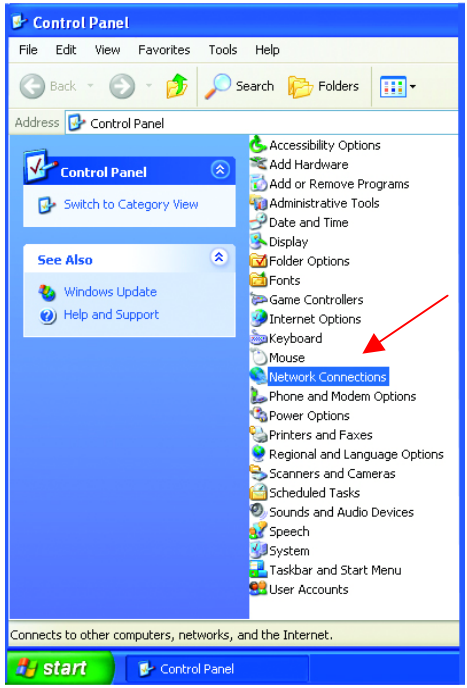
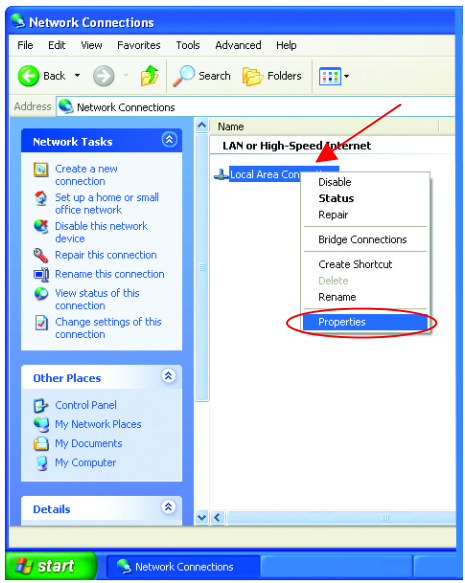
Assigning a Static IP Address



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

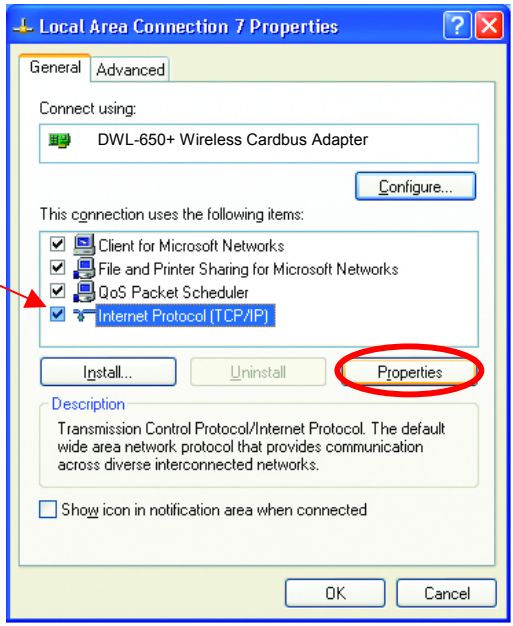


- **Right-click** on **Local Area Connections.**

- **Double-click Properties**

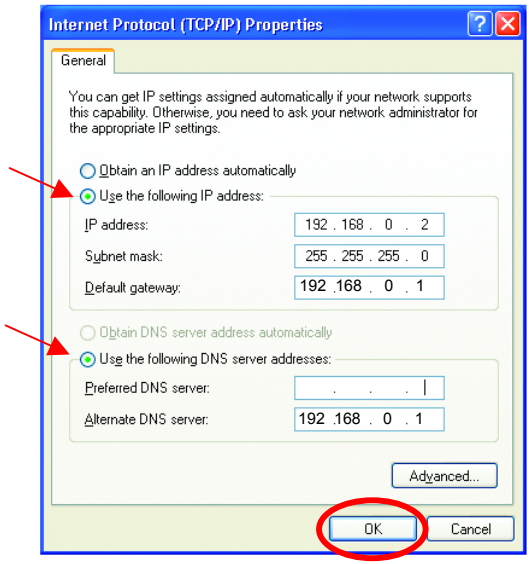
Assigning a Static IP Address

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



- **Select Use the following IP address** in the **Internet Protocol (TCP/IP) Properties** window,
- 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 provided by your ISP (Internet Service Provider.)



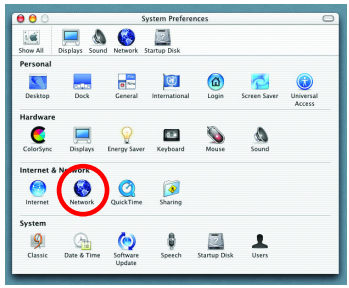
- Click **OK**

You have completed the assignment of a Static IP Address. *(You do not need to assign a Static IP Address if you have a DHCP-capable Gateway/Router.)*

Assigning a Static IP Address with Macintosh OS X

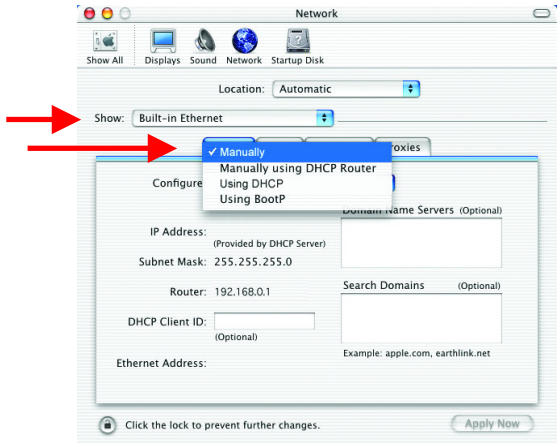
Go to the **Apple Menu** and select **System Preferences.**

Click on **Network**



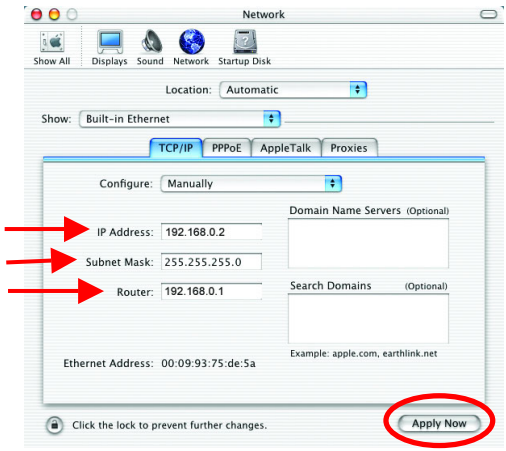
Select **Built-in Ethernet** in the **Show** pull-down menu.

