Networking Basics

Using the Network Setup Wizard in Windows XP

In this section you will learn how to establish a network at home or work, using **Microsoft Windows XP.**

> *Note: Please refer to websites such as http://www.homenethelp.com and http://www.microsoft.com/windows2000 for information about networking computers using Windows 2000, ME or 98.*
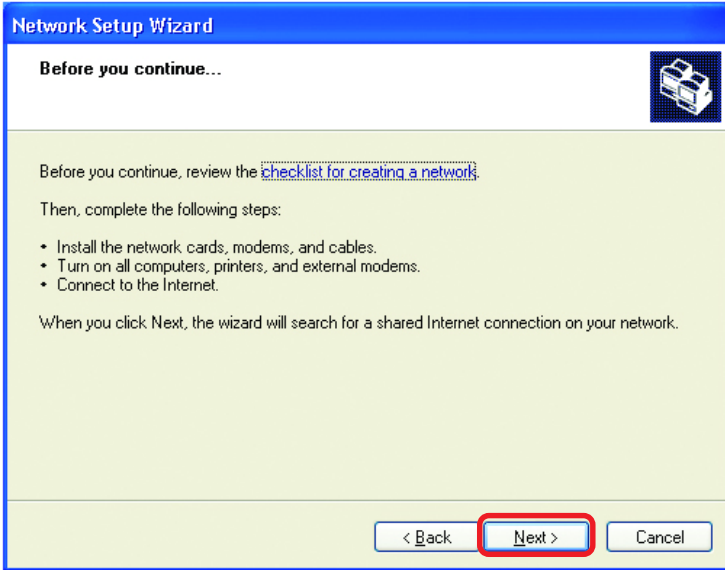
Go to **Start>Control Panel>Network Connections**
Select **Set up a home or small office network**

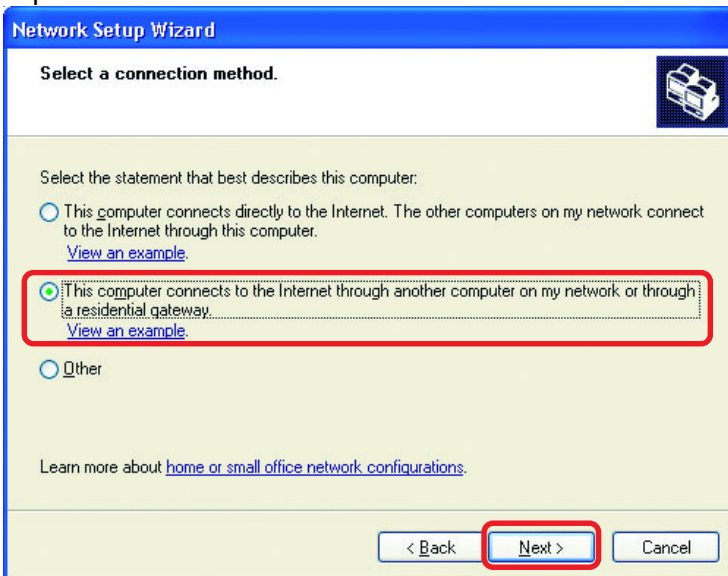When this screen appears, **Click Next.**

Networking Basics

Please follow all the instructions in this window:
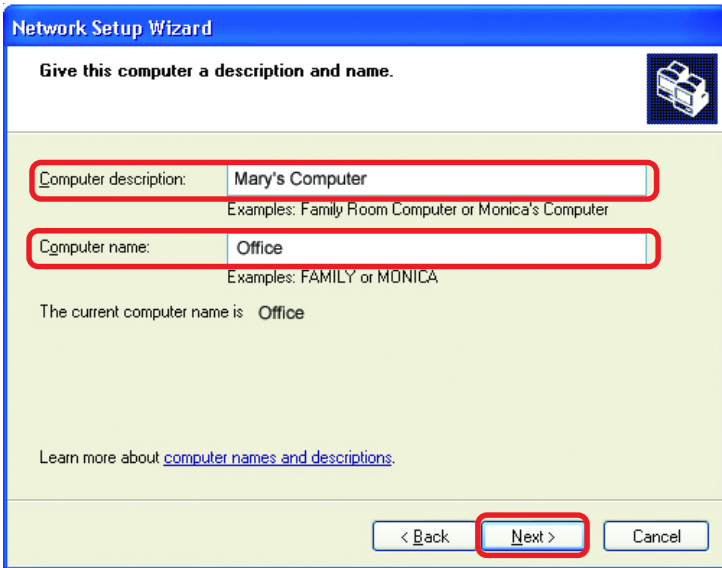

Click **Next**

In the following window, select the best description of your computer. If your computer connects to the internet through a gateway/router, select the second option as shown.

Click **Next**

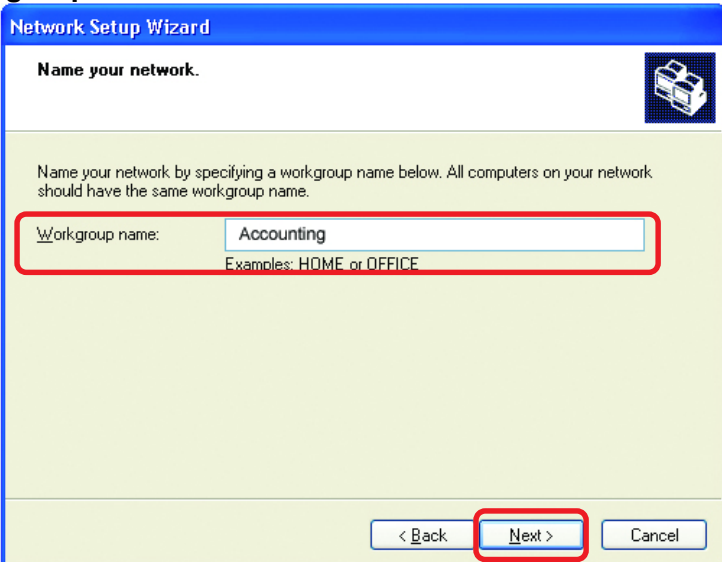Enter a **Computer description** and a **Computer name** (optional.)

