11.4.1 Lab: Install a NIC in Windows XP

Introduction

Print and complete this lab.

In this lab, you will install a NIC, verify NIC operation, and manually configure an IP address.

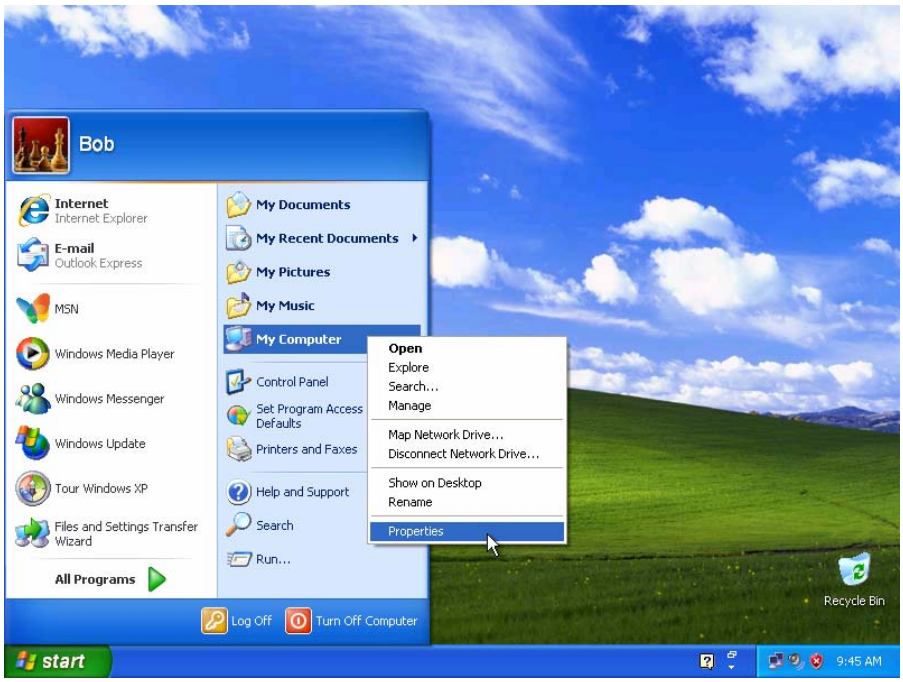
Recommended Equipment

- Computer running Windows XP Professional
- PCI NIC
- Driver files for PCI NIC on CD or floppy disk
- Anti-static wrist strap
- Tool kit

Step 1

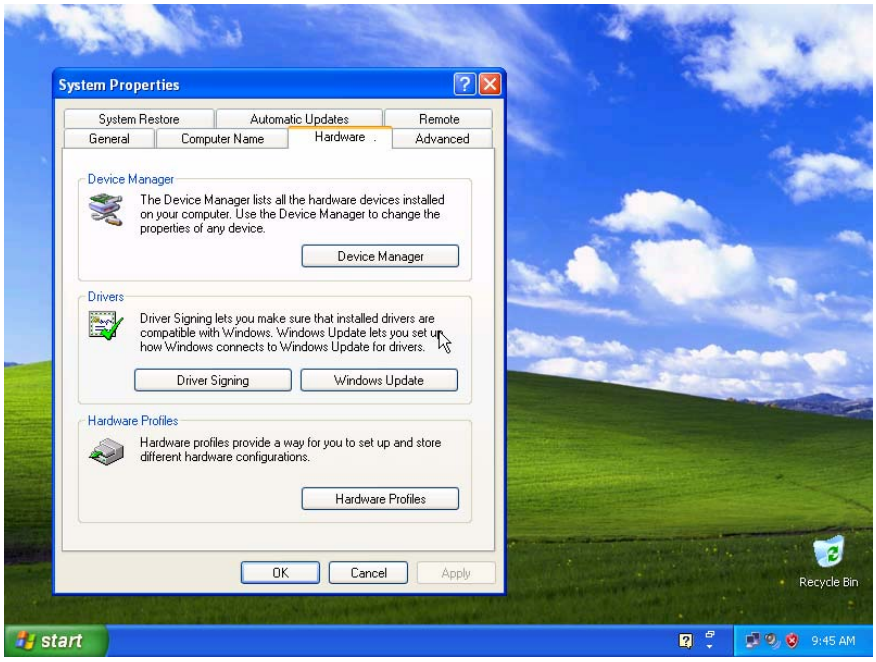
Log on to the computer as an Administrator.

Click the **Start** button. Right-click **My Computer**, and then choose **Properties**.



The “System Properties” window appears.

Choose the **Hardware** tab, and then click the **Device Manager** button.

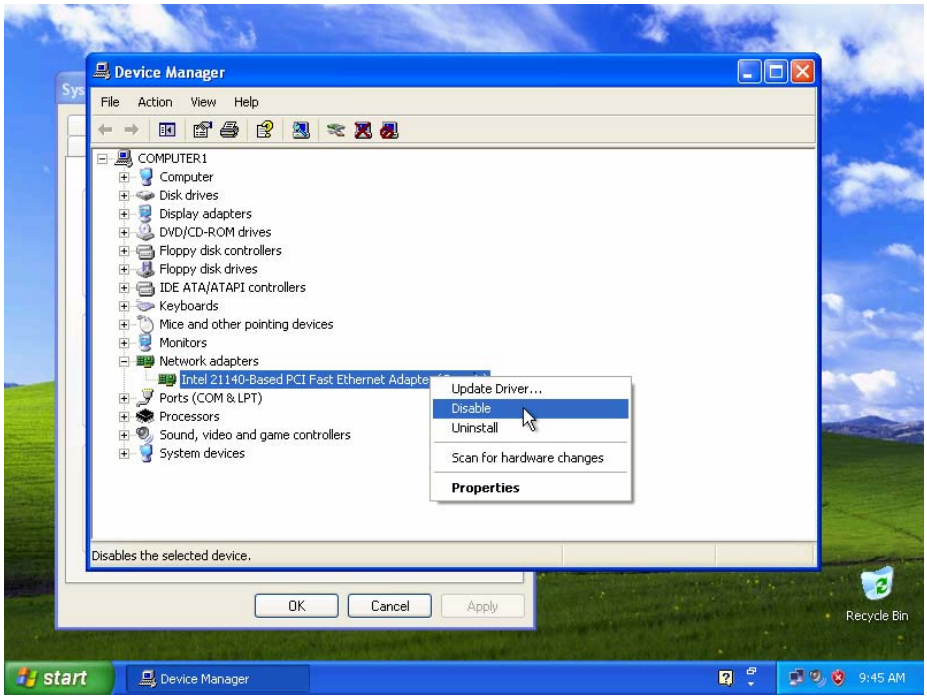


The “Device Manager” window appears.

Step 2

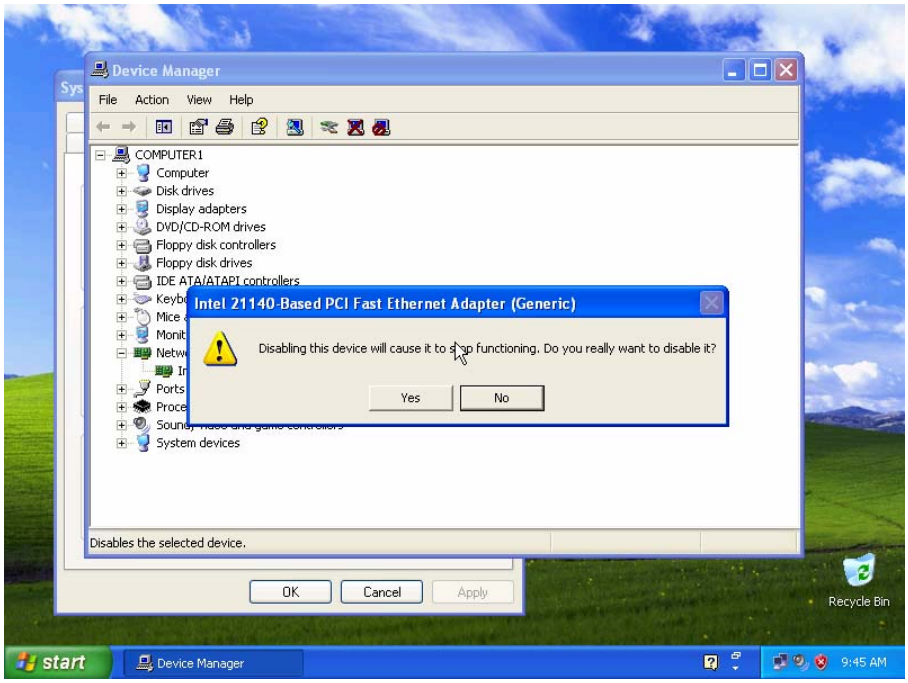
Expand **Network adapters**.

Right-click the NIC installed in your computer, and then choose **Disable**.