Select **Manually** in the **Configure** pull-down menu.



Input the **Static IP Address**, the **Subnet Mask** and the **Router IP Address** in the appropriate fields.

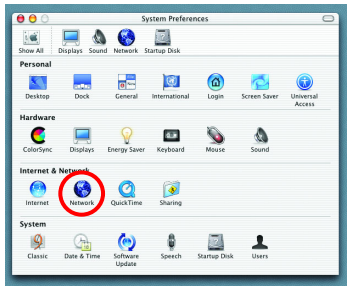
Click **Apply Now**



Selecting a Dynamic IP Address with Macintosh OS X

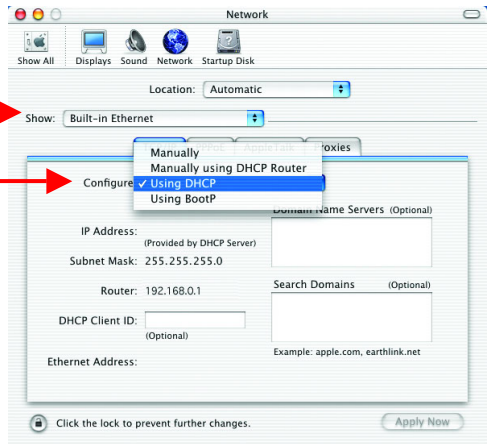
Go to the **Apple Menu** and select **System Preferences**.

Click on **Network**



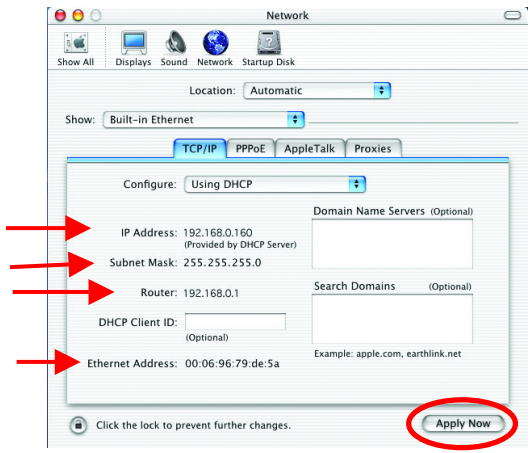
Select **Built-in Ethernet** in the **Show** pull-down menu.

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.



Checking the Wireless Connection by Pinging

For Windows XP and 2000:

Go to **Start** > **Run** > type **cmd**. A window similar to *Fig. 9.25* 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.

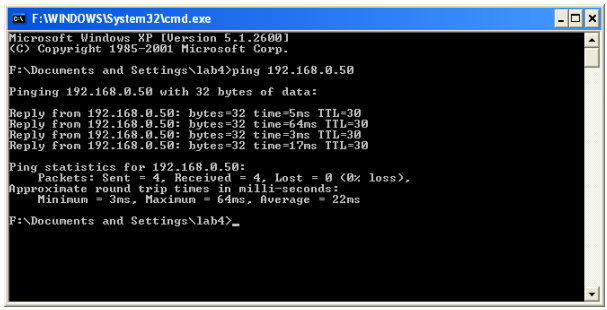


Fig. 8.35

For Windows Me and 98:

Go to **Start** > **Run** > type **command**. A window similar to *Fig. 9.26* 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.

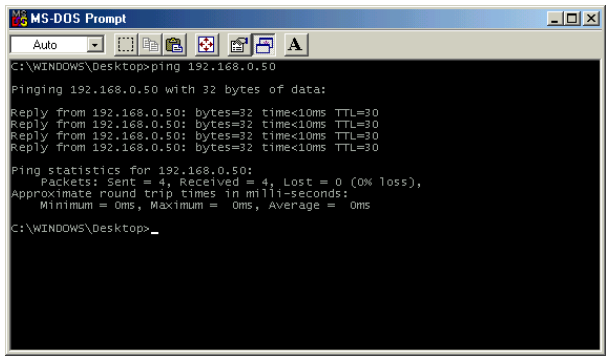


Fig. 8.36

Adding and Sharing Printers in Windows XP

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.

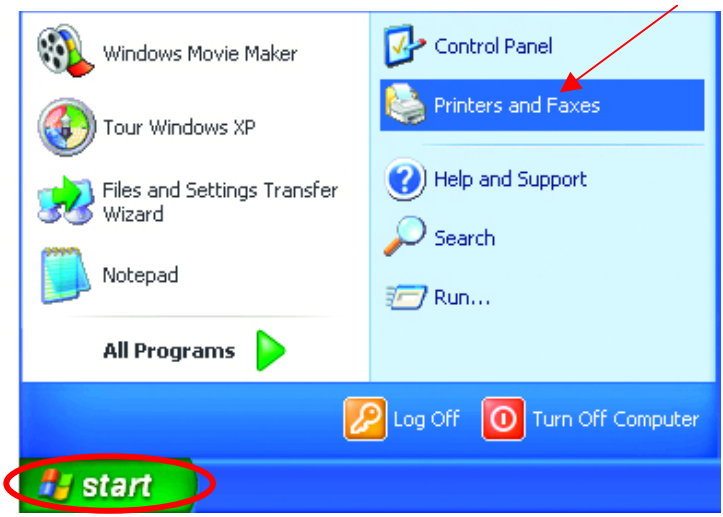
Whether you want to add a **local printer** (a printer connected directly to one computer,) share an **LPR printer** (a printer connected to a print server) or share a **network printer** (a printer connected to your network through a Gateway/Router,) use the **Add Printer Wizard**. Please follow the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

