



# **Windows 95 and Windows 98**

## **PC Configuration Guide**



## Windows 95 and Windows 98 Setup

**Welcome to AT&T DSL Internet Service!** This guide is designed to help you configure your PC to access the Internet quickly and easily using AT&T DSL.

### Before You Begin

First, please make sure that your PC has an Ethernet Network Interface Card (NIC). This is **required** to use the service. If your PC does not have a NIC, you can purchase one at any computer retailer.

Next, check to see which type of service you will be using.

If you have ordered **Single-User Service with DHCP** and you have a fairly new personal computer, particularly one with a NIC built in, you may be able to connect to the service without any configuration at all. Simply connect your computer's Ethernet port to the DSL modem with a standard Ethernet cable and restart; you should be able to access the Internet immediately. If you are unable to access the Internet in this way, please follow the directions below to set up TCP/IP support on your PC.

If you have ordered **Multi-User Service, or Single User with Static IP**, you will need to configure your PC with static IP addresses. Please follow the instructions below.

## How to configure PC network IP address:

1. Enter the Control Panel as shown in figure 1.

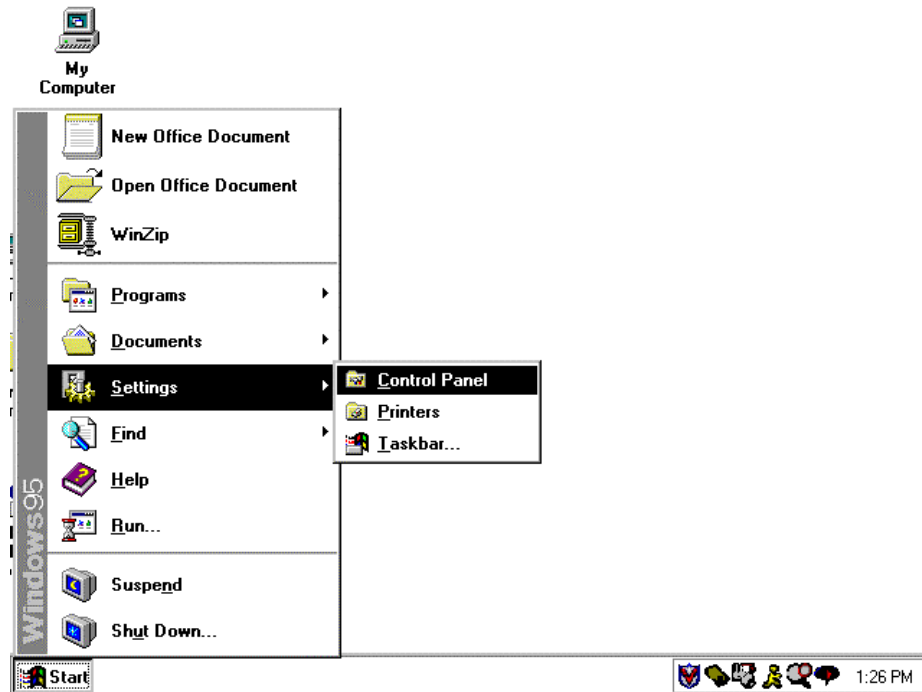


Figure 1 – How to access the Control Panel

2. Once in the control panel window, use the mouse to click twice on the Network icon as shown in figure 2a for Windows 95 and figure 2b for Windows 98.



Figure 2a – Network icon on Windows 95



Figure 2b – Network icon for Windows 98

3. If TCP/IP is already selected with the correct network card listed on the Network Dialog Box components section, such as "TCP/IP -> 3Com Etherlink XL TPO 10Mb Ethernet NIC", go to step 8. Otherwise click on "Add" in the Network Dialog Box under the "Configuration" tab.

