VTel DSL

Installation and Network Configuration Guide

This handbook contains instructions for:

- Installing your Best Data DSL800EU Router (v.15.2.10)4/29
- Identifying the network readiness of your computer
- Setting your network specifications
- Tips on troubleshooting problems

Welcome to VTel's First-In-Vermont DSL Service.

We are pleased to provide this configuration guide to assist in setting up your computer for VTel DSL service.

If you have comments or problems, please call toll free at 802-885-9000.

Now that you have your DSL800EU Router, it is necessary to make some minor configuration changes to your computer to connect to the VTel DSL network. This manual will identify these changes and explain how to implement them.

Best Data DSL800EU

Step #1 - Physical Installation

- Plug in the power supply and connect the power cable to the DSL router.

- The phone cord included with your router is your DSL cable; this is the cable that should be used to connect your router to the phone jack. Plug one end into the *LINE* port on the back of the router and the other end directly into your phone jack on the wall. Run the line directly from the wall to the router.

The Best Data DSL800EU has two ports for connecting your computer, an Ethernet or LAN port, and a USB port. The two ports should not be used at the same time on the same computer. Both ports can be used simultaneously if they are connected to two different computers. If your computer has an Ethernet adapter, you should use that connection. If you are using a laptop computer or a computer that does not have an Ethernet port, then you should use the USB connection. Connecting via the USB port requires Windows 98SE or later. Windows 95, Windows 98, and Windows NT 4.0 or earlier require connecting via the Ethernet connection. We recommend connecting via the Ethernet port and do not provide support for connections through the USB port. If you are unsure of what type of connection you have, call our office at 802.885.9002 for assistance.

Connecting to the Ethernet Port

- Plug one end of the provided Ethernet cable into the *ETHERNET* port on the back of the router. With your computer powered on, plug the other end into your computer's Ethernet adapter.

control panel. This will disable any modem connection from the computer completely. If this fails you may need to reinstall your operating system. Contact your computer support technicain, if you do not have a computer support technician VTel may be able to recommend an area professional.

****ATTENTION WINDOWS 98 USERS ****

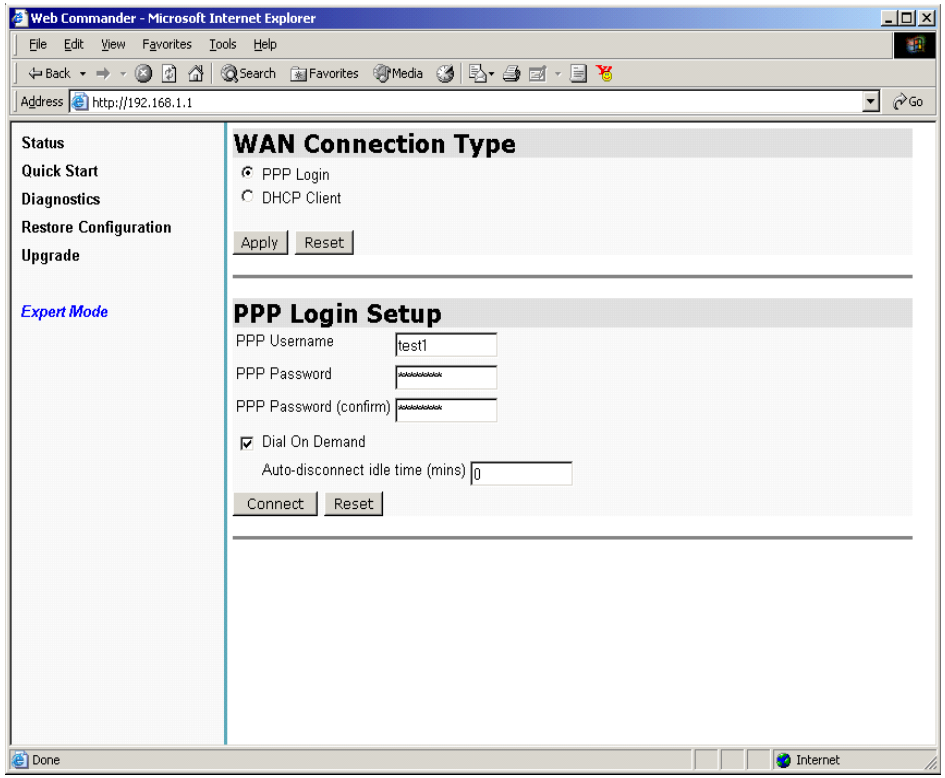
Gateway, Compaq, HP and possibly other brands of computers with Windows 98 second edition preinstalled MAY have defective network software that prevents your computer from connecting via a Local Area Network. This type of connection is required for an ADSL connection. You will need to reinstall your system software from the original disk. BE AWARE that this is not a trivial operation, system installs from these disks usually set the system back to original condition, eliminating all your present applications, data and settings. Contact your Computer Support Technician to assist you, they may be able to perform the operation with a minimum of inconvenience. If you do not have a Computer Support Technician VTel may be able to recommend an area professional.

Verify Connectivity

- Make sure that the *POWER LED* is lit and green on the router. If the *POWER LED* does not come on and remain lit, verify that you have correctly connected the power cord to the router. If the light does not remain lit, call our office at 802.885.9002.
- The *LAN LED* should be lit and green and possibly flickering occasionally. This indicates a connection to your computer. If the indicator light does not come on re-check the connection between your computer and the router. If after verifying the physical connections between the computer and router you are still unable to obtain a connection, call our office at 802.885.9002 for assistance in diagnosing the cause for this.
- Make sure the *DSL LED* is lit and steady. Occasional flickering is normal. If the *DSL LED* is not lit, or blinking steadily, re-check the telephone line connection between the router and the wall. If the DSL light does not stay a steady green color, the router is not receiving a DSL signal from your phone line. Call our office at 802.885.9000 for assistance in diagnosing the cause for this.

Step #2 - Configure the DSL800EU

- Start your web browser, such as Internet Explorer or Netscape. If it attempts to load a page, press the *Stop* button at the top of the browser window.
- In the *Address* or *Location* bar of your web browser, clear any address that may be present then enter **http://192.168.1.1** and press *[Enter].*



Step #1

- Make sure PPP is selected
- Enter your VTel username and password
- Click the check box for Dial on Demand
- Click Connect

Tips and Troubleshooting

The three lights (Power, Ethernet Link, DSL Link)on my DSL modem are green but I still cannot access the Internet. Why?

Go back to the "Setting your Network Preferences" section on page 12 and repeat the set up procedure. If you are certain that your settings are correct and you still cannot connect call VTel Internet Technical Support at 802-885-9002.

Everytime I try to launch Internet Explorer or Outlook Express my computer tries to use my modem to dial the phone. Why?

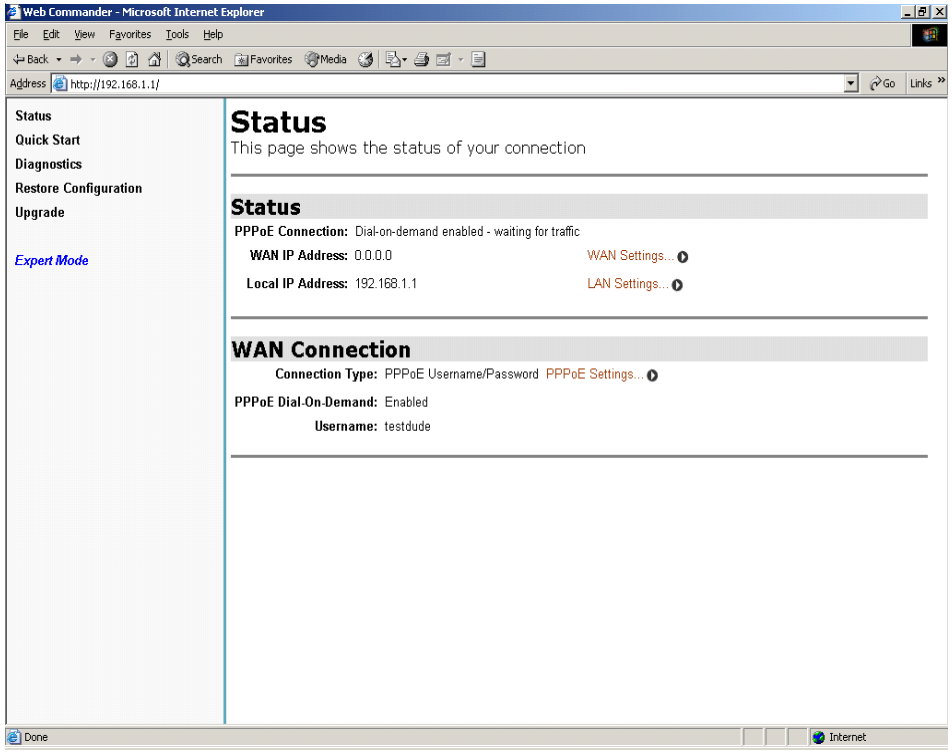
There is a connection setting in Explorer or Outlook that tells the computer to dial the modem . To change it right click on the Explorer icon on your desktop. Select "Properties" and click on the *Connection* tab. Select "Never dial a connection" below the white box. If "Connect to the Internet using a local area network" is an option select that as well. Exit Explorer/Outlook and reopen it. It should not attempt to dial the phone. If it still tries, use the connection wizard to reset your connection preferences. Go to *Options* under the "Tools" menu in either Explorer or Outlook and click on the *Connections* tab. Click on the "Setup" button at the top of the window where it says "Use the Internet Connection Wizard to connect your computer to the Internet". Proceed through the screens indicating that you want to connect via a local area network. If you have a mail account on your computer now, respond that you do not want to set up a new mail account, it should show you your current settings click "Accept" and finish the process. There is one last ditch effort if the situation persists. You can delete the "Dial Up Adapter" in the network

Try it out!