Click **Next**

Enter a **Workgroup** name. All computers on your network should have the same **Workgroup name.**

Click **Next**

Networking Basics

Please wait while the **Network Setup Wizard** applies the changes.
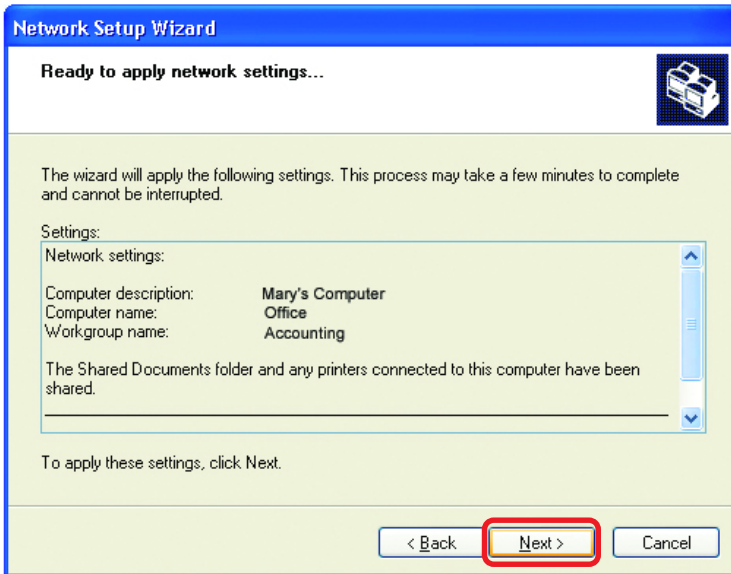
When the changes are complete, click **Next**.

Please wait while the **Network Setup Wizard** configures the computer. This may take a few minutes.
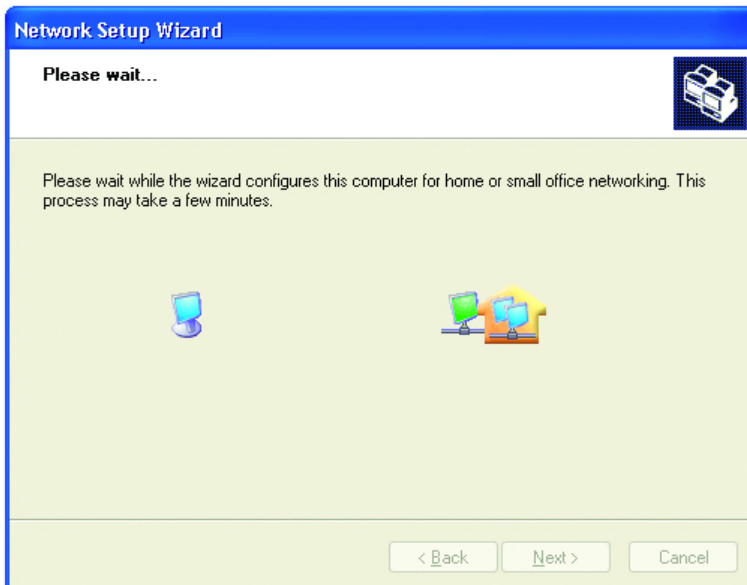
Networking Basics

In the window below, select the option that fits your needs. In this example, **Create a Network Setup Disk** has been selected. You will run this disk on each of the computers on your network. Click **Next**.
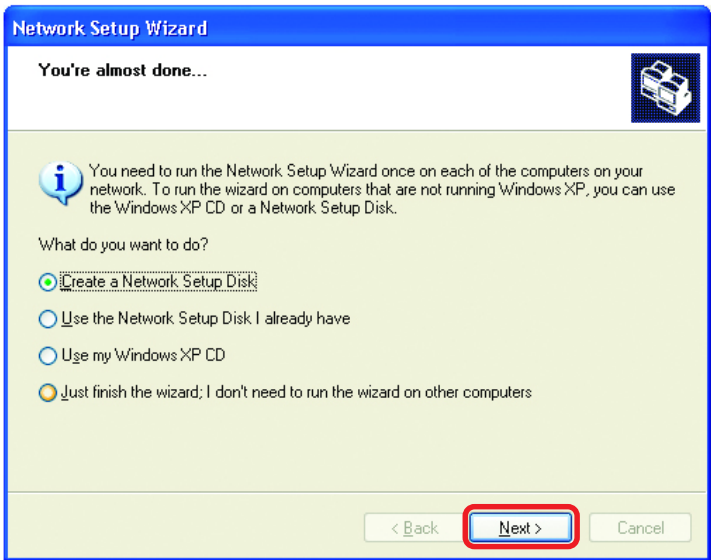
Insert a disk into the Floppy Disk Drive, in this case drive **A.**

Copying...

Please wait while the wizard copies files...

Cancel

Please read the information under **Here's how** in the screen below. After you complete the **Network Setup Wizard** you will use the **Network Setup Disk** to run the **Network Setup Wizard** once on each of the computers on your network. To continue click **Next.**

Network Setup Wizard

To run the wizard with the Network Setup Disk...

Complete the wizard and restart this computer. Then, use the Network Setup Disk to run the Network Setup Wizard once on each of the other computers on your network.

Here's how:

1. Insert the Network Setup Disk into the next computer you want to network.
2. Open My Computer and then open the Network Setup Disk.
3. Double-click "netsetup."