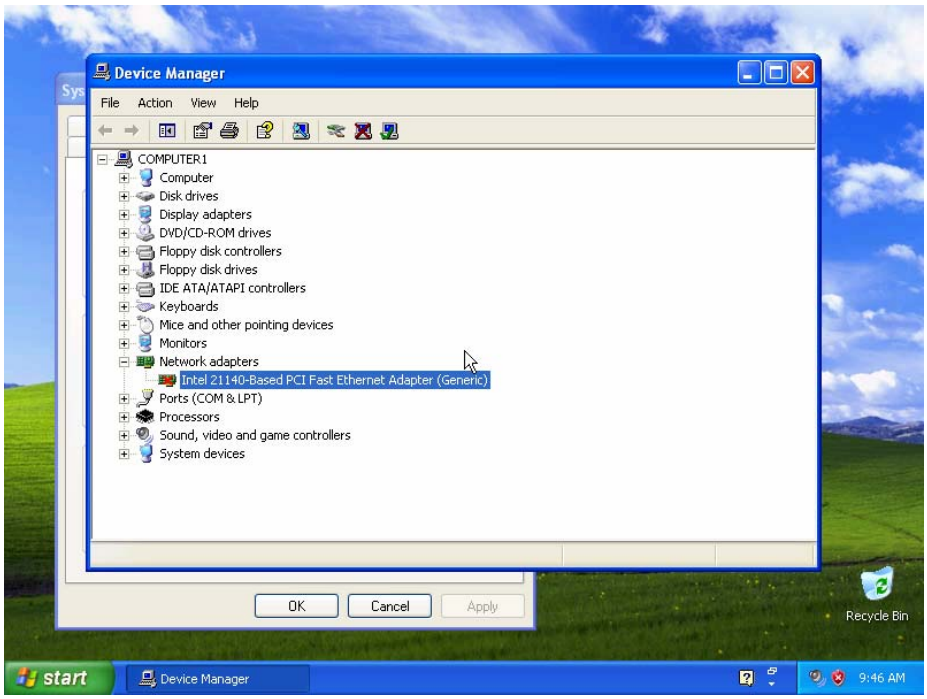


The “Disabling this device will cause it to stop functioning.” confirmation window appears.

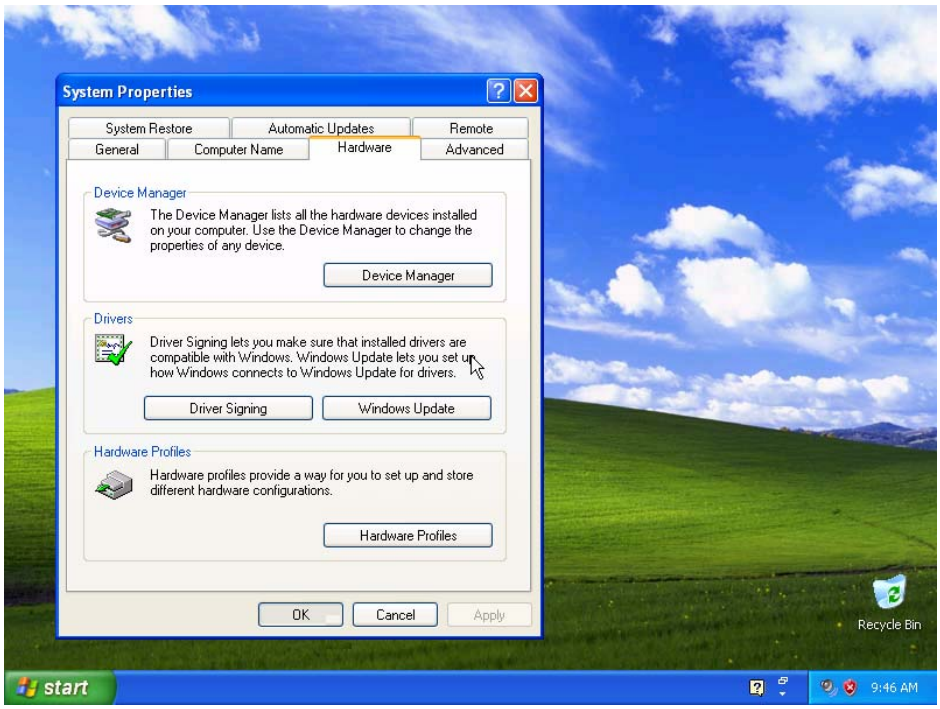
Click **Yes**.



A red “X” appears over the icon of the NIC installed in your computer.



Close the Device Manager window.



Close the System Properties window.

Turn off your computer.

Step 3

Who is the manufacturer of the new NIC?

What is the model number of the new NIC?

What slot type is used to connect the new NIC to the motherboard?

Step 4

If a switch is present on the power supply, set the switch to “0” or “off”.

Unplug the computer from the AC outlet.

Unplug the network cable from the computer.

Remove the side panels from the case.

Step 5

Choose an appropriate slot on the motherboard to install the new NIC.

You may need to remove the metal cover near the slot on the back of the case.

Make sure the NIC is properly lined up with the slot. Push down gently on the NIC. Secure the NIC mounting bracket to the case with a screw.

Step 6

Replace the case panels.

Plug the network cable into the new NIC.

Plug the power cable into an AC outlet.

If a switch is present on the power supply, set the switch to “1” or “on”.

Step 7

Boot your computer, and then log on as an administrator.

Choose **Start**. Right-click **My Computer,** and then choose **Properties**.

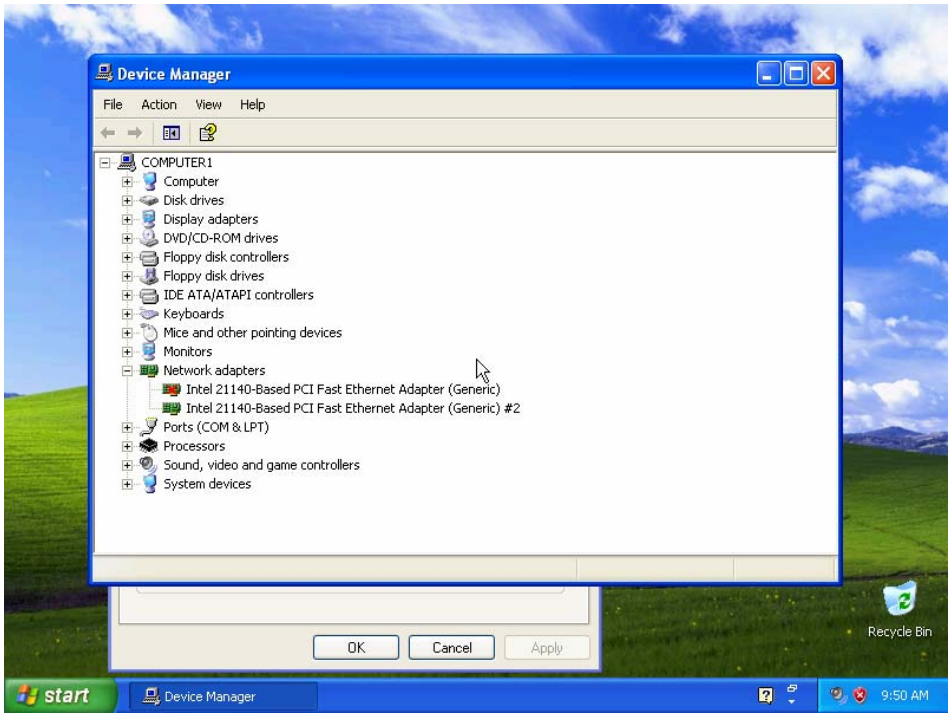
The “System Properties” window appears.

Choose the **Hardware** tab, and then click the **Device Manager** button.

Step 8

The “Device Manager” window appears.

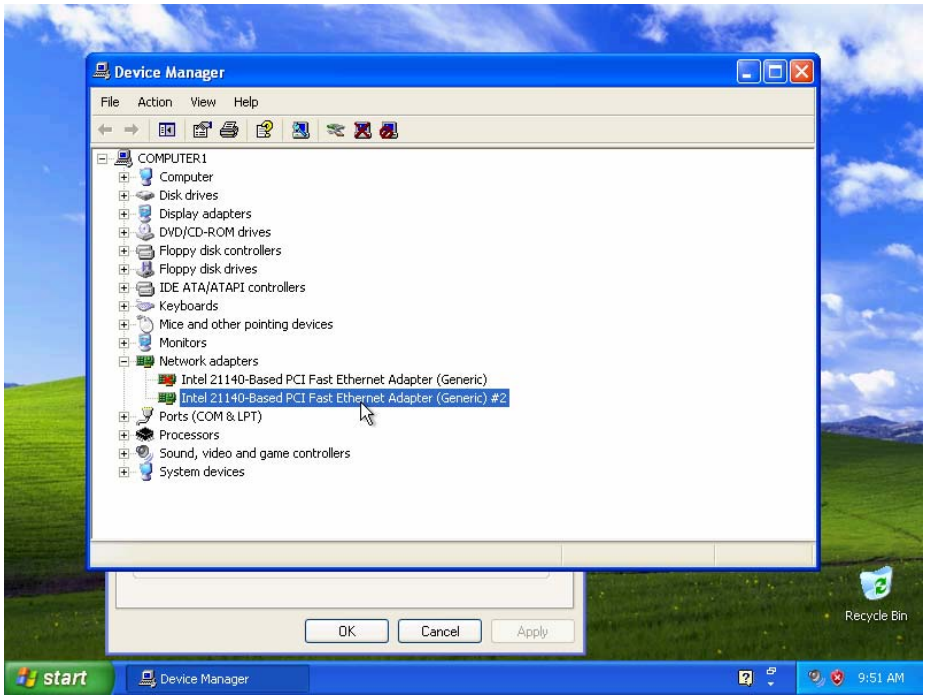
Expand **Network adapters**.