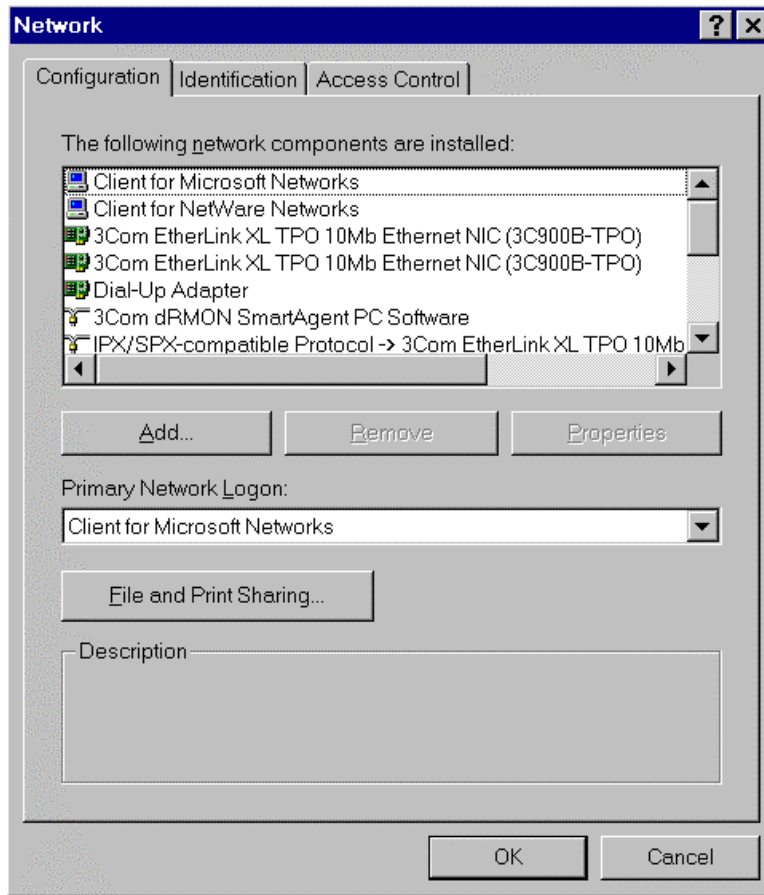


Figure 3 – Network Dialog Box

4. On the following screen, select "Protocol".

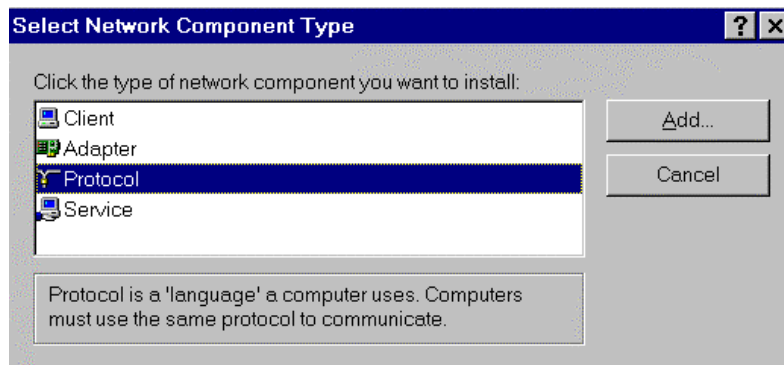


Figure 4 – Network Component

5. Click on "Add".
6. In the Select Network Protocol Dialog Box, click on "Microsoft" on the left scroll window to select the manufacturer, and "TCP/IP" on the right panel, as shown in the figure below.