< Back   Next >   Cancel

Networking Basics

Please read the information on this screen, then click **Finish** to complete the **Network Setup Wizard**.
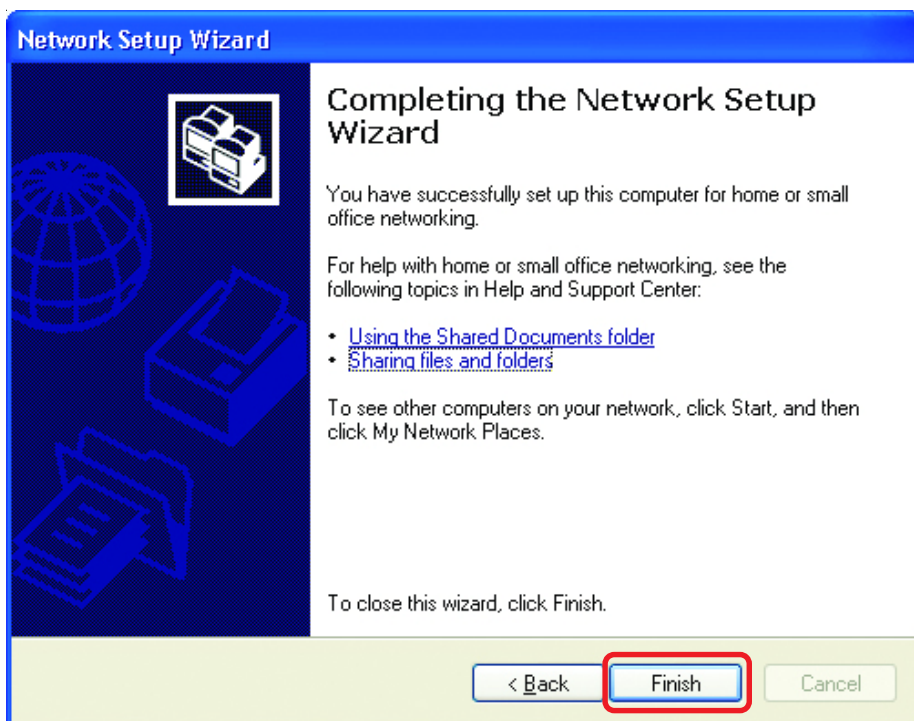
The new settings will take effect when you restart the computer. Click **Yes** to restart the computer.
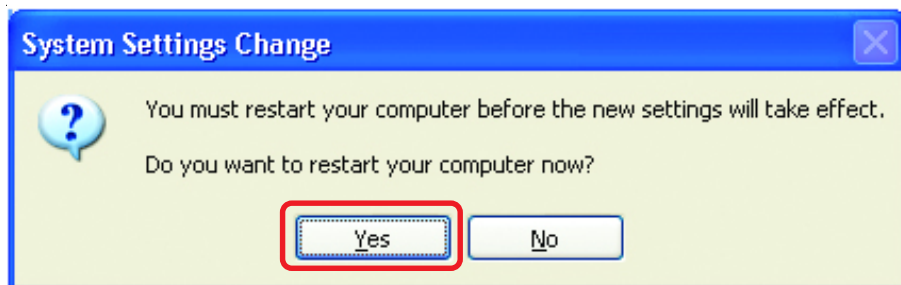
You have completed configuring this computer. Next, you will need to run the **Network Setup Disk** on all the other computers on your network. After running the **Network Setup Disk** on all your computers, your new wireless network will be ready to use.

Networking Basics
Naming your Computer

To name your computer, please follow these directions:In **Windows XP**:

- ■ Click **Start** (in the lower left corner of the screen)

- ■ **Right-click** on **My Computer**

- ■ Select **Properties** and click
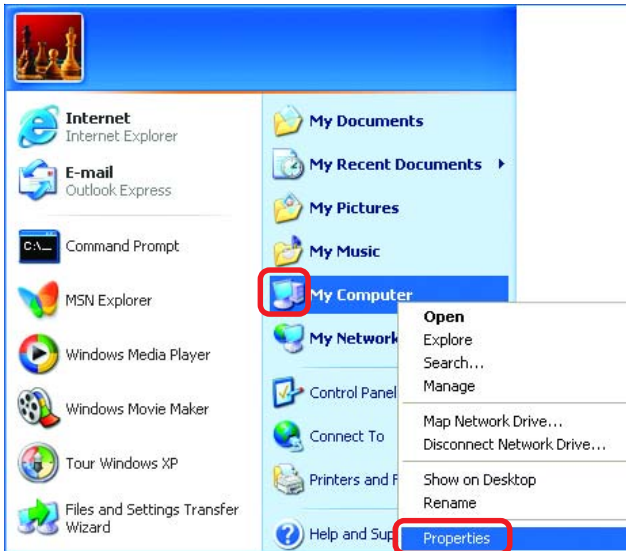
- ■ Select the **Computer Name Tab** in the System Properties window.

- ■ You may enter a **Computer Description** if you wish; this field is optional.

- ■ To rename the computer and join a domain, Click **Change**.

Naming your Computer

■ In this window, enter the
Computer name

■ Select **Workgroup** and enter
the name of the **Workgroup**

■ All computers on your
network must have the same
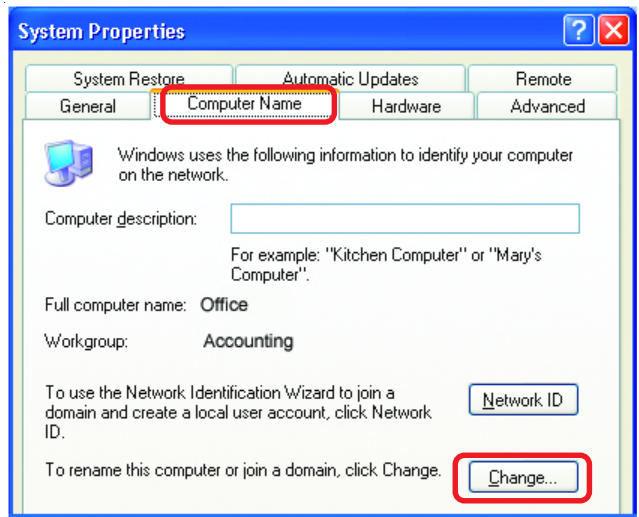**Workgroup** name.

