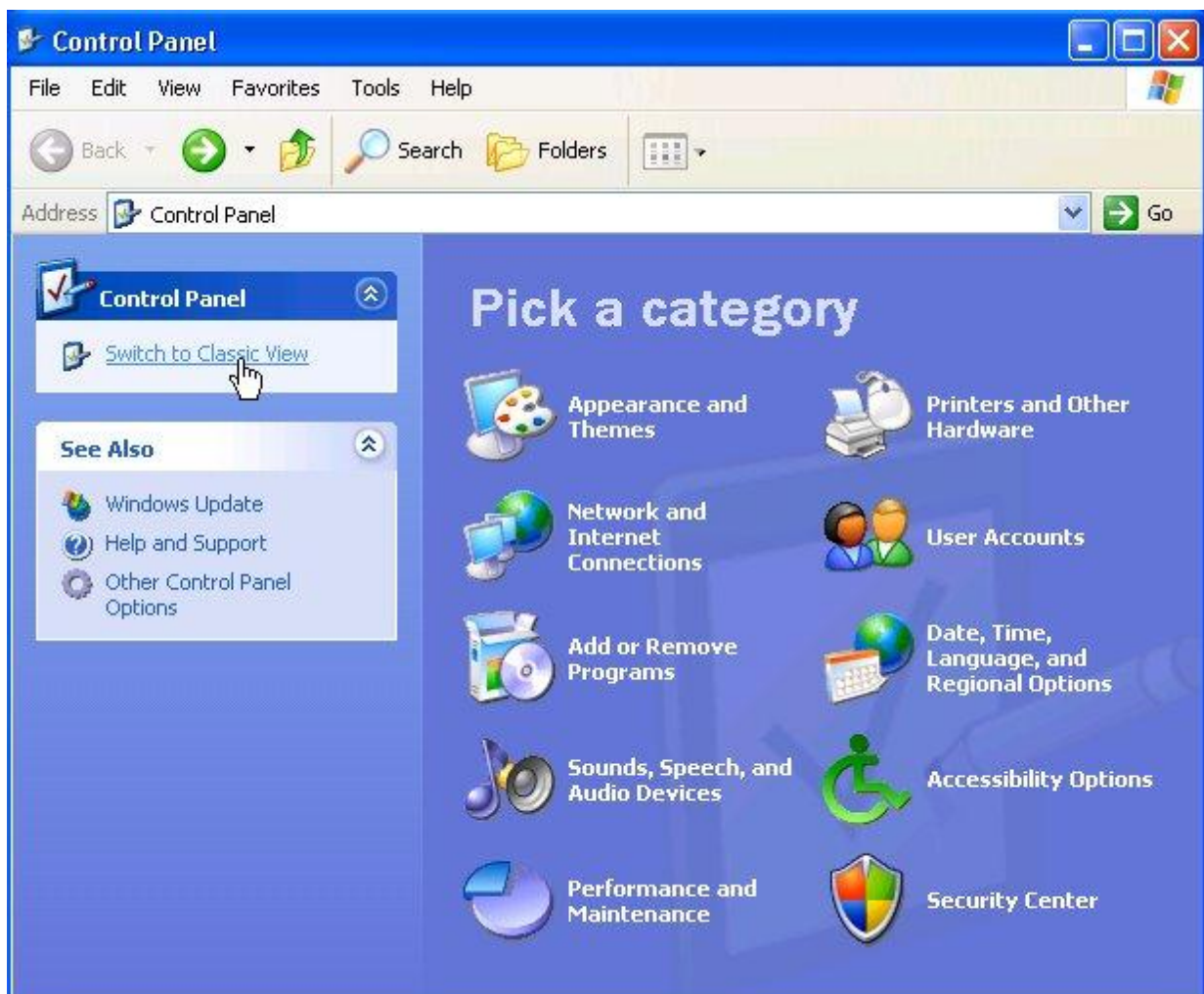
Our servers also support a new type of VPN connection called Secure Socket Tunneling Protocol (SSTP) which uses Port 443, the same as all secure websites, which makes it very difficult to block. The catch is that only Windows Vista and Windows 7 PCs can make an SSTP connection.

In our experience PPTP VPNs work most of the time but if you continue to have problems it's a good reason to upgrade to Windows 7.