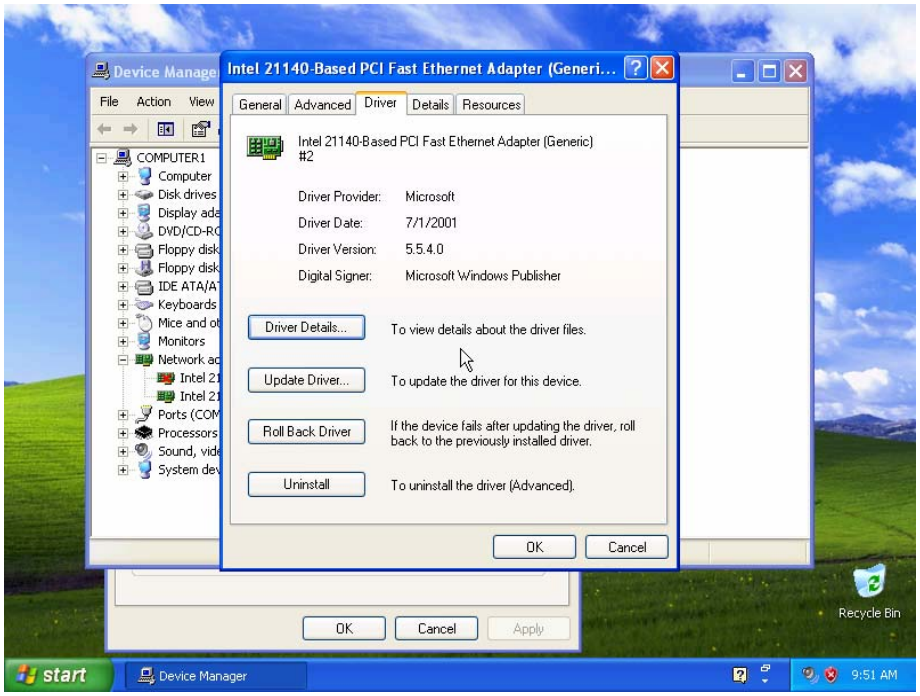
How many Network adapters are present (enabled and disabled) in the list?

If the new card icon has a red X over it, right-click on that icon, and then click **Enable**.

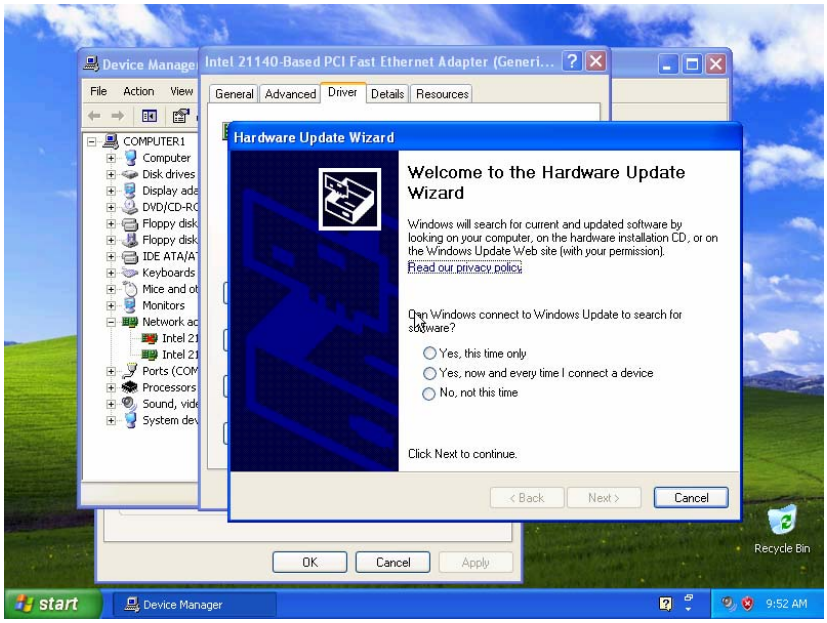
Right-click the new NIC icon, and then choose **Properties**.



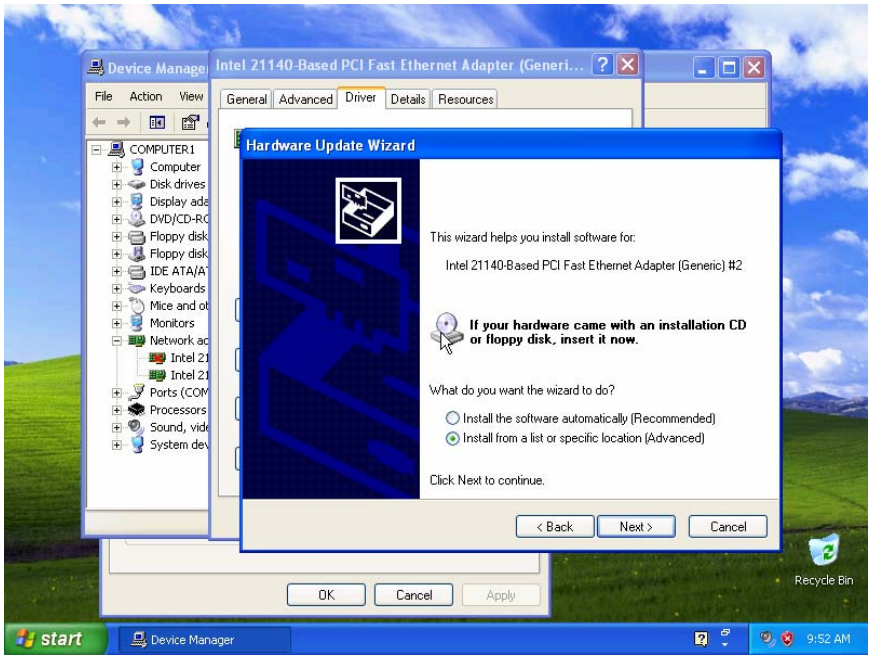
Choose the **Driver** tab. Click the **Update Driver…** button.



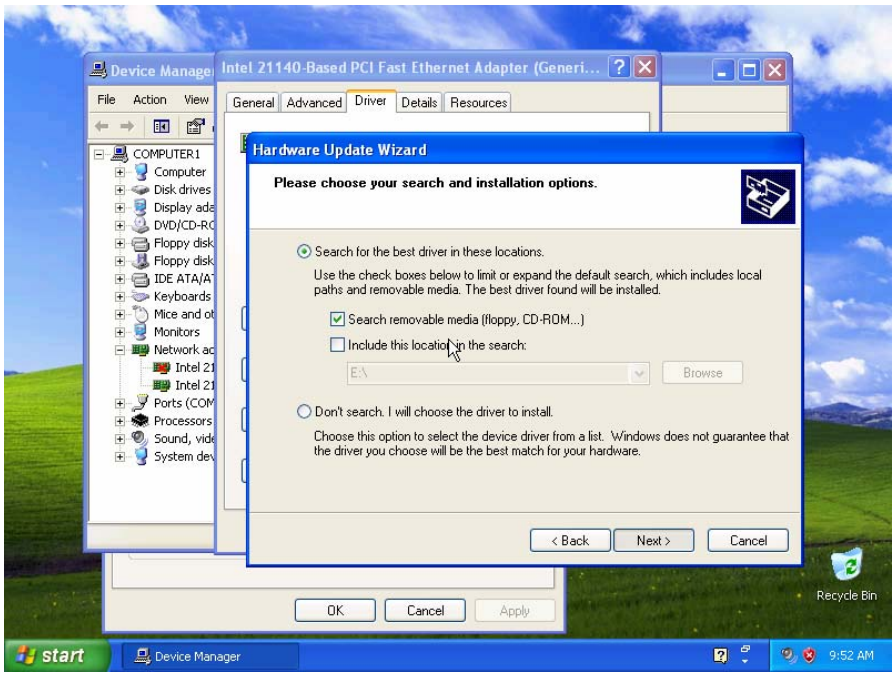
The “Hardware Update Wizard” appears.
If you are prompted to connect to Windows Update, click the **No, not this time** radio button, and then click **Next**.



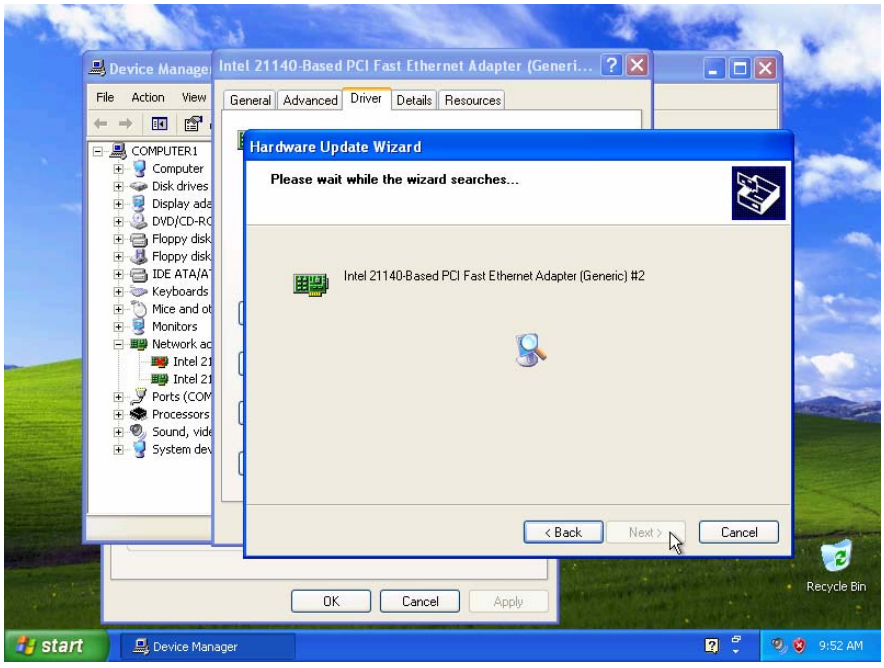
Choose the **Install from a list or specific location (Advanced)** radio button, and then click **Next**.



