

Lab 03

Windows Operating Systems (Cont.)

Objectives

Develop a good understanding of

1. The role of an operating system in a computer system
 2. Services provided by an operating system and have some hands on experience in
 1. Understanding windows desktop user interface
 2. Configuring the Windows operating system using control panel
 3. Managing hardware, software, and users
 3. Standalone and networked operating systems
 4. Getting connected
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Objectives (Cont..)

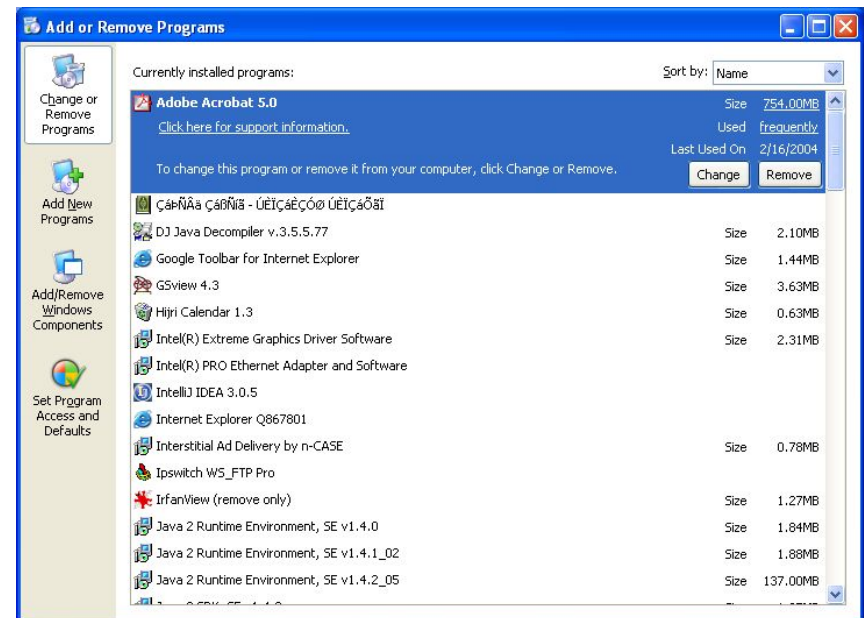
- Specifically, lab 03 will focus on how to
 1. Manage windows programs
 2. Manage windows components
 3. Manage Folders and Files
 4. Creating connections to the Internet

Managing Windows Programs

- ❑ Programs are pieces of software like applications, games, and utilities
- ❑ Windows XP comes with some preinstalled programs.
- ❑ If you want to install a new program in Windows XP you have to use the setup feature of the installation CD-ROM for the program.
- ❑ Nowadays most installation CDs come with the auto run feature which starts the setup automatically when you just put the CD-ROM in the CD drive

Installing Programs Using Add/Remove Programs

- You can also use **Add/Remove Programs** in the control panel to install a program.
- Once you click the **Add New Programs** button on the left side of the screen, you can click a CD or Floppy button to begin an installation.



