

Windows 2000 Plug-and-Play

OBJECTIVES

1. Remove network adapter.
2. Install network adapter with Plug-and-Play.
3. Remove modem.
4. Install modem with Plug-and-Play.

RESOURCES

1. Marcraft 8000 Trainer with Windows 2000 installed
2. A Windows 2000 Plug-and-Play network adapter installed
3. A Windows 2000 Plug-and-Play modem installed
4. Network connection (optional)



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DISCUSSION

The performance of Plug-and-Play (PnP) has improved with easy installation of PnP hardware in new systems. Windows 2000 doesn't require that you restart the computer as much as with previous operating systems. If a device is not PnP-compatible you may be able to install it manually through Add/Remove Hardware in the Control Panel. You may need the drivers provided by the manufacturer unless Windows has them already. In this lab you will install a PnP modem and network adapter with Windows 2000.

PROCEDURE

1. **View network adapter in Device Manager**
 - ___ a. Boot to the Windows 2000 desktop.
 - ___ b. Right-click on My Computer and select Properties.
 - ___ c. Click the Hardware tab and click Device Manager.
 - ___ d. You will see a list of device types attached to the computer.
 - ___ e. Look for the Section called Network adapters and expand it by clicking the plus (+) sign next to the icon.



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- ___ f. The window should look similar to Figure 19-1. Record the name of the network adapter in Table 19-1.



Figure 19-1:
Network Card in Device
Manager

- ___ g. Right-click on the network adapter and click Uninstall.
___ h. You will be prompted to Confirm Device Removal, click OK.

2. Remove network adapter

- ___ a. Close all windows and shut down the computer.
___ b. Open the computer case.
___ c. Remove any external cables from the network card.
___ d. Remove the mounting screw of the network adapter.
___ e. Gently pull the adapter out of its expansion slot and set the adapter and screw aside.

3. View hardware changes

- ___ a. Turn on the computer and boot to the Windows 2000 desktop.
___ b. Right-click on My Computer and select Properties.
___ c. Click the Hardware tab and click Device Manager.
___ d. Record your observations in Table 19-2.
___ e. Close all windows and shut down the computer.

4. Add network adapter

- ___ a. Gently insert the network card back into the available expansion slot.
___ b. Add the mounting screw of the network adapter.
___ c. Plug in any external cables that you removed previously.
___ d. Turn the computer on and boot to the Windows 2000 desktop.
___ e. The network adapter will install automatically. You may not see any dialog windows. Navigate to Device Manager as in previous steps.
___ f. Record your observations in Table 19-3.
___ g. If you are connected to a LAN double-click on My Network Places from the desktop.
___ h. Double-click Computers Near Me. If you are connected you should see other computers in the window.

5. An alternative approach

- ___ a. From Device Manager right-click on the network adapter and choose Uninstall.
- ___ b. Confirm the Device Removal by clicking OK.
- ___ c. Right-click the top icon (the computer name STATION01, for example) and choose Scan for hardware changes as in Figure 19-2.

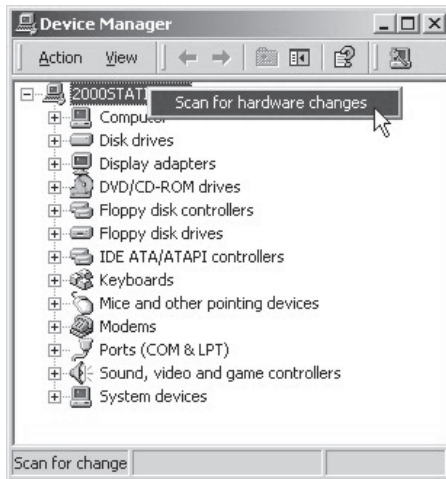


Figure 19-2: Scan for Hardware Changes

- ___ d. The computer should detect an Ethernet adapter. You will see a window similar to Figure 19-3. The words "Ethernet controller" will change to the specific name of the network adapter.
- ___ e. Notice that the adapter is now installed in Device Manager. Close all windows.



Figure 19-3: Found New Hardware

6. Repeat Steps 1 through 4 with the Plug-and-Play modem

7. Test the modem

- ___ a. Navigate to Device Manager.
- ___ b. Look for the modem and right-click on its icon. Click Properties.
- ___ c. Click the Diagnostics tab.
- ___ d. Click the Query Modem button. If the modem is installed the computer will communicate with the modem. Responses to commands will appear in the window, similar to Figure 19-4.
- ___ e. Close all open windows.
- ___ f. Shut down the computer.

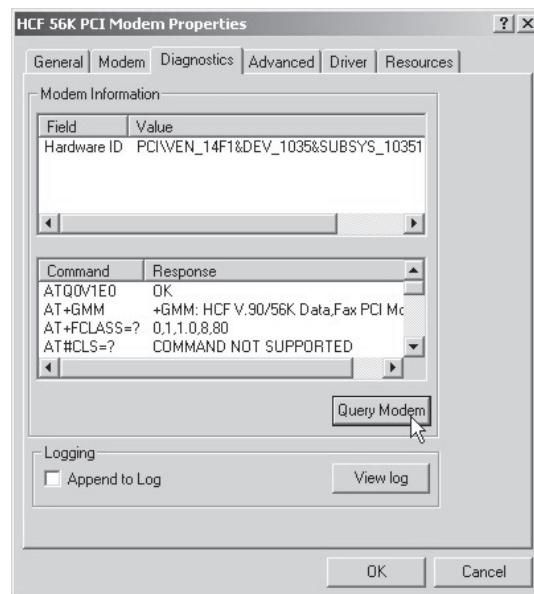


Figure 19-4: Sample Modem Query

TABLES

Table 19-1

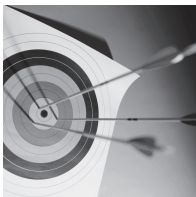
Network Adapter:	
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Table 19-2

Observations After Removal:	
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Table 19-3

Observations After Adding:	
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Feedback

LAB QUESTIONS

1. What does PnP stand for?
2. Why can PnP be useful?
3. What is an alternative way of installing a non-PnP device?
4. Will you see any dialog windows when installing a PnP device?
5. How can you scan for hardware changes while the computer is running?