

SANDY SENIOR CENTER

PRESENTS

Course 204

Windows 7 level 2



March 2012

Foreword

Sandy Senior Center

Windows® Manual

This manual is designed to assist the student while taking classes at the Sandy Senior Center. The material in this manual has been gathered from several sources and provides a review of what is presented in class. This course is a continuation of the Windows Fundamentals course. The course is designed to be taught in four classes each class two hours long. The manual is generated in color.

The following suggestions are given to make the learning process easier. Read the objectives for that week's class and try to determine what your greatest weakness are in that week's material. Read the section and go back over the objectives again. Mark the areas where you still need more information and have the instructor answer any questions that the classroom presentation does not cover adequately.

The following symbol will alert you to a definition or related fact which is general in nature and has been inserted inline with the text you are reading to make the subject more understandable.



Acknowledgments

This manual was originally developed by Sandy Senior Center volunteer Jerry Stewart. Use of this manual is granted to all Salt Lake County senior centers under the provision that the acknowledgments section remain with the manual. Centers may modify the covers to reflect their center. Students may print the manual; all other uses must be approved by Jerry Stewart.

Table of Contents

Week 1: Objective	3
Start Menu Customization	3
Taskbar Customization	5
Context menu	6
Default Programs	8
System Restore	9
The Control Panel	10
Uninstall Programs	11
Class 2: Objectives	11
User Accounts	11
Mouse	16
File Structure	17
Windows Explorer	19
Class 3: Objectives	22
Restore Top Menus	22
BAR and Ribbon	23
Networking	25
Action Center	27
Sticky Notes	28
Windows DVD Maker	30
Class 4 Objectives	32
Backing up your PC	32
Recovery	34
Snipping Tool	34
Desktop Gadget Gallery	35
Windows Live Essentials	36

Introduction

The Windows fundamentals course was designed to help the user on day to day operation of their computer. It presented the functions there were common to Microsoft Windows operating systems XP, Vista and Windows 7. This section will show more advanced tools, some unique to Windows 8 and provide users the ability to tailor the computer for what works best for their needs. The objectives for each week's lesson will be provided prior to the information to help you study and do a self evaluation.

Week 1: Objective

Know the following terms:

- Personalize
- Properties Sheet
- Registry
- System Restore
- Hyperlink

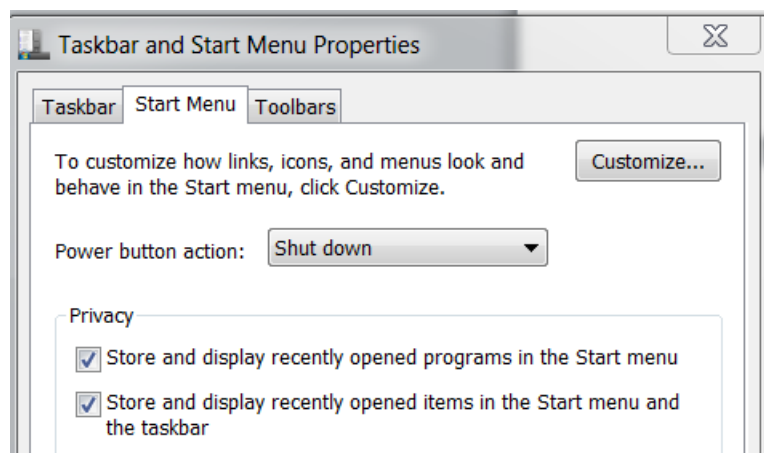
Be Able to:

- Customize the Start Menu
- Customize the Task Bar
- Use advanced features of the context menu
- Set Default Programs
- Restore your computer with Restore
- Have internet automatically update date and time

Understand:

Why copying programs onto the hard disk will not make programs work

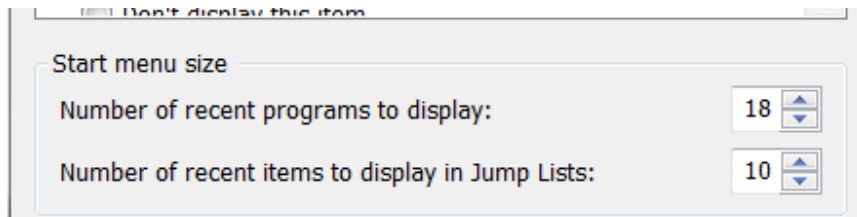
Start Menu Customization



Change the Start menu to match how you use the computer. The default number of recently used programs that can be displayed on the Start Menu is 10. With a modest resolution screen you can easily display 18. Right click on the Start Icon and select Properties. On the properties sheet screen click Customize.

Notice that the Power Button action in the middle of the pop-up now says “Shutdown”. That is a new feature that allows you to shut down your computer with the power button safely. It sends the same command to Windows as clicking on the shutdown icon. If your computer is hung up, you will have to hold the power button in about 5 seconds to override the safe shutdown command.

From the resulting menu look at the bottom of the sheet for the start menu size selections. Type in or click on the up and down arrows to select the number you want. The Number of items that are listed on the Jump Lists can also be



increased from this screen. The order in which your programs are listed is based upon the number of times that program is

used by the logged in user. If you use a lot of programs you may prefer to change the list to alphabetical or some other order. To do this you need to pin the programs to the start menu. To do this, just right click on each program which you want to fix in the Start Menu and select Pin to Start Menu. This will put it to the top of the Start Menu permanently. A dividing line will show up below the bottom pinned program to identify the pinned and the most used programs. You want to pin each program in the order that you want them to be fixed permanently. Each new item pinned to the start menu will be pinned to the bottom of the pinned list. Notice you could have pinned it to the taskbar instead of the start menu. In either case to unpin the item, just right click and select unpin. Reserve the task bar for most used programs only. In my case I only have the mail program and snipping program on the task bar.

