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Lab 1.5.3 Installing a Printer and Verifying Operation

Objectives

- Manually install a printer using the default Windows XP driver.
- Verify printer and driver installation and troubleshoot any problems.
- Download and install the most recent driver from the printer manufacturer.

Background / Preparation

Many home and small office printers are plug-and-play, which means that Windows XP automatically discovers the printer and installs a functional driver. However, if you know the process for manually installing a printer and updating the printer driver, you have the knowledge to troubleshoot many types of printer problems.

In this lab, you will install a virtual printer on a Windows XP workstation. This lab is designed to work without an actual printer, but most steps are exactly the same for connecting a physical printer.

The following resources are required:

- Computer with Window XP installed
- Internet connection

Step 1: Add a printer

a. From the **Start** menu, select **Control Panel**. Double-click the **Printers and Faxes** icon. If this icon is not shown, click **Switch to Classic View** in the left pane.

b. In the **Printers and Faxes** window, click the **Add Printer** icon to open the Add Printer Wizard. Click **Next**.
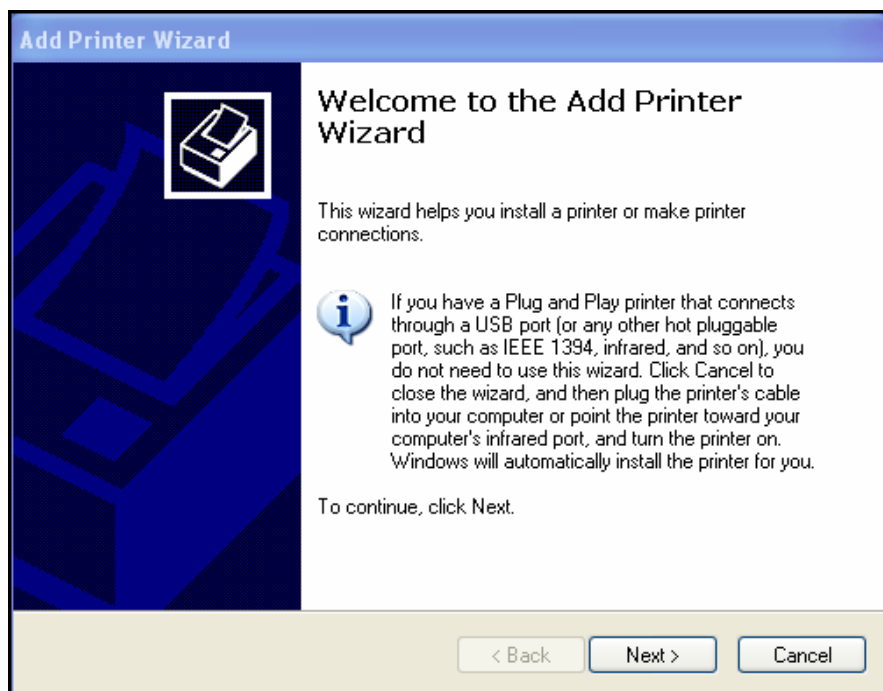
c. For Local or Network Printer, click the Local printer attached to this computer radio button, and uncheck Automatically detect and install my Plug and Play printer. Click Next.
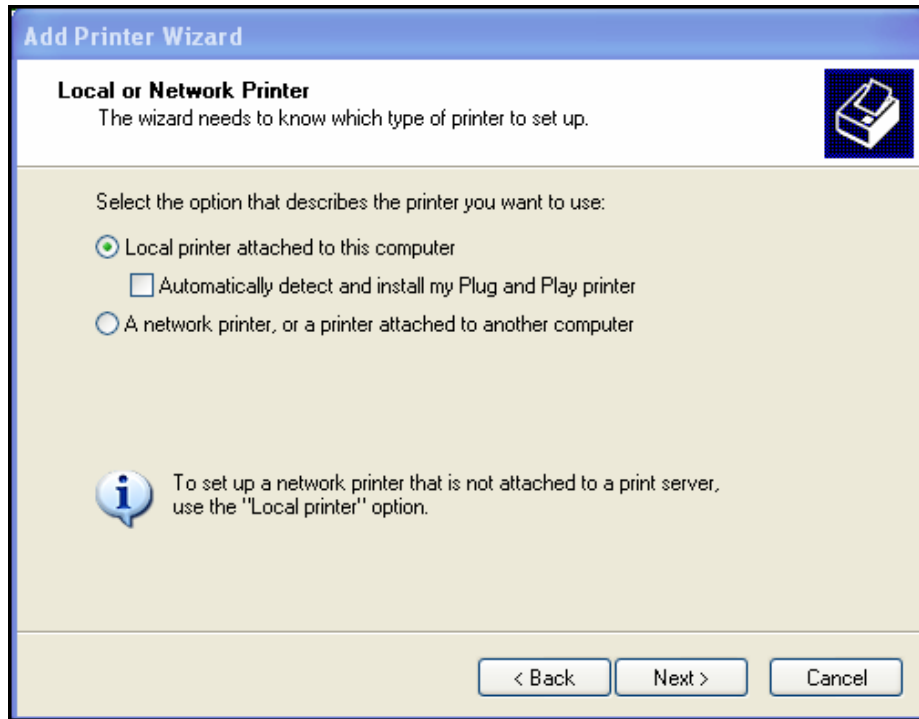

