BASIC PC MAINTENANCE AND BACKUP
Lesson 1

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Maintenance Tasks for Windows XP, Vista and Windows 7

In order to keep a computer running smoothly, certain maintenance tasks should be completed on a regular basis. The list below explains a few of the most important tasks and gives steps for completing them.

1. Clean out unneeded files using *Disk Cleanup*   Every month

To open the Disk Cleanup program: In Windows XP, click the Start button -- *Computer*. <u>Right</u> click the main disc drive, usually *C drive*. Click *Properties*. In Vista and Windows 7, click the Start button and type *Disk Cleanup* in the Search box at the bottom of the Start menu.
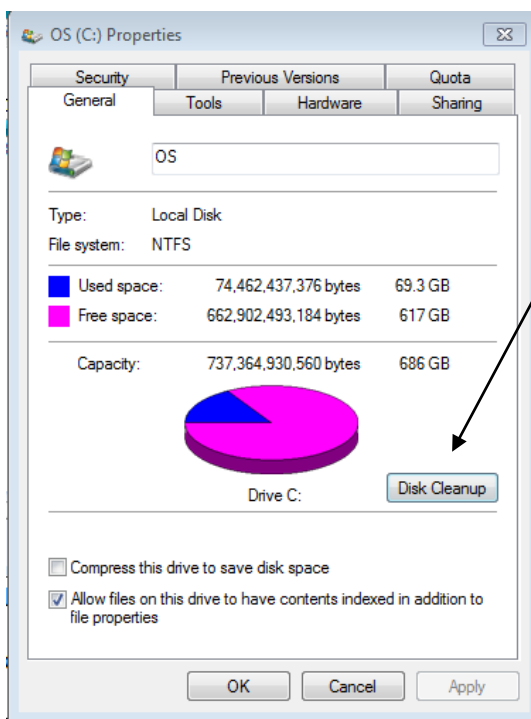
Click *Disk Cleanup* to calculate how much space may be gained by removing unneeded files. After the list appears, click to place checkmarks next to items to remove. (**All items are safe to remove.**) Click *OK*. Wait while Windows removes your files.

2. Correct errors on your hard disk using *Error-Checking*.   As needed

This is useful if your computer you shuts down unexpectedly, as with a crash or power failure. It will fix errors that might have occurred because the computer didn't have time to clean up the hard disk before shutting down.

Follow the same steps as in number 1 to get to the C drive *Properties*. Click the *Tools* tab at the top of the Properties window. Under *Error-checking*, put check marks in the first box (plus the second box, if your computer has a noticeable problem), and click *Check Now*.

When you attempt to run Error-checking (also called Scan Disk), you will get a message that says, "Error-checking could not be performed at this time, etc. Do you want to do this the next time the computer starts?" Click "Yes" and this check will be completed the next time you turn on your computer.

3. Speed up access to files using *Defragmentation*.   XP and Vista: rarely
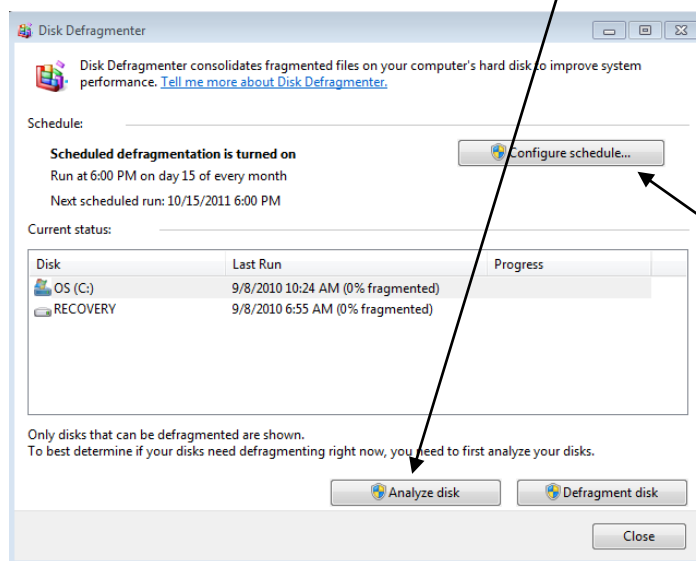   Win 7: Automatic

Defragmentation re-aligns pieces of files that get stored in different places each time you add data to a file, such as typing more words into a document. Defragging helps to speed up your computer. It is done occasionally unless a computer is running slowly.