■ Click **OK**
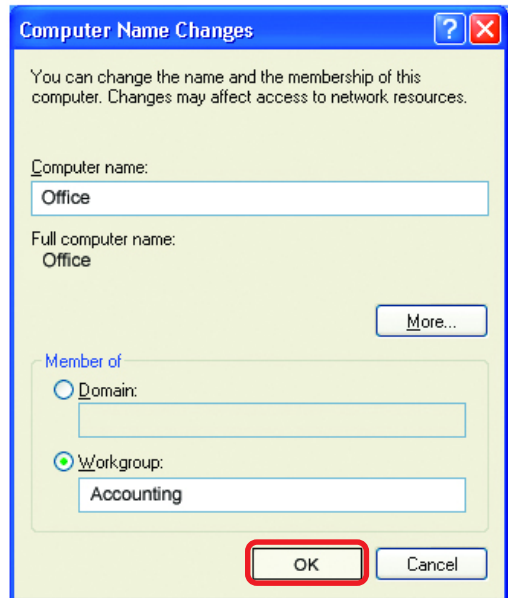
Checking the IP Address in Windows XP

The wireless adapter-equipped computers in your network must be in the same
IP Address range (see Getting Started in this manual for a definition of IP Ad-
dress Range.) To check on the IP Address of the adapter, please do the follow-
ing:

■ Right-click on the
*Local Area
Connection
icon* in the task
bar

■ Click on **Status**

Networking Basics
Checking the IP Address in <u>Windows XP</u>

This window will appear.

■ Click the
Support tab

■ Click **Close**
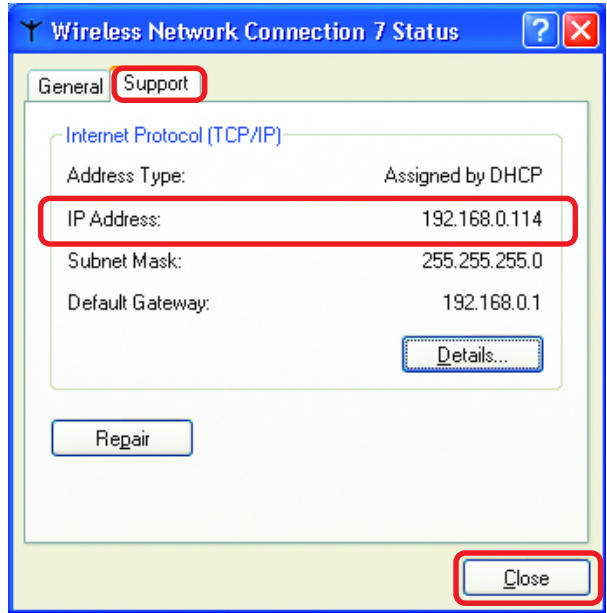
Assigning a Static IP Address in <u>Windows XP/2000</u>

Note: Residential Gateways/Broadband Routers will automatically assign IP Addresses to the computers on the network, using DHCP (Dynamic Host Configuration Protocol) technology. If you are using a DHCP-capable Gateway/Router you will not need to assign Static IP Addresses.

If you are not using a DHCP capable Gateway/Router, or you need to assign a Static IP Address, please follow these instructions:

■ Go to **Start**

■ Double-click
on **Control
Panel**
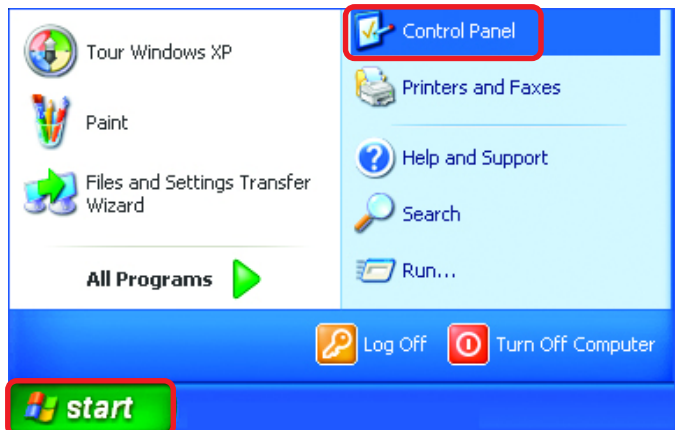
Networking Basics
Assigning a Static IP Address in <u>Windows XP/2000</u>

- ■ Double-click on **Network Connections**

- ■ Right-click on **Local Area Connections**

- ■ Double-click on **Properties**
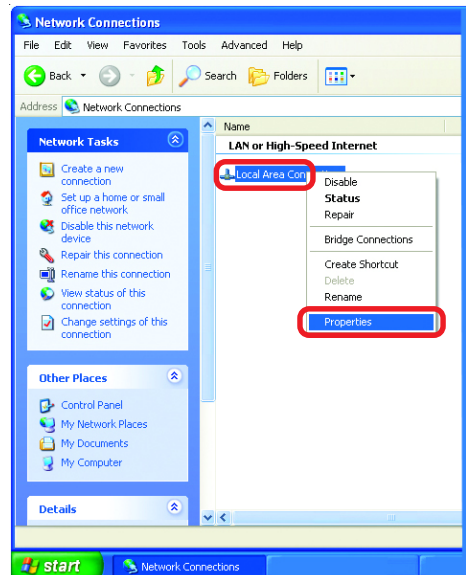
Networking Basics
Assigning a Static IP Address
in Windows XP/2000

- Click on **Internet Protocol (TCP/IP)**

- Click **Properties**

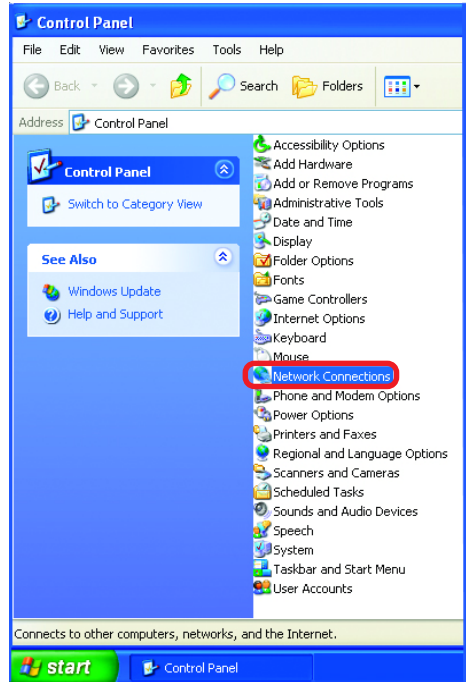- Input your **IP address and subnet mask.** (The IP Addresses on your network must be within the same range. For example, if one computer has an IP Address of 192.168.0.2, the other computers should have IP Addresses that are sequential, like 192.168.0.3 and 192.168.0.4. The subnet mask must be the same for all the computers on the network.)