1 - How to Create a PPTP Connection

From the Windows XP Desktop click: **Start – Control Panel**

If your Control Panel appears as below, click on **Switch to Classic View**



Double-click **Network Connections** and then click **Create a new connection**



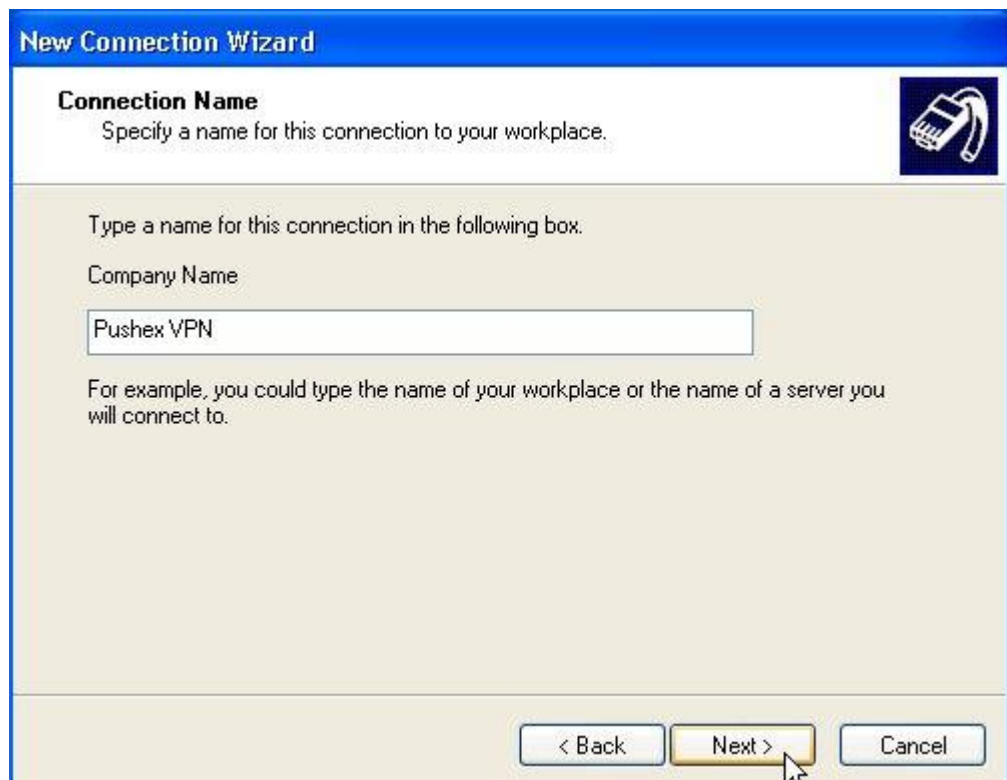
This starts the **New Connection Wizard** – click: **Next >**

Select: **Connect to the network at my workplace** then click: **Next >**

Select: **Virtual Private Network connection** then click: **Next >**

You can give the VPN connection you're creating any name you like, below we've called it:-

Pushhex VPN



Click: **Next >**

Enter the hostname: **vpn.pushhex.com**



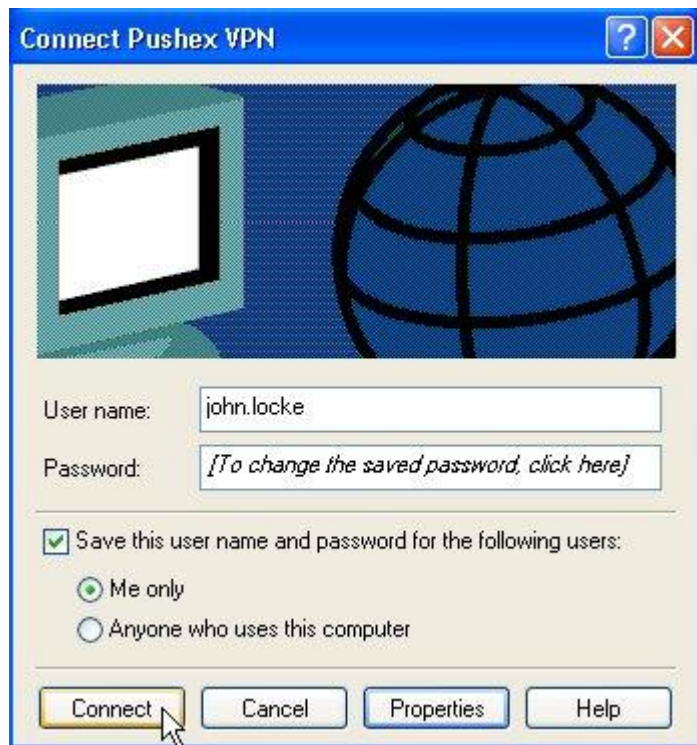
Click: **Next >**



Select:-
Add a shortcut...
if you want one on
your Desktop.