d. For Select a Printer Port, click the Use the following port radio button and choose LPT1: (Recommended Printer Port). Click Next.
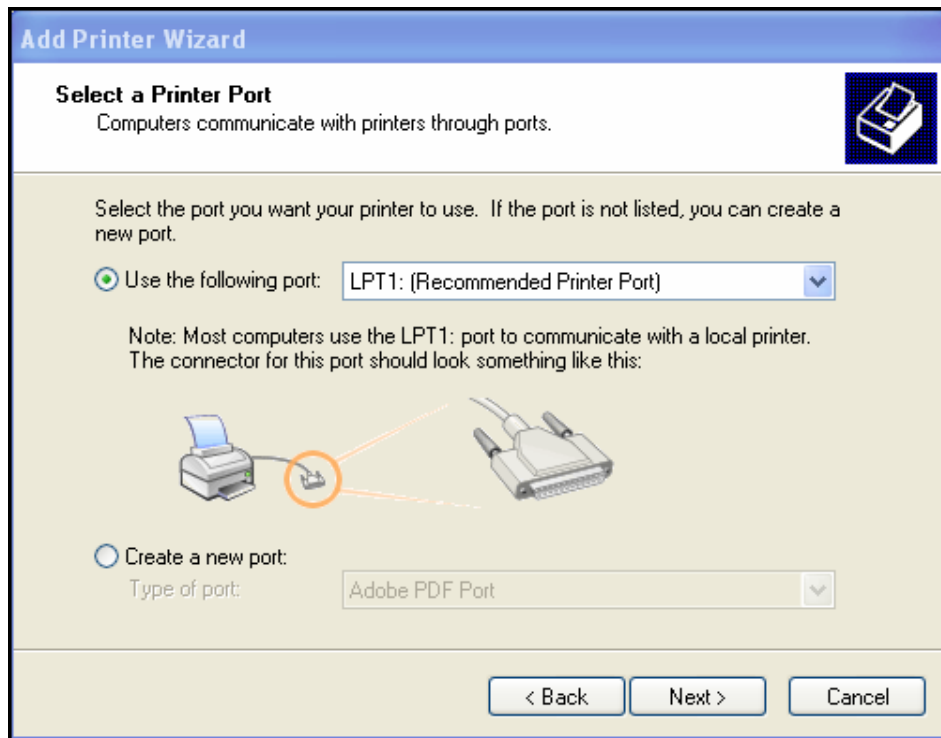
e. **Note:** In this step, you will choose a driver provided by Windows XP for an HP LaserJet 2200, a common home or small office, black-and-white laser printer. You do not have to physically have the printer to do these steps. However, if you are installing a printer that is actually attached to your computer, choose the manufacturer and printer model corresponding to your printer instead of the HP LaserJet 2200.