- Input your **DNS server addresses. (Note: If you are entering a DNS server, you must enter the IP Address of the Default Gateway.)**

The DNS server information will be supplied by your ISP (Internet Service Provider.)

- Click **OK**
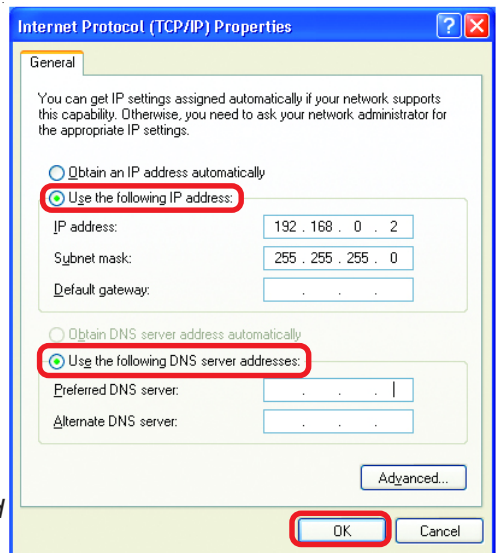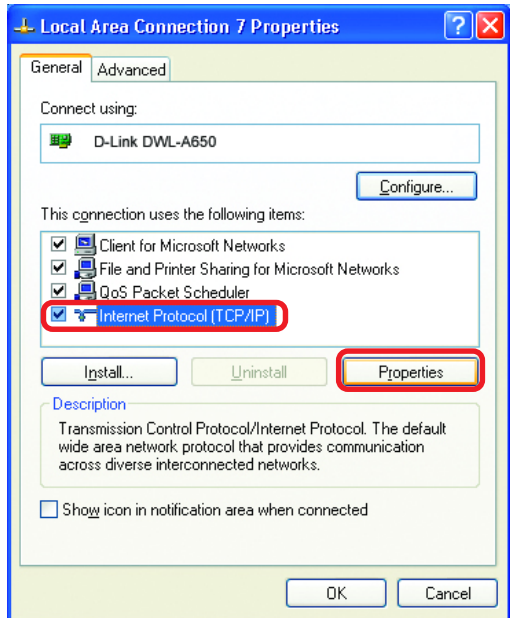
Networking Basics
Assigning a Static IP Address with <u>Macintosh OSX</u>

- ■ Go to the **Apple Menu** and se-lect **System Preferences**

- ■ Click on **Network**
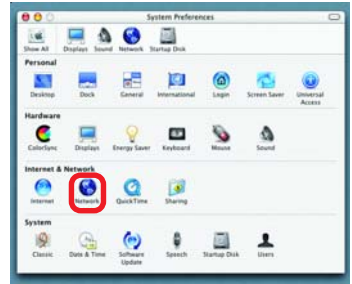
- ■ Select **Built-in Ethernet** in the **Show** pull-down menu

- ■ Select **Manually** in the **Configure** pull-down menu
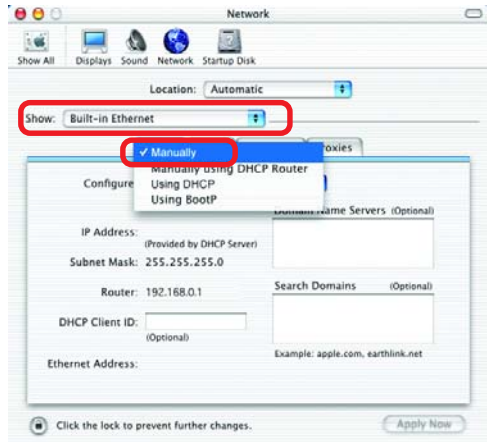
- ■ Input the **Static IP Ad-dress**, the **Subnet Mask** and the **Router IP Ad-dress** in the appropriate fields

- ■ Click **Apply Now**

Networking Basics
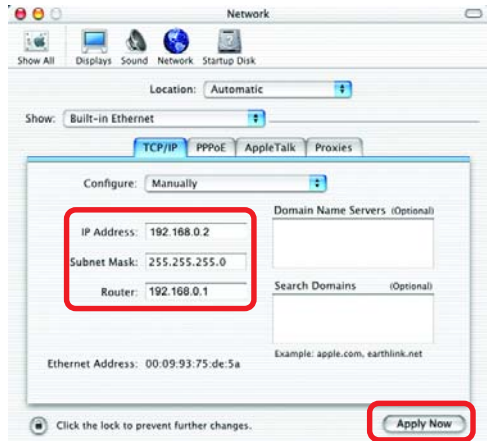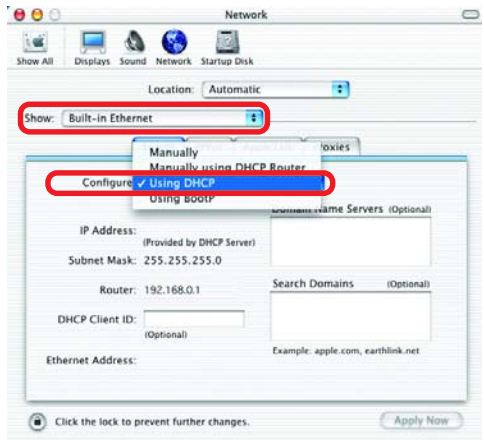### *Selecting a Dynamic IP Address with <u>Macintosh OSX</u>*