Adding a local printer

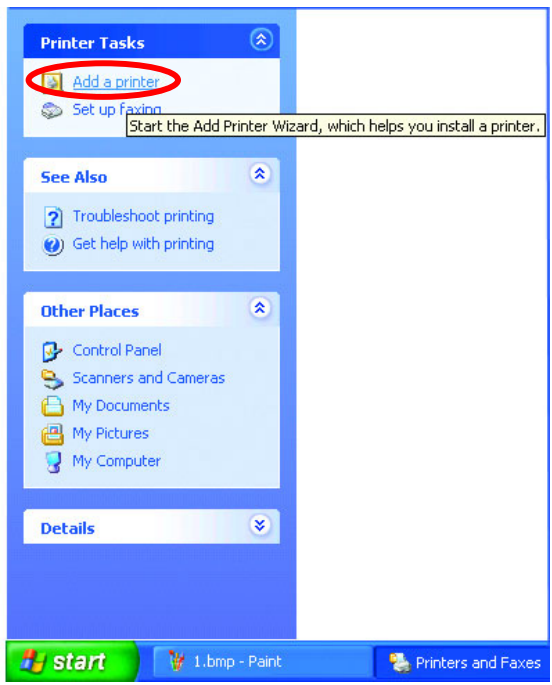
(A printer connected directly to a computer)

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.

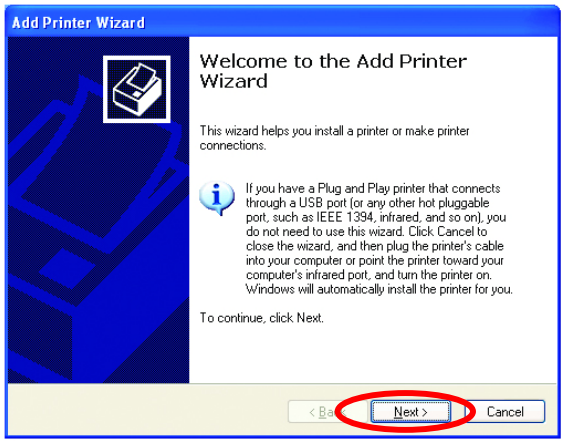
- Go to **Start> Printers and Faxes**



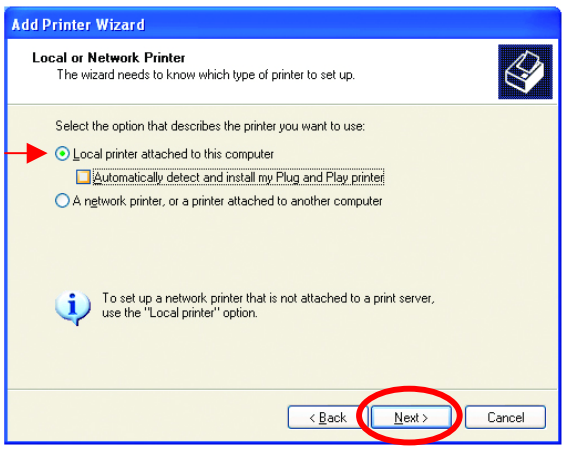
- Click on **Add a printer**



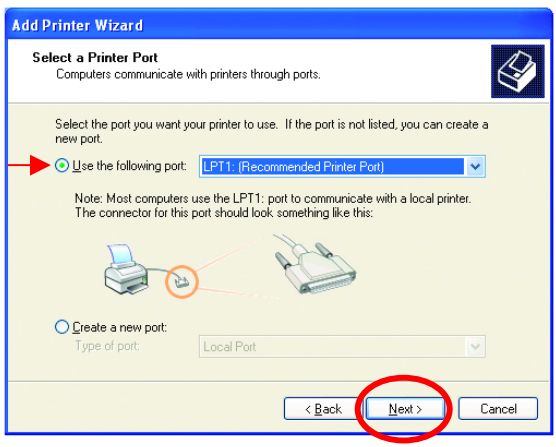
Adding a local printer



- Click **Next**



- Select **Local printer attached to this computer**
- *(Deselect **Automatically detect and install my Plug and Play printer** if it has been selected.)*
- Click **Next**



- Select **Use the following port:**
- From the pull-down menu **select the correct port** for your printer

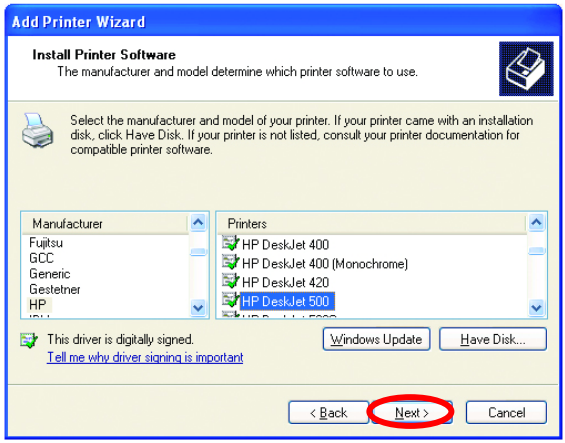
*(Most computers use the **LPT1:** port, as shown in the illustration.)*