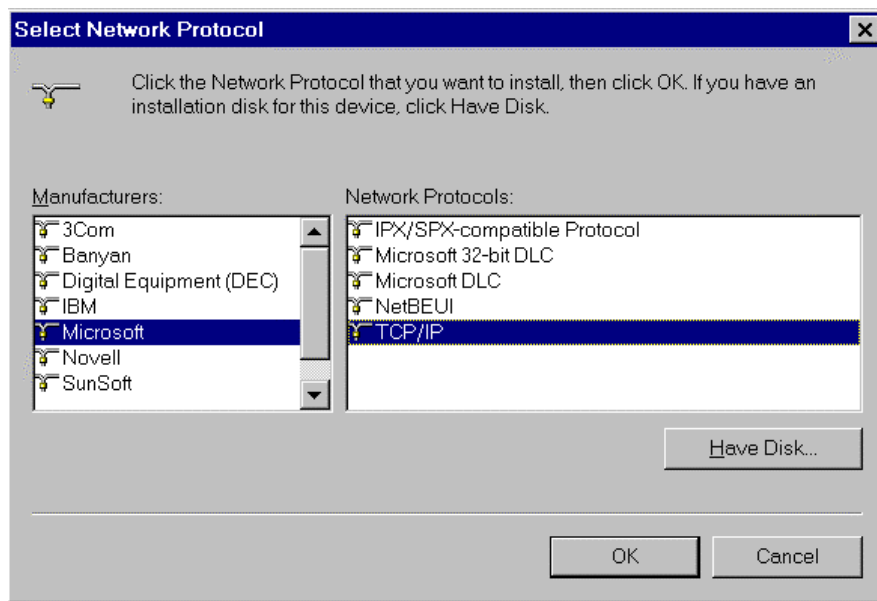


Figure 5 – Select Network Protocol

7. Click on the "OK" button.

*If you are using our Single-user DHCP service, **STOP HERE.*** Connect the Ethernet port on your PC to your DSL modem and restart your PC. Start a web browser and attempt to access the Internet - e.g. [www.att.com](http://www.att.com). If you are unable to access the Internet, you can continue following these instructions to configure additional parameters.

8. Click on the "TCP/IP" choice that reflects the type of ethernet card installed on the computer, and select "properties", as shown in figure 5a.

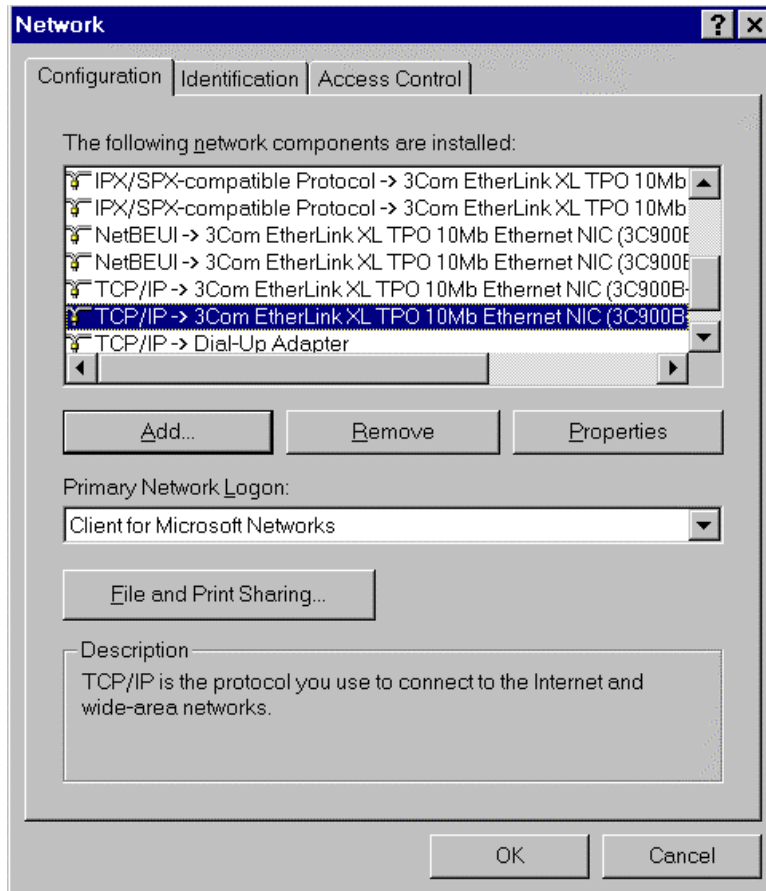


Figure 5a – Network: Configuration

9. *If you have our Single-user DHCP service, or if your xDSL router is configured with DHCP, select "Obtain IP address automatically."* Otherwise, enter the correct IP address and subnet mask provided by AT&T for your PC.