Right above the Start menu/Customize area of the Properties sheet is a list of items that can be changed on the right side of the Start Menu. This sheet will allow you to modify the selected item. In some cases the option is only on or off but in most it allows you to select Display as a Link, Display as a Menu, or don't display at all. The Display as a Menu option displays the list in a similar way as the jump list display.

If you seldom use particular items on the start menu just click on “Don't display this item”. Consider turning off “highlight new programs”. Clicking the “Recent items” option will give you an additional “Jump List” that lets you see the last 15 items you did without having to remember which program you used.

click and drag. You will have to move to almost twice the original size before you see it inlarge. The taskbar changes in increments only.

The last customization I highly recommend is making the notification area show all of the icons of the programs that are running in the background. Open the taskbar properties sheet as discribed above and then click on the Customize... box. You can and choose what icons are shown from the menu but I recommend that you click in the box at the bottom of the sheet which says "Always show all icons and notifications on the taskbar". This way you will know how many programs are running automatically on startup and be able to see the USB icon when you use USB Flash drives and other USB devices. Clicking of this icon will allow you to safely remove (eject) your device. The USB icon is the first icon on the second row in the picture above.

Context menu

A right click on any item will give you a context menu. As stated in the Fundamentals course the right click can be your best friend because it tells you what you can do. We used it there and above to select the properties sheet so we could modify something. Lets take that a step futher and use it to accomplish more advanaced tasks.

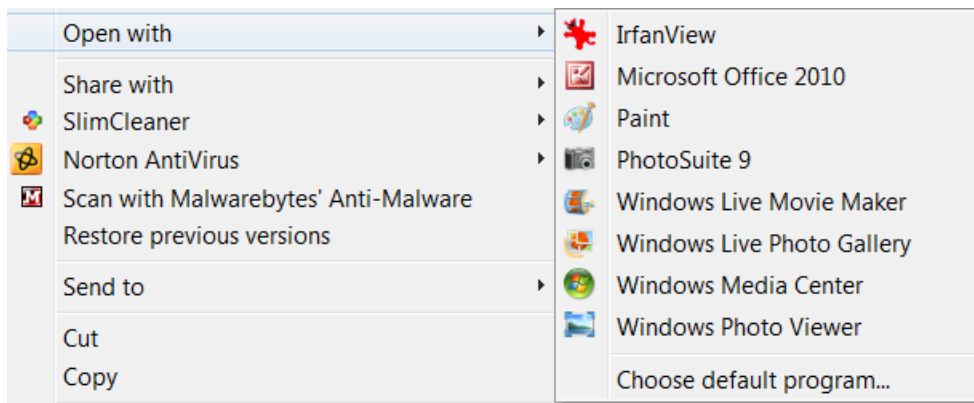
1. Open file location
2. Run As Administrator
3. Open With
4. Scan With
5. Send To

The Search command at the bottom of the start menu will find the file for you but many times you will need to know where the file is located. You may need to move it, upzip it, or check the properties to see if it is a duplicate. Right click on the file, and select Open file location. Now read the location in Windows Explorer.

This is also handy when you have the same file name in several locations. Using the details pane in Windows Explorer will allow you to pick the right file or delete duplicates or out of date files.

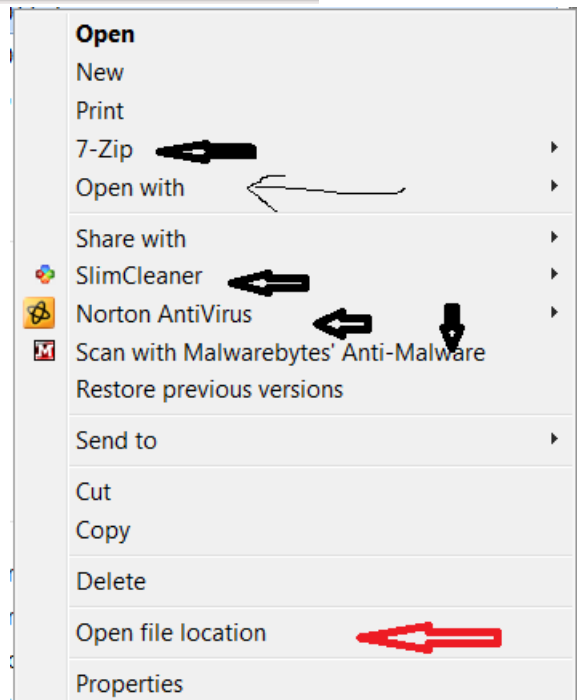
There are many maintenance tools included in windows that do not show up on the start menu. Command Prompt and cmd.exe will give you a DOS screen and if you used "Run as Administrator" to open either program you will be able to accomplish all tasks. For Example, compmgmt.msc opened with "Run as Administrator" will allow you modify you storage devices.

There are times when you will want to open a file with a program other than the program which has been set as your default program. By right clicking on that file and choosing "Open With" you will get a list of recommended programs that will open that file.