- Click **Next**

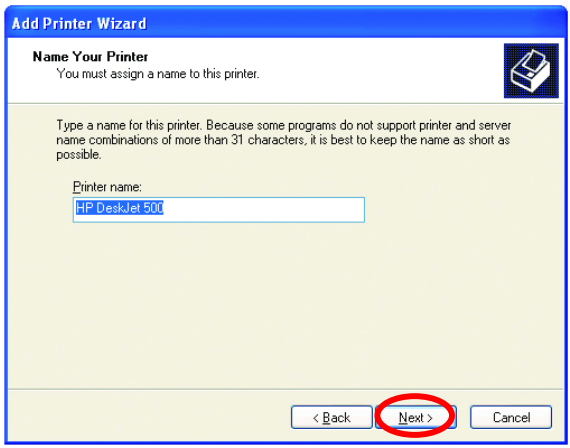
Adding a local printer

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

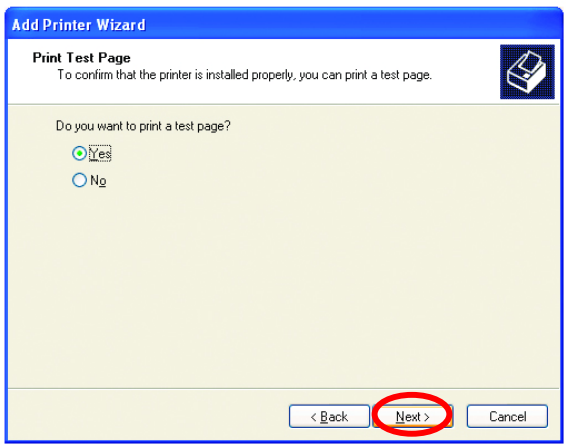
*(If the correct driver is not displayed, insert the CD or floppy disk that came with your printer and click **Have Disk**.)*



- At this screen, you can change the name of the printer (optional.)
- Click **Next**

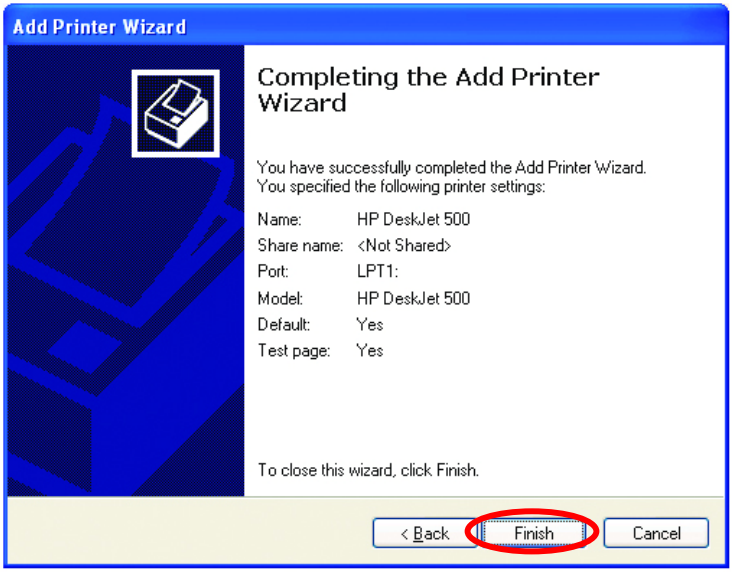


- Select **Yes**, to print a test page. A successful printing will confirm that you have chosen the correct driver.
- Click **Next**



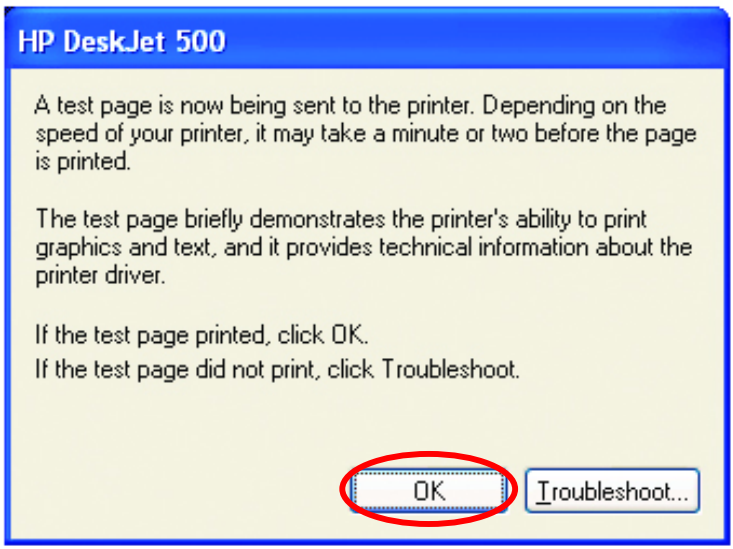
Adding a local printer

This screen gives you information about your printer.



Click **Finish**

When the test page has printed,



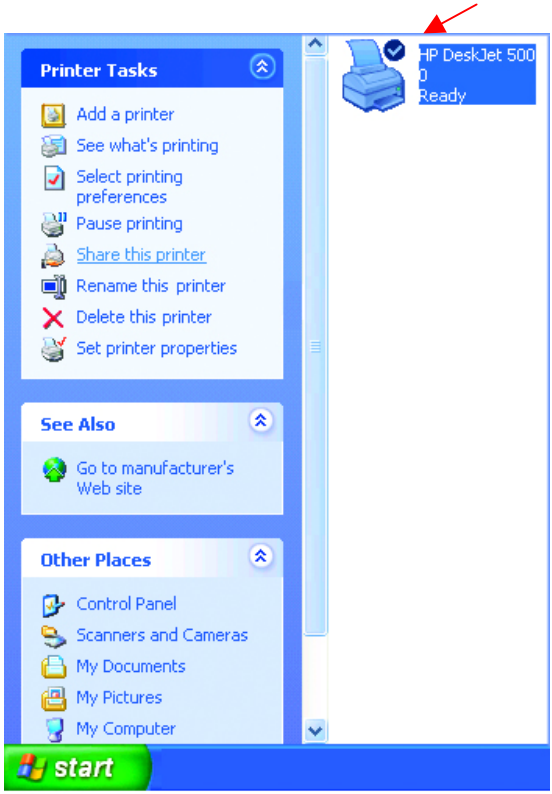
Click **OK**

Networking Basics (continued)

Adding a local printer

- Go to **Start**> **Printers and Faxes**

A successful installation will display the printer icon as shown at right.

