Logging into SSCC’s PC Network Domain Using PPTP (Virtual Private Networking): Instructions for Windows 9x/ME

This publication documents a superior method of gaining remote access to network shares defined on the SSCC’s Microsoft Windows NT domain (called PRIMO).

PPTP is the networking protocol that underlies “Virtual Private Networking” (VPN). VPN is a remote access technology that allows for high-security, encrypted connections over the public Internet (or even over a private network) between an appropriately configured client computer (yours) and a remote “VPN server” (ours). This is an easy and cheap way to log into the PRIMO domain from just about anywhere.

In the SSCC we will, over time, probably take advantage of the high-security potential of VPN connections. In the short run, the biggest advantage of VPN connections for SSCC’s remote Windows 9x/ME users is that they can be initiated from anywhere in the world. Logging into PRIMO via a VPN connection does not require that you login first to DOIT’s modem pool; it requires only that you get access to the Internet in some way. Dialing into DOIT’s modem pool via the Dial-Up Networking connections that you create when you install WiscWorld is one way to connect to the Internet. But you could also dial up a commercial Internet Service Provider (AOL, for example) that has local access numbers all over the world. Or you could connect to the Internet via an Ethernet connection at a distant university or a public facility.

Requirements:

- Windows 9x/ME Operating System
- *Client for Microsoft Networks, Dial-Up Networking, and Microsoft VPN Adapter* (See below for more details)
- Existing Internet connection (WiscWorld/DOIT dial-up, Ethernet, DSL, Cable Modem, etc.)
- SSCC Windows NT account (PRIMO account)

NOTE: Windows 95 users are required to download and install the dial-up networking update (DUN 1.3 update/2.4MB) before proceeding. This download is available from *Microsoft’s website* and adds VPN support to Windows 95.
Verifying/Meeting the Requirements for VPN

You must have Client for Microsoft Networks, Dial-Up Networking, and the Microsoft VPN Adapter installed on your home PC. Either or both of Client for Microsoft Networks and Dial-Up Networking may have come already installed on your PC. You will almost certainly have to install the Microsoft VPN Adapter yourself. Fortunately, this is a straightforward procedure.

To determine if you need to install Client for Microsoft Networks:

1. Click on the Start button, go to Settings, and choose Control Panel
2. Double-click on Network
3. Select the Configuration tab

If Client for Microsoft Networks is not listed as an installed component:

1. Click on the Add... button.
2. Choose Client and click on the Add... button
3. Select Microsoft on the left-hand side of the window and Client for Microsoft Networks on the right-hand side. Click OK.

Dial-Up Networking and Microsoft VPN Adapter are installed in the following way:

1. In the Control Panel, double-click on Add/Remove Programs
2. Click on the Windows Setup tab.
3. Double-click on Communications.
4. Check the boxes, if necessary, next to Dial-Up Networking and Virtual Private Networking. If they are already checked, they are already installed.
5. Click **OK**. Installation will proceed. You may be prompted for your system CD to install these components.

Setting up the VPN Connection

You have to define a *Dial-Up Networking* connection to connect your PC to the SSCC’s VPN server. This sounds odd because the VPN connection itself goes over the Internet, not a phone line and modem, but *Dial-Up Networking* is indeed the tool you use to define the connection. Here’s how:

1. Double-click on **My Computer** and then on **Dial-Up Networking**
2. Double-click on **Make New Connection**
3. Give the new connection an appropriate name like "Primo via VPN". In the **Select a Device**: box, drop down the list of options and select **Microsoft VPN Adapter**. Click **Next**.
4. In the **Host name or IP Address**: box enter **vpn.ssc.wisc.edu**. Note that this is an evolving resource in the SSCC and the identity of our VPN server may change.

You also have to configure *Client for Microsoft Networks* to log you into the PRIMO domain automatically:

1. Click on the **Start** button, go to **Settings**, and choose **Control Panel**
2. Double-click on **Network**
3. Select the **Configuration** tab
4. Select **Client for Microsoft Networks** and then click on the **Properties** button
5. Select **Log on to Windows NT domain**. Enter "PRIMO" in the box labeled **Windows NT domain**: Click **OK**.
6. Click on the **Identification** tab
7. Enter “PRIMO” in the box labeled **Workgroup:**
8. Click **OK** to exit the network configuration application and then click on **Yes** when prompted to restart your computer.

**Connecting**

You must first connect in a standard way to the Internet. One way to do this is by dialing into DOIT’s modem pool in the way you set up when you installed WiscWorld. Otherwise you could connect to a private ISP or take advantage of an Ethernet LAN connection in an office on the UW campus or, in theory, anywhere else that a LAN is connected to the Internet. Once your Internet connection is made you initiate the connection to our VPN server.

Double-click on the SSCC VPN Server Dial-Up Networking connection that you created earlier (**Primo via VPN** if you used the suggested name). You will be prompted for your SSCC username and password at this step. You will know that this process has been successful when you see your SSCC login script executing.