Insert the CD or floppy disk with the new NIC drivers, and then click **Next**.



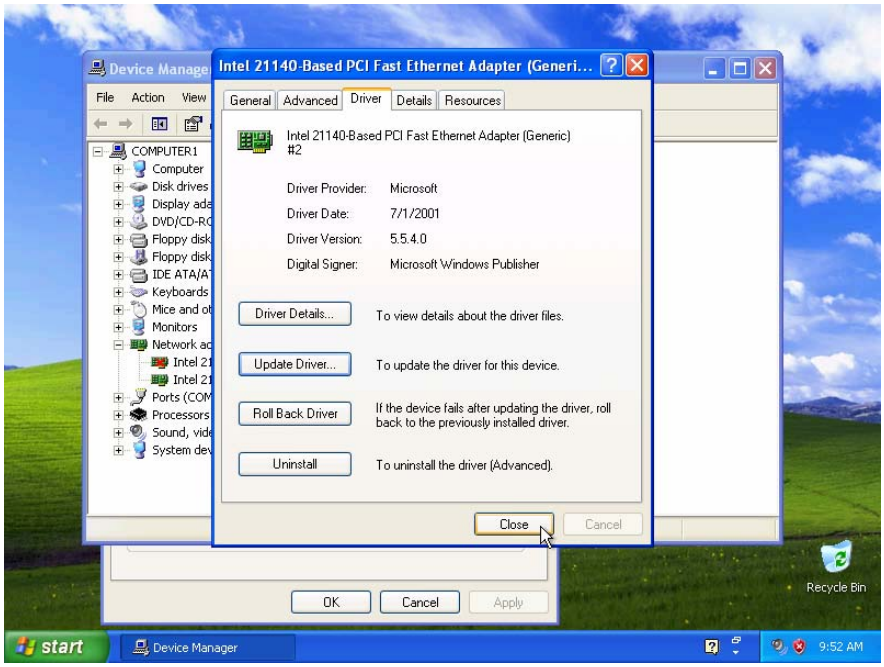
The “Please wait while the wizard searches…” window appears.



Click **Finish** after Windows installs the new driver.

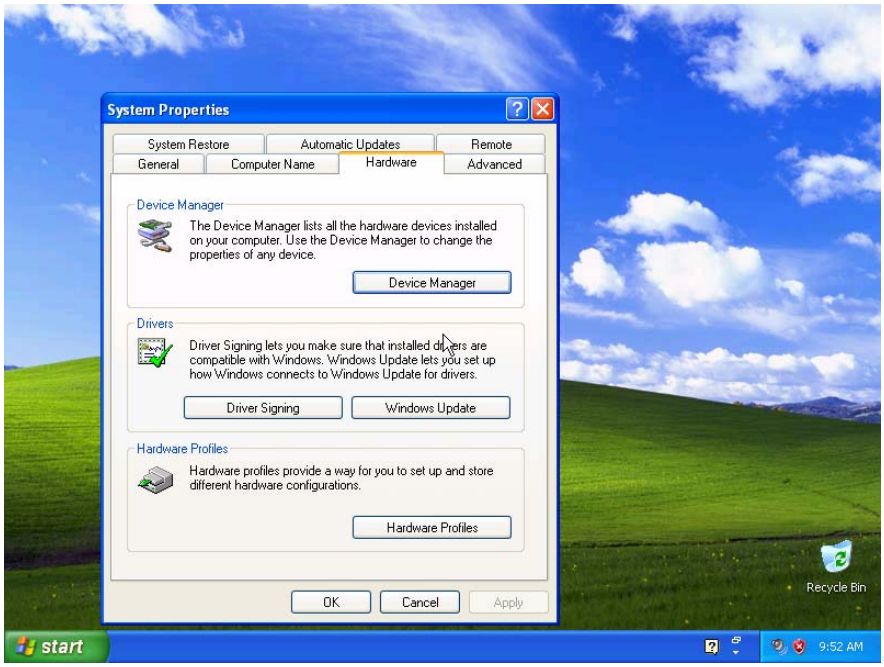
The Hardware Update Wizard window closes.

Click **Close**.



The “NIC Properties” window closes.

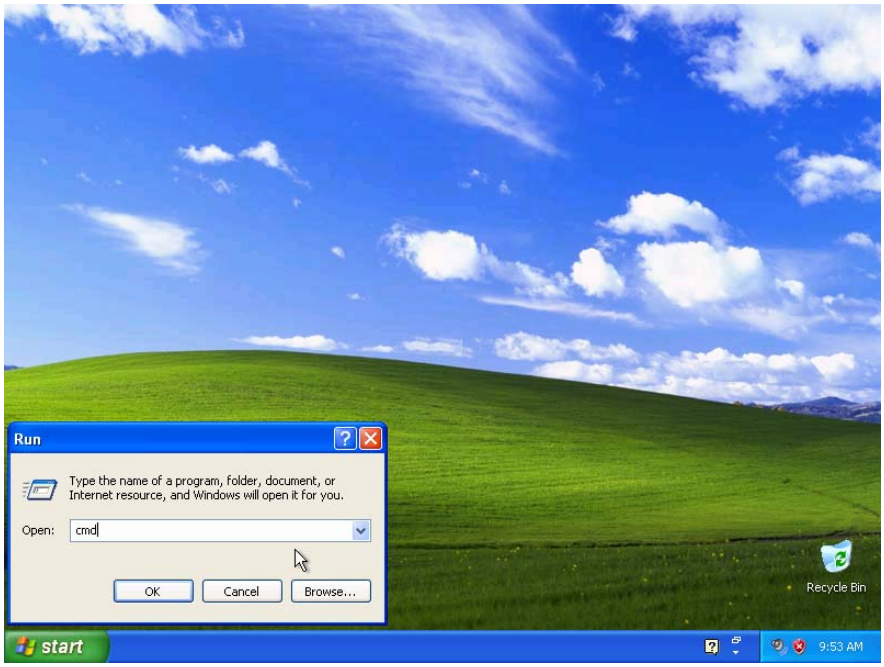
Close the Device Manager.



Step 9

Choose **Start > Run**.

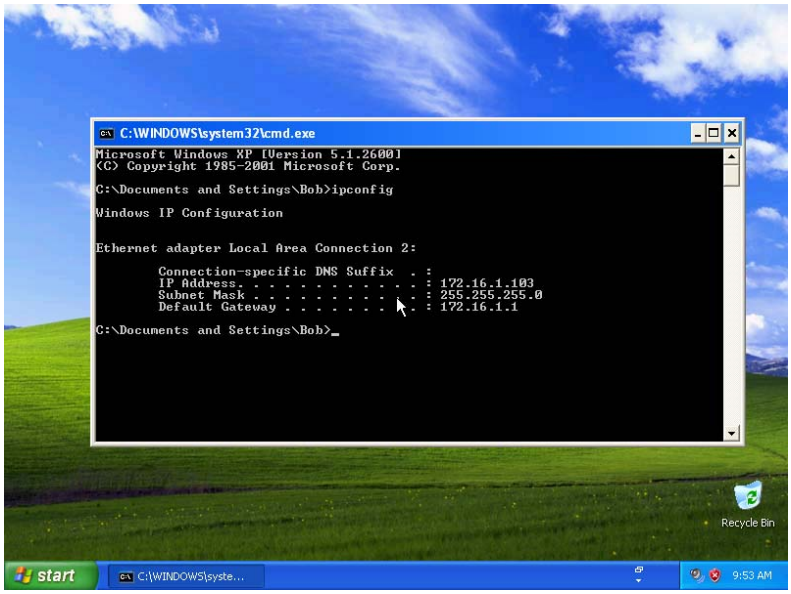
Type **cmd** in the **Open:** field, and then click **OK**.



The “C:\WINDOWS\System32\cmd.exe” window appears.

Type **ipconfig** and press **Enter**.

The settings of the new NIC are displayed.



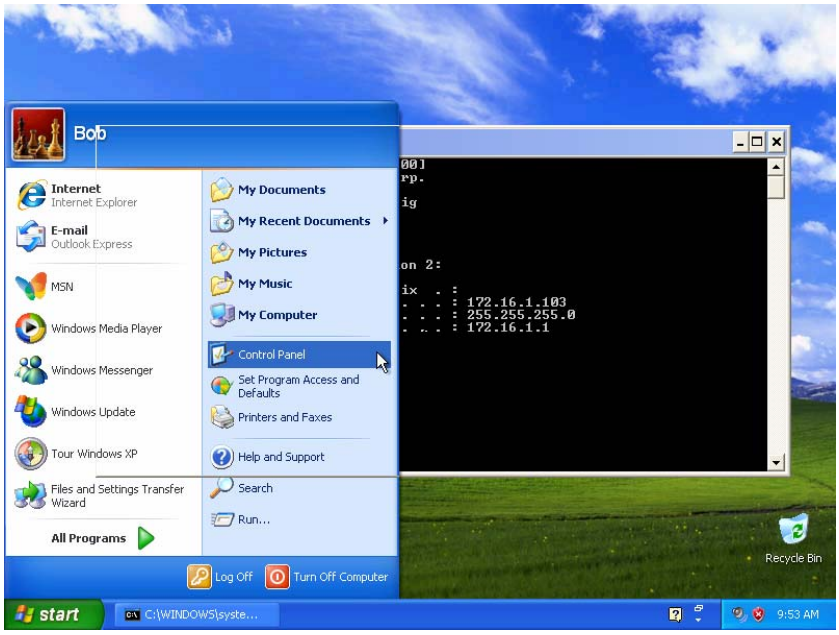
What is the IP address?