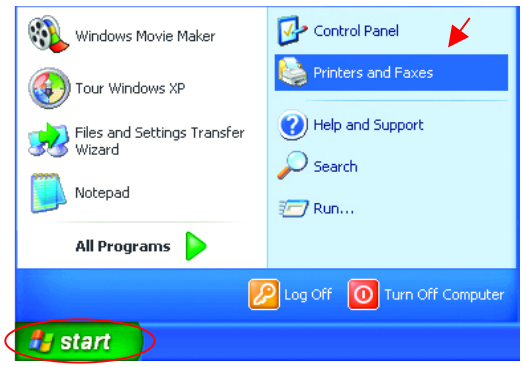


You have successfully added a local printer.

Sharing a network printer

After you have run the **Network Setup Wizard** on all the computers on your network, you can run the **Add Printer Wizard** on all the computers on your network. Please follow these directions to use the **Add Printer Wizard** to share a printer on your network:

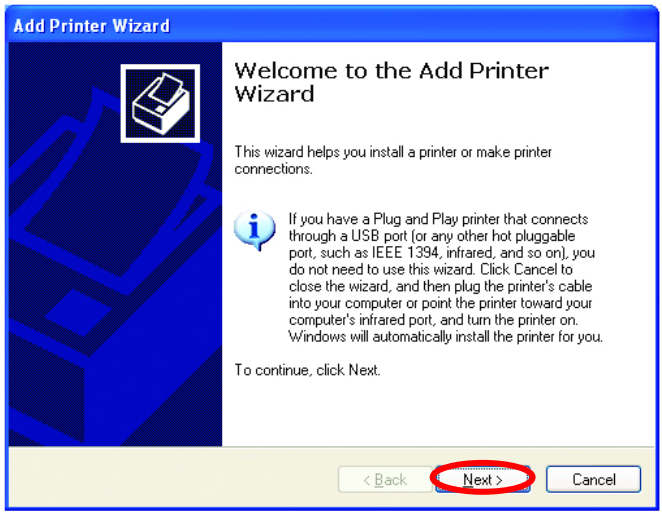
- Go to **Start**> **Printers and Faxes**



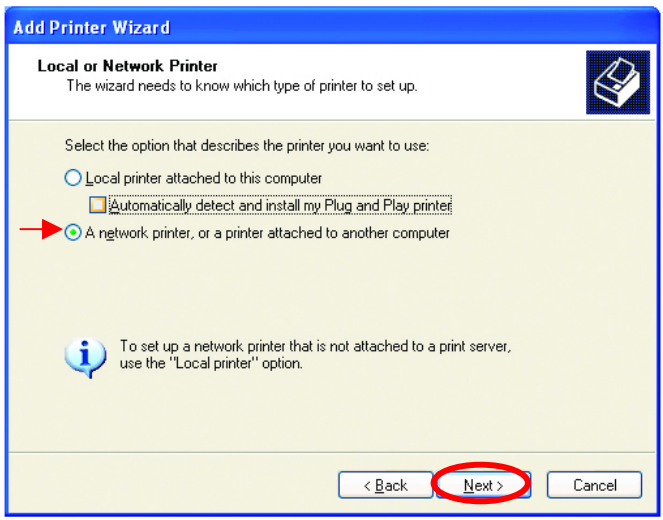
Sharing a network printer

- Click on **Add a Printer**

- Click **Next**

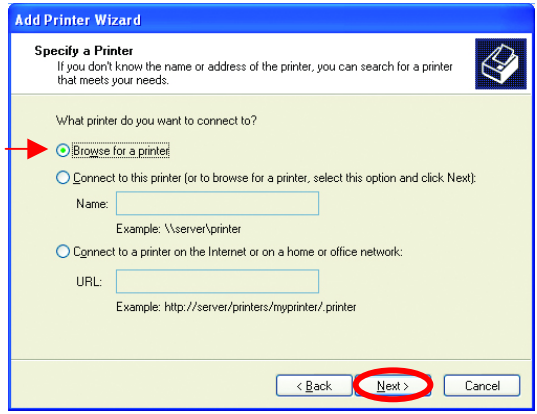


- Select **Network Printer**
- Click **Next**



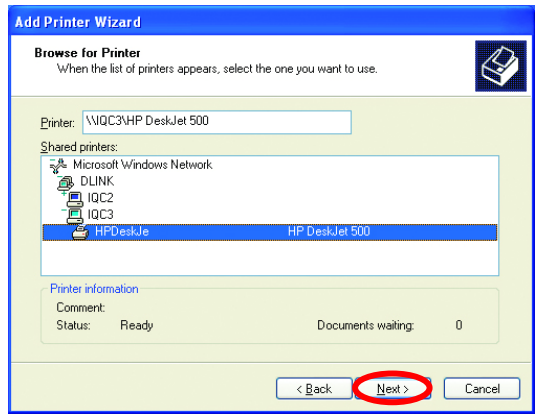
Sharing a network printer

- Select **Browse for a printer**

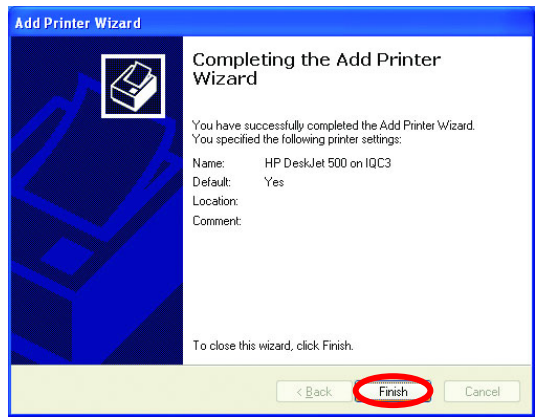


- Click **Next**

- Select the **printer** you would like to share.