Uninstalling Programs

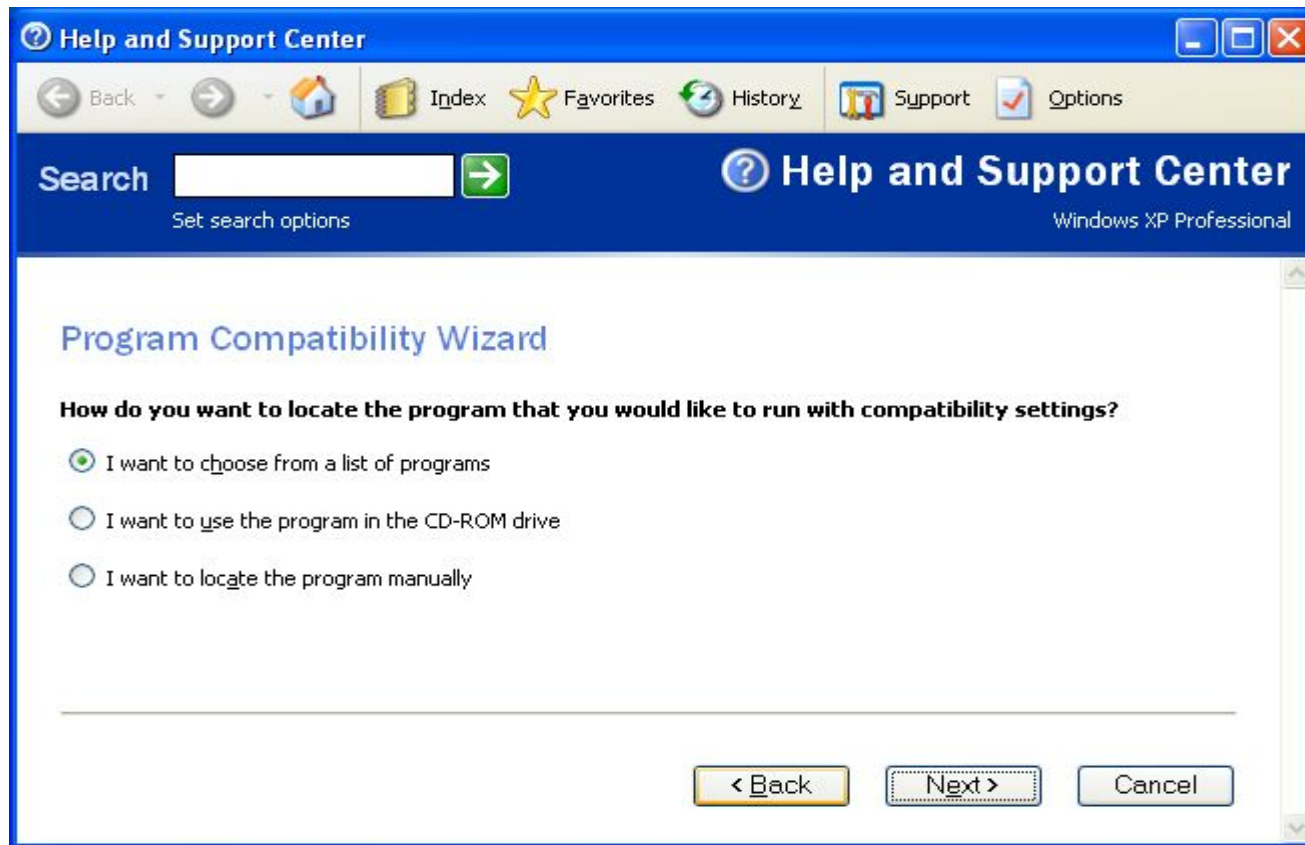
Using Add/Remove Programs

- Uninstalling a Program
 - You can uninstall/remove a program from your computer by clicking the **Change or Remove programs** button on the left side of the window.
 - Then you have to choose a program which you want remove and click the remove button. Follow any additional prompts that appear.
- Using a programs uninstall feature.
 - Some programs come with their own uninstall options. You may use them to uninstall the program.

Using Windows XP Compatibility Mode

- ❑ Windows XP includes a new feature called the compatibility mode that allows it to act like a previous version of Windows.
- ❑ The purpose of the compatibility mode is to allow users to use older applications that might not work with Windows XP.