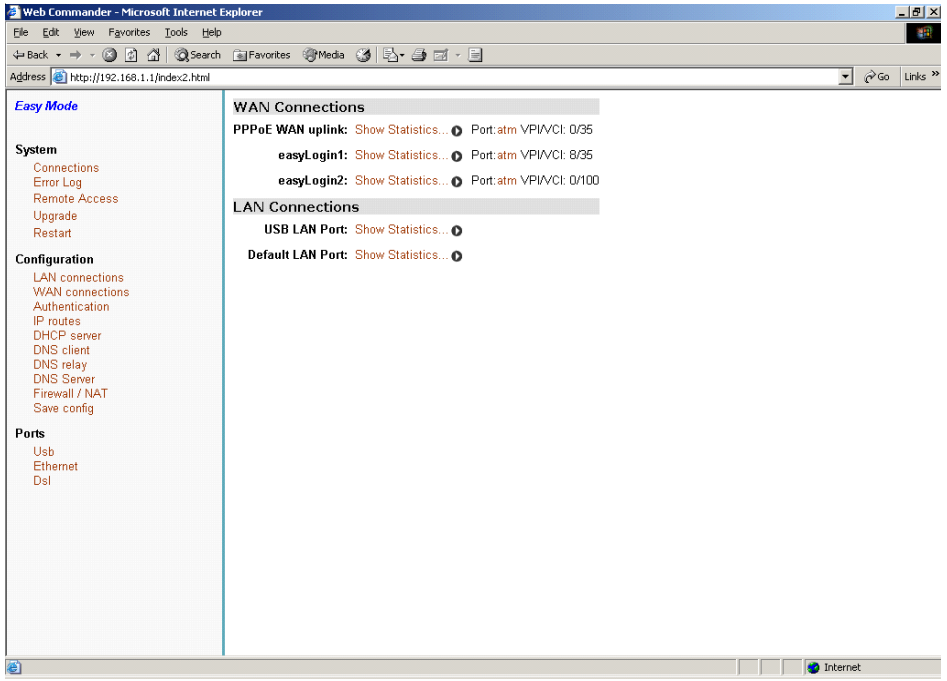
Your computer needs to be restarted for the changes to take effect. When you click OK the machine should prompt you to restart. If it doesn't prompt you, then you should restart it manually. Upon restart your DSL internet connection should be live. Open your browser and see if you can successfully browse the Internet. If the browser tries to dial the phone to make a connection or presents an error message that says the host cannot be found, double check your settings and try again. If you still experience errors check the troubleshooting tips on the next page. If problems persist contact VTel Internet technical support at 802-885-9002.

Visit www.vermontel.net frequently
for service bulletins and other important information.

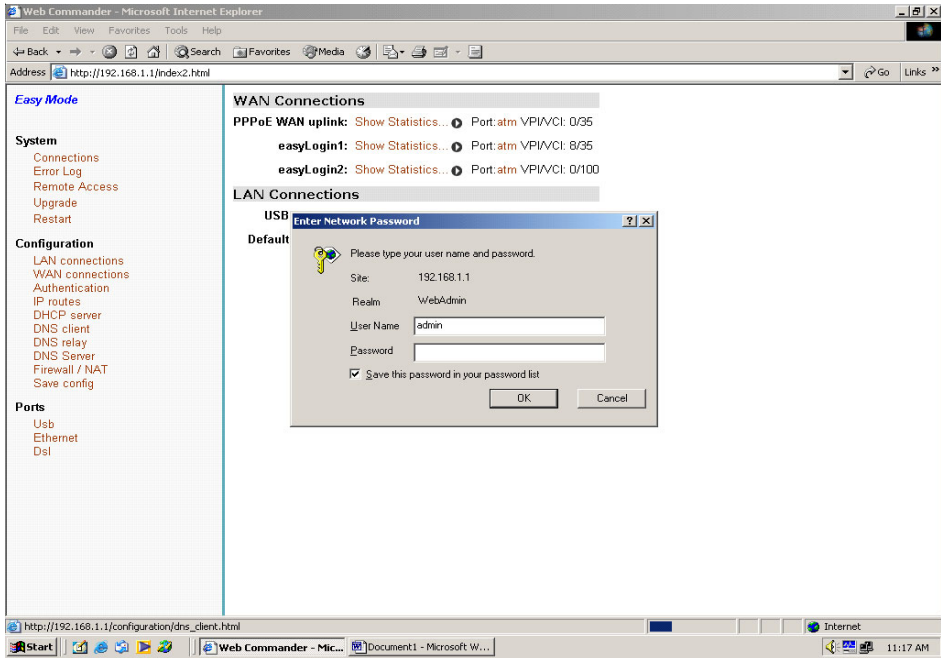
Select the **Account Mgmt** link on the left menu bar to monitor usage, change passwords, and access other useful tools.



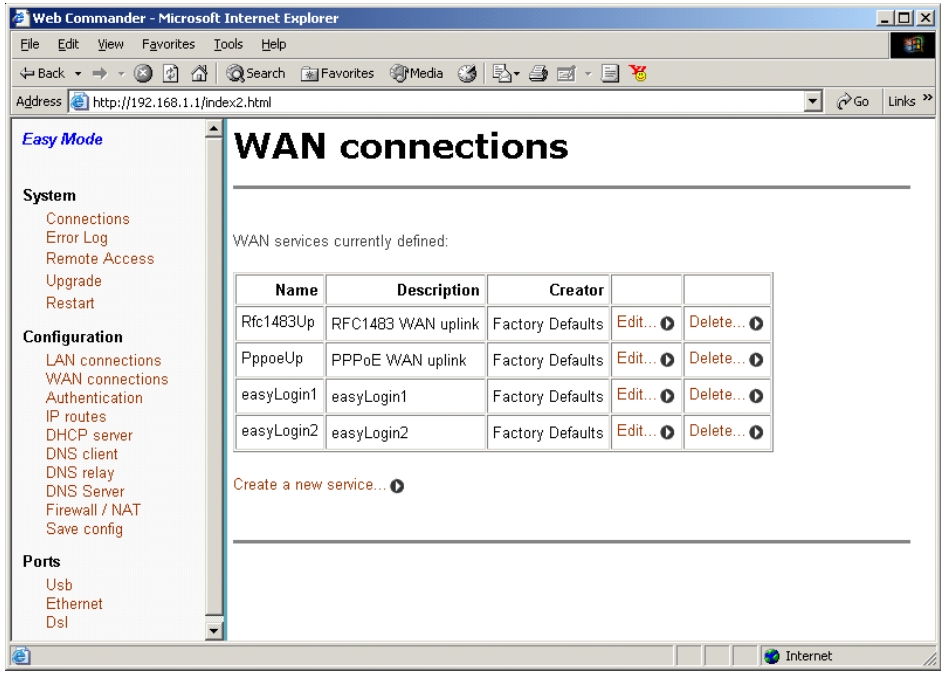
Step #2: Click on the left of the above screen click Expert Mode



- Click on “WAN Connections” from the left menu bar.