What is the subnet mask?

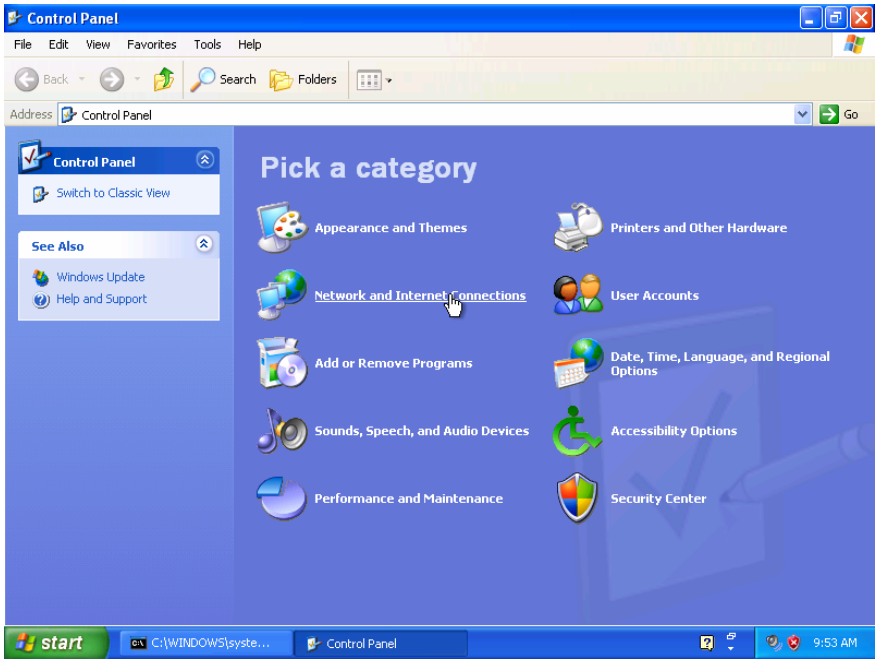
What is the default gateway?

Step 10

Choose **Start > Control Panel**.

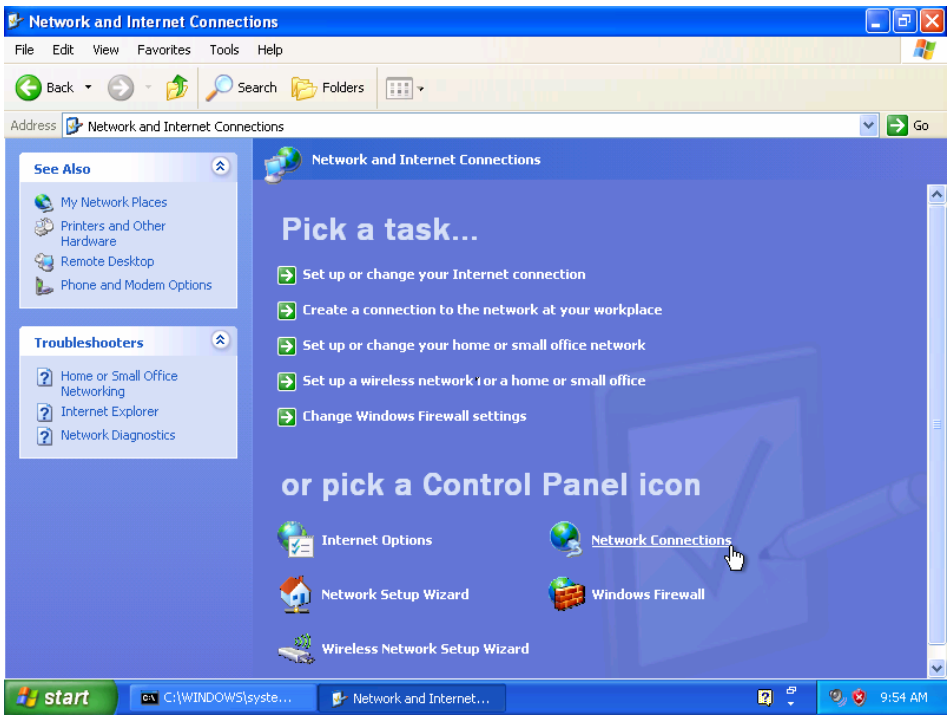


Click **Network and Internet Connections**.

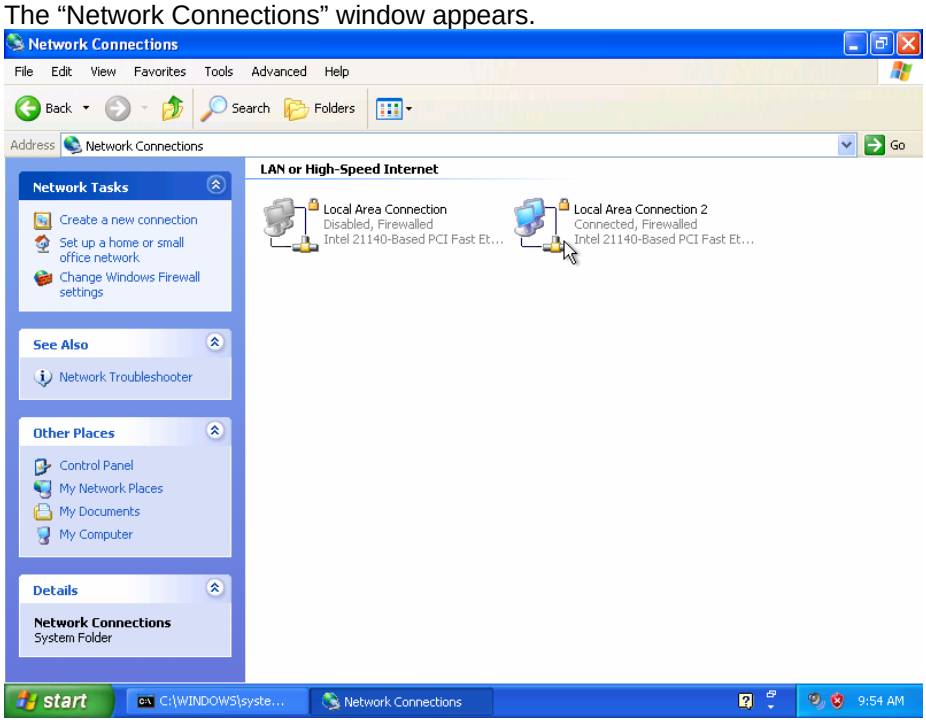


The “Network and Internet Connections” window appears.

Click **Network Connections**.

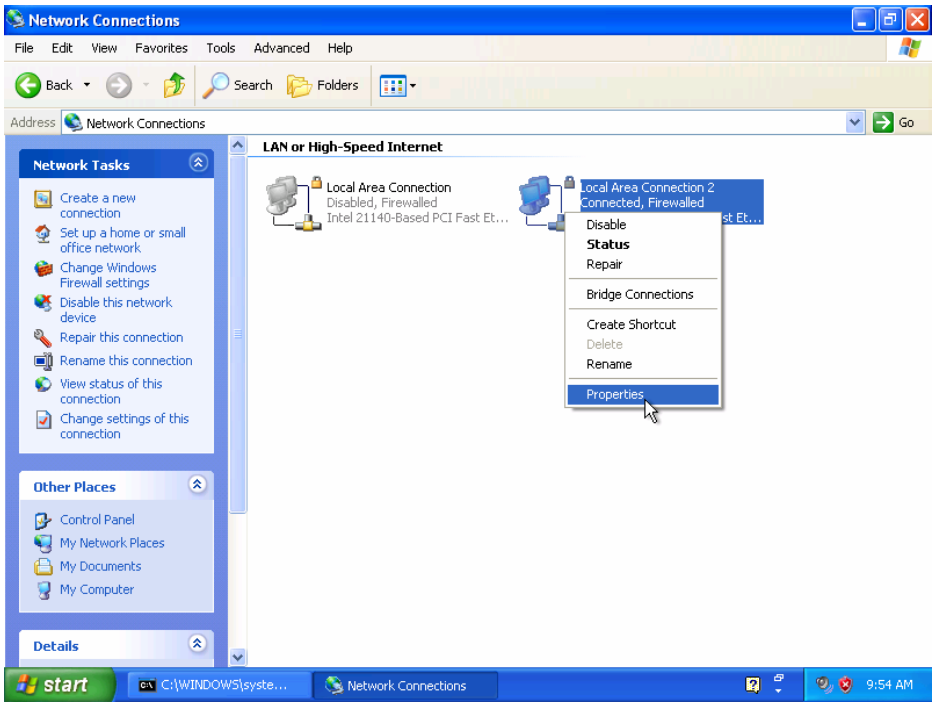


The “Network Connections” window appears.