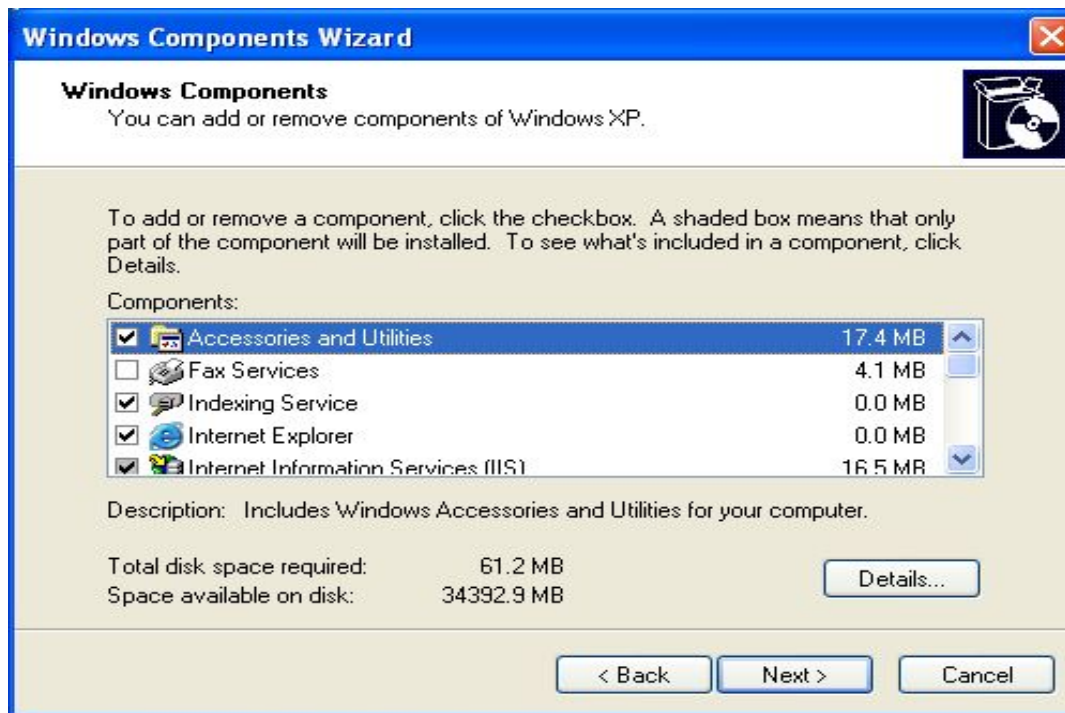
Compatibility mode-demonstration



Managing Windows XP components

- ❑ Windows XP provides a way for including additional Windows components that are not installed by default.
- ❑ Installing Windows components
 1. Insert the windows XP CD-ROM in to the CD drive.
 2. Click the Add Remove Programs button in the control panel.
 3. Click the Add/Remove windows components button on the left part of the window.
 4. The Windows Components wizard as shown in the next slide appears.

Managing Windows XP components (Cont..)



Managing Windows XP components (Cont..)

4. Select the desired category and click the details button.
 5. In the sub-components menu that appears select the items you want to install and click OK.
 6. Click Ok. Windows XP examines your system and installs the components you selected.
 7. The completion window appears. Click Finish.
- You may also remove any windows components if you don't need them.

Managing Folders and Files

- File is a collection of data that has a name and is stored on computer storage (disk, tape, CD, DVD, or USB)
- Two categories of files
 1. Executable files
An executable file is a program that tells computer how to perform specific task
 2. Data files
A data file contains words, numbers, pictures, or voice that can be manipulated

Managing folders and files (Cont..)

- File name
 - Each file on a computer must be given a unique name
 - In Windows, a file name can contain as many as 255 characters
- File extension
 - A file extension is a set of characters added to a file name to indicate the type of the file, e.g. .doc, .ppt, .pdf
- Folder
 - A folder (also called “directory”) is a group of files for easy retrieval. Each folder has a unique name
 - A folder can contain other folders, called “subfolders”
- Path --- a device letter, folder name, file name, and extension, for example
c:\Documents\Lab02.ppt

Managing folders and files (Cont..)

- Typical operations on files and folders include
 - Create, Delete, and Rename files and folders
 - Folder sharing
 - Folder compression
 - Copying a file or a folder
 - Restoring files or folders
 - Backup important files
 - Reorganizing files in folders
 - Associating files with applications

Managing folders and files (Cont..)

- Create, Delete, and Rename folders
 - To create folder:
 - Open the folder that you want to create a new folder in, such as 'My Document' or just 'C drive'.
 - Click the File menu, point to New and then click Folder.
 - A new folder appears.
 - Press the BACKSPACE key and type the desired name for the folder.
 - To delete a folder:
 - You can delete a folder by right-clicking the folder name or icon and clicking delete.

Managing folders and files (Cont..)

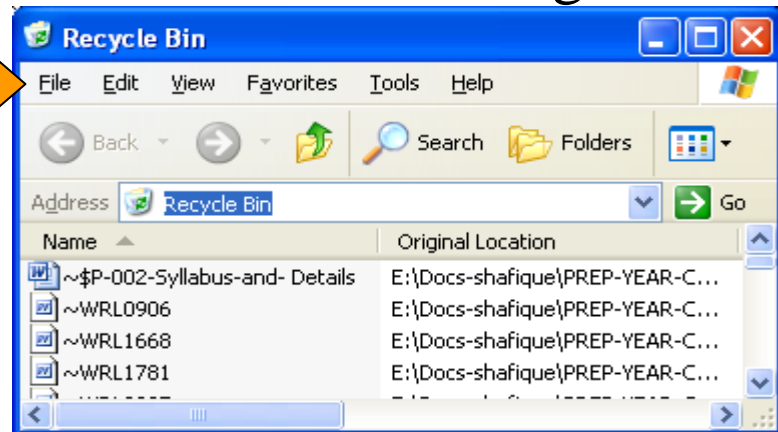
- Create, Delete, and Rename folders
 - To rename a folder:
 - Right click on the folder or file name or icon and click Rename.
 - Then press the BACKSPACE key and type the desired name.