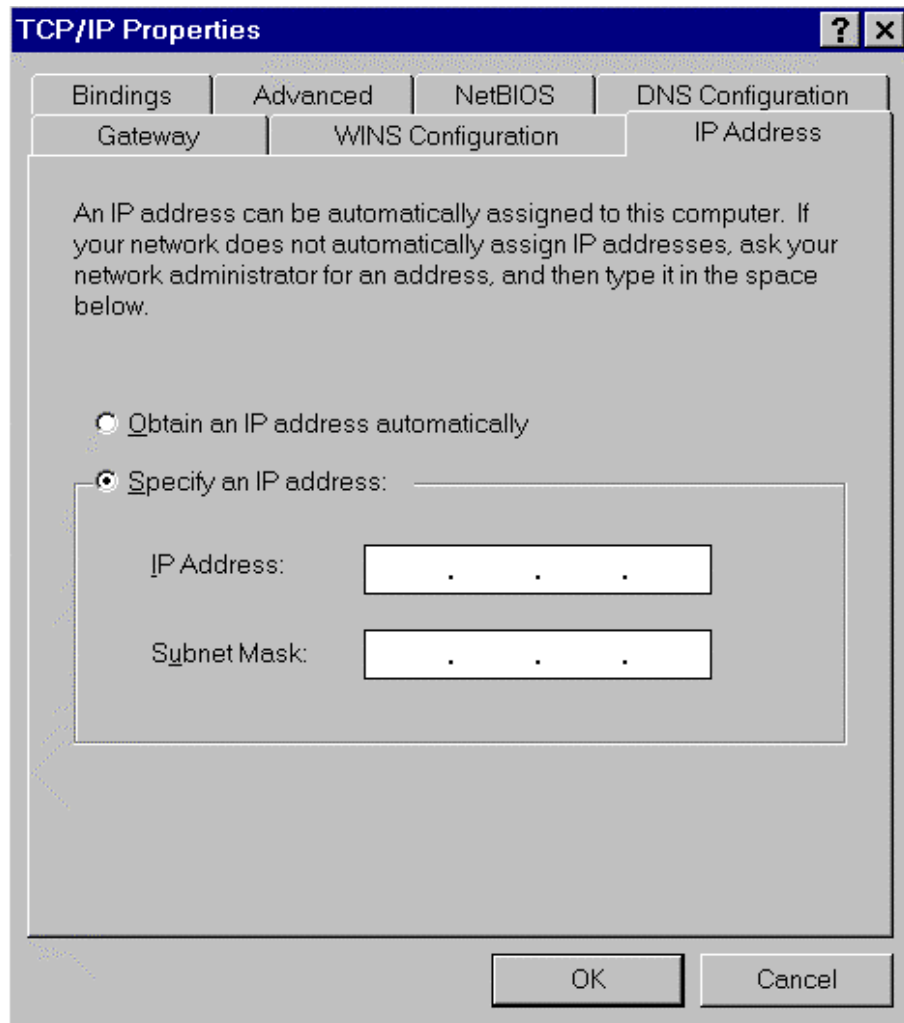


Figure 6 – TCP/IP Properties: IP Address

## How to configure DNS and Gateway:

1. Select the “DNS Configuration” tab.

Use the following screen to input the IP addresses of the Domain Name Servers.

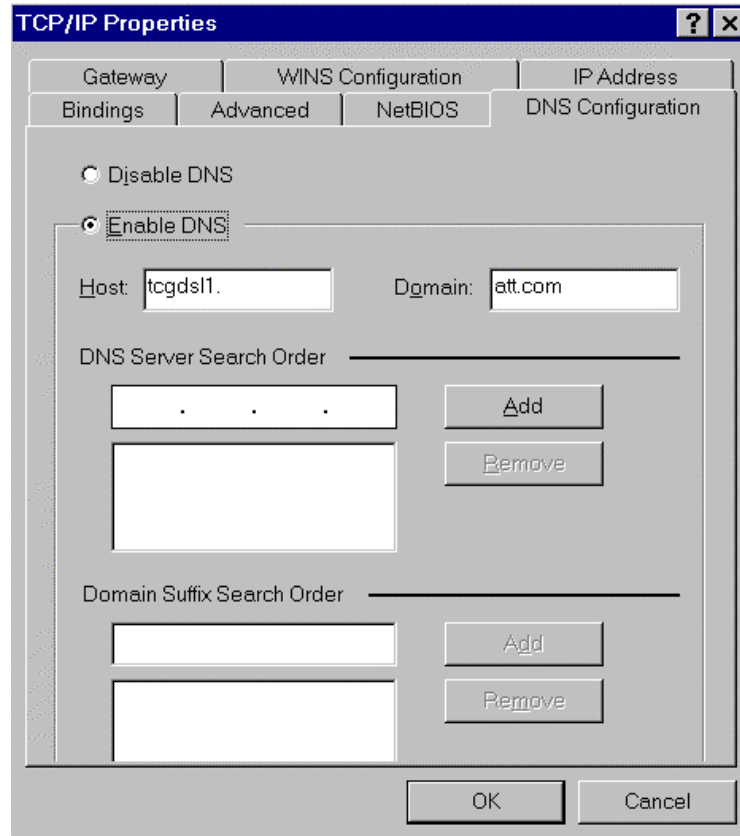


Figure 7 – TCP/IP Properties: DNS Configuration

If you are not running your own DNS, and are using your DSL connection for Internet access, AT&T provides 2 DNS servers that you can use. You should add both DNS servers into your computer's configuration, putting the DNS server that is geographically closest to you first followed by the second server (to provide you with a backup in case the first server is unavailable). Putting the servers in this order will give you the best performance.