- Click **Next**

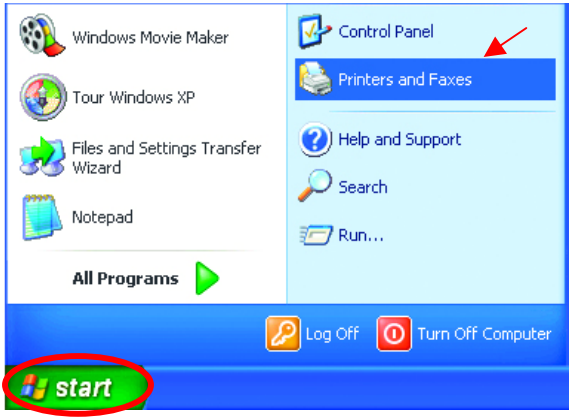


- Click **Finish**

Sharing a network printer

To check for proper installation:

- Go to **Start**> **Printers and Faxes**



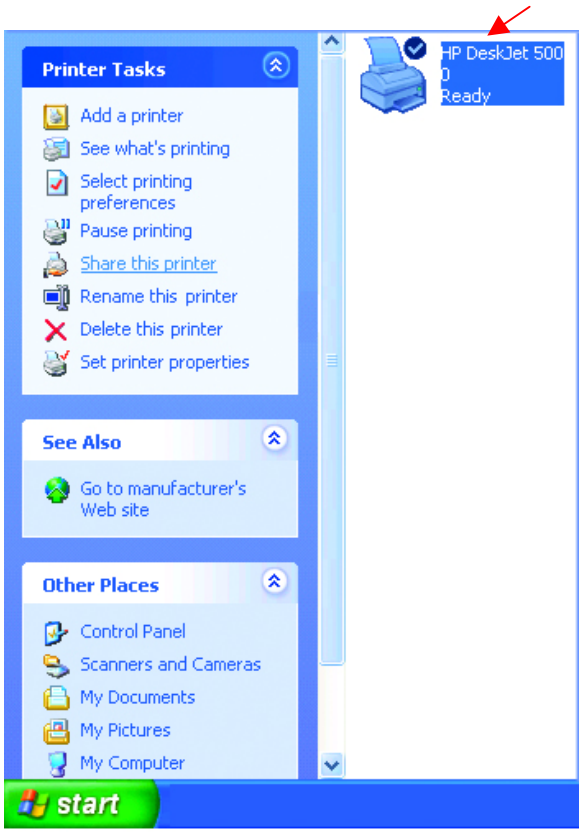
The printer icon will appear at right, indicating proper installation.

You have completed adding the printer.

To share this printer on your network:

- Remember the **printer name**
- Run the **Add Printer Wizard** on all the computers on your network.
- Make sure you have already run the **Network Setup Wizard** on all the network computers.

After you run the **Add Printer Wizard** on all the computers in the network, you can share the printer.



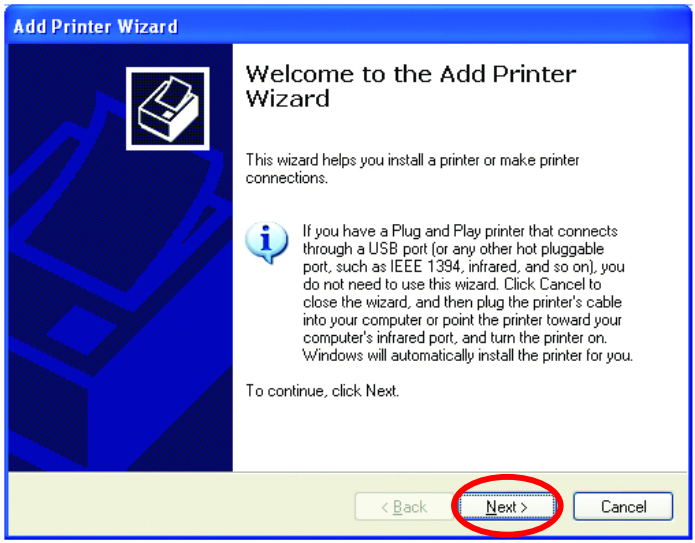
Sharing an LPR printer

To share an **LPR printer** (using a print server,) you will need a Print Server such as the **DP-101P+**. Please make sure that you have run the **Network Setup Wizard** on all the computers on your network. To share an **LPR printer**, please follow these directions:

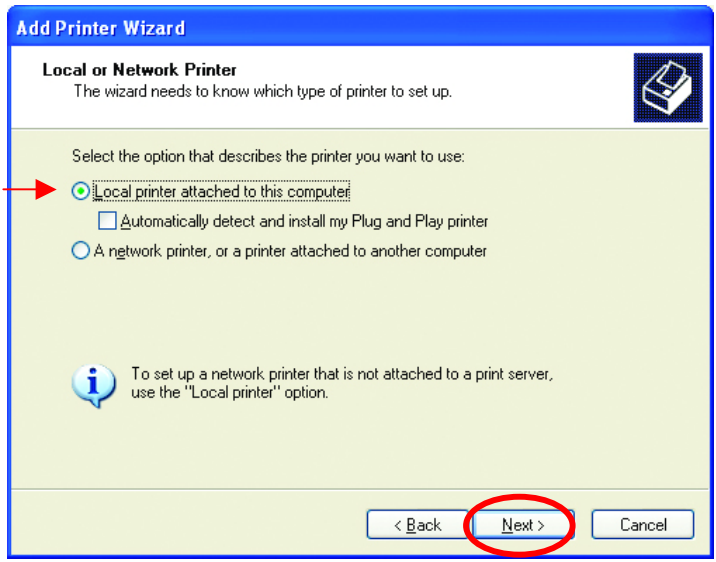
- Go to **Start> Printers and Faxes**
- Click on **Add a Printer**

The screen to the right will display.