For **Install Printer Software**, select **HP** from the Manufacturer list. In the Printers list, locate **HP LaserJet 2200 Series PCL** and click to select it. Click **Next.**
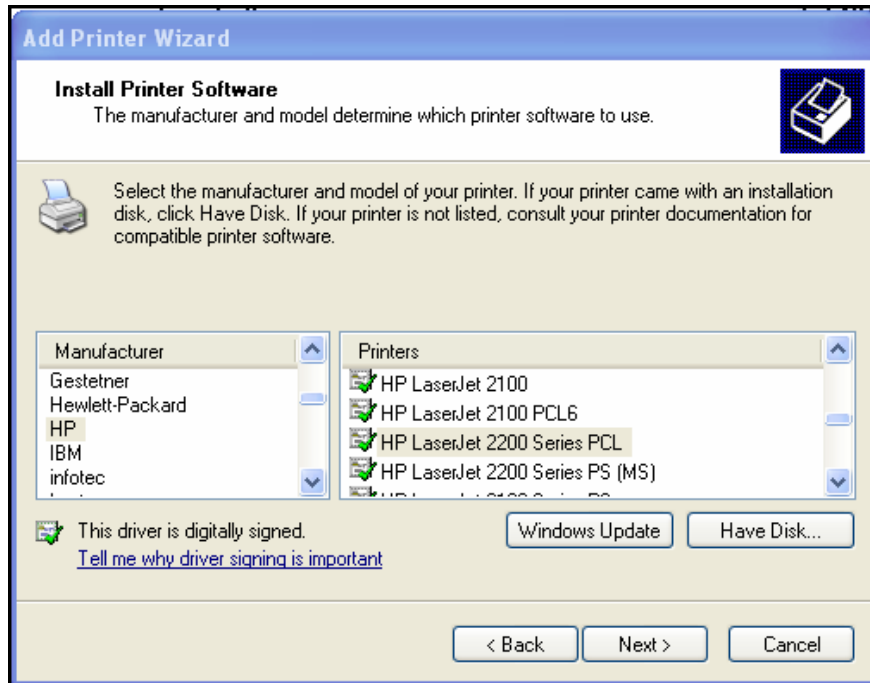
f. For **Name Your Printer**, choose a descriptive name for the printer. In an environment like a large office that has several printers of the same make and model, it is helpful to give each printer a unique name so that it can easily be identified. Click **No** under **Do you want to use this printer as the default printer?** (If you are connecting an actual printer, click **Yes** if you want Windows applications to use this printer by default.) Click **Next**.
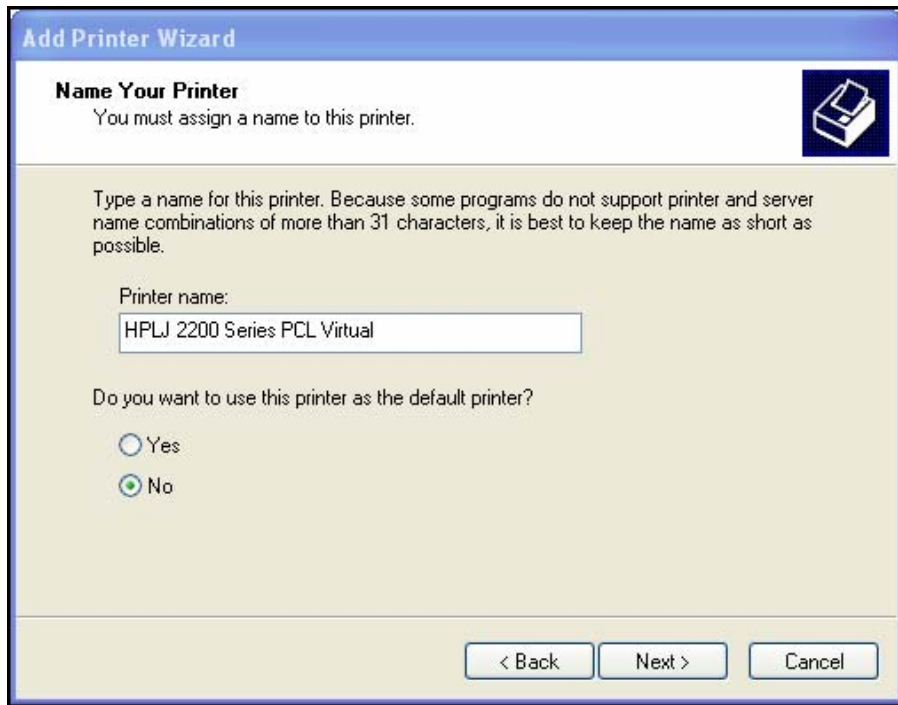
g. In the **Printer Sharing** window, click **Next** to accept the default option to not share this printer.

h. If you are actually installing a printer, click **Next** in the **Print Test Page** window to print a test page. If you are installing a virtual HP LaserJet 2200, click the **No** radio button before clicking **Next**.