- Make sure the Username is admin and the password field is blank.
- Click Ok

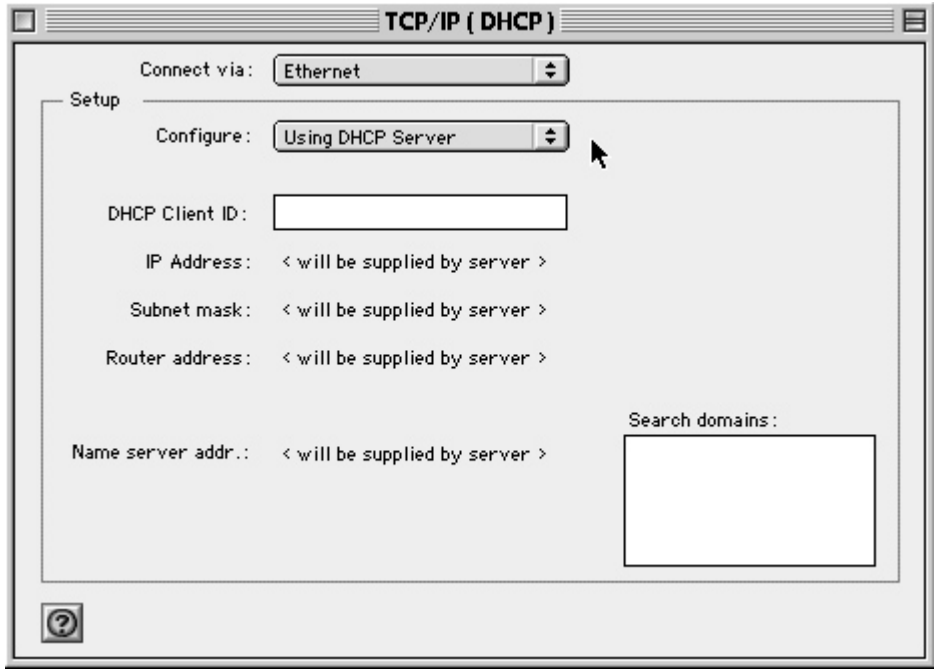


Setting your Macintosh Network Preferences

Click on the Connect via: pulldown menu and select Ethernet.

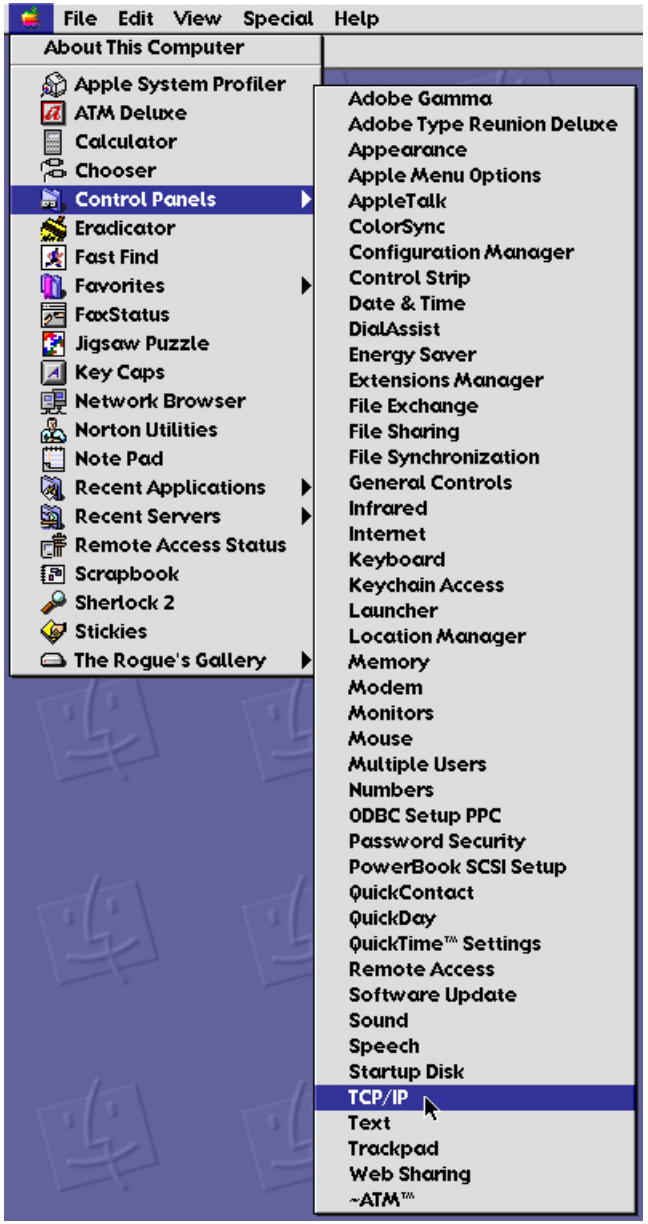
Select “Using DHCP Server” from the *Configure* pulldown. Leave the other boxes blank.

Click the close button in the upper left corner of the window and say Yes to save the changes.

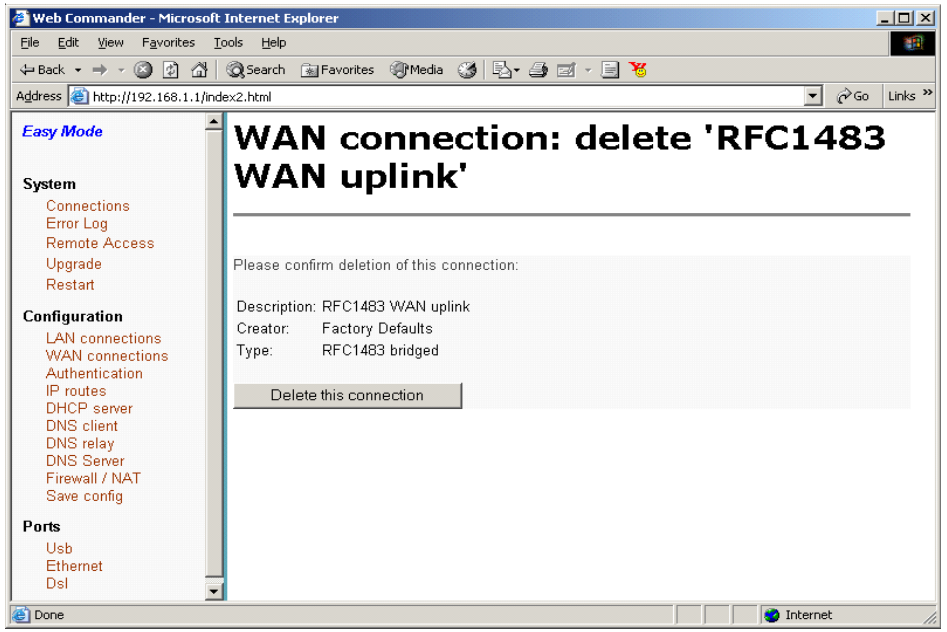


Setting your Macintosh Network Preferences

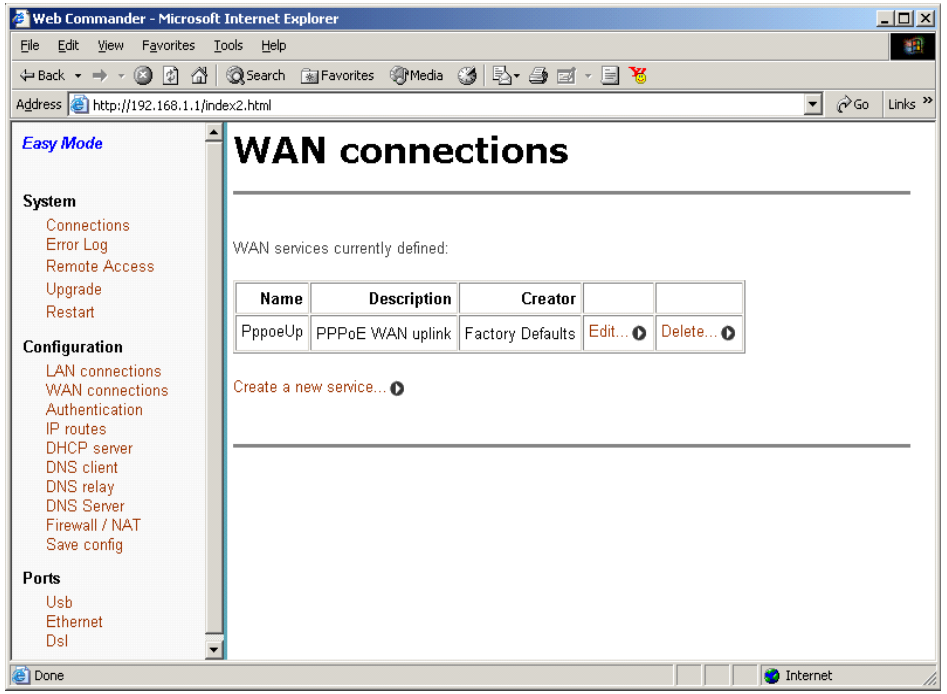
Click on the Apple in the left uppermost corner of your screen. Slide down to Control Panels and then over to the right so the submenu drops down. Slide down to TCP/IP and click on it.