■ Go to the **Apple Menu** and se-
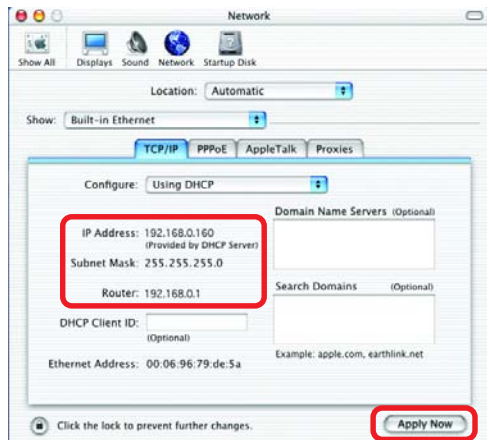 lect **System Preferences**

■ Click on **Network**

■ Select **Built-in Ethernet** in
  the **Show** pull-down menu

■ Select **Using DHCP** in the
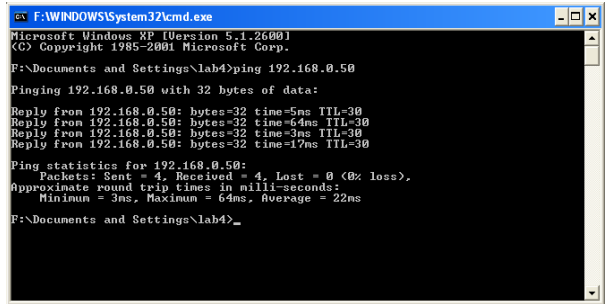 **Configure** pull-down menu

■ Click **Apply Now**

■ The **IP Address, Subnet
  mask**, and the **Router's IP
  Address** will appear in a
  few seconds

54

Networking Basics
Checking the Wireless Connection by Pinging in Windows XP and 2000

■ Go to **Start** > **Run** > type **cmd**. A window similar to this one will appear. Type **ping xxx.xxx.xxx.xxx**, where **xxx** is the **IP Address** of the Wireless Router or Access Point. A good wireless connection will show four replies from the Wireless Router or Acess Point, as shown.

```
ox F:\WINDOWS\System32\cmd.exe                                    _ □ ×
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

F:\Documents and Settings\lab4>ping 192.168.0.50

Pinging 192.168.0.50 with 32 bytes of data:

Reply from 192.168.0.50: bytes=32 time=5ms TTL=30
Reply from 192.168.0.50: bytes=32 time=64ms TTL=30
Reply from 192.168.0.50: bytes=32 time=3ms TTL=30
Reply from 192.168.0.50: bytes=32 time=17ms TTL=30

Ping statistics for 192.168.0.50:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 3ms, Maximum = 64ms, Average = 22ms

F:\Documents and Settings\lab4>_
```
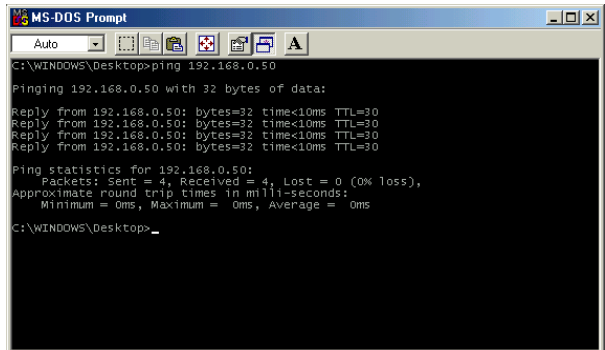
Checking the Wireless Connection by Pinging in Windows Me and 98

■ Go to **Start** > **Run** > type **command**. A window similar to this will appear. Type **ping xxx.xxx.xxx.xxx** where **xxx** is the **IP Address** of the Wireless Router or Access Point. A good wireless connection will show four replies from the wireless router or access point, as shown.

```
MS-DOS Prompt                                                    _ □ ×
 Auto  ▼  ⌷ ▣ ⧉ ⊞ ⚙ 🖺 A
C:\WINDOWS\Desktop>ping 192.168.0.50

Pinging 192.168.0.50 with 32 bytes of data:

Reply from 192.168.0.50: bytes=32 time<10ms TTL=30
Reply from 192.168.0.50: bytes=32 time<10ms TTL=30
Reply from 192.168.0.50: bytes=32 time<10ms TTL=30
Reply from 192.168.0.50: bytes=32 time<10ms TTL=30

Ping statistics for 192.168.0.50:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\WINDOWS\Desktop>_
```

Networking Basics
Adding and Sharing Printers in <u>Windows XP</u>

After you have run the **Network Setup Wizard** on all the computers in your network (please see the **Network Setup Wizard** section at the beginning of **Networking Basics**,) you can use the **Add Printer Wizard** to add or share a printer on your network.

Whether you want to add a **local printer** (a printer connected directly to one computer,) share an **LPR printer** (a printer connected to a print server) or share a **network printer** (a printer connected to your network through a Gateway/Router,) use the **Add Printer Wizard**. Please follow the directions below:

First, make sure that you have run the <u>Network Setup Wizard</u> on all of the computers on your network.