i. In the **Completing the Add Printer Wizard** window, review the printer settings, and then click **Finish**.
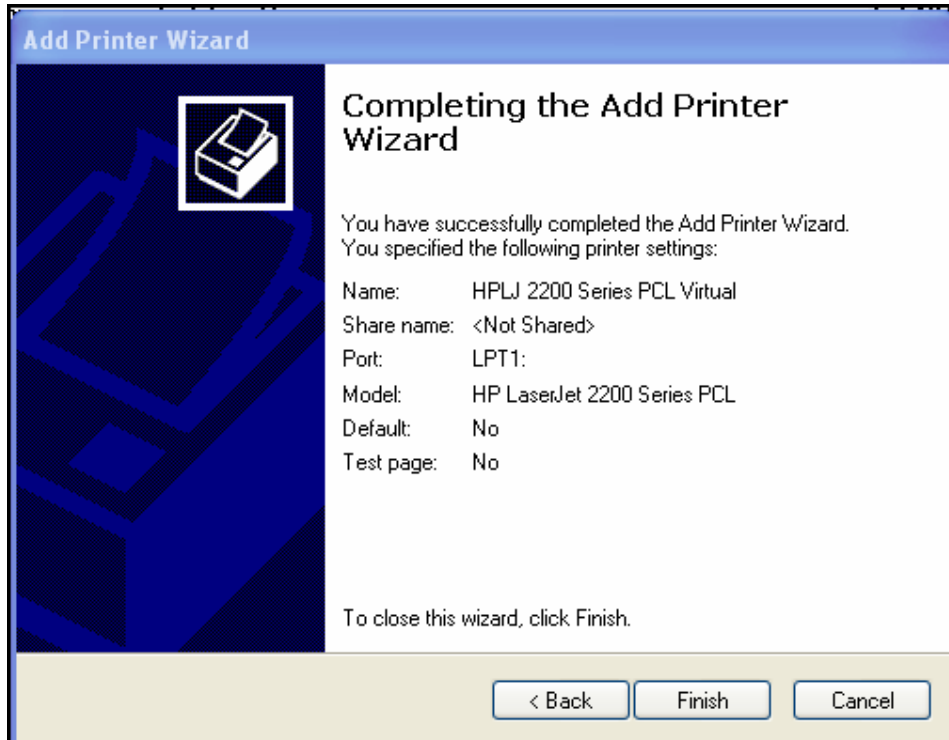
Step 2: Verify the printer installation

    a. Open the Printers and Faxes in control panel and check to see that the printer that you installed and named is shown. If it is not shown, repeat Step 1.

    b. Right-click the icon for the new printer (HPLJ 2200 Series PCL Virtual), and then click Properties.
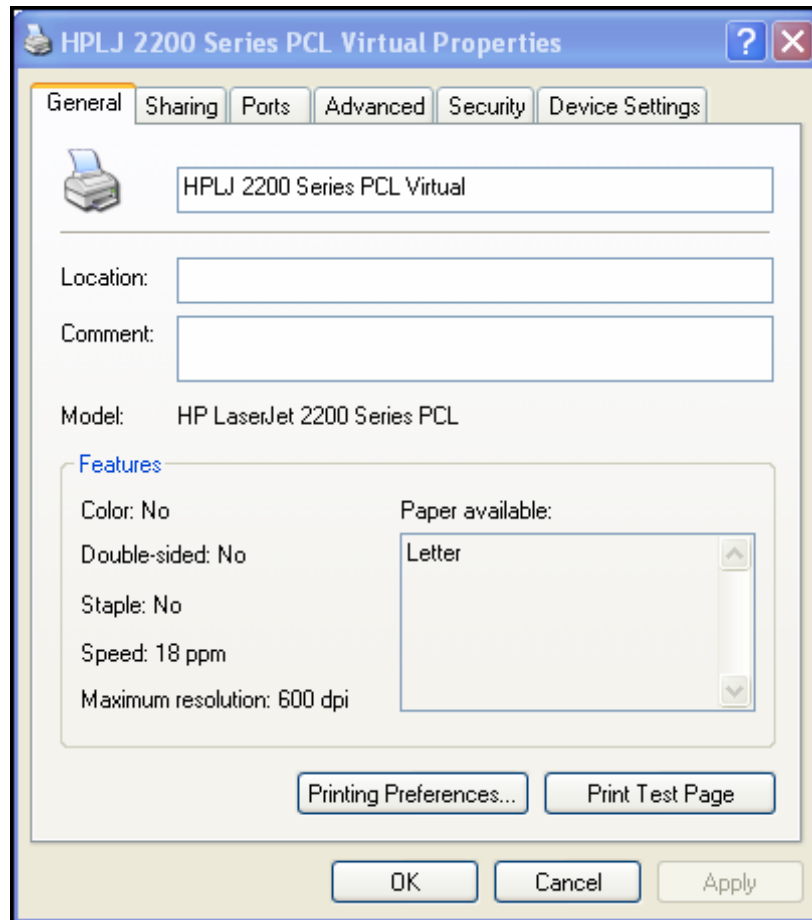
    c. Click the Advanced tab and record the name of the driver shown in the Driver textbox.