Managing folders and files (Cont..)

□ Using Folder Menus

- The windows XP folders contains the following menus.

- File
- Edit
- View
- Favorites
- Tools
- Help

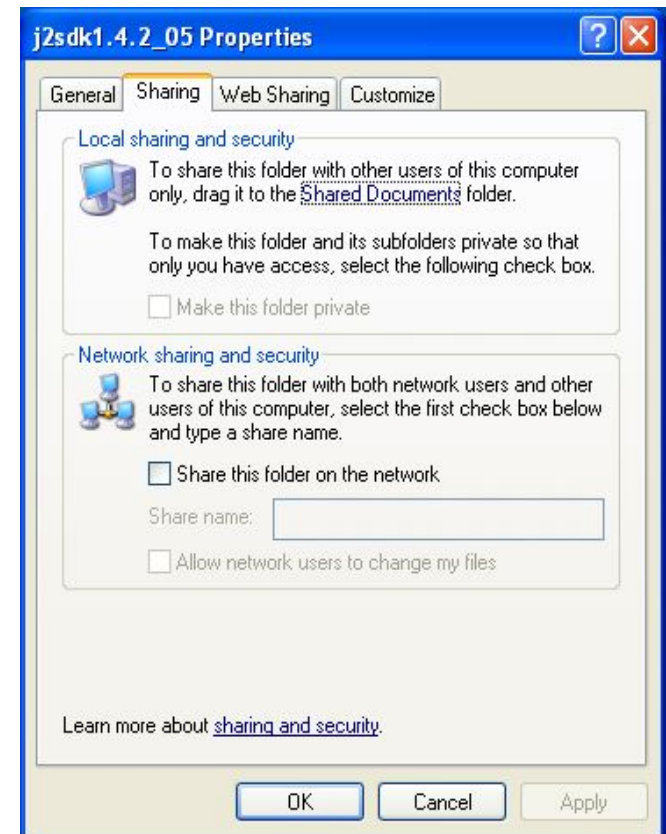


- Now let us have a demonstration of the above menus.

Managing folders and files (Cont..)

□ Folder sharing

- Windows XP contains networking capabilities. It allows users to share a folder with other users on the network.
 - **Note:** You can share folders but cannot share individual files
- You can share any folder by just right-clicking the folder, clicking properties and then clicking the sharing tab.
- Select Share this folder on the network check box.
- If you want other users to change the files in the shared folder then check box “Allow network users to change my files”.



Managing folders and files (Cont..)

□ Folder compression

- To compress a file or folder on an NTFS drive
 - Open **_My Computer**.
 - Double-click a drive or folder.
 - Right-click the file or folder you want to compress, and then click **Properties**.
 - On the **General** tab, click **Advanced**.
 - Select the **Compress contents to save disk space** check box, and then click **OK**.
 - In the **Properties** dialog box, click **OK**.

Managing folders and files (Cont..)

□ Folder compression

- In **Confirm Attribute Changes**, select the option you want.
- Notes
 - To open My Computer, click **Start**, and then click **My Computer**.
 - You can only use NTFS compression for files and folders on drives formatted as NTFS. If the **Advanced** button does not appear, the file or folder you selected is not on an NTFS drive.
 - If you move or copy a file into a compressed folder, it is compressed automatically.

Manage Hardware

□ **Plug and play**

- **Plug and Play:** The feature of the operating system which can detect any hardware change and attempts to install it is called Plug and Play.
- Windows XP is a plug and play operating system.
- The hardware device you are trying to install must also support plug and play to be detected by the operating system.

Manage Hardware (Cont..)

□ Installing a Plug and Play device

1. Shutdown Windows XP and switch off your computer.
2. Attach the new device to the correct slot or port.
3. If the device is an internal device unplug the power cable before removing the cover.
4. After attaching the new device turn on the computer.
5. Windows XP will automatically detect the hardware and install it if the driver software is available in the drive database.
6. Otherwise it will prompt you to specify the location of the driver. There on you just have to follow the prompt.

Manage Hardware (Cont..)

- Removing a Plug and Play device.
 - Shutdown the computer and remove the device.
 - When you reboot the computer Windows XP will detect the change automatically and removes the internal software and driver

Manage Hardware (Cont..)