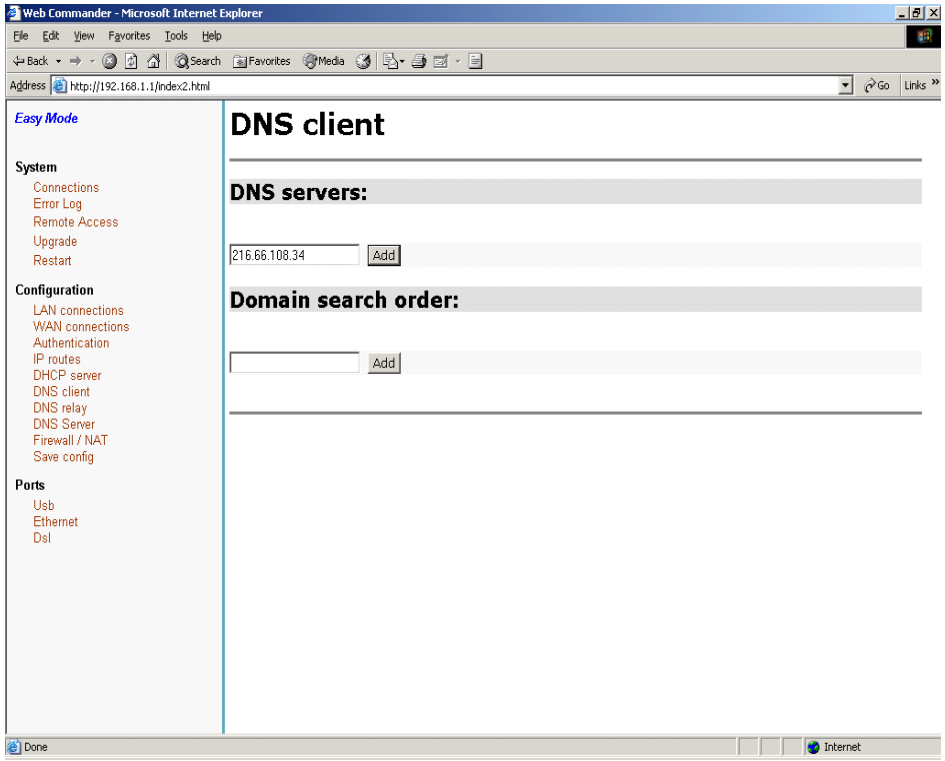
- Click on delete for the Rfc1483Up entry.



- Click the button [Delete this connection].
- Repeat this last step for the easy Login 1 and easy Login 2.

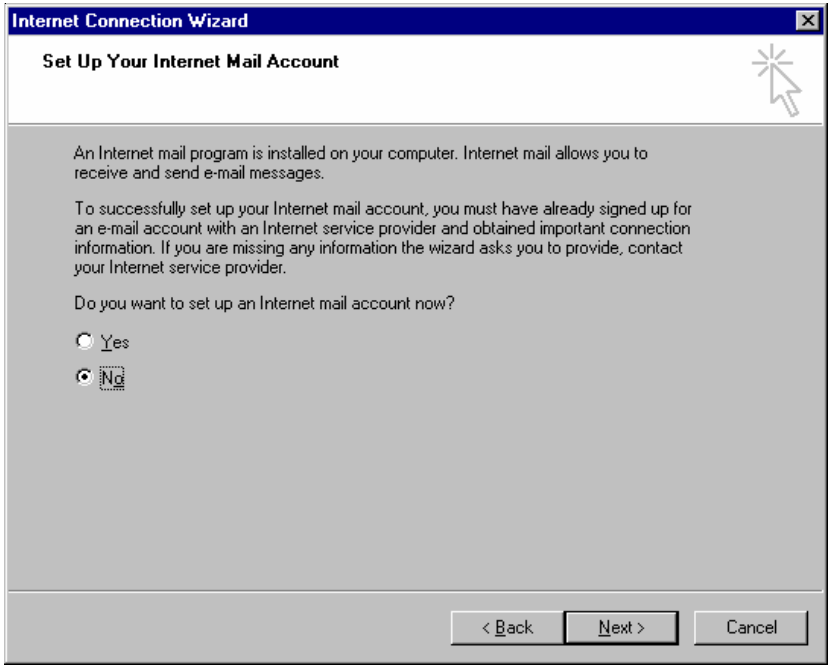


- From the left menu click DNS Client.
- Under DNS Servers, add 216.66.108.34 and click add.

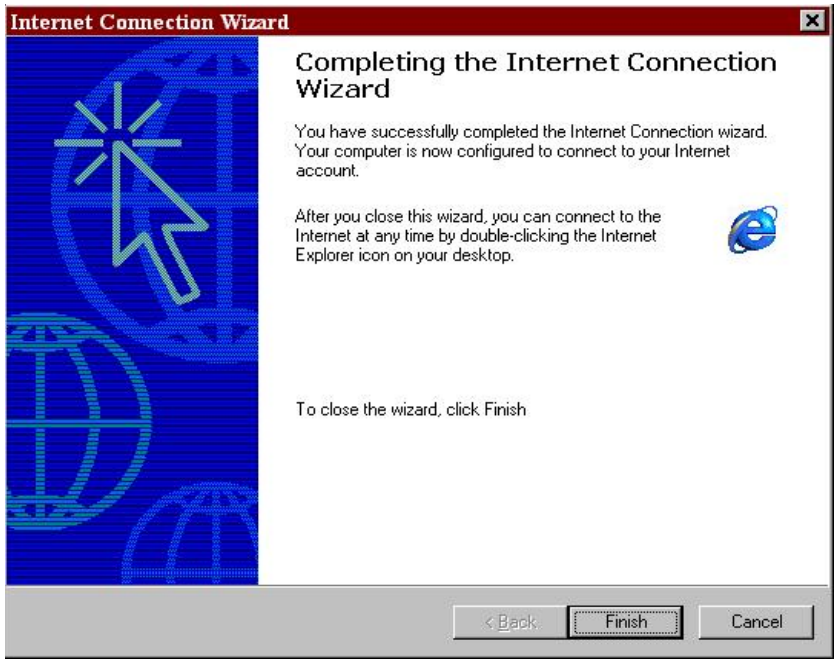


After you have clicked add your window should show the following.

Click “NO” to continue with your DSL configuration when prompted to set up your internet mail account.

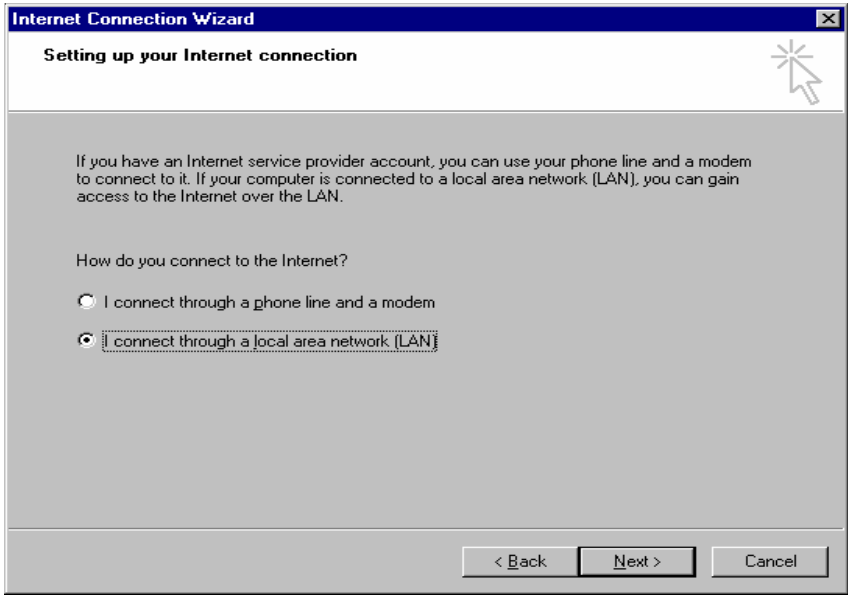


Click finish and begin to use your DSL connection!