Follow the same steps as in number 1 to get to C drive *Properties*. Click the *Tools* tab at the top of the Properties window.

Win XP and Vista: When you click *Defragment Now*, a window opens with two choices: *Analyze* or *Defragment*. Choose *Analyze*. The computer will determine whether you need to defragment at this time. If you do, the message will be "You need to defrag this drive." If not, it will say, "You do not need to defragment the drive at this time."

Windows 7: Windows 7 automatically defragments your drive at regular intervals. You can also change the schedule for defragmentation by clicking *Configure Schedule*.

Windows 7 Disk Defragmentation window

Learn the Details of Your Computer

A good way to get detailed information about your computer is to download from the Internet and run **Belarc Advisor**, a small, free program that creates a current profile of your computer when ever you run it. Here are the instructions:

1. Go to www.spcug.org. Click the Downloads link at the top of the home page.
2. Scroll to the bottom of the list of downloads.
3. Click the Download button under Belarc Advisor.
4. Click Save. The program, called advisor.exe, will be saved in your Downloads folder.
5. To find this folder, click the Start button, then click the computer owner's name in the right pane, then click Downloads. Advisor.exe should be the top item on the list.
6. Double click Advisor.exe, then click Run.
7. First, any previous versions of Belarc Advisor will be removed from your computer. Then the advisor creates a profile of your computer, with many details and comments on the status of your system. This takes a few seconds to complete. You can print the results page and keep it as reference when calling a support person.

In Windows 7, another way to check the current status of your computer's maintenance and security is to open the *Action Center* (*Security Center* in Vista).   To open it, click the tiny flag in the notification center (bottom right of the taskbar). Here you will find messages from Microsoft about how your computer is running and how secure it is. They are color-coded (Red means Fix it now!)

PRINTING FROM A COMPUTER

Regardless of the type and manufacturer of your printer, similar options are available when you click File | Print.
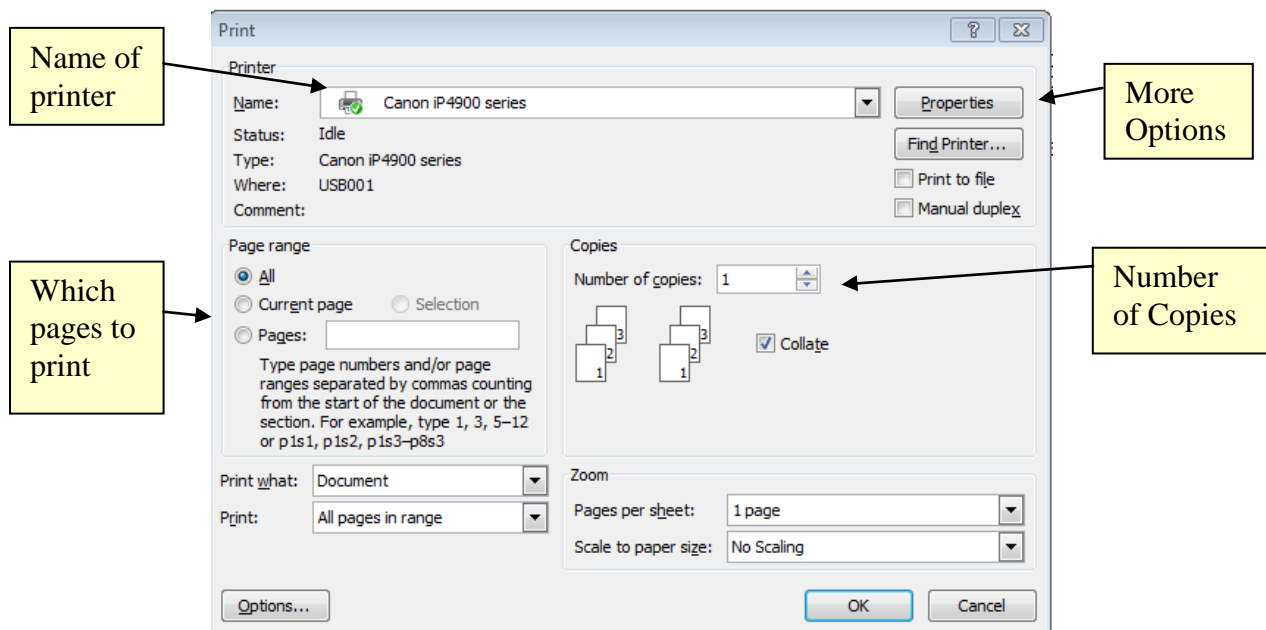
The Print Window