Click: **Finish**

The **Connect** box will then appear:



Enter the same username and password you use for the Pushhex Exchange server.

If you want you can select:-

Save this user name and Password...

Then click: **Connect**

When you've successfully connected you will see this message:



The "2 flashing computers" icon will continue to be visible while the VPN is connected.

When connected, to check that your PC is using the VPN go to the website:-

<http://www.whatismyipaddress.com>

and it should show your computer as being located in the UK.

To disconnect from the VPN, right-click on the "2 flashing computers" icon, representing the VPN connection, and select: **Disconnect**



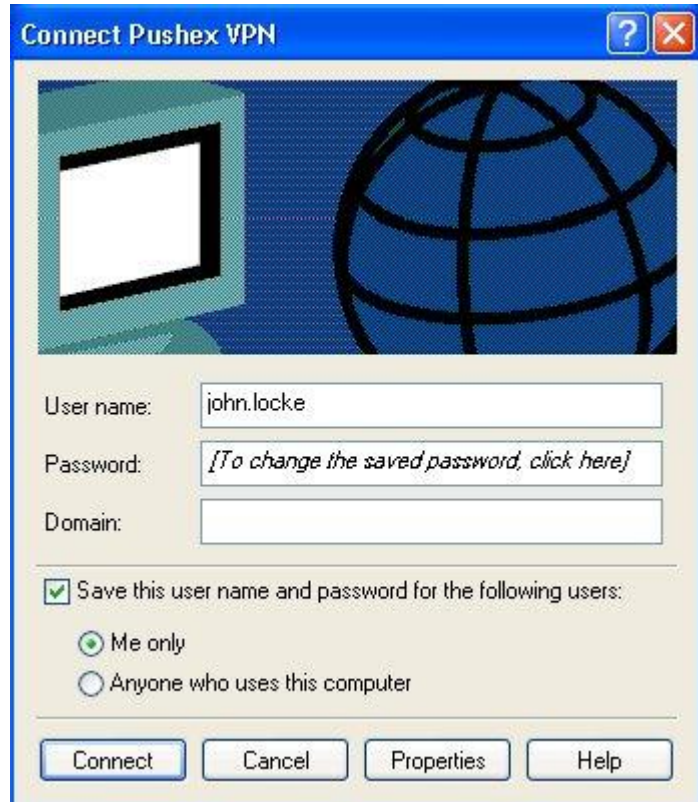
Double-click on the VPN icon on your Desktop when you want to reconnect:



2 - Troubleshooting Tips

Domain Option in Connect Box

Sometimes there might be a line for entering a **Domain** value in the **Connect** box, as shown below:-



Just leave the **Domain:** box blank and click:

Connect

DNS Server Problems

With what you've done so far, the VPN connection to our servers may work perfectly for everything you want to do.

However, if there are still some websites you can't reach or you're particularly concerned that anybody monitoring your local connection should not see what you're doing, you need to make an extra configuration step to make sure the DNS servers you are using are the ones on our VPN servers and not the ones assigned to you locally.

DNS servers convert website names, such as **www.google.com**, into numeric IP addresses, such as **209.85.229.104**

There are several reasons why you want to use the DNS servers on our VPN servers, rather than your local DNS servers, when the VPN is connected:-

1. Your ISP might be giving you the wrong answers to DNS lookup requests, **on purpose**, as an easy way to block access to particular sites.
2. Your ISP could be logging all your DNS requests to check what you are doing.
3. Your ISP could, quite legitimately, be sending you to, for example, your nearest Hotmail server when what you **actually** want, to get the speediest response, is the Hotmail server located nearest to our VPN servers.

In Windows XP the only way to make your PC use the DNS server on the VPN server is to edit the Registry.

Here's a Microsoft Knowledge Base article about how to do it:-

<http://support.microsoft.com/kb/311218>

(We have a script you can download to perform the Registry editing for you, that we'll discuss at the end of the manual method, described next.)

The Registry contains settings which, if changed or deleted, can stop your PC functioning. Don't be put off by this warning, just make the changes carefully.