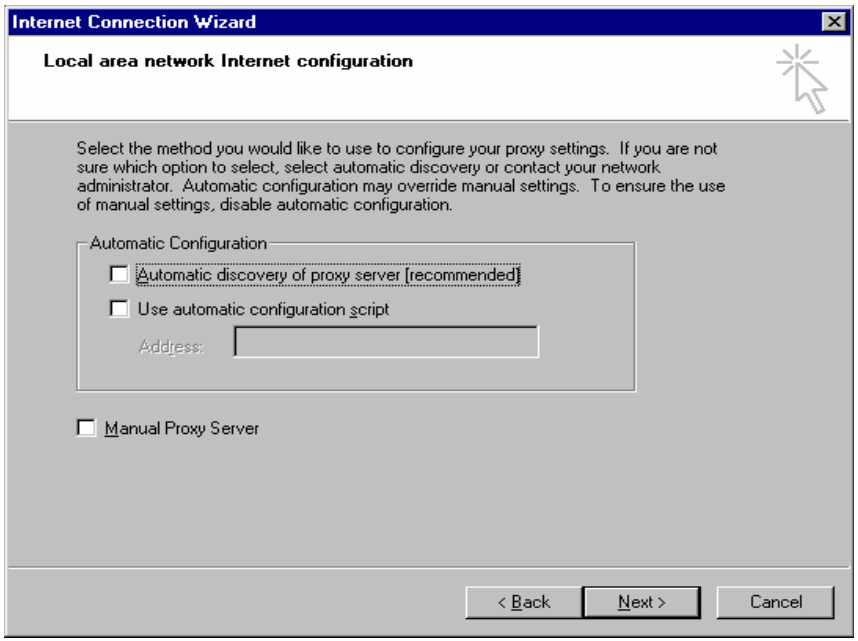


Turn to page 27 to proceed and begin using your DSL connection!

Select “I connect through a local area network [LAN]” as shown below, then click “Next.”

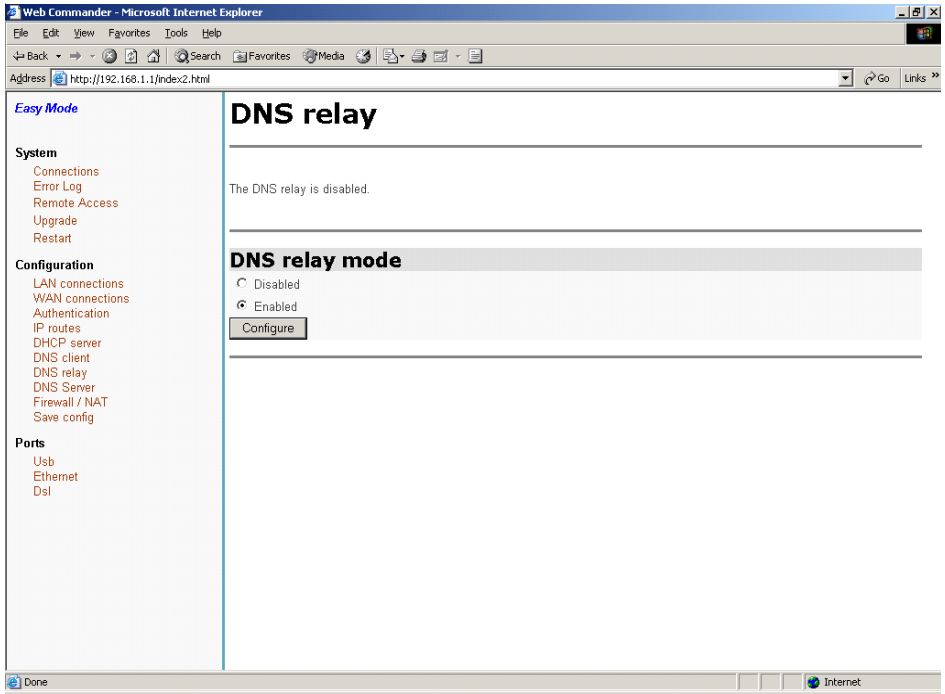


If you have boxes checked make sure to uncheck them. No boxes are to be checked in this screen. After you have done so click “Next.”

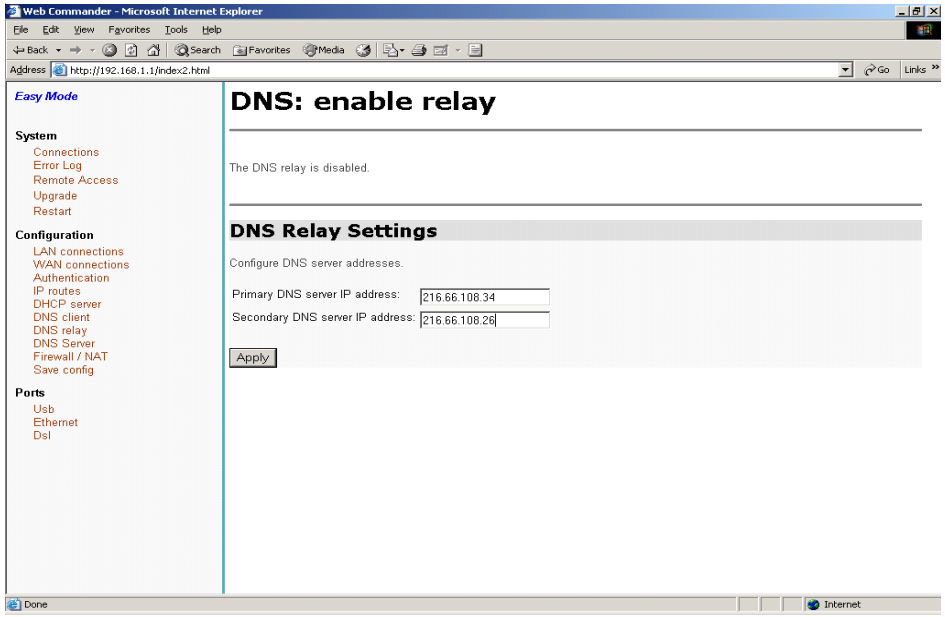


Step #3:

- On the left menu bar click DNS Relay.



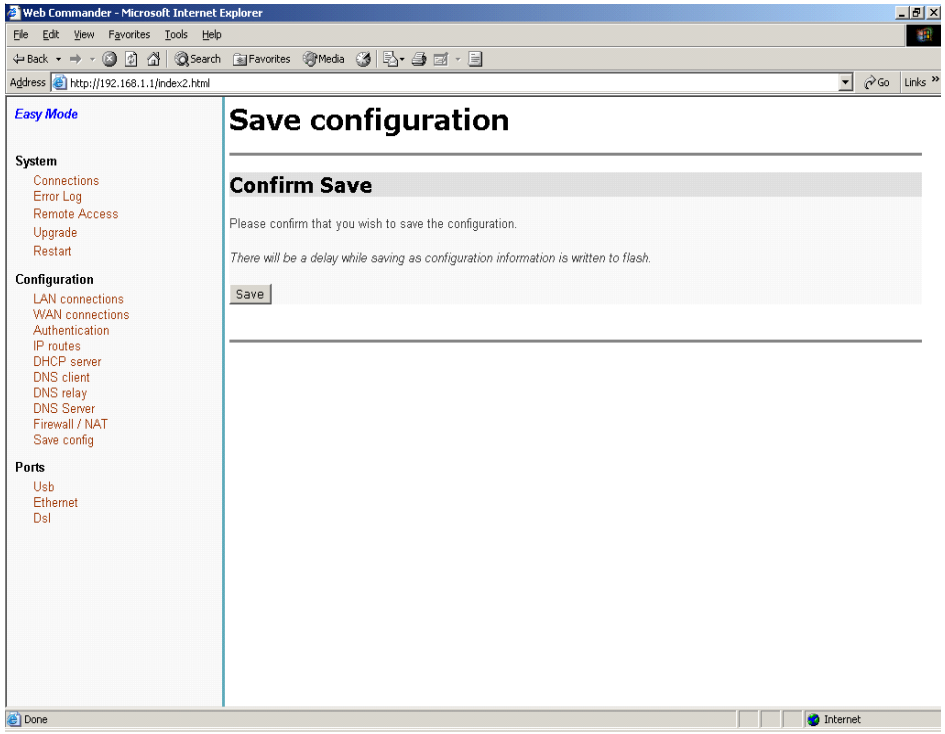
- Enable DNS relay mode and click Configure.



- Enter DNS numbers
  216.66.108.34 (primary) and
  216.66.108.26 (secondary)
- Then click apply

Step #4

- From the left menu bar click Save Config



Confim the save by clicking the save button as shown in the above picture.

Be patient this may take a few minutes!