        Driver Name: _____

    d. Click the Device Settings tab and examine the available options for the printer using this driver. To close the window, click Cancel.
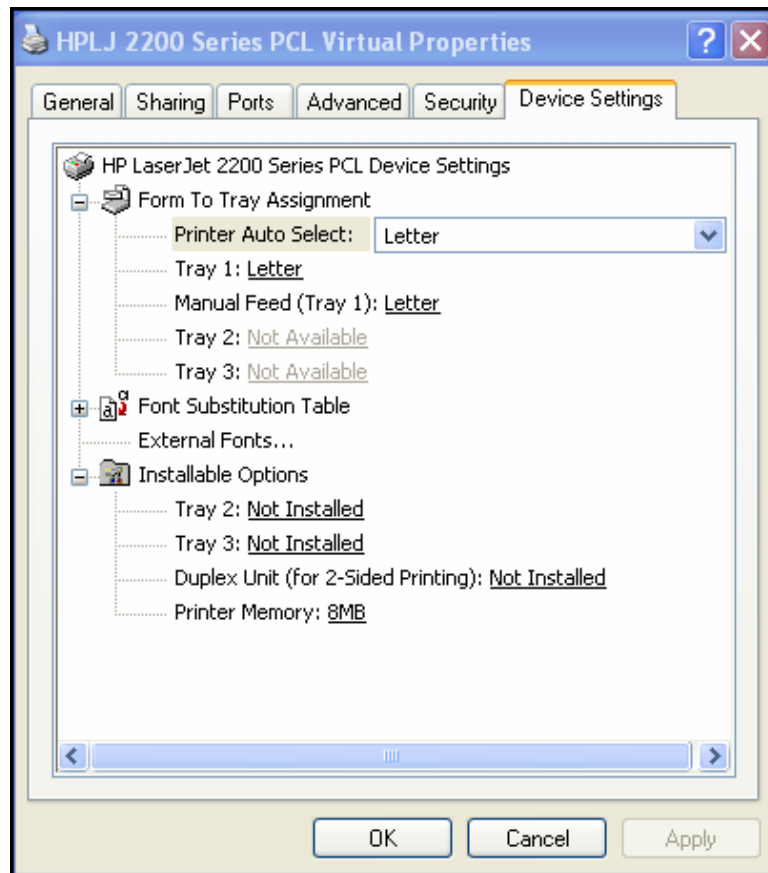
Step 3: Download and install an updated printer driver

When you use the Add Printer Wizard to manually install a printer, the driver that is installed by default allows the device to function, but the Windows-installed driver does not always allow all features of the device to be used. The most full-featured drivers are usually those provided by the device manufacturer.

Updating a printer driver is one of the best ways to troubleshoot problems and to increase printer functionality. Most manufacturers continue to update drivers to improve compatibility with operating systems, so it is a good idea to periodically check for driver updates and to install them if they are available.

In this step, you will go to the Hewlett-Packard website to obtain an updated driver for the HP LaserJet 2200. If you have installed a different printer, modify these instructions as needed.

a. Open a web browser and go to **http://www.hp.com**.

b. Click on the Software and Driver Downloads link.

   NOTE: Many manufacturers have a support link on their home page that leads to drivers and other downloads.

c. Click the **Download drivers and software (and firmware)** radio button. Enter the printer model in the **for product** text box and click the double arrow link to the right of the text box.

d. The search displays the available products. Click HP LaserJet 2200 Printer or the model of the printer for which you are downloading a driver.

e. Click **Microsoft Windows XP** in the list of operating systems. In the list of drivers shown, click **Download** for the HP LaserJet 2200 PCL6 driver option.

Driver

| Description	Current version	Size (MB)	Estimated download time	Previous version	
HP Universal Print Driver for Windows - PCL 5	2.75.0.2 6 Sep 2006	8.8	56K: 21m 512K: 2m		Download »
HP Universal Print Driver for Windows - PostScript	2.75.0.2 6 Sep 2006	8.5	56K: 20m 512K: 2m		Download »
HP LaserJet 2200 PCL5e Driver	4.27.2200.410 22 Apr 2004	1.9	56K: 4m 512K: <1m		Download »
hp LaserJet 2200 PCL6 driver	4.27.2200.410 22 Apr 2004	2.2	56K: 5m 512K: <1m		Download »

f. In the download dialog box, click **Save.**

File Download - Security Warning

Do you want to run or save this file?