- Installing a Non Plug and Play device
 - If you need to install any Non-Plug-and-Play device, use the following procedure.
 1. Go to Control Panel.
 2. Click Add hardware icon.
 3. Click next on the welcome screen.
 4. Make your selection and click next.
 5. If Windows does not find the device or you want to select from the list, the hardware Types window appears. Select the type of the hardware you want to install and click next.
 6. Depending on the type of device you select, a new wizard may appear. You can also click the have disk button to specify the location of the driver.
 7. Follow any additional screens that may appear and click Finish.

Manage Hardware (Cont..)

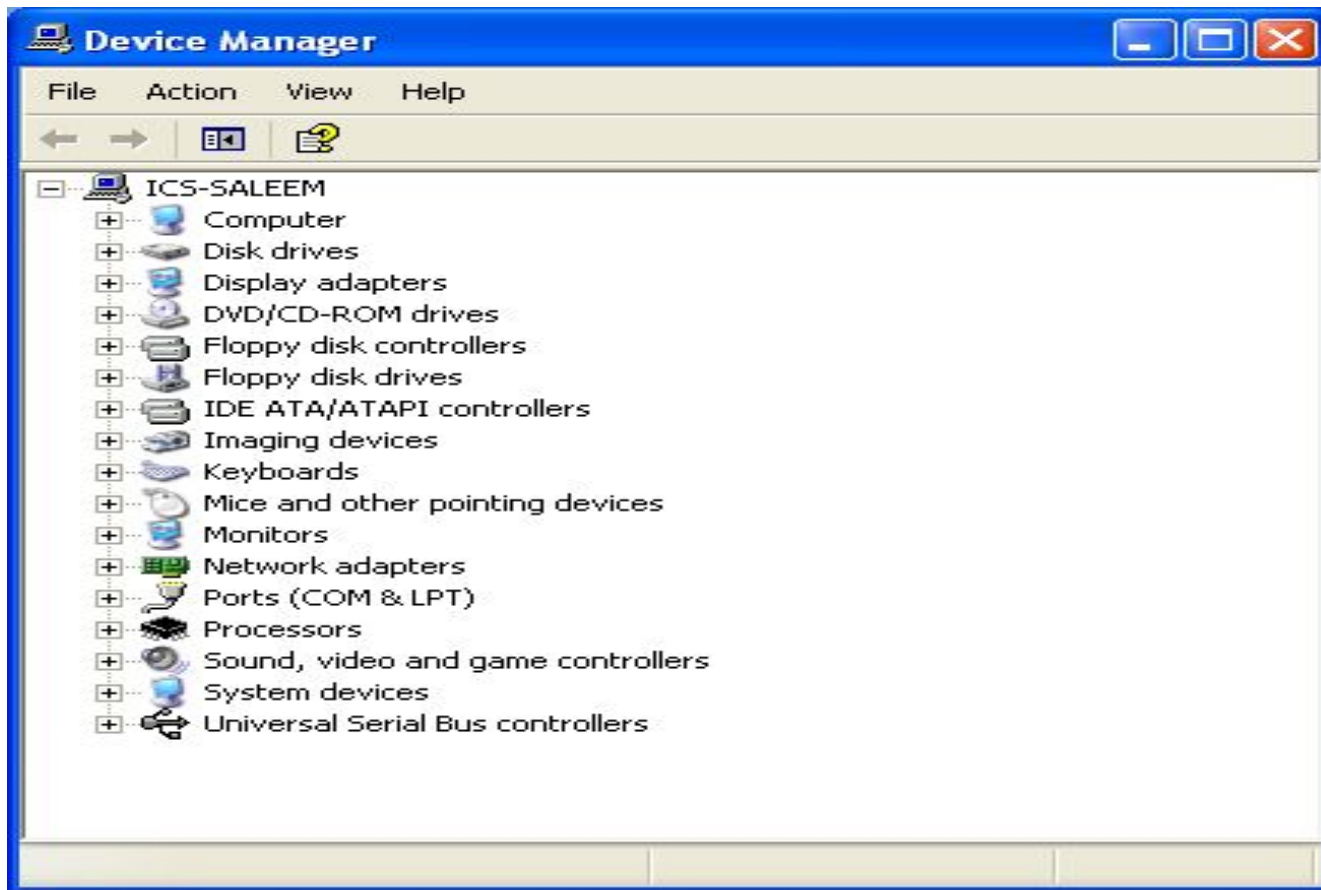
□ Using Device Manager

- All devices installed or attached to your computer can be managed from a tool called Device Manager.
- To access the device manager do the following procedure.
 - Right click My Computer and then click Properties.
 - Click the Hardware Tab.
 - Click the Device Manager button to open it.
 - You can also access the Device Manager using the Computer Management tool found in the

Control Panel → Administrative tools

- Demo

Device Manager



Manage Hardware (Cont..)