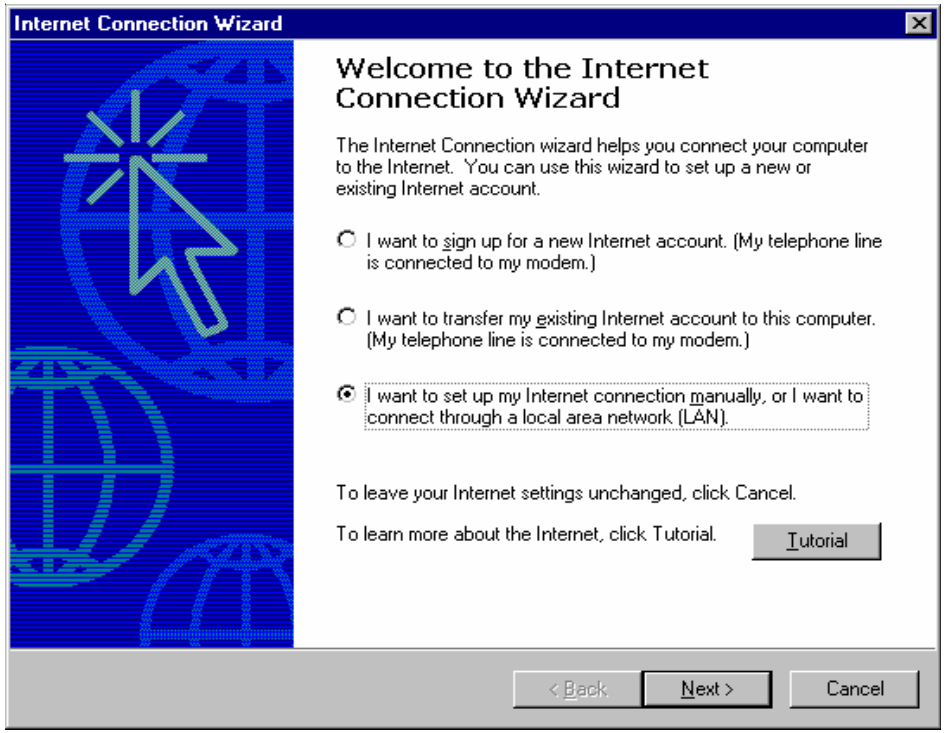
When its finished it will say: Configuration Saved.
DO NOT Close the window until you get this message

You are now ready to use your connection.

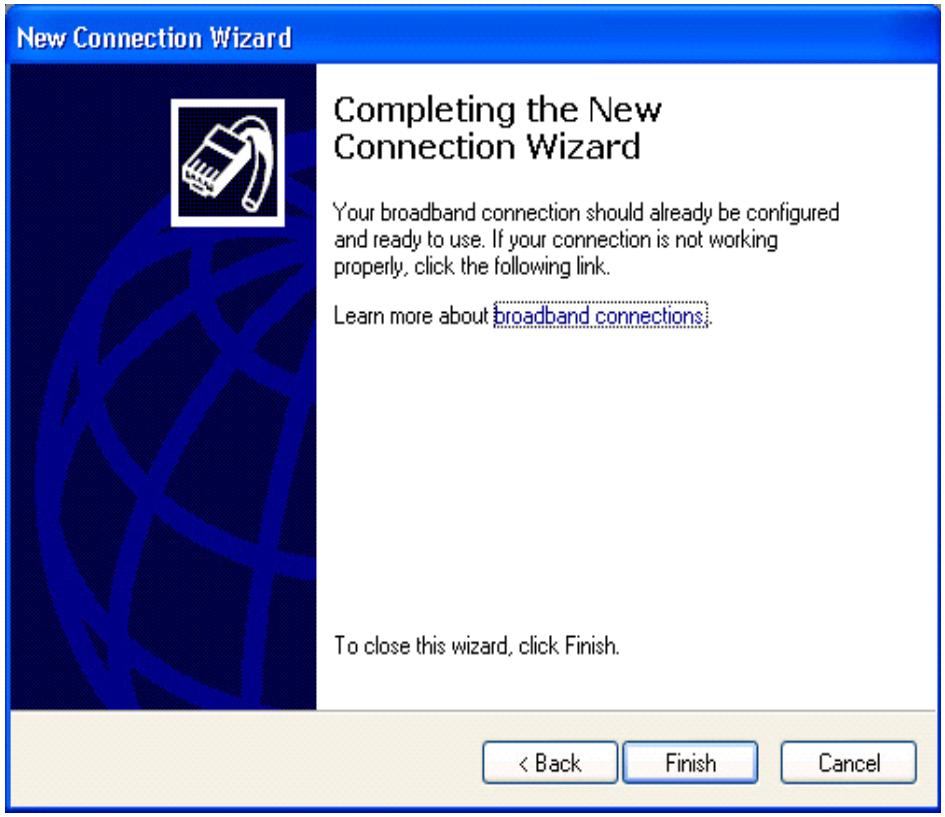
Internet Connection Wizard Instructions
Windows 95,98,ME and NT

The Internet Connection Wizard will help you walk through the DSL settings necessary for your computer.

Select “I want to set up my Internet connection manually, or I want to connect through a local area network” as shown below, then click “Next.”



Click “Finish” and close your browser.



Turn to page 27 to proceed and begin using your DSL connection!

Step #3 - Test your Connection

In the *Address* or *Location* bar of your web browser, clear any address that may be present then enter **http://www.vermontel.net/** and press *[Enter]*. If the VTel Internet web site is displayed, your router and computer are correctly configured. If you encounter any difficulties or an error occurs, please call our office at 802.885.9002 for assistance.

Additional Notes

Once your DSL connection is up and running, you may notice some hissing or white noise on your telephone line. What you are hearing is sound generated by the information being passed between your DSL Modem and the Internet. To remove this sound from your phone line, the use of a DSL micro filter may be necessary. There are two types of filters available: Desk/Inline and a Wall-Mount version. Install these filters as needed; however be aware that too many installed micro filters may cause your DSL service to stop working

What is Ethernet?

Ethernet is a networking technology used to hook multiple machines together. There are three kinds of Ethernet wiring and connectors, Thick Ethernet (Fig. A), Thin Ethernet (Fig. B), and 10BaseT Ethernet (Fig. C). You may encounter the term 100BaseT or 10/100BaseT in documentation or referring to cards, but it is simply a faster version of 10BaseT and the cards and connectors are compatible. Your DSL modem uses, 10BaseT, which is the most common type and often comes built-in on many new computers. 10BaseT uses wires similar to telephones (just a little thicker) and the plugs, called RJ-45 connectors are wide versions of the plastic plugs found on telephones wires. The other two types of Ethernet wiring utilize coaxial cable, like cable TV wiring. Thin Ethernet has a snap in, or twist on connector and thick Ethernet has a 15 pin plug akin to a monitor connector. If your network card is configured for either thick or thin Ethernet there are adapters called MAUs available at electronic stores (such as Radio Shack) that will convert them to 10BaseT.

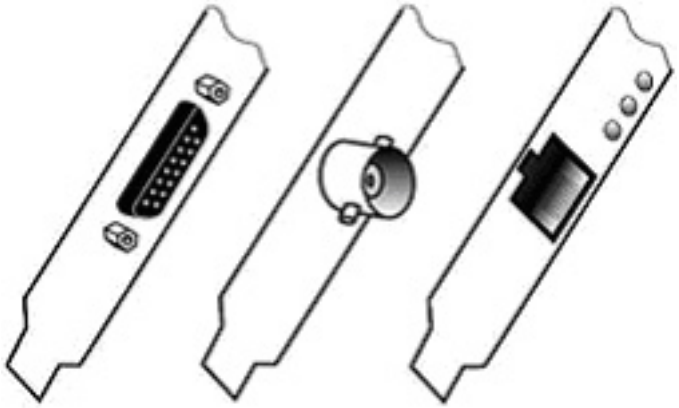


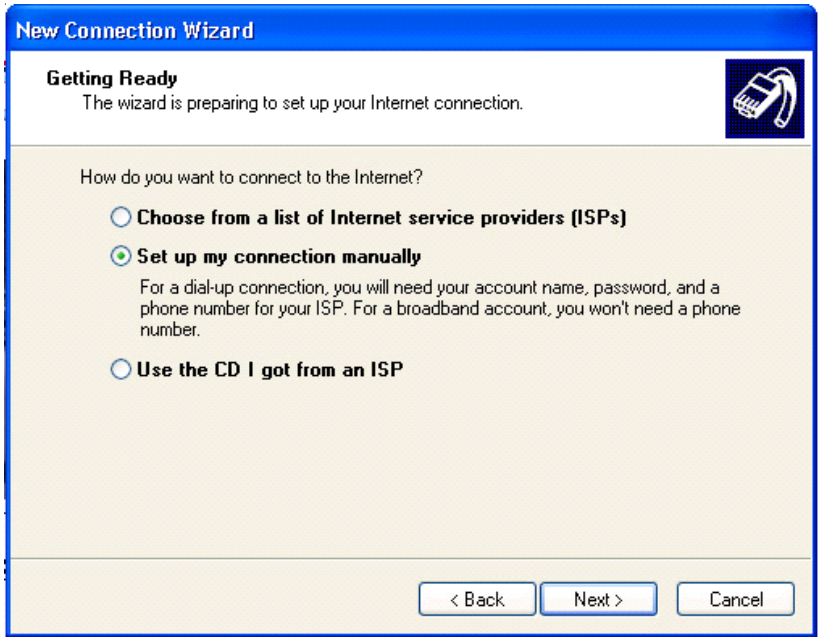
Fig. A (thick) Fig. B (thin) Fig. C (10BaseT)

<-This is the type you need.