If your location is in the eastern half of the US, list the servers in this order:

12.127.16.83  
12.127.17.83

If your location is in the western half of the US, list the servers in this order:

12.127.17.83  
12.127.16.83

If you're running a DNS on one of your own computers, you should use the IP address of that computer. Since this computer is in your own location, it will give you the best possible performance.

2. Enter the IP addresses of the Domain Name Servers as follows:

Enter two addresses in the “dotted quad” box to the left of the “ADD” button, one at a time and press “Add” after each.

When the two addresses have been entered and appear in the box below the entry field, accept the results by selecting the “OK” button at the bottom.

3. *If you are using our Multi-user service, or Single User Static IP service, enter the default gateway address, provided by AT&T. Once this is done, click on “Add”.*

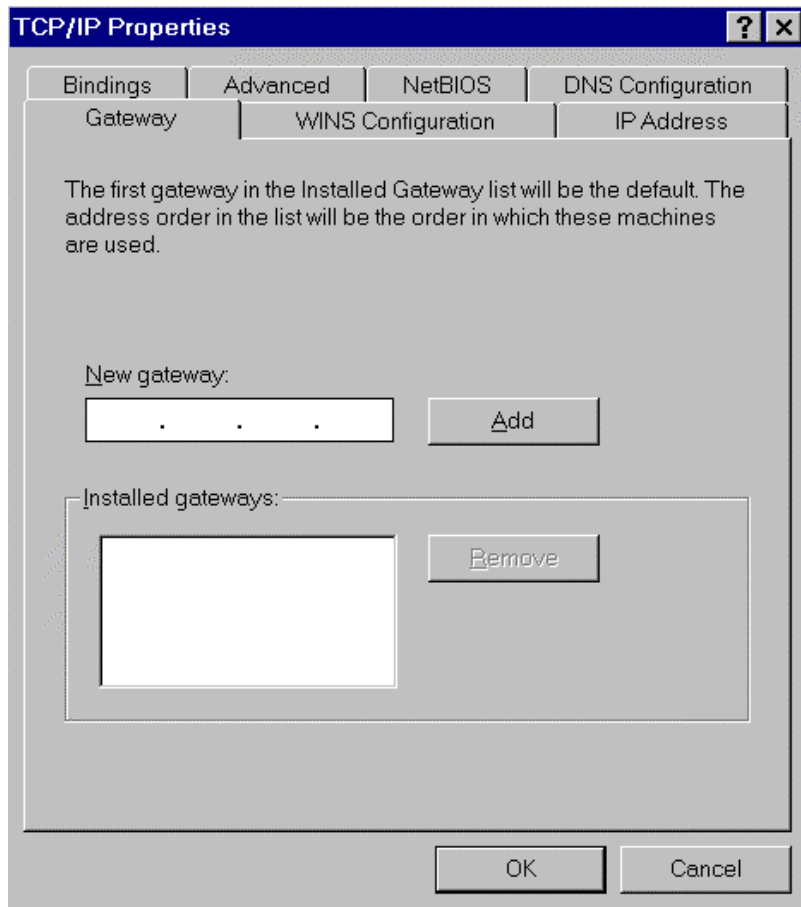


Figure 8 – Default Gateway

4. Once this is done, click on “OK”.

5. Click on “OK” again when the screen shown in figure 9 is displayed.

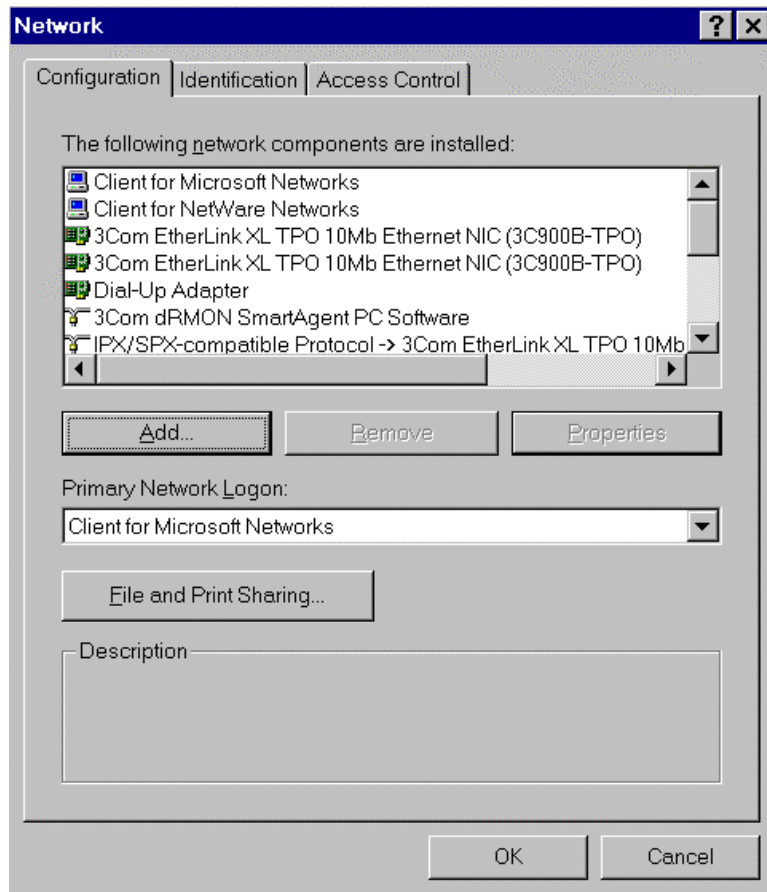


Figure 9 – Click on “OK” again.

6. Click on OK when you are prompted to restart the computer.

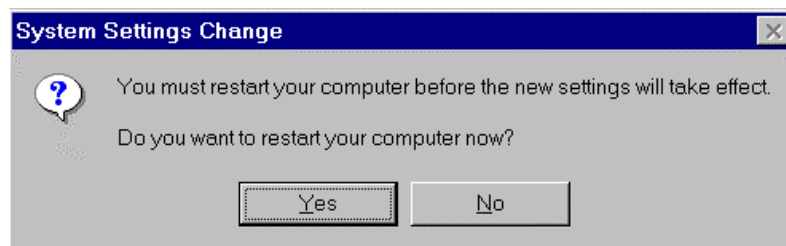


Figure 10 – Restart the computer

## Test Network Connectivity:

Perform the following test commands to verify the operation your configuration.