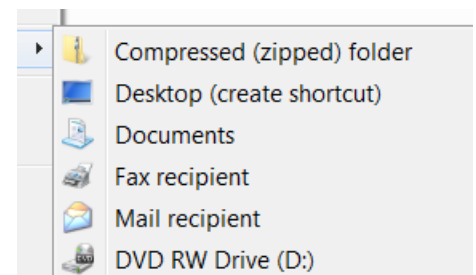
The picture above shows the choices that this computer had for a .jpg file. Notice that the bottom choice was “Choose default program”. Although you could reset you default option for this file type with this menu, we will show a more flexible program shortly

The next to last item mentioned above was the “Scan With” option. The wording will be a little different depending on what antivirus and malware programs you have installed. This is because many programs will install extra commands on the context menus. In the example to the right, the black bold arrows point to added items. In some cases these programs have multiple options such as



7-Zip, SlimCleaner, and Norton Antivirus. In this menu you could scan With Norton or scan With Malware bytes, etc. When you download a file, your antivirus program should automatically scan it and determine if it is a known virus. However, if you put a flash drive or CD/DVD into your computer your antivirus does not scan it until you try to use the file. The same is true of your backup drive. Remember there is a window of several days between the day a virus is put on the internet and your antivirus program is updated with the capability to detect and delete new viruses. Most antivirus programs only check your hard drive(s).

The Send-To selection will open us a secondary menu as shown on the right. The Compressed folder will zip the selected file and put in a folder with than name and the compressed folder icon. The Documents icon will move the selected file(s)



to the My Documents folder. For the Fax recipient shortcut to work you need a fax modem installed on your computer. For Mail recipient shortcut to work you need a Mail client installed and setup. Windows Live Mail and Thunderbird or free email clients. If you have Microsoft Office you will have the Outlook mail client.

The bottom Send-To option on the example above shows the DVD RW Drive. If you click on this option, the file(s) will be sent to a holding folder for the Optical drive. The name for your Optical Drive may be different depending on its capability and manufacture. For example, a Blue Ray burner may show up as Sony BD (D:) You will then see a pop-up saying you have files waiting to be burned. You can go there and burn the files in the holding folder to a CD or DVD or you can cancel out and wait until you have all the files you want to burn have been sent to holding folder. When you are ready click on Computer and then the

Default Programs

The Default Programs command located on the start menu allows you to reset which programs control which types of files. Since more people now have more than one program for working with pictures, movies, music and other file types, they are finding that the program they want to be default is no longer performing that task. This is because the latest program the user installs becomes master for all files it knows how to handle. The first option (Set Your Default Programs) as shown below will allow you to select all or a set a list you choose to be opened by that program. If you just want to set a few specific files types to a given program the second option (associate a file type or protocol with a program) is more user friendly.

Choose the programs that Windows uses by default



Set your default programs

Make a program the default for all file types and protocols it can open.



Associate a file type or protocol with a program

Make a file type or protocol (such as .mp3 or http://) always open in a specific program.



Change AutoPlay settings

Play CDs or other media automatically



Set program access and computer defaults

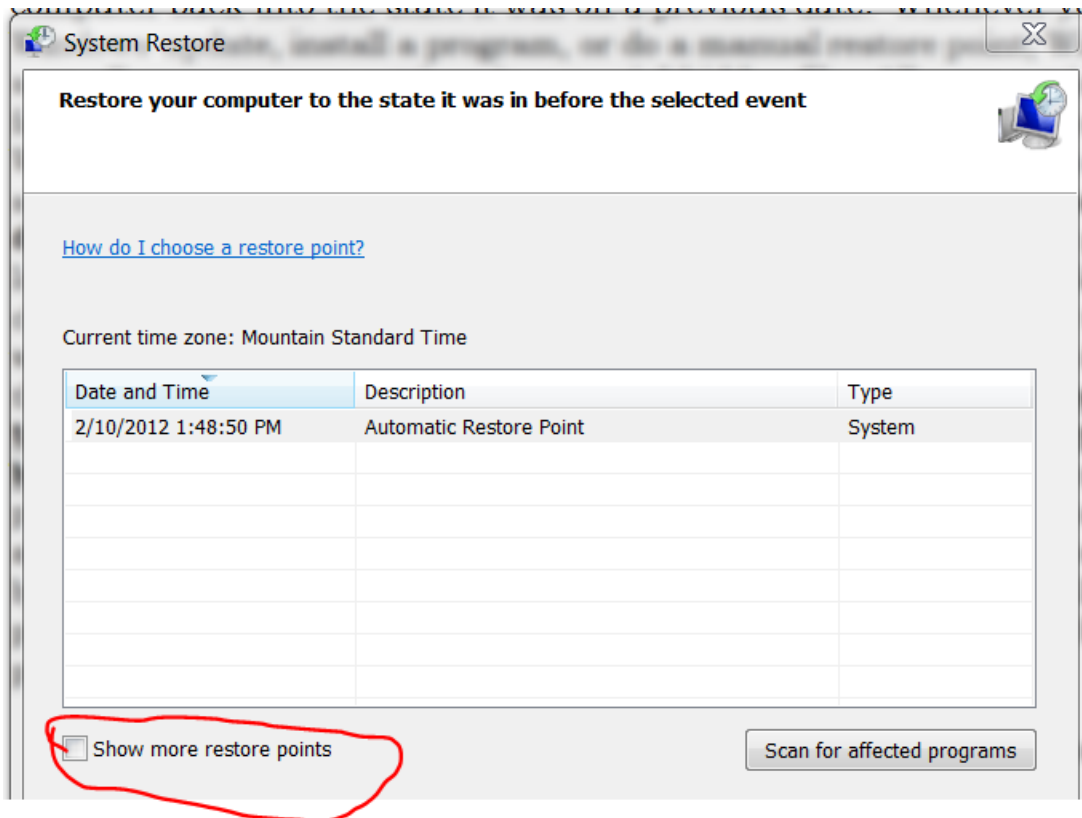
Control access to certain programs and set defaults for this computer.

The third option allows you to set what happens when you insert a CD or DVD (the autoplay function). The last option allows you to reset all associations to the Microsoft defaults.