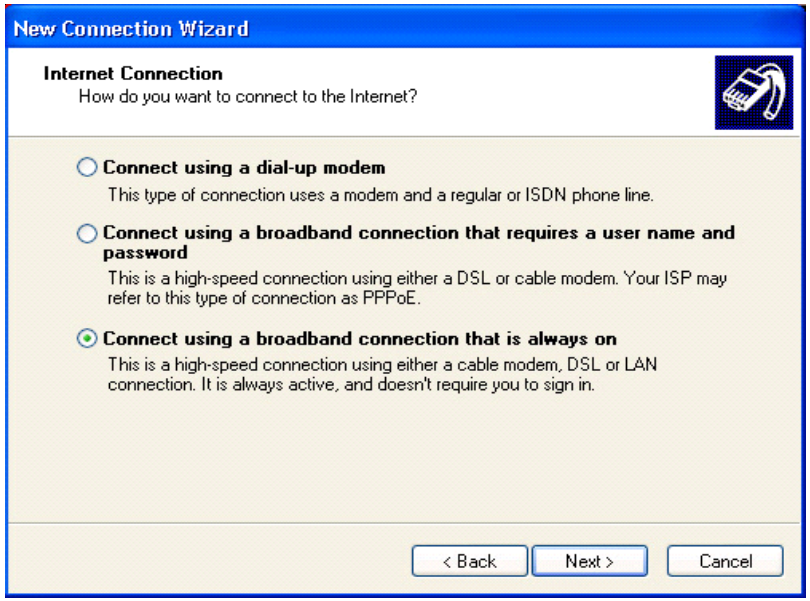
In rare instances and generally on older cards you may see a combination of two of the types. As long as one of the types is 10BaseT then it will work for what we need.

The 1 Meg Modem uses 10BaseT Ethernet to connect to your computer. The Ethernet wire supplied will plug into the back of the modem and into the RJ-45 connector on your computer or the computer's network card.

Select "Set up my connection manually" as shown below, then click "Next."



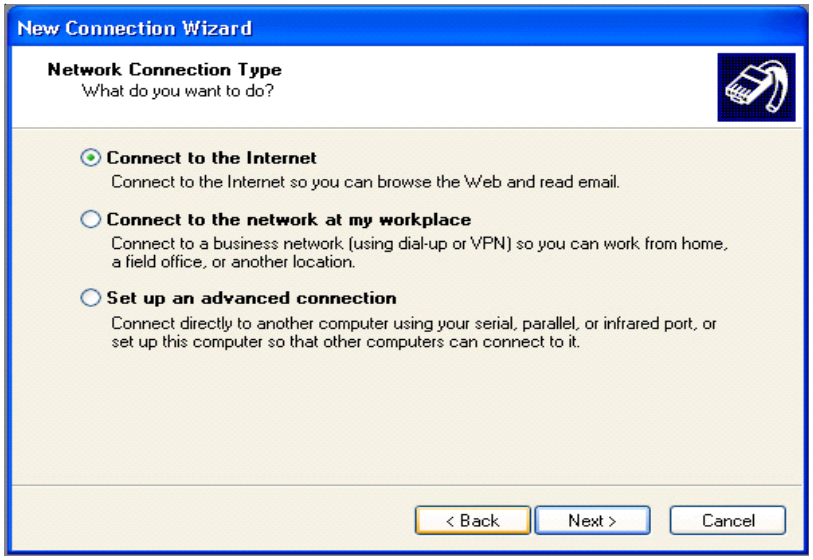
Select "Connect using a broadband connection that is always on" as shown below, then click next



Internet Connection Wizard Instructions For Windows 2000 and XP

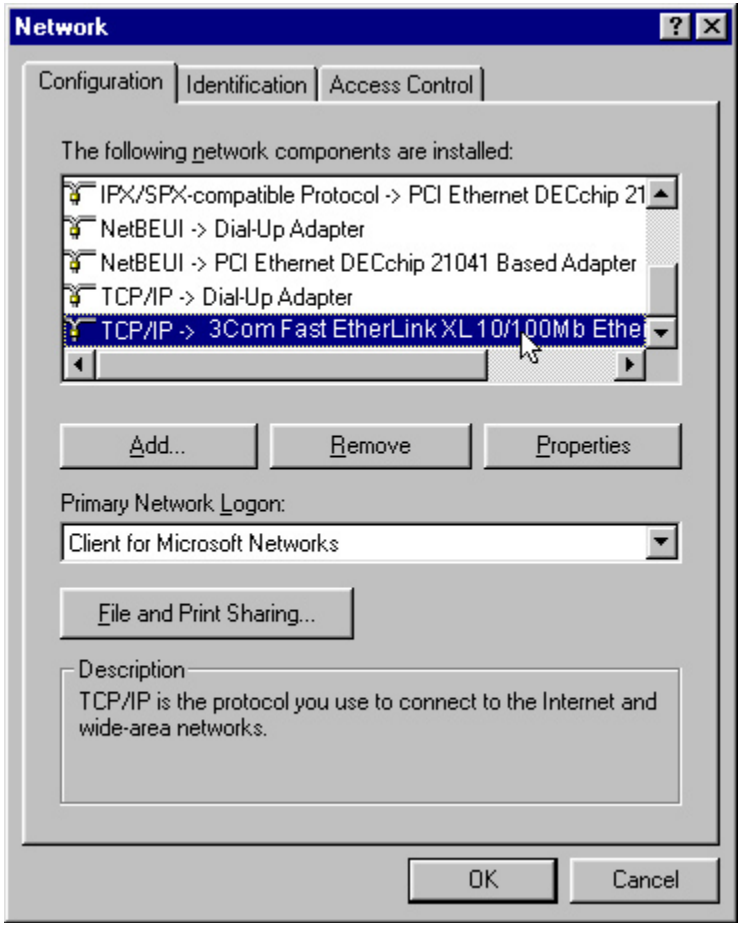
Click “Next” in the screen below. The Internet Connection Wizard will help you walk through the DSL settings necessary for your computer.

Select “Connect to the Internet” as shown below, then click “Next.”



Finding Ethernet on an IBM Compatible PC

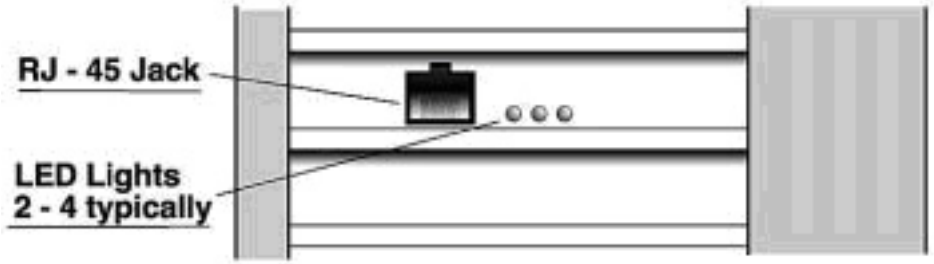
Some computers come from the factory with Ethernet installed. It will be mentioned in the documentation or technical specification list that came with the computer. Built in Ethernet could be identified physically by a RJ-45 connector on the back of the machine or on a network card. It can also be determined through the network control panel as an entry in the list such as either: TCP/IP -> Intel Based Ethernet (which indicates an Ethernet connector on the motherboard), or TCP/IP -> xxx Ethernet NIC (which indicates an installed network card) where xxx represents a manufacturer’s name and the model number of the card. The example below shows that there is a 3Com Fast Etherlink network card installed in the machine.



Finding Ethernet on an IBM Compatible PC

The illustration below shows the rear view of a typical PC. There is an area where there are several slots in a row with metal covers on them. This illustration shows an Ethernet card installed in one of the slots. Your PC may have other cards such as a video card or a modem card in one or several of the slots. Look carefully to identify the plugs and lights shown.