- Click **Next**

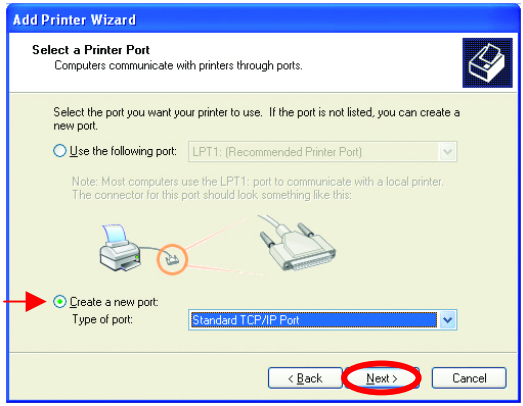


- Select **Local printer…**
- Click **Next**



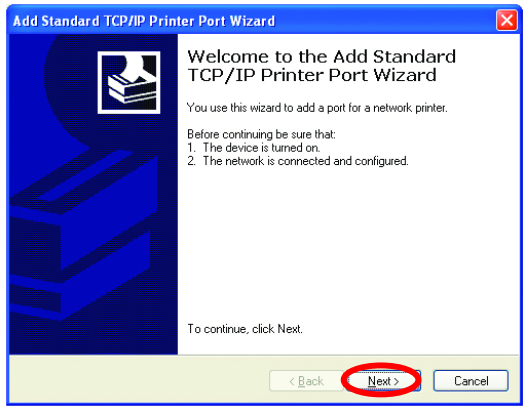
Sharing an LPR printer

- Select **Create a new port**
- From the pull-down menu, select **Standard TCP/IP Port**, as shown.



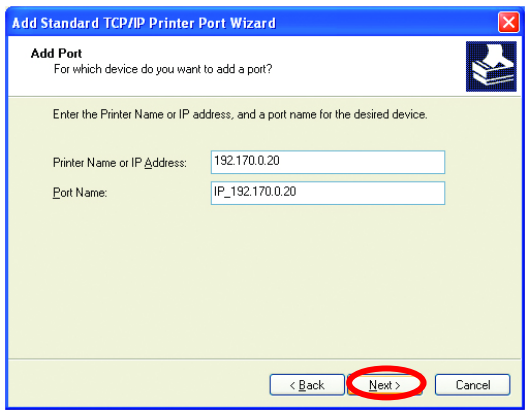
- Click **Next**

- Please read the instructions on this screen.



- Click **Next**

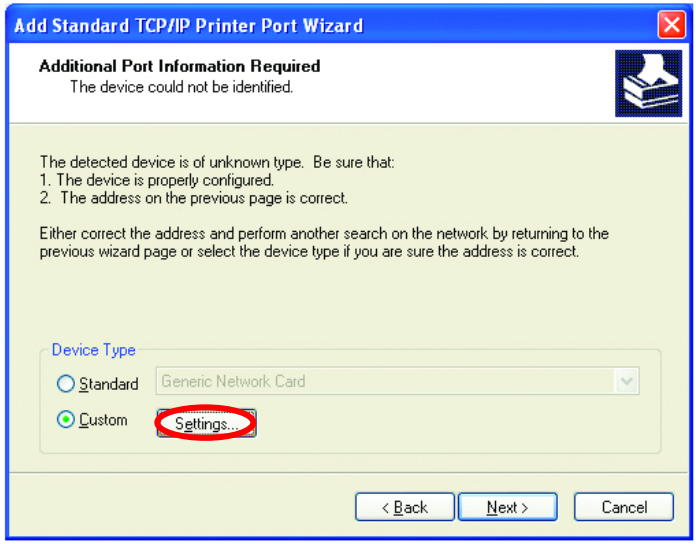
- Enter the **Printer IP Address** and the **Port Name**, as shown.



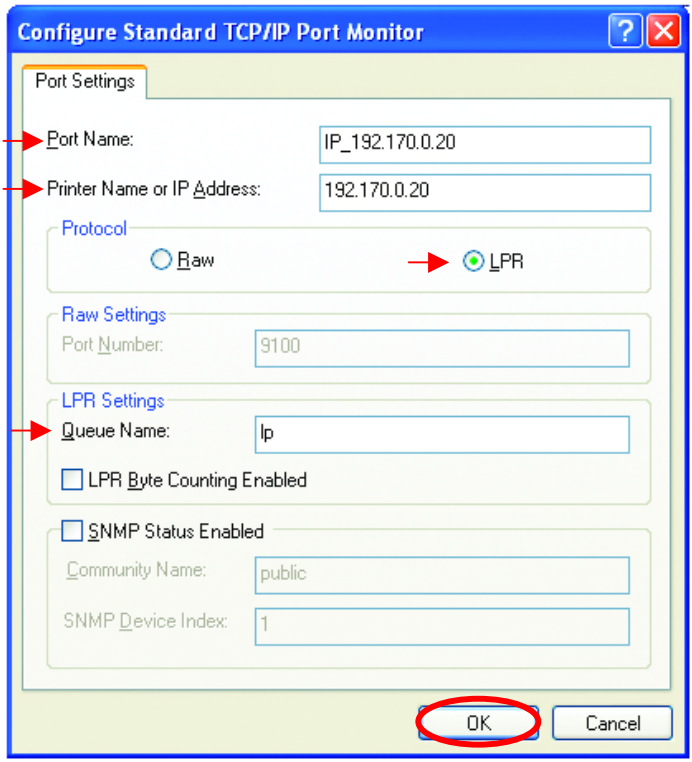
- Click **Next**

Sharing an LPR printer

- In this screen, select **Custom.**



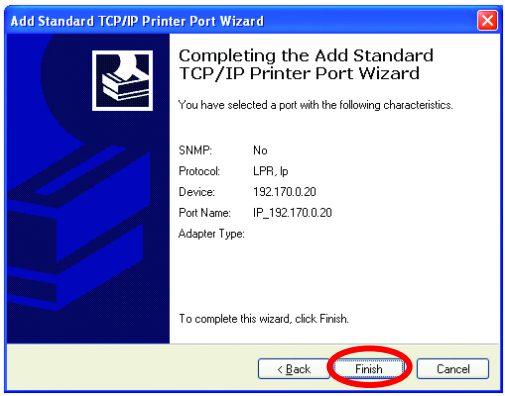
- Click **Settings**



- Enter the **Port Name** and the **Printer Name** or **IP Address**.
- Select **LPR**
- Enter a **Queue Name** (if your Print-Server/ Gateway has more than one port, you will need a **Queue name**.)
- Click **OK**