The parts of this window can be important to you.
1. **The Printer section**: Here you choose the printing device where you want the output to go. Most of us have only one printer, but you should still notice that its name is listed in the upper box. Clicking *Properties* will take you to the printer settings area described below, where you can change the quality of the type, the page orientation, and other settings.
2. **The Page Range section**: Here you decide whether you wish to print the entire file or just certain pages. This is useful if you have a multi-page document and only wish to print pages 1 – 3, for example. Click in the button next to Pages, and type in the specific page numbers you want. You can be very selective, such as 1, 3, 5 – 8.
3. **The Copies section** is where you choose how many copies of the document you want. Click the up and down arrows or type in a number. 1 is the factory setting (default).

PRINTING TERMS

When you install your printer software, Windows automatically sets the printer up to print with predetermined factory settings. A printer usually has the ability to print in Draft, Normal, and Best settings, and to print in grayscale or color. The factory default settings for an inkjet printer usually are "Normal" and "Color."

DRAFT, NORMAL, OR BEST: Experience has shown that most of the time, documents can be printed in Draft with little loss of quality. The advantage is that your printer will run faster and that less ink will be used. The Best setting is recommended for photo printing. To change the default setting to "Draft," look for a button in the Print window that says Properties. Click it and adjust the print quality.

COLOR OR GRAYSCALE: When web pages are printed, they are rendered in the same colors that appear on the screen. Oftentimes a web page is printed for informational purposes and can be printed in "grayscale," thus saving your color cartridge. You will usually find the grayscale option in the Properties window, as described above.

PORTRAIT or LANDSCAPE: Most printers will print a page with either a vertical orientation (Portrait) or a horizontal orientation (landscape). This can be adjusted in the Properties window. Portrait is the factor setting. Sometimes when printing directly from the Internet, pages are too wide for portrait orientation. Switching to landscape can print the entire width of the page.

Generally, these properties revert back to factory settings after the current print job. Check your settings to make sure this is true for your printer.

FINDING HELP for COMPUTER PROBLEMS

When you encounter a problem with your computer, don't call the expensive experts until you have tried one of the Help options listed below.
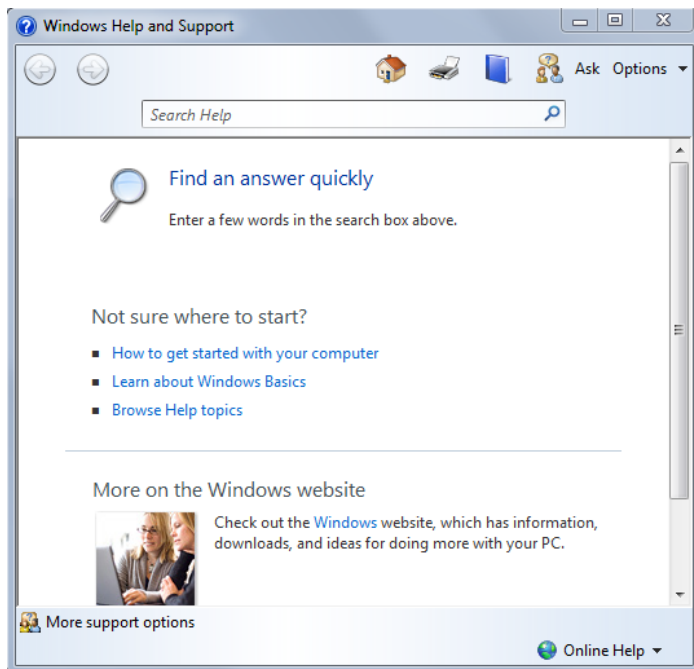
1. The Windows Help and Support Center -
To access the Help and Support Center in all versions of Windows, click START - Help and Support.
The Help Center in <u>Windows XP</u> offers three different ways looking for help.
- You can **browse** through the Contents of the Help program by clicking one of the topics under Pick a Help Topic (Win XP). This approach would be useful if you are interested in learning about a topic or feature of Windows.
- If you have a specific name of a feature of Windows and need to know the steps involved or information about it, then the **Index** would be a good option. Here you type in a term and find all the related articles about it.
- Or, if you don't know the official name of what you're looking for, type a word or phrase in the **Search** box, which searches the entire Help text for words that you enter and often can help you define the problem as well as get an answer.