Here are our instructions, based on the Microsoft article:-

To run the Registry Editor,

click: **Start - Run**

and type:

regedit

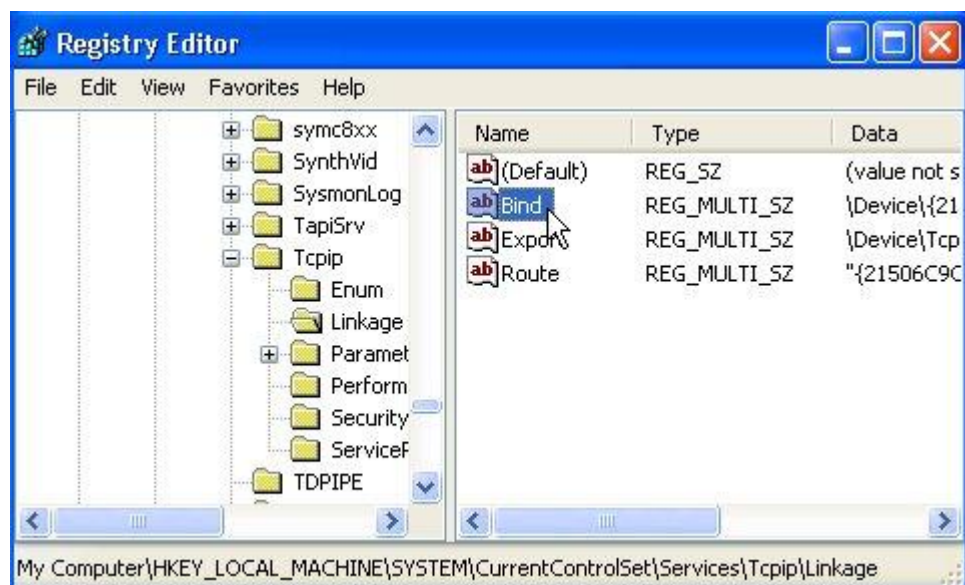
then click: **OK**



In the Registry Editor, navigate to:-

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Linkage

Double-click on the word **BIND**



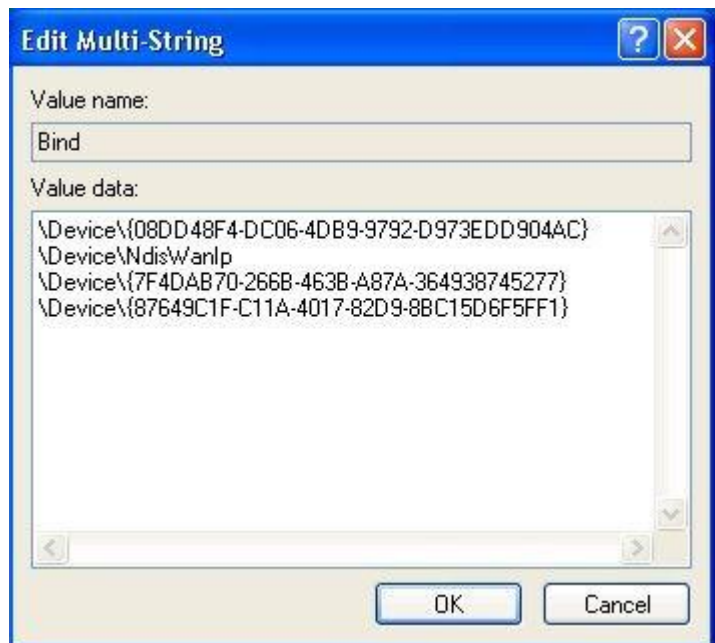
You will see a window like the following:

Your list may have more or less entries, and they may be in a different order.

Each line represents a network adaptor in your PC and the entry:-

\Device\NdisWanlp represents the **Dial Up** entry used by the VPN.

The goal is to move the **Dial Up** line to the top of the list.



Imagine that this window is Word document. Highlight the line:-

\Device\NdisWanlp

Right-click and select Cut.

Backspace to delete the blank line.

Move the cursor to top-left and press

Enter to insert a blank line.

Move the cursor back to top-left and right-click and select **Paste**

Click: **OK** and then **File – Exit** to quit the Registry Editor.

This change takes effect immediately so no need to reboot your computer.

If you ever add a new network adaptor to your PC you may need to repeat this step.

We have a Visual Basic script you can download here:-

<http://support.pushhex.com/files/fixdns.vbs>

Double-click on the downloaded file to run it – there's no confirmation message to say what it's done. Your anti-virus program may throw up warnings about running scripts which you should ignore.



When you've connected to the VPN, you can check that you're using the DNS servers on the VPN server by typing the following into your browser:-

<http://www.dns.test>

The top-level domain **test** doesn't exist and so no DNS servers on the Internet will be able to find the required IP address, which means the webpage will fail to load.

We've added a dummy record to the DNS servers on our VPN servers so, if your PC is using our DNS server, the webpage **will** load correctly.