Note: The orientation depicted is of a tower, or vertical computer, if you have a desktop unit turn the picture sideways.



PC Laptops

Some laptops come with built-in Ethernet, and if so, will have a RJ-45 jack somewhere on the back or side of the computer. Many laptops do not come Ethernet ready and the most common way to outfit them is to use a PCM/CIA card, sometimes called a PC Card like the one shown below. These cards fit into slots on the sides of the laptop and have pop-out RJ-45 connectors.

Setting Your Network Preferences

Windows NT users will see this screen in step #2 of Setting up your Network Prefrences.

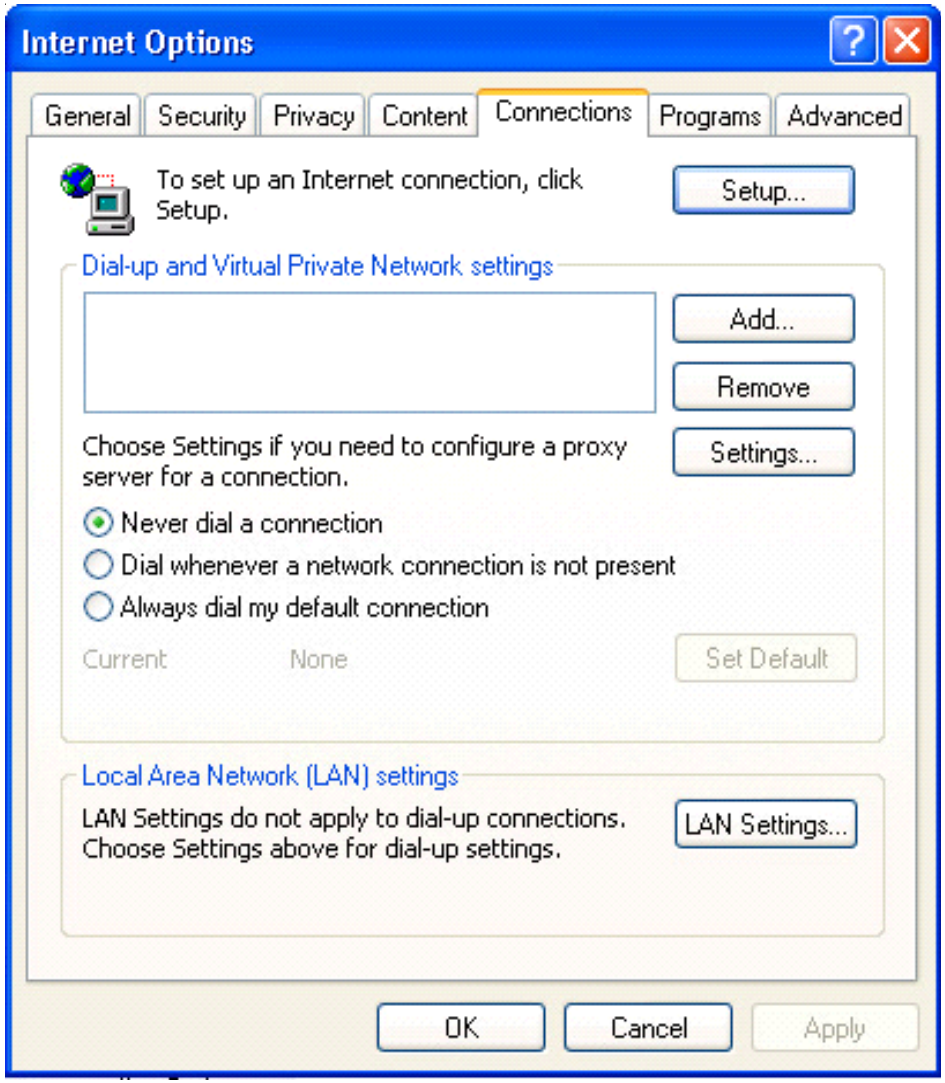
Internet Connection Wizard differs between operating systems. If you have Windows 2000 or XP go to Page 19. If you have Windows 95, 98, ME or NT go to Page 22.

Setting Your Network Preferences

Click the Connections tab. Your window should look similar to the one below. NT users may see the screen on the next page.

Click the Setup button in the upper right to start the Internet Connection Wizard.

NOTE: You may have Dial-up accounts listed, if so, it's ok to leave them there. However, please be sure Never Dial a Connection setting is selected



Finding Ethernet on a Macintosh Computer

To quickly determine if your Macintosh is Ethernet equipped, open the TCP/IP Control Panel, under the Apple Menu, slide down to Control Panels and then to the right to the submenu to find TCP/IP. Click on the pulldown menu at the top of the window and see if Ethernet is an option. If it is it will say Ethernet Built-In, or if a card is installed, Ethernet Slot x. If Ethernet is not in the list your machine is not currently Ethernet ready. You will need to purchase and install a network card, see "Generic Ethernet Cards" following this section.

If your machine indicates Ethernet capability you will still need to check what type of connector it is equipped with.
The illustrations below show the two different types of built-in Ethernet on a typical Macintosh computer identified by this symbol <•••>. Fig. A shows an AAUI port that requires an adapter such as an Asant• FriendlyNet to provide a RJ-45 jack (they come in all flavors of Ethernet so be sure to specify 10BaseT). Fig. B shows a machine with built-in 10BaseT utilizing a RJ-45 jack.
Note: Some models come equipped with both types of connectors, if so, use the built-in RJ-45.

Fig. A

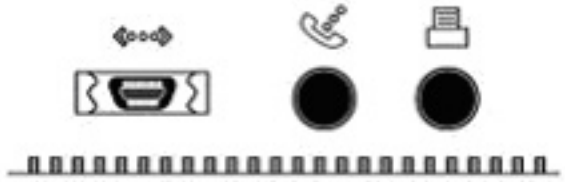
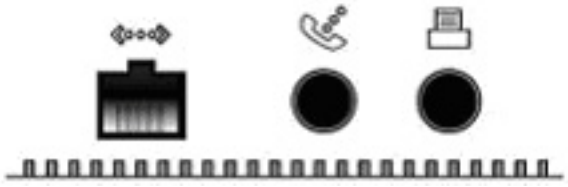


Fig. B



Macintosh Laptops

Some Macintosh laptops come with built-in Ethernet and have either a RJ-45 jack or an AAUI port like the one pictured in Fig.A. However many models use a PC Card (PCM/CIA), like the one pictured earlier in the PC section of this manual.

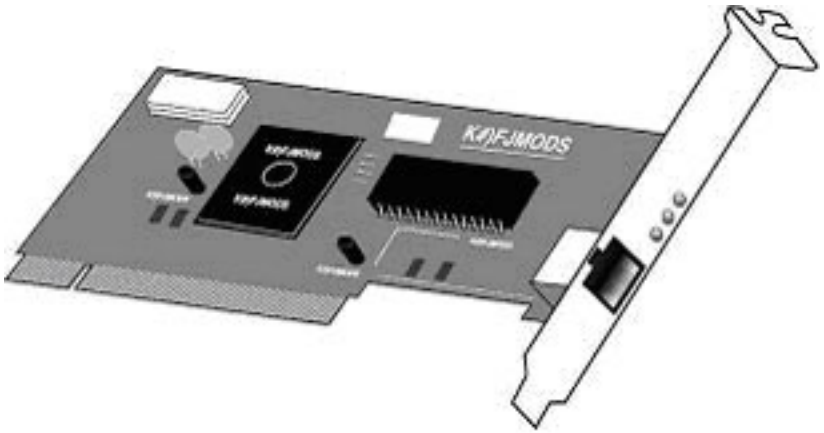
Generic Ethernet Cards

There are several types of Ethernet cards available. The type you will need depends on the make, model and age of your machine.

Older PC's use cards that fit an ISA slot, sometimes known as an EISA slot. Newer machines almost all have PCI slots, and use PCI Ethernet cards. The documentation that came with your computer will include information on the types of slots available.

Older Macintosh computers will have one of several types of slots. These slots have names such as Comm, Direct or NuBus. Newer Macintoshes use PCI cards identical to those in newer PC's. Consult your documentation to identify which type of card you need prior to ordering a new one. If you order by phone the sales person should be able to help identify the proper card if you can supply the make and model of the computer.

The illustration below shows a typical PCI Ethernet card. It should come with an installation disk containing the proper drivers (software) required to use the card. Install them according to



Setting Your Network Preferences

Open Internet Explorer and Click on Tools option at the top.

Click on Internet Options(may be called Internet Properties on some systems) at the Bottom to get to the screen shown below.