System Restore

Restore is a program that will put the computer back into the state it was on a previous date. Whenever you do a Windows update, install a program, or do a manual restore point, Windows will save all your program settings in a special hidden file. All your setting and factory settings are contained in the “Registry”. The registry is part of the Windows operating system and every time you issue a command it is checked to see how to execute the command. **The Restore program does not back up any data that you have changed and does not delete any data that you have generated.** Its primary goal is to undue any installation of incompatible programs and operator error. Restoring the computer back to a previous date will fix these kinds of problems without loss of data. **This should be the first step you take if a program or the operating system does not work the way it did before you loaded a program or had guests on your machine.** Many times the problem may not show up for days or weeks because the function that was affected is not used every day. If a system file was deleted or became corrupted by hardware failure or power line interruption, the Restore feature will not fix the problem. If restoring the computer back to an earlier time does not fix the problem then it’s time to use that backup you made. Backup will be covered in the last week.

1. Type “restore” into the search box or select restore from the control panel. If you are not logged on as the administrator it will ask for the administrator password.
2. Select the date to be restored to. The program will automatically show you the last restore point. If you think the problem happened further back, you can select the show more restore points. A portion of your hard drive is set aside for this function (2%). If you have a 500 Gb hard drive you restore points could go back several years. Once the limit is reached it will delete the oldest before creating a new restore point.
3. Click next and do not turn the power off until the restore is complete. This may take 5 to 10 minues.



The Control Panel

The Control Panel is the central command site for adjusting the properties of many Windows ® features. In Windows 7, the control panel can be viewed in 3 different ways. The default method is called the category view. This is the best place to start because the items the average user needs to address are located on the sheet. 1: Add remove or change a user, 2: uninstall a program, 3: You also have the options to view all options in the control panel as small icons and large icons. Just click on the current view in the upper right had corner.

View by: **Small icons** ▼ This is handy if you know which program you want to use without going through several layers of menus.

Each icon on this sheet represents a different set of controls. Clicking on any of these will open its associated **Properties Sheet**. Clicking on Time and date will allow you to set or turn off synchronization your computer clock with the internet. offering a number of customizable options. The icons in your Control Panel will vary somewhat from computer to computer because some programs will add their own property sheet to those provided by Microsoft. We'll take a quick look at some of the more common icons in the next class

Class 2: Objectives

Know the following terms:

- Administrator Rights
- Standard User
- Hyperlink
- Windows Explorer
- HomeGroup
- Public Folders
- Library

Be able to:


- Add and delete users
- Change user rights
- Change password options
- Customize the Mouse
- Navigate via Windows Explorer
- Drag and Drop to change file locations
- Drag and Drop to copy files
- Use the Bread Crumb Trail
- Remove unused programs

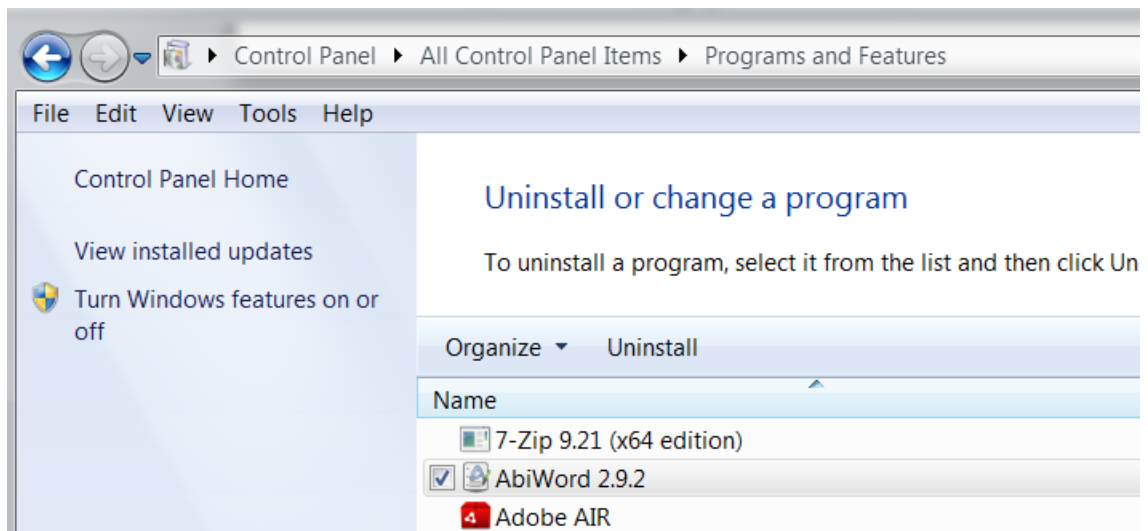
Understand:

- File Structure
- What features are available in the Accessibility Options

Uninstall Programs

In the category view of the control panel is a hyperlink to uninstall a program. A hyperlink is like a shortcut to a program but uses text rather than an icon to indicate where it is going to take you. You can identify a hyperlink by watching

your cursor change from a pointer to a hand.  In the small or large icons view you need to look for the “Programs and Features” icon. Either method will open the uninstall or change programs sheet. The sheet has a new look compared to the previous versions of Windows. In the example below, the program AbiWord has been selected. When it was selected a hyperlink “uninstall” was added to the menu. If a Suite has many programs, for example, Microsoft Office, an additional hyperlink called “Change” would also appear. This would allow you to add or remove individual programs in the suite and leave the rest of the Office suite installed as it was before you checked this block.