On the following pages, we will show you these 3 ways to use the **Add Printer Wizard:**

1. Adding a local printer

2. Sharing an network printer

3. Sharing an LPR printer

(Other Networking Tasks)

For help with other tasks, that we have not covered here, in home or small office networking, see **Using the Shared Documents** folder and **Sharing files and folders** in the **Help and Support Center** in Microsoft **Windows XP**.
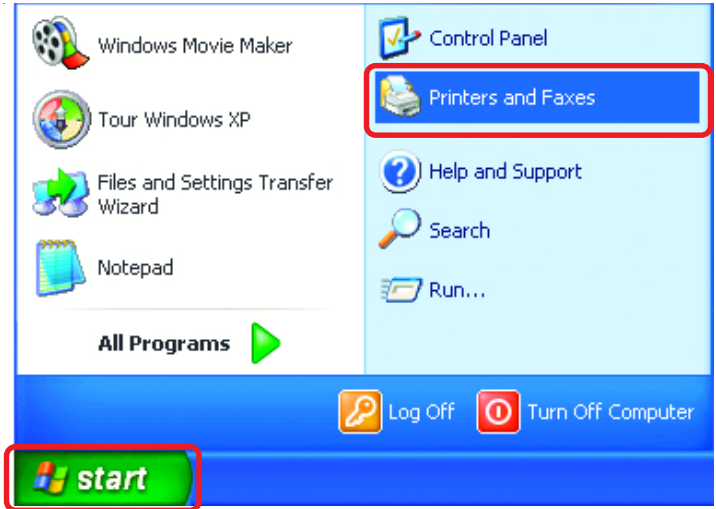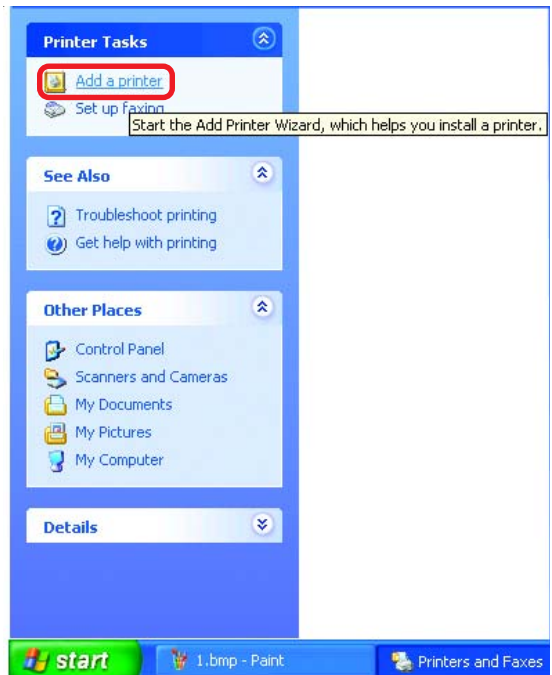
Networking Basics
Adding a local printer (a printer connected directly to a computer)

A printer that is not shared on the network and is connected directly to one computer is called a **local printer**. If you do not need to share your printer on a network, follow these directions to add the printer to one computer.

■ Go to **Start> Printers and Faxes**

■ Click on **Add a printer**

Adding a local printer

Welcome to the Add Printer Wizard

This wizard helps you install a printer or make printer connections.

If you have a Plug and Play printer that connects through a USB port (or any other hot pluggable port, such as IEEE 1394, infrared, and so on), you do not need to use this wizard. Click Cancel to close the wizard, and then plug the printer's cable into your computer or point the printer toward your computer's infrared port, and turn the printer on. Windows will automatically install the printer for you.
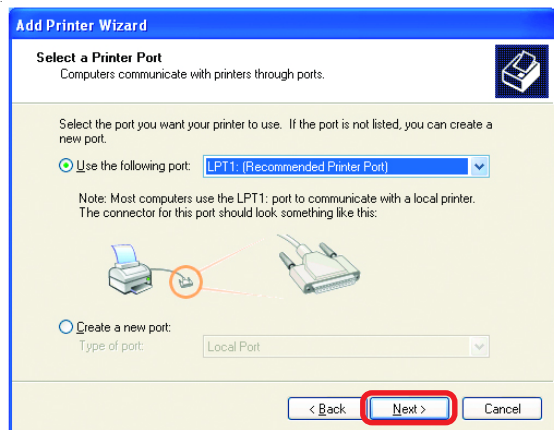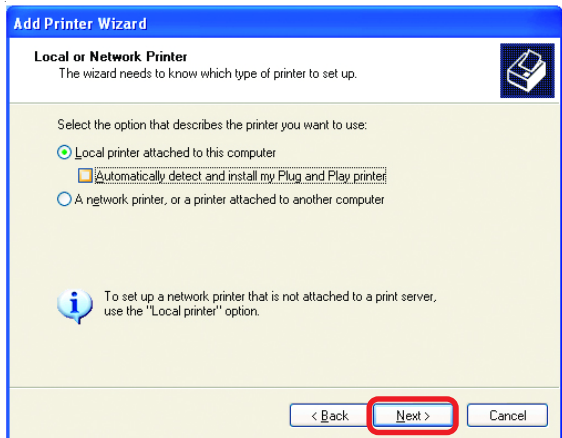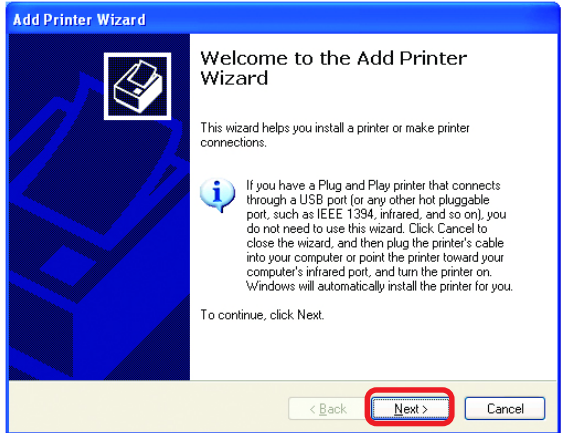
To continue, click Next.

■ Click **Next**

■ Select **Local printer attached to this computer**

■ *(Deselect **Automatically detect and install my Plug and Play printer** if it has been selected.)*

Local or Network Printer
The wizard needs to know which type of printer to set up.

Select the option that describes the printer you want to use:

⦿ Local printer attached to this computer
  ☐ Automatically detect and install my Plug and Play printer
○ A network printer, or a printer attached to another computer

To set up a network printer that is not attached to a print server, use the "Local printer" option.

■ Click **Next**

■ Select **Use the following port:**

■ From the pull-down menu **select the correct port** for your printer

*(Most computers use the **LPT1:** port, as shown in the illustration.)*

Select a Printer Port
Computers communicate with printers through ports.

Select the port you want your printer to use. If the port is not listed, you can create a new port.