Name: lj2200pcl6win2kxp2003-en.exe
Type: Application, 2.15 MB
From: ftp.hp.com

[Run]   [Save]   [Cancel]

While files from the Internet can be useful, this file type can potentially harm your computer. If you do not trust the source, do not run or save this software. What's the risk?
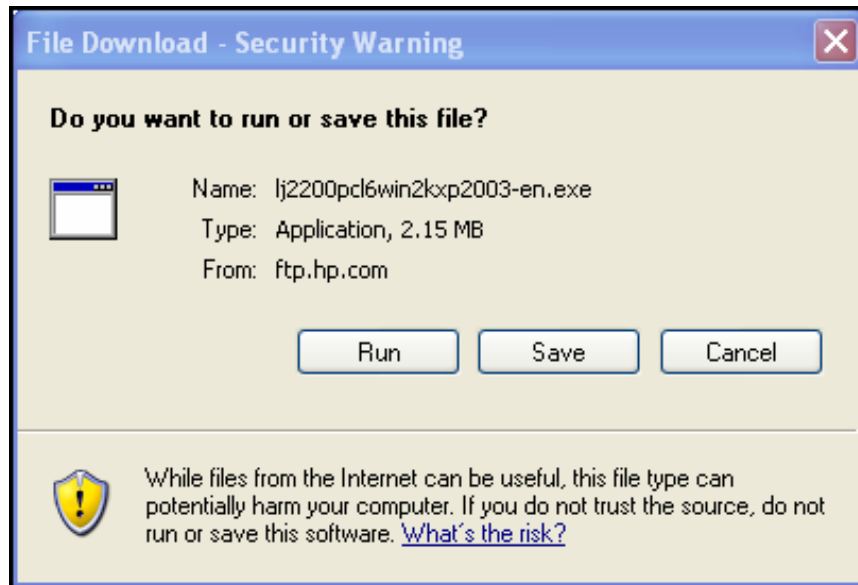
g. In the **Save As** dialog box, click the **Desktop** icon in the left pane to save the driver installation file to your desktop. You can save the file anywhere, but it is important that you know where you have saved it.

h. Write the name of the file: _____

i. Click on the **Save** button. Close the browser and any other open applications.

j. Double-click the icon for the downloaded file.

   NOTE: You may not see the filename extension (**.exe**). File extensions are only visible if you disable the default **Hide extensions for known file types** from Windows Explorer. See your instructor for more information.

k. When prompted, click **Run**. In the dialog box, click the second radio button and then **Next** to unpack the files to c:\lj2200. Click **Finish**.
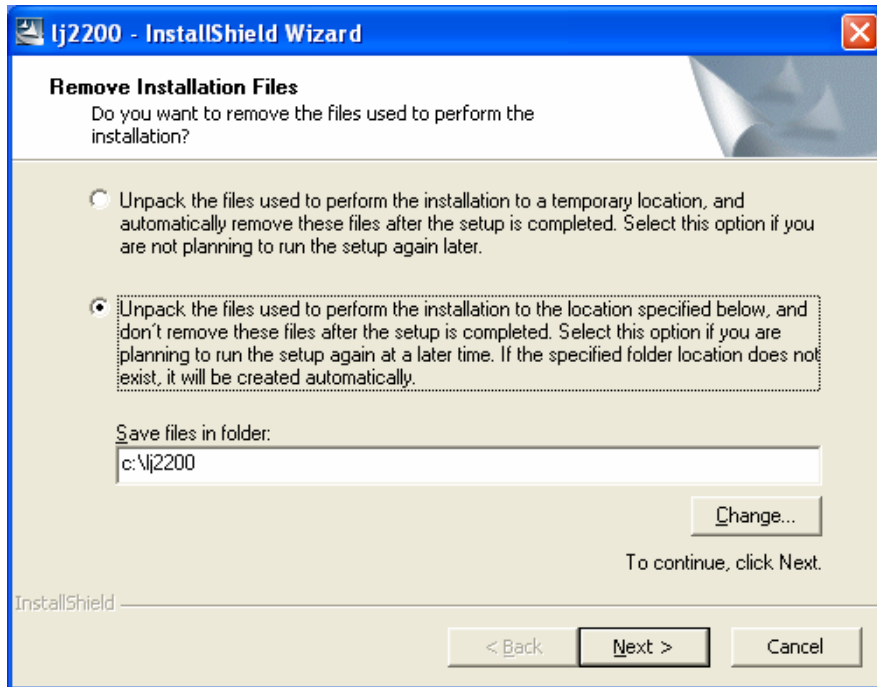

l. Repeat Steps 2a and 2b to open the Properties page of the new printer. Click the **Advanced** tab. Click the **New Drive** button, and then click **Next** to begin the Add Printer Driver Wizard.