Windows XP also contains a Support menu called **Ask for Assistance**. Here you can link to places on the Internet for help, such as Microsoft's website or your computer manufacturer's Help page.

Windows 7 Help and Support Home Page

In Windows Vista and 7, the Help and Support Center has been improved substantially although the opening Window is simpler than that in XP. A powerful **Search** function will search thoroughly through the entire Help menu (about 10,000 pages) for your search word or phrase. The tutorials are often automated (showing you step by step) and instructional articles are more comprehensive. You can also **Browse** by topic if you don't know what to put in the Search box. In both Windows XP and Vista, you can print sections of Help for future reference.

2. Help at the Microsoft website

All versions of Windows' Help and Support Centers have a link to more help at the Microsoft website. If you want to bypass your computer help links, you can go directly to the Microsoft website at http://support.microsoft.com. This page contains links to Microsoft's best help features:

- Search the Knowledge Base for articles on hundreds of topics related to Microsoft products.
- Frequently Asked Questions (FAQ's) is a section containing the questions most often asked of Microsoft support personnel and their answers.
- Solution Centers will take you to an area where you can link to an area dedicated to your specific MS operating system (Windows Vista) or program (PowerPoint 2007).
- The Answers forums offer questions from users and answers by MS experts. You can post your question there.

Take some time to browse the Microsoft website. It has been simplified to make it easier for average computer users to find help.

3. Get Help by searching the Internet

Using Google or another search engine, you can often find an answer to a specific problem. Type your question (What is "Error 5T - 456"?) in the search box and see where it takes you. When you review the list of results, look carefully at the source. Not all answers you get from unauthorized sources will be correct. It's better to start with known companies or check a number of solutions before you settle on one.

4. Program Help

Most programs, from Microsoft or from other publishers, have a Help section, indicated by a question mark. While the program is open, look for Help in the menu toolbar at the top. Most of the time, these menus work much the same way as described above for Windows help except that they contain information specific to the program you are using. Another idea is to visit the website of the specific program's manufacturer and look for *Support* or *Help*.

In the good old days, products came with paper **User Manuals** to put on the shelf. In the technology age, many user manuals are located on the Internet or on the installation CD that came with the program. This is true both of software that you purchase or other kinds of products, such as cameras, printers, or tools. Look through the documentation that came in the box with the product for the web address which will lead you to a user manual. Once there, you can download, save, and print the manual using Acrobat Reader. Another option is to save the web address of the manual as a Favorite for later reference.

5.

6. The Sarasota PC User Group (SPCUG)

SPCUG offers many types of help for your computer issues. Our monthly meeting includes several **Forums** where members can discuss specific topics or the Tech Forum, where they can ask questions on their own topics. The **large group presentation** is geared toward informing the members about computer topics. The **Monitor** is full of helpful articles. The **Saturday classes** offer members a hands-on computer learning environment or demonstrations of skills, new software and devices.

Online options include SPCUG's own online **Yahoo discussion group** where a member can find answers to computer questions from other members. Go to the club website (www.spcug.org) and click on the Yahoo group link on the home page to join this group. The **Members Helping Members** list, which appears on the SPCUG website, includes names and phone numbers of members willing to be called with questions about their specific area of expertise. The new **Tutorials** link contains downloadable copies of the Basic class lessons, plus other useful step-by-step instructions for common processes.

HOMEWORK

1. Try doing Disc Cleanup on your own computer. Be ready to report back.

2. Check out your printer's options based on today's class. Bring questions.

3. Explore the new www.spcug.org website. Click the **Tutorials** link. Click the PC Maintenance and Backup title to view the class materials for this class. You can print a copy, if you wish.
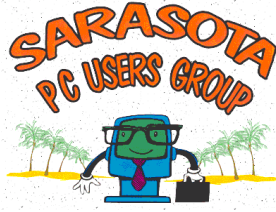
**BASIC COMPUTER MAINTENANCE
AND BACKUP**
Lesson 2

BACKING UP YOUR COMPUTER

Once you begin to create and save files on your computer, it is important to make copies of these files on a different computer or external device in case of a computer crash. We call this procedure Backup. First, let's consider the types of devices where backups can be stored.