⦿ Use the following port: LPT1: (Recommended Printer Port)

Note: Most computers use the LPT1: port to communicate with a local printer. The connector for this port should look something like this:

○ Create a new port:
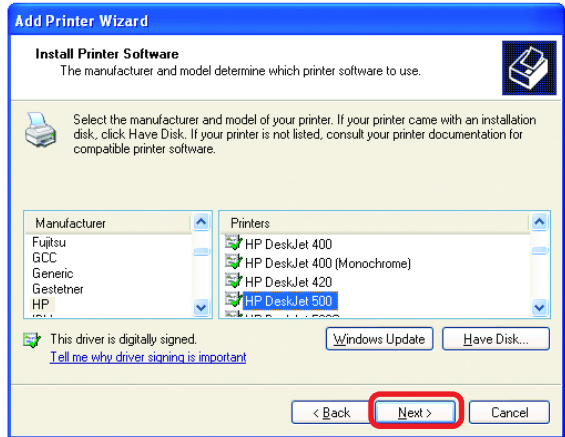 Type of port: Local Port

■ Click **Next**

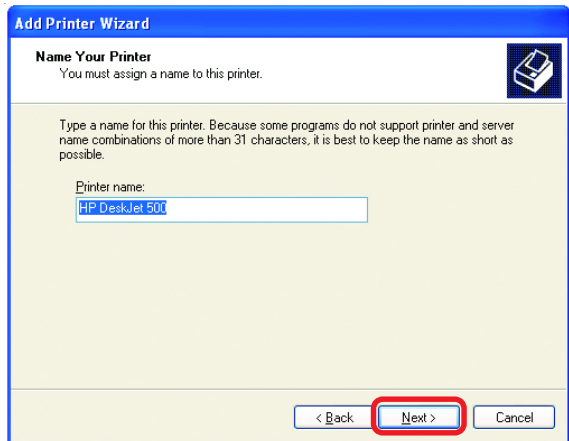## Networking Basics
Adding a local printer

- Select and highlight the **correct driver** for your printer.

- Click **Next**

  *(If the correct driver is not displayed, insert the CD or floppy disk that came with your printer and click **Have Disk**.)*
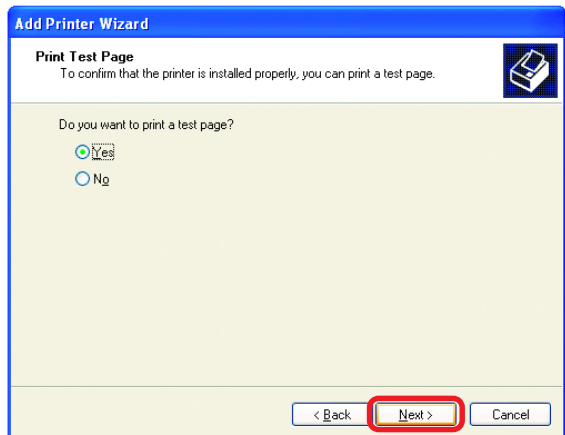
- At this screen, you can change the name of the printer (optional.)

- Click **Next**

- Select **Yes**, to print a test page. A successful printing will confirm that you have chosen the correct driver.
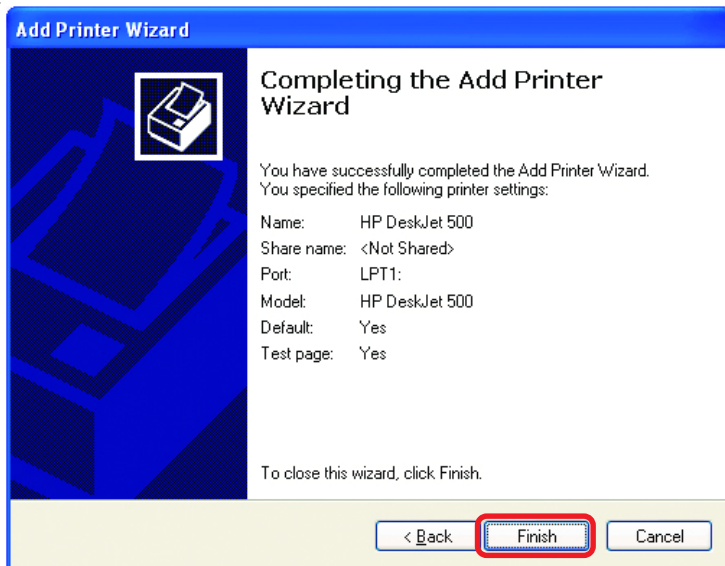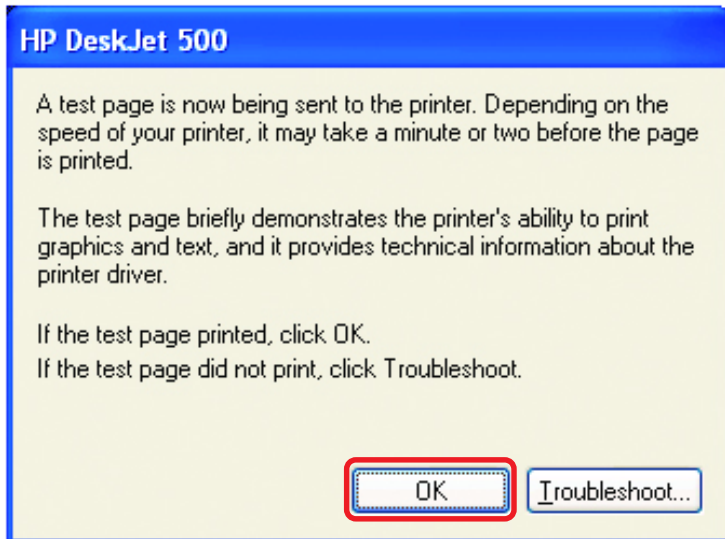
- Click **Next**

Networking Basics
Adding a local printer

This screen gives you information about your printer.

Click **Finish**

When the test page has printed,

Click **OK**