Uninstalling software is a complicated business. Many programs add files to your Windows directory and other locations on your computer in addition to the ones they add to their own program folders. Usually, they also add entries to Windows system files and to the Registry files. If you just delete a program's folder, you leave a lot of "orphan" files behind in other locations, clogging up your hard drive. You will also end up with error messages on start up when the registry is looking for a file that you have deleted. Unfortunately, the Uninstall wizard is only as good as the data provided by the software vendor. The most common problem with some vendors uninstall program is its failure to delete all of the files out of the registry. There are several free second source uninstall programs that do a better job than the built in program. Ask the instructor for his recommendation on the most current free second source program. These programs will create a restore point in case you have to recover and they do additional searches to cleanup any files missed by the vendors uninstall program.

Ease of Access

This icon will open the **Properties Sheet**, shown below, which offers a number of ways to customize Windows for easier use by those with disabilities. The Explore all settings list is about twice the size as shown. Clicking on any the icons in this list will provide you a list of options that can be enabled for a particular need. The Start Magnifier and Set up High Contrast are handy for people with poor sight.

Make your computer easier to use

Quick access to common tools

You can use the tools in this section to help you get started.

Windows can read and scan this list automatically. Press the SPACEBAR to select the highlighted tool.

☐ Always read this section aloud

☐ Always scan this section



Start Magnifier



Start Narrator



Start On-Screen Keyboard



Set up High Contrast



Not sure where to start? [Get recommendations to make your computer easier to use](#)

Explore all settings

When you select these settings, they will automatically start each time you log on.



[Use the computer without a display](#)

Optimize for blindness



[Make the computer easier to see](#)

Optimize visual display



[Use the computer without a mouse or keyboard](#)

Set up alternative input devices



[Make the mouse easier to use](#)

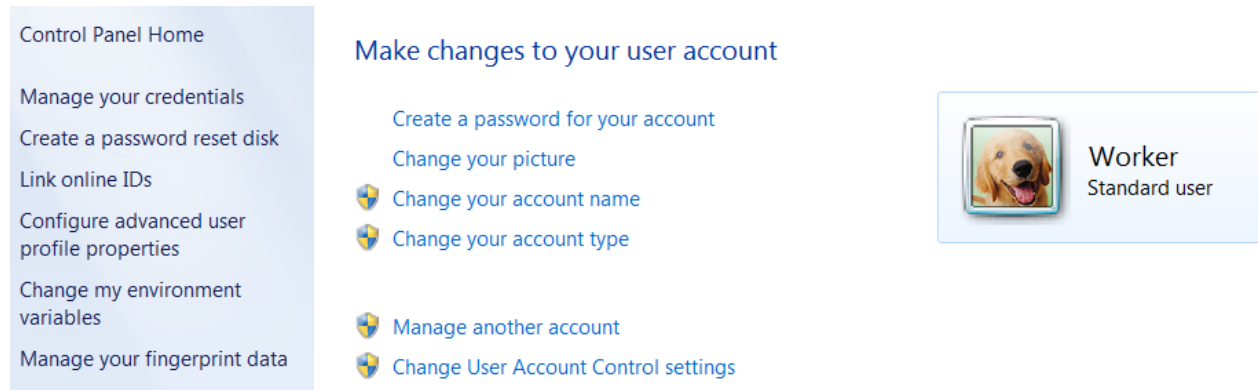
Adjust settings for the mouse or other pointing devices

User Accounts

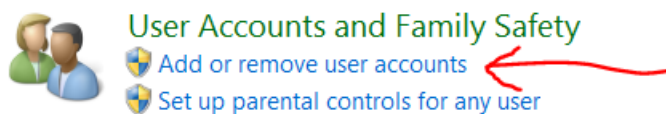
Although this feature was available in previous versions of Windows, Windows 7 has made it more user friendly and it no longer requires the skills of a network administrator to set up. When you buy a computer, an account with administrator rights is included. There is usually no password installed so when you boot, your computer goes directly to the desktop display. You must have at least one account with administrator rights on your computer so that you can make system level changes like installing or removing a program. If you are the only person using a computer you should have two accounts installed. One should be a standard account and one should be the account with administrator rights. If two people use the same computer, you should have two standard accounts and one account with administrator rights. The account with administrator rights should have a good password installed and should only be used when changing system configuration. You should use the standard

account for all other activity. With two users this is even more important because all files you create and any customization you do is tied to the user account. When you search for pictures, music, emails, and any documents you create it only looks at the signed in user account. This speeds up the search and prevents you having to wade through files which do not apply to you. If you want to share files with other users, store them in the “Public Folders” (Public Folders are automatically shared between users and homegroup computers).

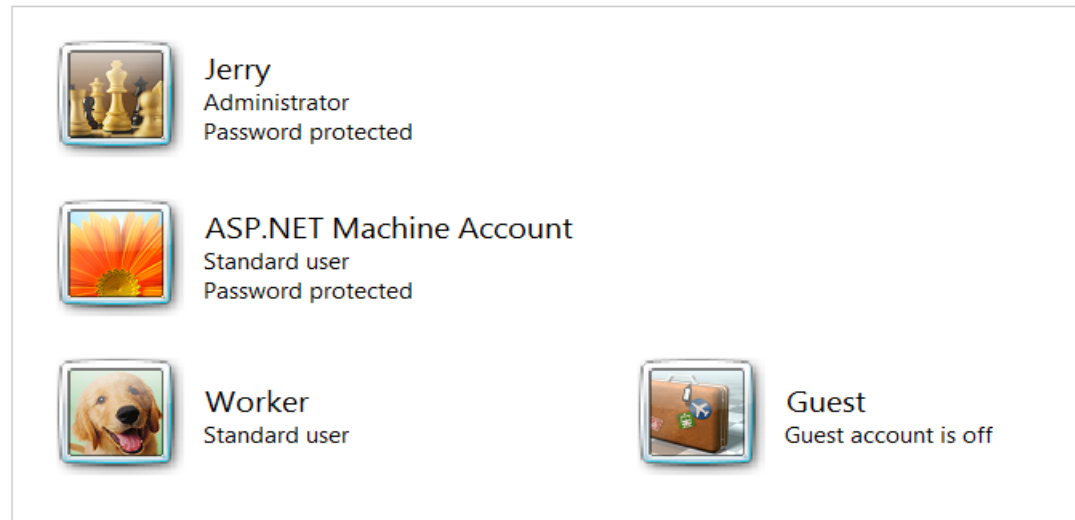
When you open the “Users” program in the control panel category view you will see a screen similar to the one below.