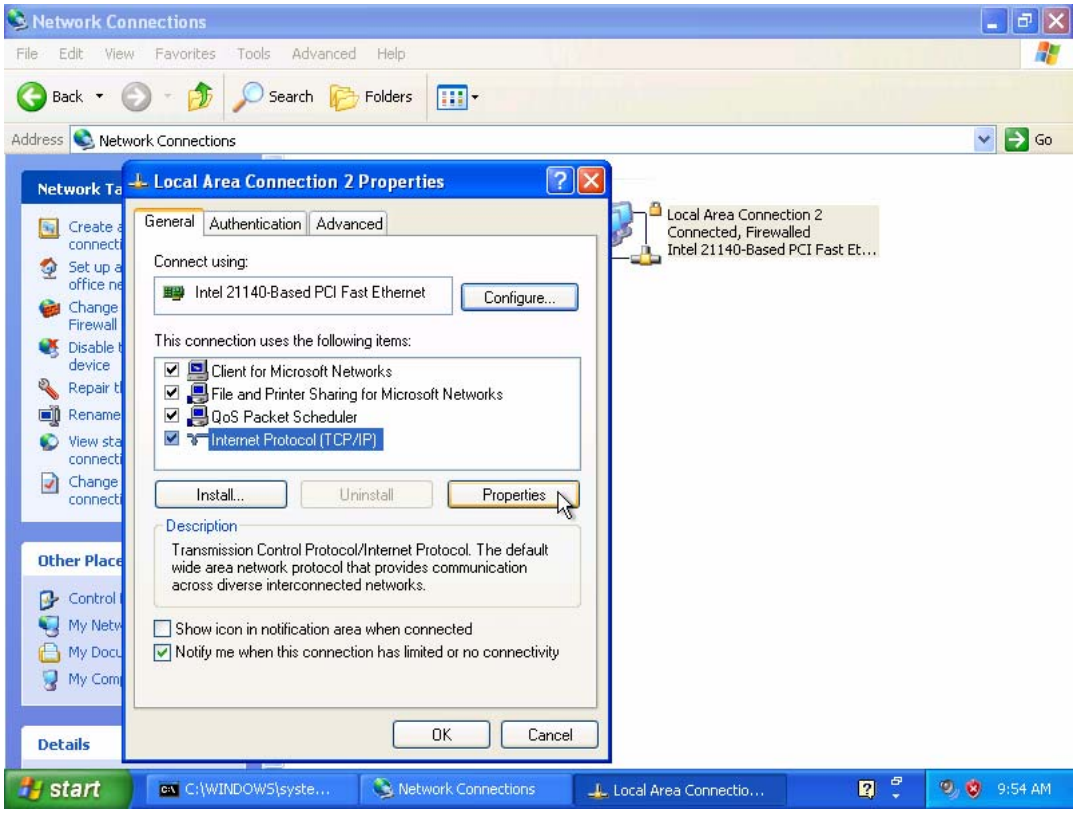
Step 11

Right-click the connected “Local Area Connection” and choose **Properties**.



The “Local Area Connection Properties” window appears.

Choose Internet Protocol (TCP/IP) and click **Properties**.



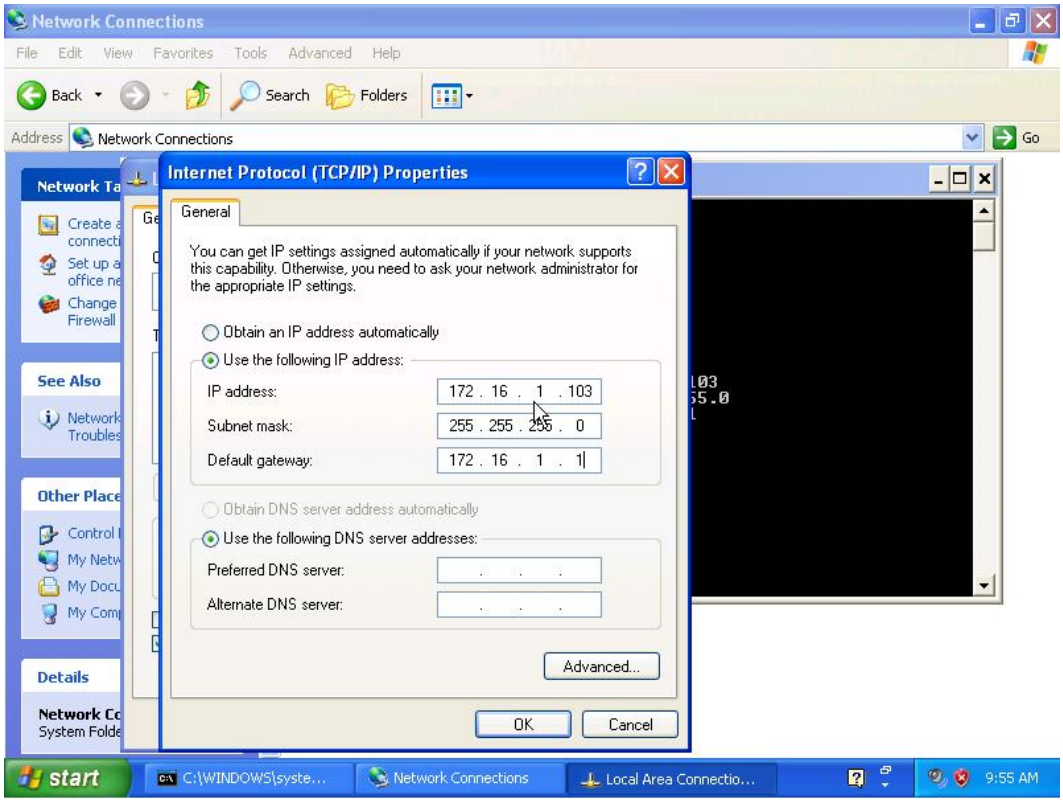
Click the **Use the Following IP address:** radio button.

Note: Use the IP address, subnet mask, and default gateway you wrote down earlier in the lab to fill in the following three fields:

Type the IP address assigned to your computer in the “IP address” field.

Type the subnet mask assigned to your network in the “Subnet mask:” field.

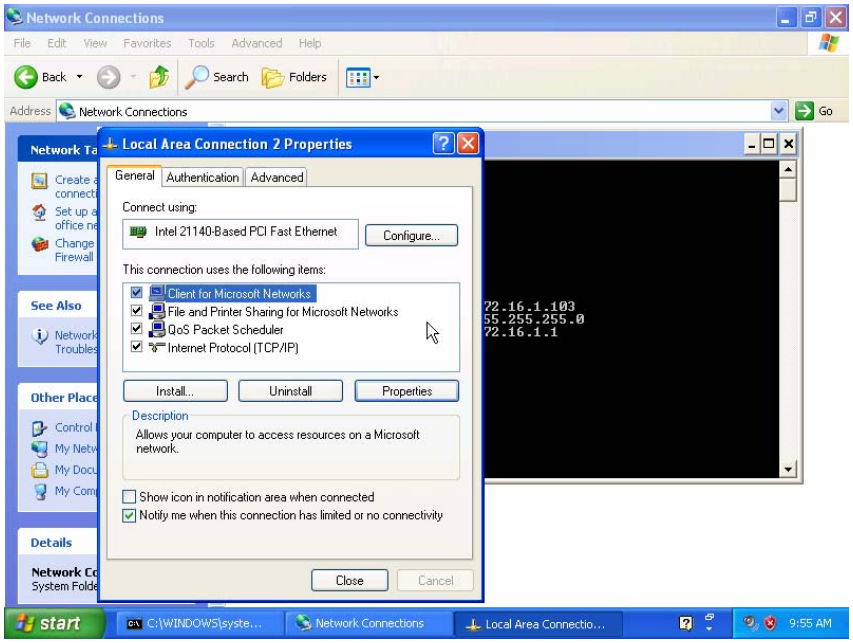
Type the default gateway assigned to your network in the “Default gateway:” field.



Click **OK**.

The “Internet Protocol (TCP/IP) Properties” window closes.

Click **Close**.

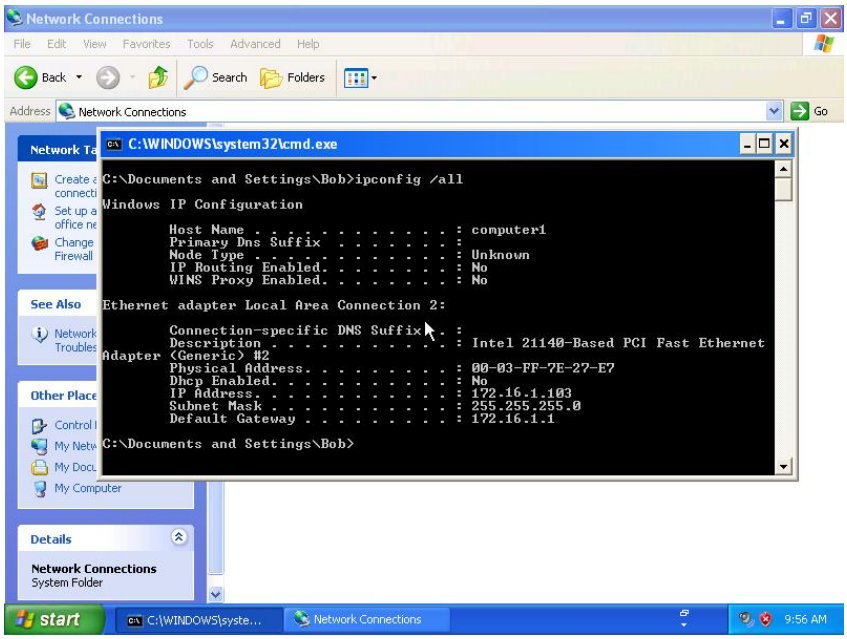


The “Local Area Connection Properties” window closes.