- Examine a device's properties
 - Select a particular device for which you want to examine the property in the Device manager.
 - Right-click the device and click Properties.
 - In the Properties window what you see may vary according to the device.
 - But the three basic tabs are General, Driver, and Resources.
 - Now let us have demonstration for each tab.

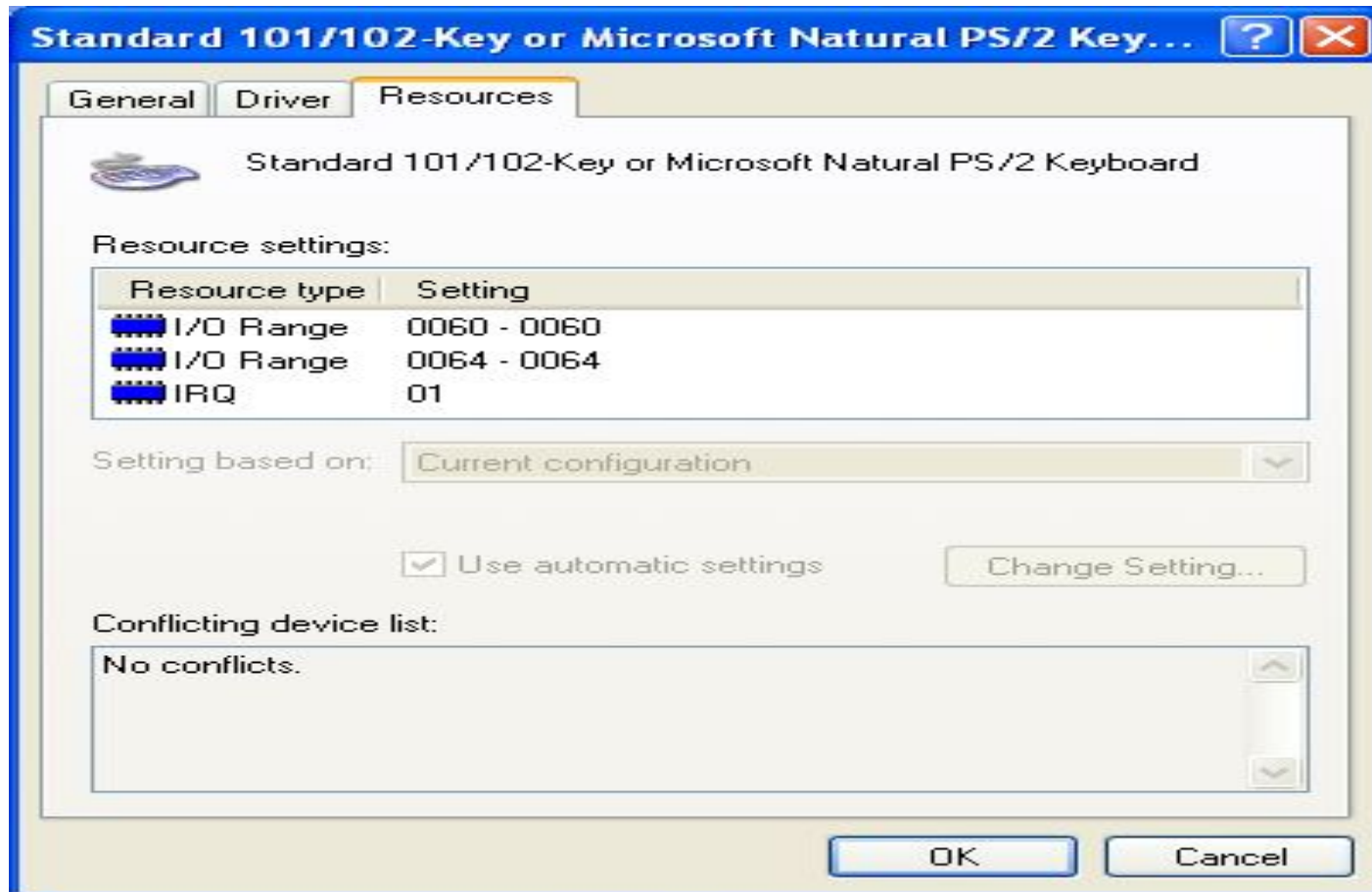
The General tab



Driver Tab



Resources tab



Creating connections to the Internet

Standalone and Network Operating Systems

- An operating system that has been developed to be used by a standalone user is called a standalone operating system. For example, Windows XP Home Edition is a standalone operating system
- An operating system that includes special functions required for connecting computers and devices into a computer network is called Network Operating System (NOS). Some examples of NOS are Novell Netware, Microsoft Windows NT Server, MS .NET Server, LINUX

Internet Connections

- ❑ An internet connection allows a computer to access the Internet.
- ❑ Users can send e-mail, view the web pages, and download information with the Internet connection.