m. Click **Have Disk** in the Printer Driver Selection window.
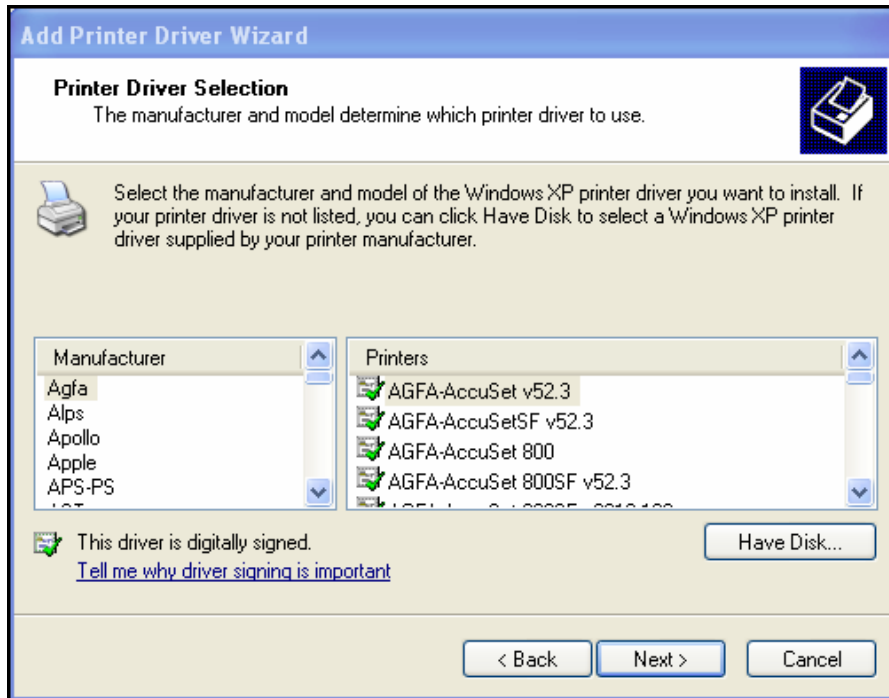
n. In the **Install From Disk** window, click **Browse** and locate the folder created in Step 3 by navigating to **My Computer > Local Disk C:\lj2200**. Click **Open** and you return to the **Install From Disk** window. Click **OK**.
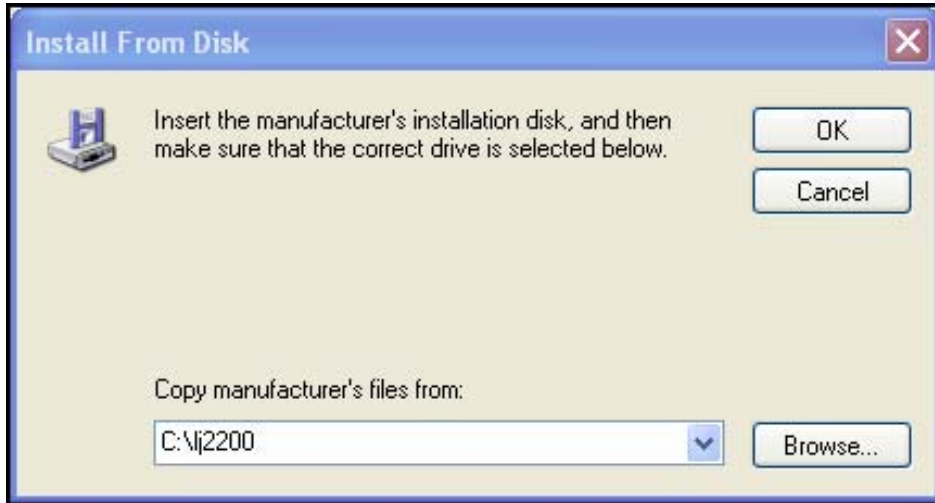
o. In the Printer Driver Selection window, select **HP LaserJet 2200 Series PCL 6**, and then click **Next**. Click **Finish** in the window that follows.
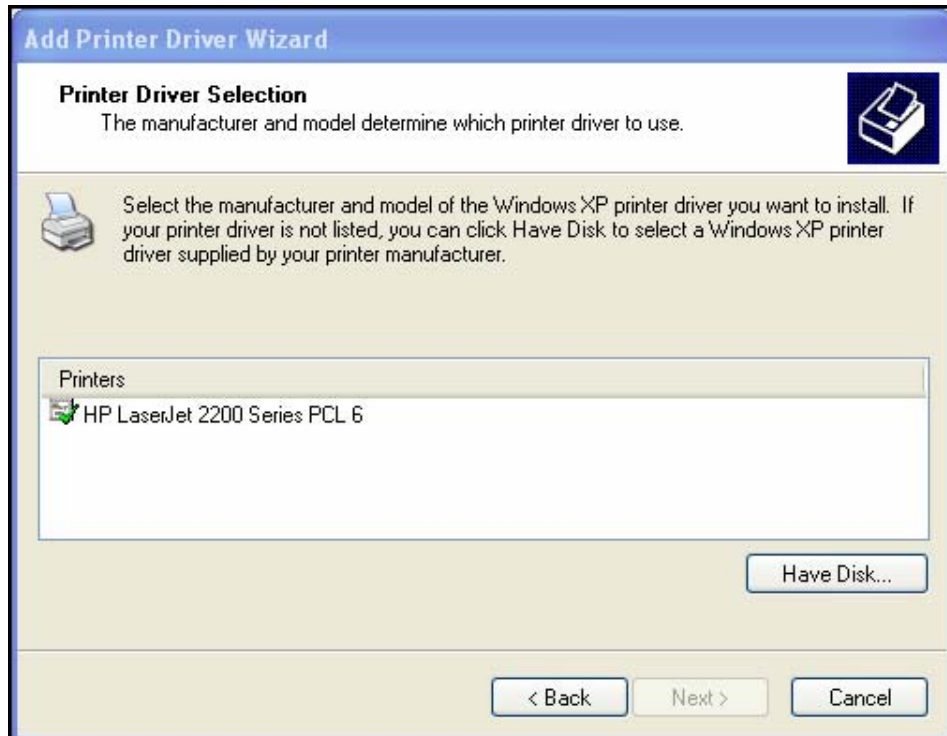