Step 12

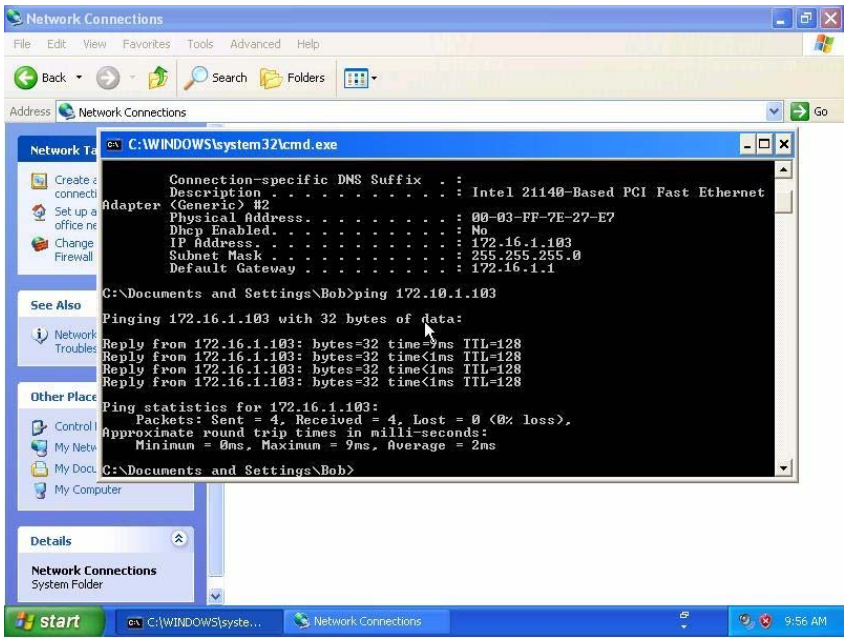
The “C:\WINDOWS\System32\cmd.exe” window is revealed.

Type **ipconfig /all**, and then press **Enter**.



Does the NIC have DHCP Enabled?

Type **ping** and your IP address. For example, **ping 172.16.1.103**.



Write one of the replies of your ping command.

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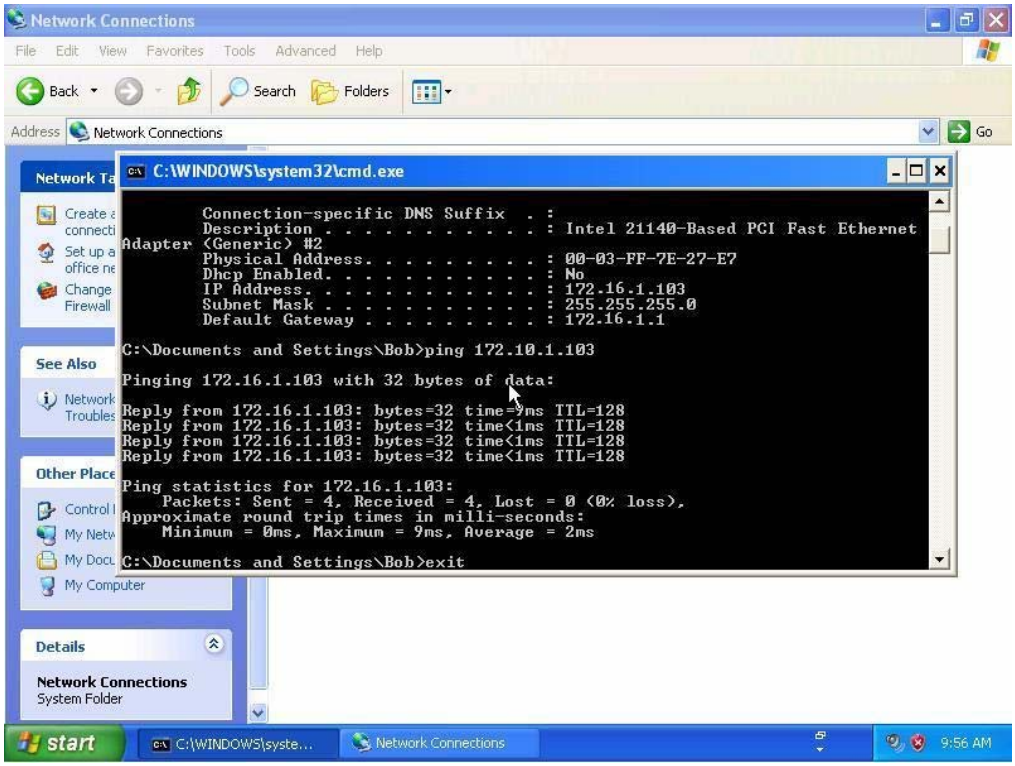
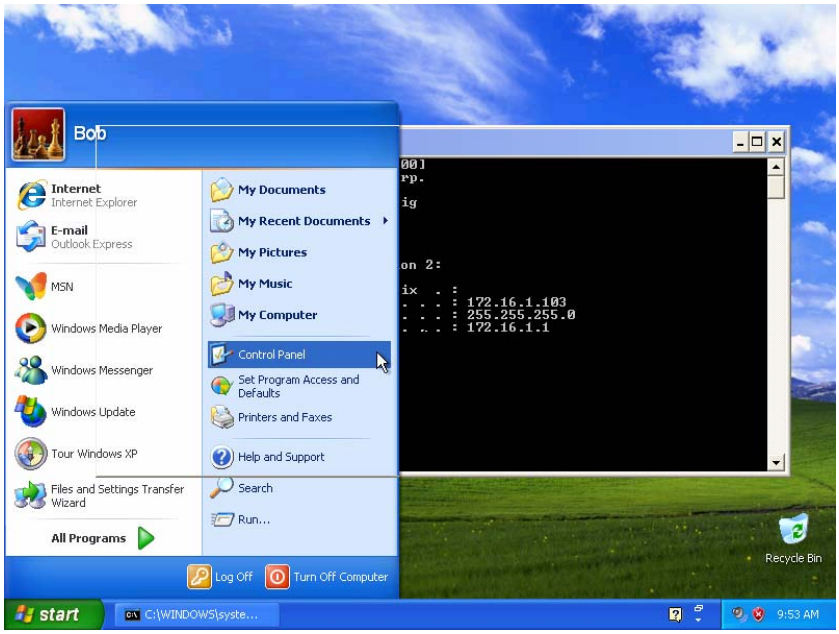
Type **exit,** and then press **Enter**.

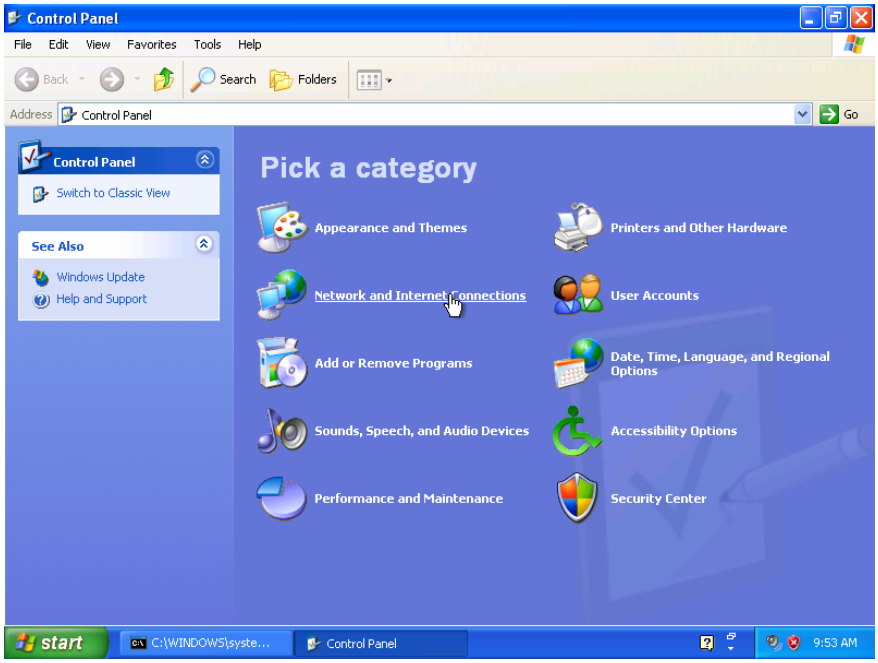


Step 13

Choose **Start > Control Panel**.