- ❑ An Internet connection requires the services from an Internet Service Provider (ISP).
- ❑ The two main types of Internet connection are
 - Dial-up connection
 - Broadband connection

Dial-Up connection

- ❑ The most common type of Internet Access is the Dial-Up account.
- ❑ Your Computer uses the modem connected to your phone line to dial an ISP.
- ❑ Once the ISP answers the call the user account (username and the password) for the user are verified.
- ❑ Then if the account information are correct the connection to the internet is established otherwise the connection is rejected.
- ❑ The maximum connection speed you can get through a modem is 56kbps.

Broadband connection

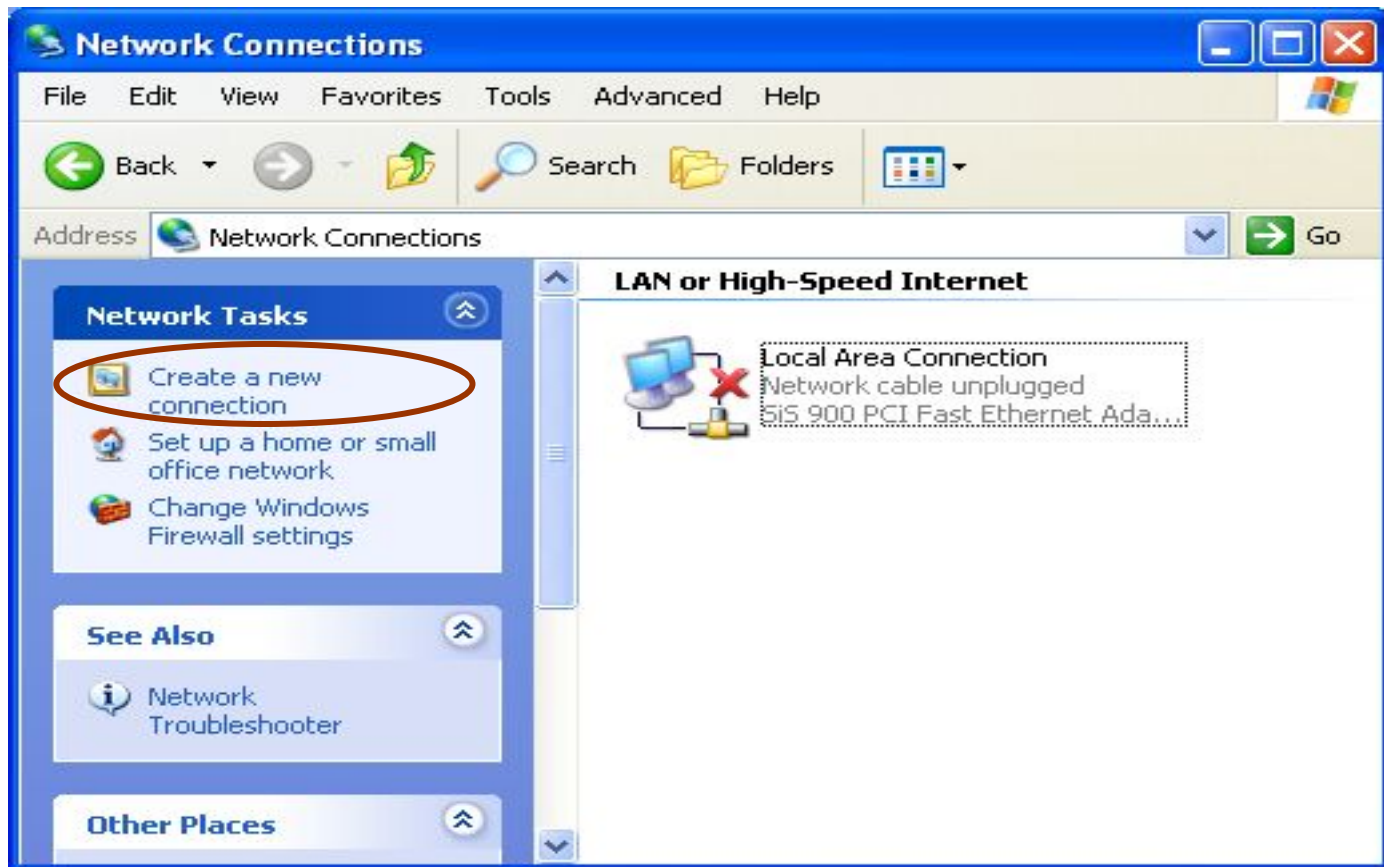
- Today's Internet contains rich multimedia and surfing experience. You can view all kinds of graphics, listen to music, etc.
- For this purposes the 56K modem connection will not give you enough bandwidth.
- An alternate to dial-up connection is Broadband connection
 - Broadband lines are always connected to the internet.
 - Broadband connections can give higher rates for data transfer.
- There are three kinds of broadband connection,
 - Cable
 - DSL
 - Satellite.