Notice the hyperlink near the bottom which says “Manage another account”. You will need to click on this link to set up additional users. If you use the control panel category view you can click on the “Add or remove user accounts” hyperlink and go directly to the desired screen shown on the next page.



Choose the account you would like to change



[Create a new account](#)

[What is a user account?](#)

Additional things you can do

 [Set up Parental Controls](#)

[Go to the main User Accounts page](#)

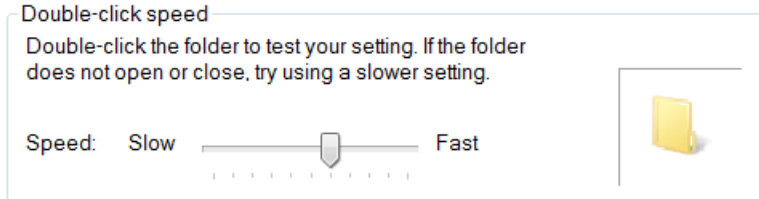
As you can tell from the two pictures above you can create accounts, add passwords, change passwords, account picture, etc. Leave the Guest account disabled to prevent hackers from using your machine. If you have been using the account with administrator right and already have a lot of documents saved and customization done there is an easy fix.

1. Generate a new account, check the administrators rights box, add a password and select the picture you want to use.
2. Go back to the control panel and change the account type of the user you have been using to "standard user". Add a password if you want to protect your new account from other people that could have physical access to your computer. Kids or Grandkids for example.
3. Continue to use the new "standard user" account.

If you want your kids or grandkids to be able to use your computer, set up an account for them also. Consider using the parental controls available with Windows or download the advanced parental controls available under Windows Live Essentials.

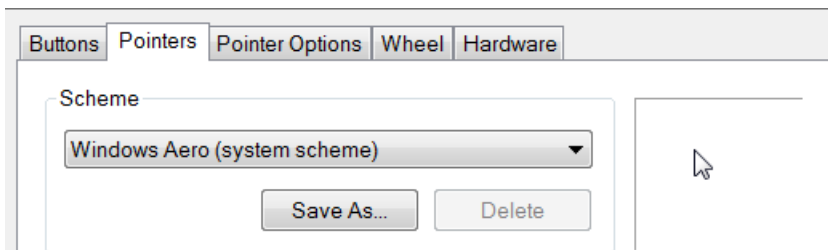
Mouse

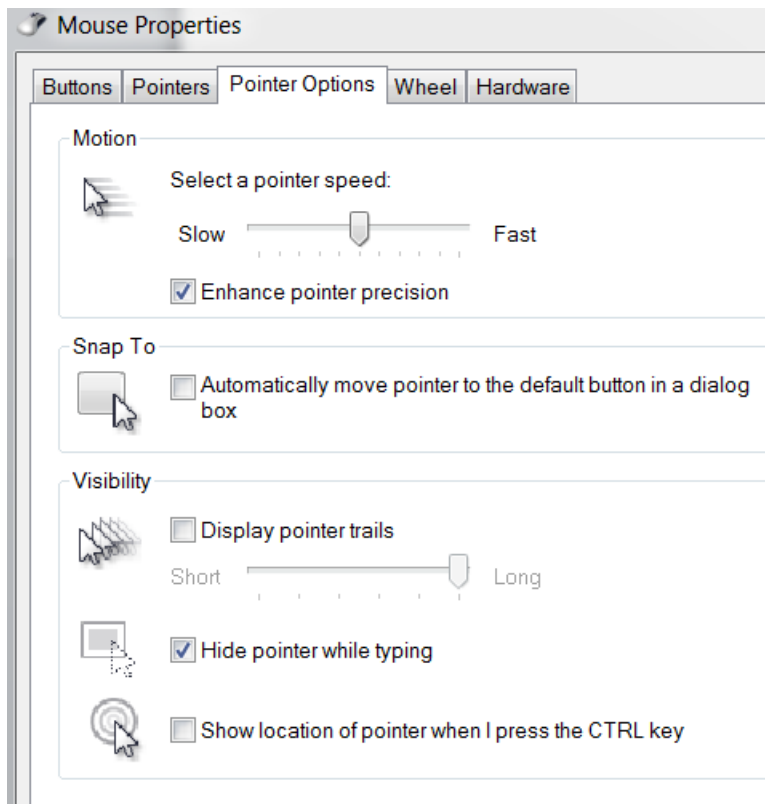
The **Mouse Properties Sheet** offers various options for tweaking mouse sensitivity and speed. The easiest way to find this sheet is to change the Control Panel to the small icons view and look for Mouse. If you are a southpaw using a left-handed mouse, you can change the button settings here to meet your needs. Also on this first sheet is a slider to make double clicking easier. We set the computers in the lab to $\frac{1}{4}$ speed to make it easier for first time users. Double clicking on the folder allows you to test the setting.