1. Click on the Start icon, select Run, and type "winipcfg".

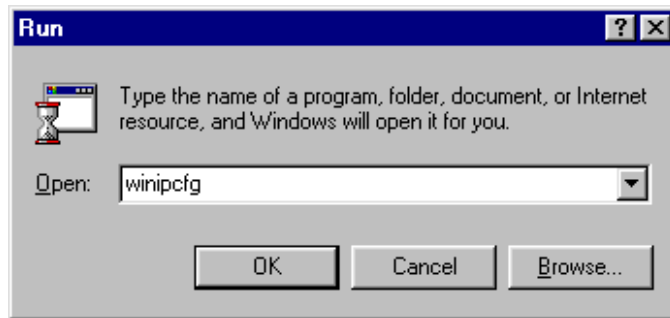


Figure 11 – Run Winipcfg

2. In the Windows IP configuration window, verify that the display contains the correct addresses, provided by AT&T.

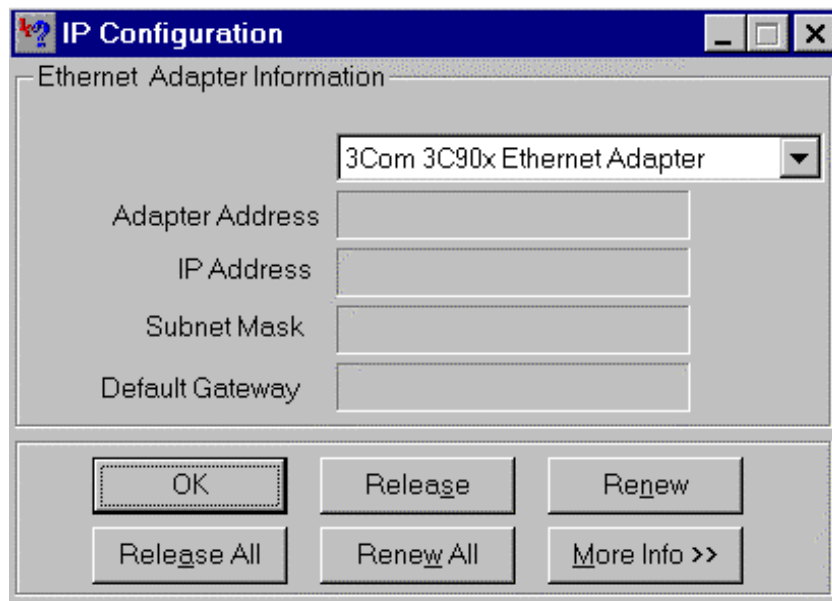
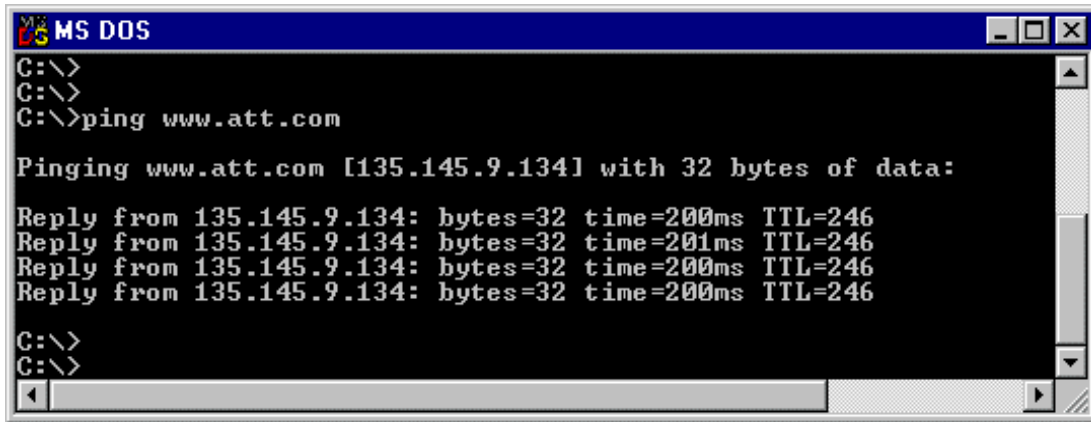


Figure 12 – IP Configuration

3. *If you are using our Single-user DHCP service, or if your router is configured with DHCP, you can obtain a new dynamic IP address by clicking on the "Release" button, followed by the "Renew" button. Please make sure that your Ethernet card is selected in the Adapter drop-down menu. Do this if your PC has failed to obtain an IP address dynamically - for example, if you connected to the network after starting up your PC.*

4. At the DOS command prompt, type in: **Ping www.att.com** to check if the Domain Name Server can resolve the address name, as in the following figure:



```
MS DOS
C:\>
C:\>
C:\>ping www.att.com

Pinging www.att.com [135.145.9.134] with 32 bytes of data:

Reply from 135.145.9.134: bytes=32 time=200ms TTL=246
Reply from 135.145.9.134: bytes=32 time=201ms TTL=246
Reply from 135.145.9.134: bytes=32 time=200ms TTL=246
Reply from 135.145.9.134: bytes=32 time=200ms TTL=246

C:\>
C:\>
```

Figure 13 – Ping Command Output

The fields that are most critical to view are ‘Time’ and the ‘Reply’ field. The ‘Reply’ field receives an ICMP echo from the address that you are sending packets. The ‘Time’ field, represented in milliseconds, measures the round trip time of a packet (ICMP packet). The lower the values in the ‘Time’ field the faster the connection.

### Additional Connectivity Diagnostics

The Netstat command may be used to troubleshoot a connection to the Internet. The command displays statistics such as: server interfaces, network connections, and sub mask used.

To run this command, type the following at the DOS prompt:

**Netstat -r** to display the contents of the routing table.

**Netstat ?** to view the parameters associated with the command.

Please view the Operating system Help files for detailed descriptions of the *Netstat Command*.