Setting up a Dial-up Connection

- Demo on setting up a dial-up connection

From control panel, open network connections and click on “Create a new connection”



New Connection Wizard



Welcome to the New Connection Wizard

This wizard helps you:

- Connect to the Internet.
- Connect to a private network, such as your workplace network.
- Set up a home or small office network.

To continue, click Next.

< Back

Next >

Cancel

New Connection Wizard

Network Connection Type

What do you want to do?



Connect to the Internet

Connect to the Internet so you can browse the Web and read email.

Connect to the network at my workplace

Connect to a business network (using dial-up or VPN) so you can work from home, a field office, or another location.

Set up a home or small office network

Connect to an existing home or small office network or set up a new one.

Set up an advanced connection

Connect directly to another computer using your serial, parallel, or infrared port, or set up this computer so that other computers can connect to it.

< Back

Next >

Cancel

New Connection Wizard

Getting Ready

The wizard is preparing to set up your Internet connection.



How do you want to connect to the Internet?

Choose from a list of Internet service providers (ISPs)

Set up my connection manually

For a dial-up connection, you will need your account name, password, and a phone number for your ISP. For a broadband account, you won't need a phone number.

Use the CD I got from an ISP

< Back

Next >

Cancel

New Connection Wizard

Internet Connection

How do you want to connect to the Internet?



Connect using a dial-up modem

This type of connection uses a modem and a regular or ISDN phone line.

Connect using a broadband connection that requires a user name and password

This is a high-speed connection using either a DSL or cable modem. Your ISP may refer to this type of connection as PPPoE.

Connect using a broadband connection that is always on

This is a high-speed connection using either a cable modem, DSL or LAN connection. It is always active, and doesn't require you to sign in.

< Back

Next >

Cancel

New Connection Wizard

Connection Name

What is the name of the service that provides your Internet connection?



Type the name of your ISP in the following box.

ISP Name

The name you type here will be the name of the connection you are creating.

< Back

Next >

Cancel

New Connection Wizard

Phone Number to Dial

What is your ISP's phone number?



Type the phone number below.

Phone number:

You might need to include a "1" or the area code, or both. If you are not sure you need the extra numbers, dial the phone number on your telephone. If you hear a modem sound, the number dialed is correct.

< Back

Next >

Cancel

New Connection Wizard

Internet Account Information

You will need an account name and password to sign in to your Internet account.



Type an ISP account name and password, then write down this information and store it in a safe place. (If you have forgotten an existing account name or password, contact your ISP.)

User name:

Password:

Confirm password:

- Use this account name and password when anyone connects to the Internet from this computer
- Make this the default Internet connection

New Connection Wizard



Completing the New Connection Wizard

You have successfully completed the steps needed to create the following connection:

ITC

- Share with all users of this computer
- Use the same user name & password for everyone

The connection will be saved in the Network Connections folder.

Add a shortcut to this connection to my desktop

To create the connection and close this wizard, click Finish.

< Back

Finish

Cancel

Summary

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 3. Managing hardware, software, and users
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