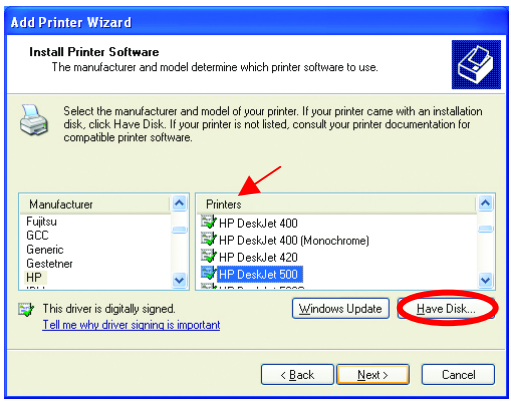
Sharing an LPR printer

- This screen will show you information about your printer.



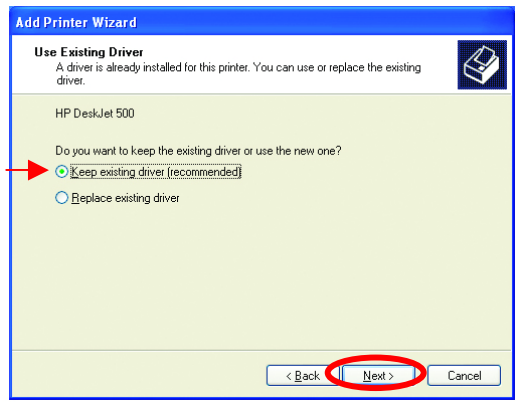
- Click **Finish**

- Select the **printer** you are adding from the list of **Printers**.
- Insert the printer driver disk that came with your printer.
- Click **Have Disk**



If the printer driver is already installed,

- Select **Keep existing driver**



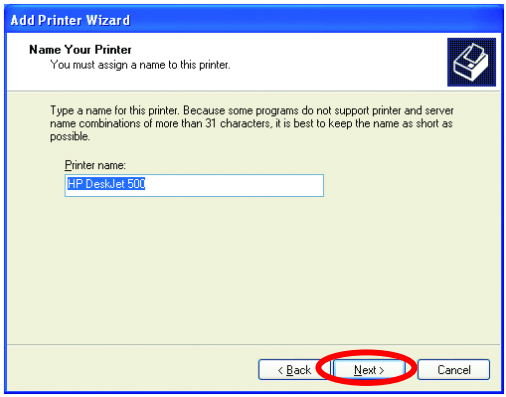
- Click **Next**

Sharing an LPR printer

- You can rename your printer if you choose. It is optional.

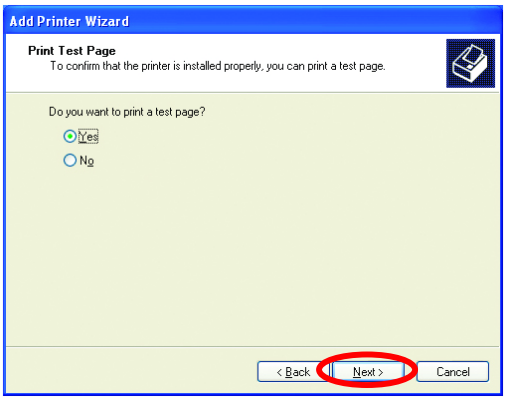
*Please remember the name of your printer. You will need this information when you use the **Add Printer Wizard** on the other computers on your network.*

- Click **Next**



- Select **Yes**, to print a test page.

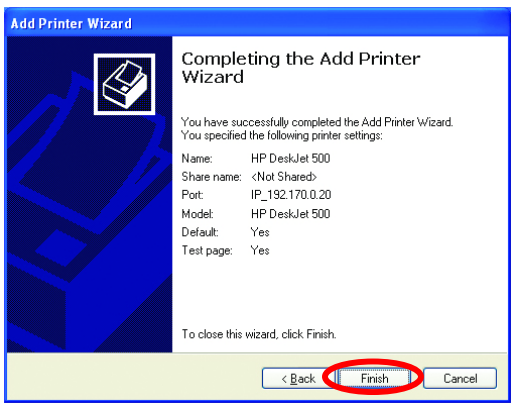
- Click **Next**



This screen will display information about your printer.

- Click **Finish** to complete the addition of the printer.

- Please run the **Add Printer Wizard** on all the computers on your network in order to share the printer.



*Note: You must run the **Network Setup Wizard** on all the computers on your network before you run the **Add Printer Wizard**.*

Other Tasks

For help with other tasks 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.

9. Technical Specifications

Standards

- IEEE 802.11b
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.1x

Ports

(1) 10/100Base-T Ethernet, RJ-45 (UTP)
(1) Power – 5V DC, 2.0A

Network Management

- Web-Based browser with JavaScript

Frequency Range

- 2.4 – 2.4835 GHz, Direct Sequence Spread Spectrum (DSSS)

Data Rates (Mbps : Channel)

- 11 : CCK
- 5.5: CCK
- 2: Barker
- 1: Barker

Data Security

- 64, 128-bit WEP (Wired Equivalent Privacy) Encryption
- Access Control List

Diagnostic LED

- Power
- Link
- TX/RX

Antenna Type

- Detachable Reverse SMA

Range

- Indoors – up to 328 feet (100 meters)
- Outdoors – up to 1,312 feet (400 meters)

Temperature

- Operating: -10ºC to 55ºC (14ºF to 131ºF)
- Storing: -20ºC to 65ºC (-4ºF to 149ºF)

Humidity:

- 5%-95%, non-condensing

Emissions:

- FCC part 15b
- UL1950-3