The next tab called pointers allows you to change the look and size of the pointer on your screen. Click on the down arrow and a list of options will appear. If you use a laptop in bright light, selecting Windows Aero Extra-large Black will make the cursor easier to see. The Pointer Option tab also has several choices that make the cursor easier to see. Displaying a pointer trail and show location of pointer when I press the CTRL key are common choices.

Moving the slider under pointer speed will increase or decrease the sensitivity of the mouse. All of these options also apply to a track pad if you are using a laptop instead of a computer with a mouse.





File Structure

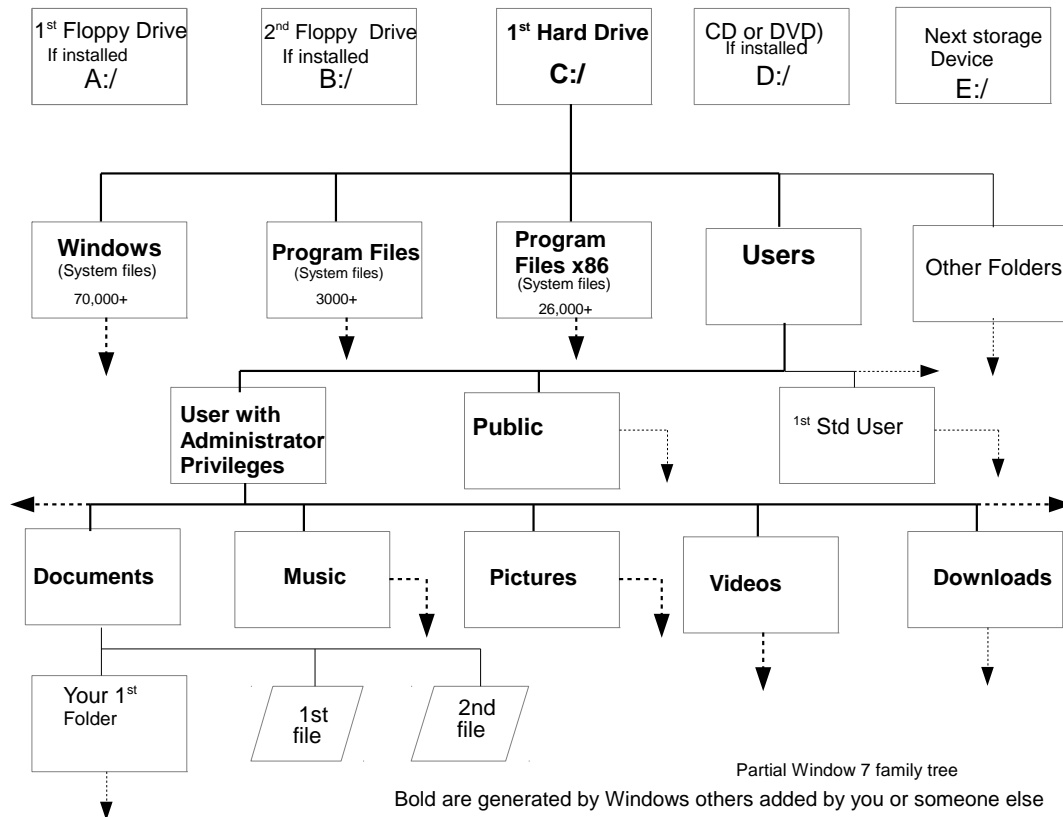
One of the primary jobs of the operating system is to manage your storage devices. The details of how management is done are not necessary for a user to know but how the file structure is organized is important to the user. NTFS (Network Terminal File Storage) is the default method of file storage in Windows 7. Previous versions of Windows have used (File Allocation Table) FAT 12, FAT 16 and FAT 32. Each version allowing larger file sizes. Windows 7 is backward compatible with files saved in these formats. Apple and Linux use a different primary file structure but have the capability to read the older FAT formats. For this reason Flash drives and external hard drives normally come formatted in the FAT32 format so they can be compatible with all computers. The newer NTFS in Windows and equivalent Apple/Linux formats provide better recovery and error prevention capabilities than FAT. FAT32, for example, can only handle files up to 4GB in size. When it was developed, that size file was almost unheard of but now, a DVD can have files that large or larger. So, if you are trying to copy a movie from a DVD onto your FAT32-formatted hard drive it likely won't copy as most full-length movies are files larger than 4GB.

If you do not need compatibility with Apple or Linux consider reformatting your external hard drive and larger flash drives to NTFS. Remember, you will lose all data on a drive that is reformatted so reformat before you use the drive or back

up the drive first. To format, right click on the drive and select format from the context menu.

The operating system uses the NTFS or FAT file system to keep track of where your files are physically located on your storage device. It also keeps track of files that have been deleted and where they are located so that space can be reused.

What the user sees is the family tree that is generated by Windows and can be modified by the user.

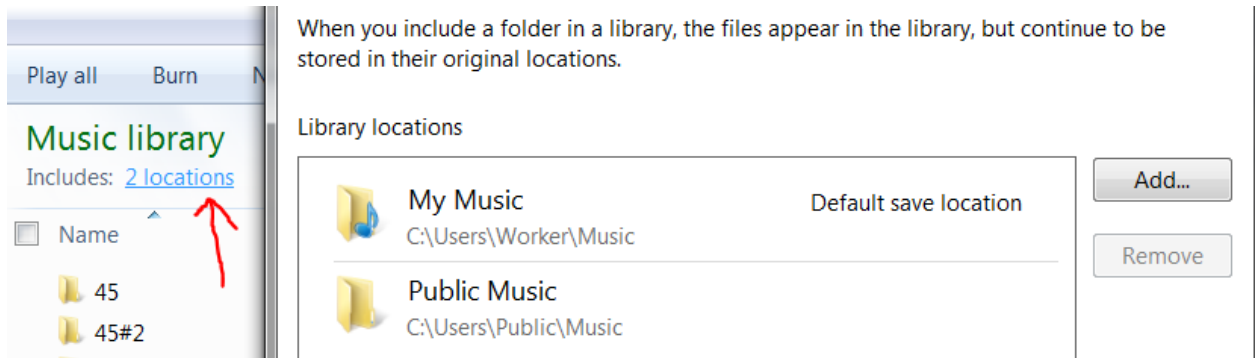


When you generate a new user whether it be a Standard User or a User with administrated rights, the **Bold** folders shown below the User with Administrator privileges is added to the new user. CDs and DVDs have their own file structures and do not use FAT or NTFS.