p. When the process is finished, return to the properties window of the printer and click the **Apply** button, and then click **OK**.

Step 4: Verify the new driver installation

In this step, you will compare the Windows default driver installed in the first step to the newly installed driver from the manufacturer website.

a. In the properties window of the new printer, verify that the **Apply** button is grayed out.

b. Click the **Advanced** tab. What is the name of the driver?

Driver Name: _____

c. Click the **Configure** tab. The window for the HP LaserJet 2200 is shown in the figure.
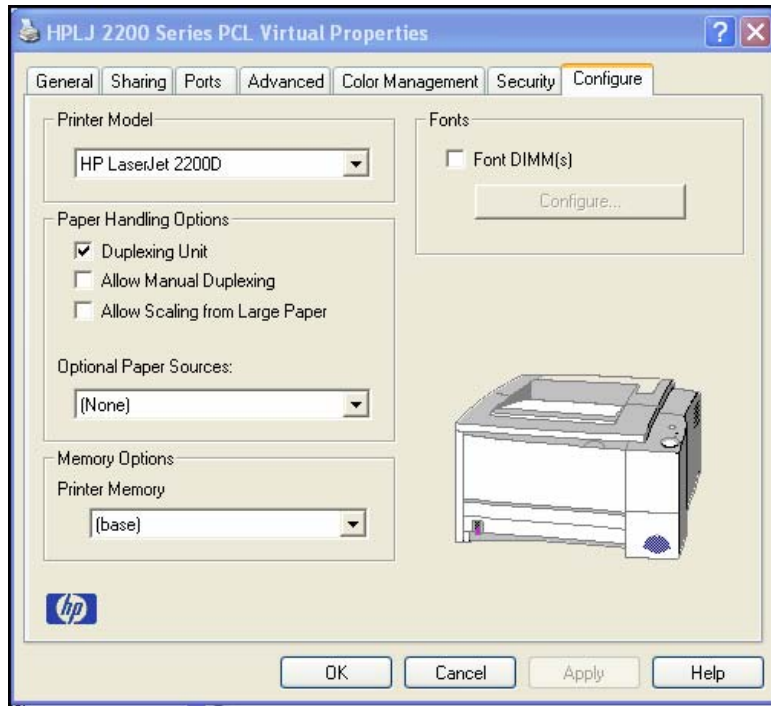
d. Compare this tab to the **Device Settings** tab in Step 2d. What are the differences?

1	
2	
3	
4	
5	
6	

e. Click on some of the other tabs in the properties window to compare the new and old drivers. Record some of the differences here.

1	
2	
3	