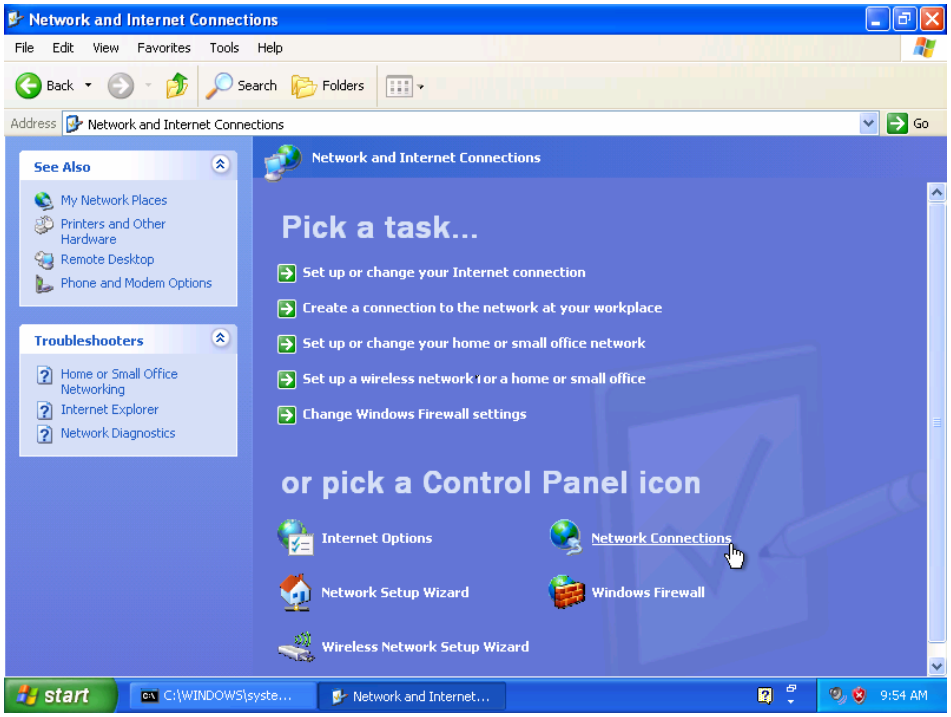


Click **Network and Internet Connections**.

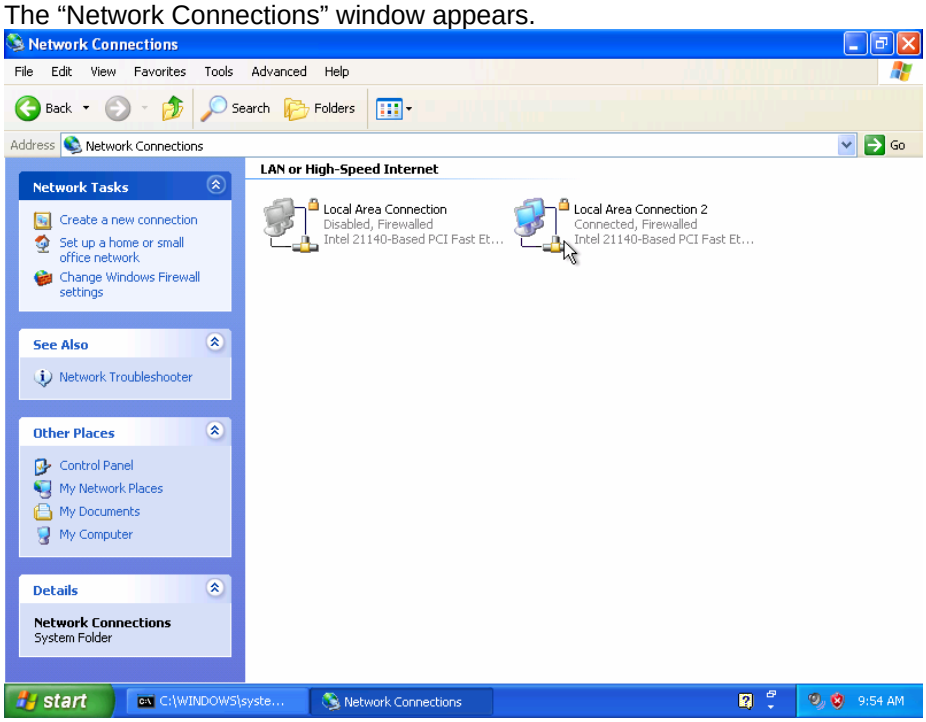


The “Network and Internet Connections” window appears.

Click **Network Connections**.

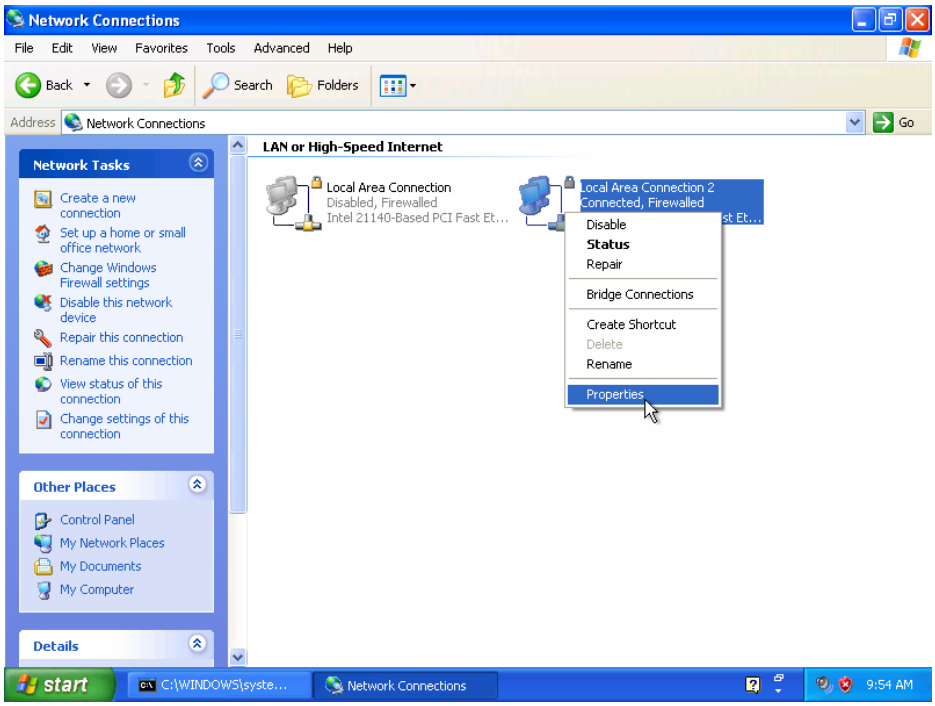


The “Network Connections” window appears.



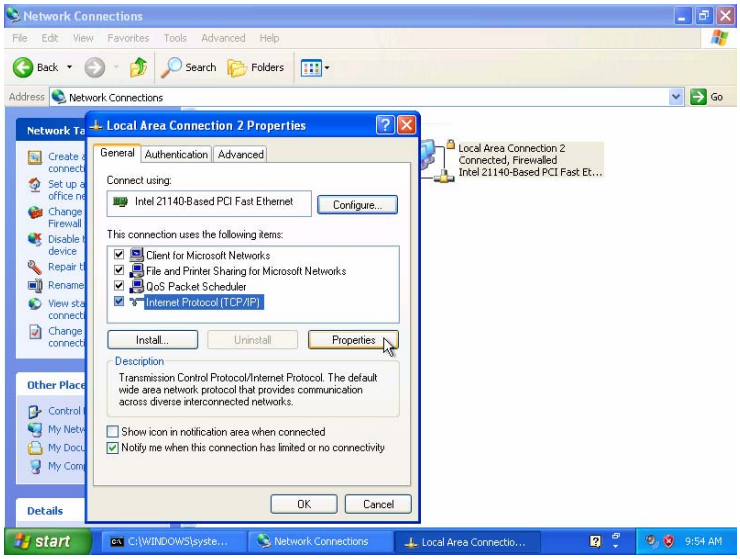
Step 14

Right-click the connected “Local Area Connection” and choose **Properties**.



The “Local Area Connection Properties” window appears.

Choose Internet Protocol (TCP/IP) and click **Properties**.

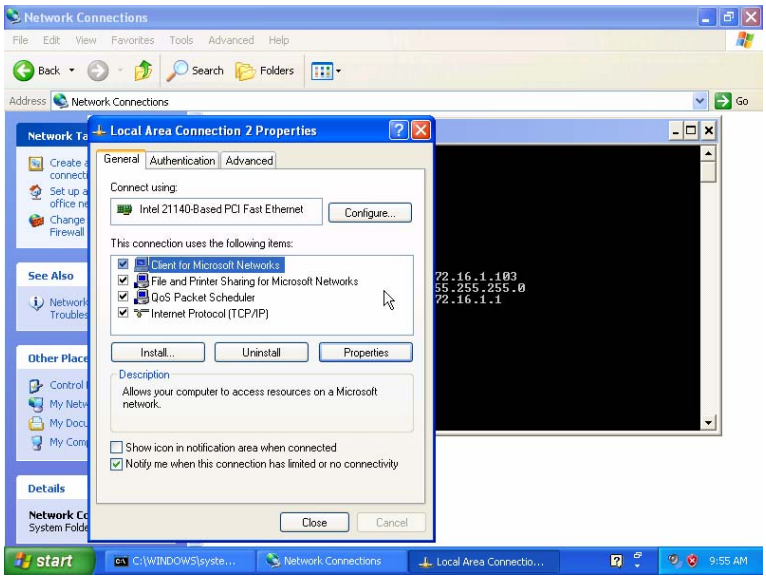


Click the **Obtain an IP address Automatically** radio button.

Click **OK**.

The “Internet Protocol (TCP/IP) Properties” window closes.

Click **Close**.



The “Local Area Connection Properties” window closes.