BACKUP MEDIA

1. One option for full back-up is an **external hard drive**. These days you can purchase an internal or external hard drive of large capacity for a reasonable price. This will allow you to back up your entire hard drive on a device that can be removed and safely stored away from your computer.

2. Almost all new computers come with a **CD-RW or DVD-RW drive**. These drives play CD or DVD disks, but can also be used to copy or "burn" data from your hard drive to a disk. This has become a popular form of backing up data, pictures and music. A CD holds 650 - 700MB; a DVD can hold 5 - 9 GB.

3. For a simple backup of your files, try a **flash drive.** One of these little devices can hold up to 128 GB of data. They plug into a USB port on your computer. Modern computers have several USB ports on the front and

   back, identified by this symbol:

IMPORTANT FILES TO BACK UP

It is possible to use software programs such as Acronis True Image, to back-up your entire computer -- programs and all files -- by creating an "image" of it. A tutorial on how to do this is located on the SPCUG website. At least, you should back up important data files on a regular basis, such as these:

- Documents, Pictures, Music, Videos, Spreadsheets, etc.
- your Favorites list; Windows Live Mail message folders and Contacts
- any other files, settings, or downloaded program setup files for which you don't have an installation disk

HOW TO BACK UP THE DOCUMENTS FOLDER MANUALLY TO A FLASH DRIVE *A typical flash drive holds 2GB – 32GB of data or more*

GETTING READY:

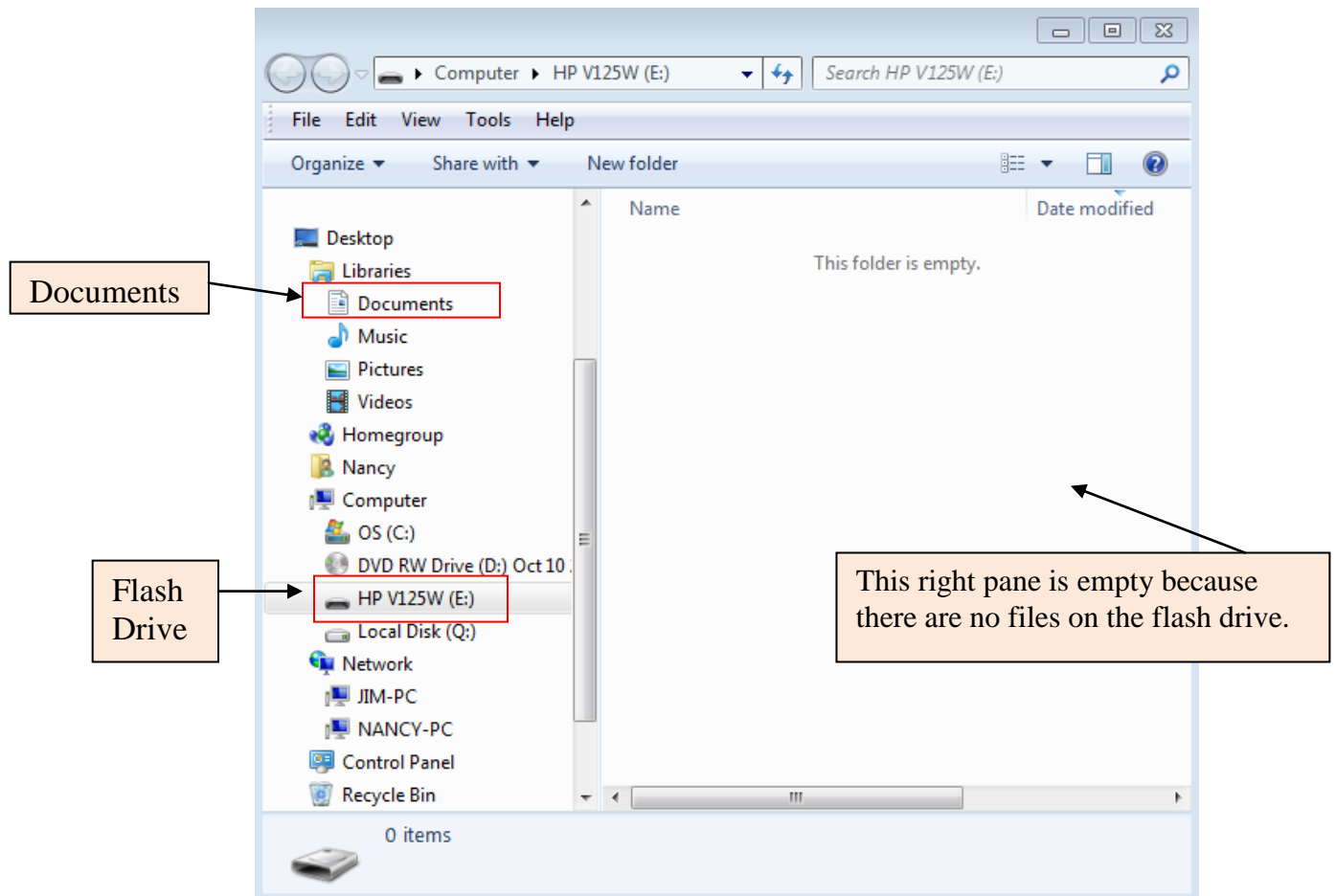Find or create two documents and save them in the Documents folder.
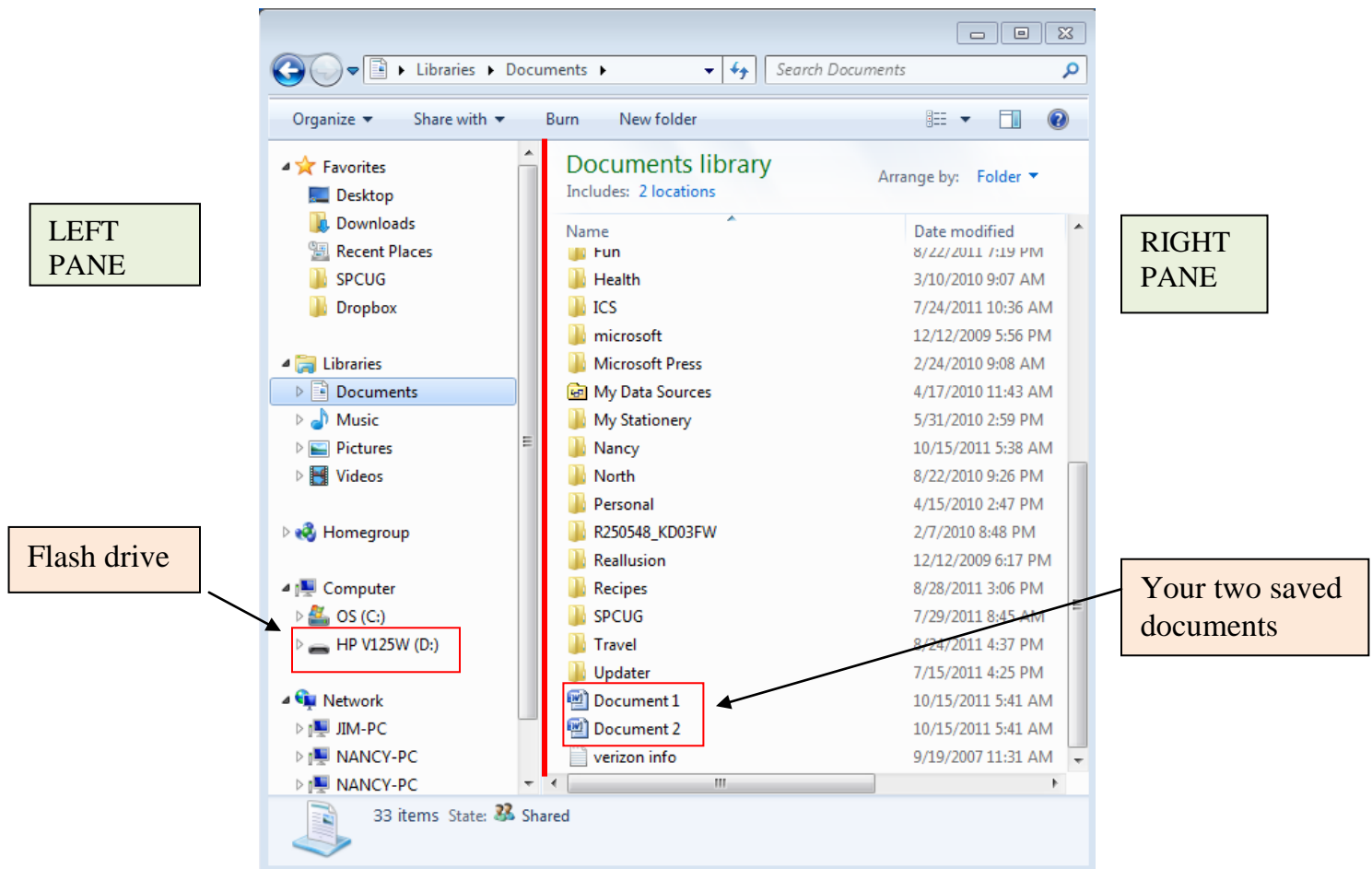
BACKING UP TO A FLASH DRIVE:

1. Insert the flash drive into a USB port.
2. Click "Open folder to view files" in the AutoPlay window.
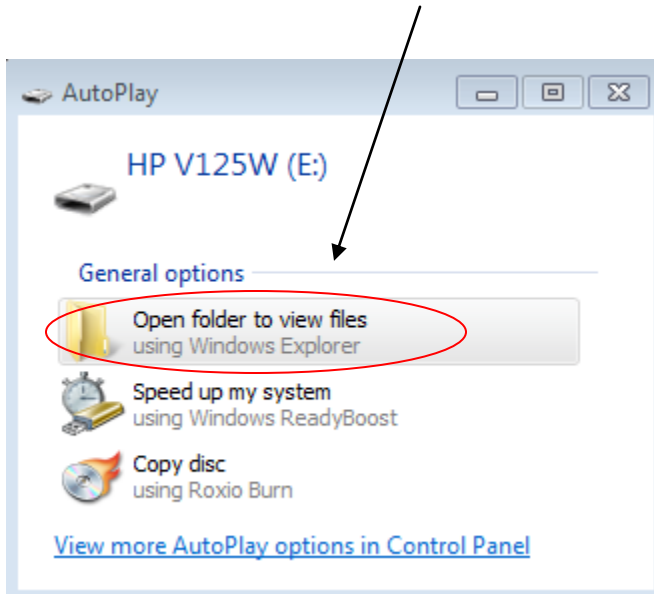
3. Find the Documents folder and the flash drive in the left pane.

Documents

Flash Drive

This right pane is empty because there are no files on the flash drive.

4. Click Documents. Its contents show in the right pane.

5. In the right pane, click Document 1 and hold down the mouse button while you drag the document across to the left pane on top of the flash drive icon until the icon is highlighted. Then let go of the button. (This is the **"Click and Drag"** method.)

6. Next, in the right pane, <u>right</u> click Document 2. From the menu, left click Copy, which puts Document 2 on the clipboard. Then <u>right</u> click the flash drive icon in the left pane. From the menu, left click Paste. (This is the **"Copy and Paste"** method.)

7. Open the flash drive window to make sure the documents arrived.

AUTOMATIC BACKUPS WITH WINDOWS 7

Windows 7 includes a Backup and Restore program which can be set up to back up files on a regular schedule. To find this, click Start and type "backup" in the Search box at the bottom of the Start menu. Backup and Restore will be one of the choices. (Backup and Restore is located on the Control Panel in System and Security.)

Setting up Your First Data Backup:
1. Open the Backup and Restore program.
2. Click "Set up backup."
3. The "Select where you want to save your backup" screen appears.
4. Specify where you want to save your backup. Your best option is an external hard drive. Flash drives with several GB of capacity are also good.
5. Click Next.
6. Click either "Let Windows choose" or "Let me choose." If you let Windows choose, it will back up all your Libraries, plus the standard Windows data, such as Appdata, downloads, favorites, links, saved games, etc. Your programs are not included.
If you select "Let me choose," you must make choices yourself.
7. Click Next. You can change the suggested backup schedule at this time.
8. Click "Save settings and start backup." Your first backup will begin and may take several minutes.
9. Remove the media on which you backed up files and store it away from your computer.

From now on, Windows will do your backup on the schedule which you set.

To restore files from a Windows backup, open the Backup and Restore program and click "Restore my files." Choose those files you want restored using the Browse buttons. Click Next and indicate where you want to put the restored files. Click "Start Restore."

HOMEWORK:

1. Download and run Belarc Advisor on your computer.

2. Develop a plan for backing up your own computer files. List on paper the types of data you have that should be backed up. Obtain the required media – such as a flash drive or external hard drive – and do your first backup, no matter how small.