Notice in the drawing above, that Documents, Music, Pictures, Videos and Downloads are at the same level in the tree. If you click on the Users name in the start menu you will see these folders and others generated by the manufacture and programs that have been installed on your computer. A new feature in Windows 7 is the Libraries function. The Library function allows you to link folders together and view them at the same time.



There is a library icon on the taskbar that will display your libraries without you having to use the start menu. If you click on the Library Music icon shown in the Library it will show you the music located in the **User** Music folder and the **Public** Music folder at the same time. You can add other folders to this library including network drives and folder in other computers in your homegroup. When you have a library open, click on the locations hyperlink and it will bring up a menu that will allow you to add or remove locations to the library.

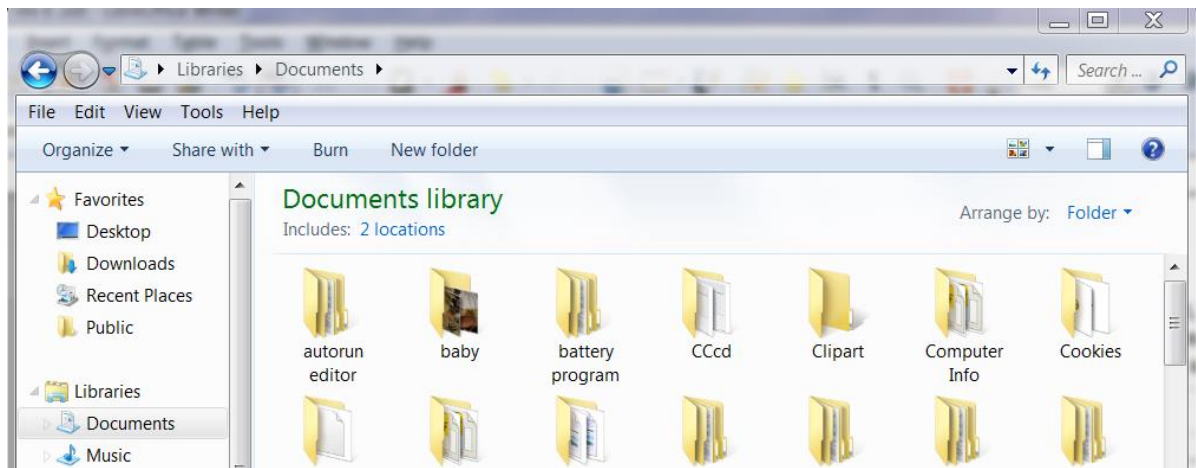


Windows Explorer

Any time you open a folder or library you are using a program called Windows Explorer. Do not confuse Window Explorer with Microsoft's web browser Internet Explorer. Unlike most programs there is no name in the title bar, just the minimize, maximize and Exit icons. Let us examine the illustration below and learn the names of the different parts of this program. The box next to the left and right arrows is called the address bar. It tells you where in the computer you are viewing. If you know where you want to go, you can type in the address there. To the right of address bar is the Search box. Below the address bar is the Menu Bar and below that is the Command Line Bar. On the left below the command bar is the Favorite Links and Folders section. These two sections are part of the Navigation pane. Whatever you click in the navigation pane is expanded and shown in the right hand pane and reflected in the address bar above.

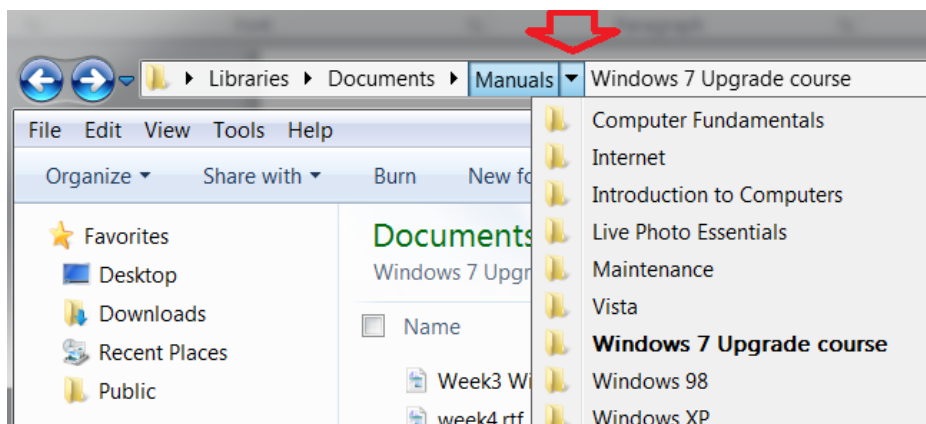
In the example below, note that Documents has been selected and the address bar shows that this is the Documents folder of the Users Libraries.

If you enter a subject in the search box at the top right side it only searches in folders and sub-folders of what is in the address bar. This feature makes searching for a document that you have written must faster than the search available in older versions of windows. This is particularly handy if you wanted to find a file on a flash drive, CD or DVD. Since these are removable devices they are



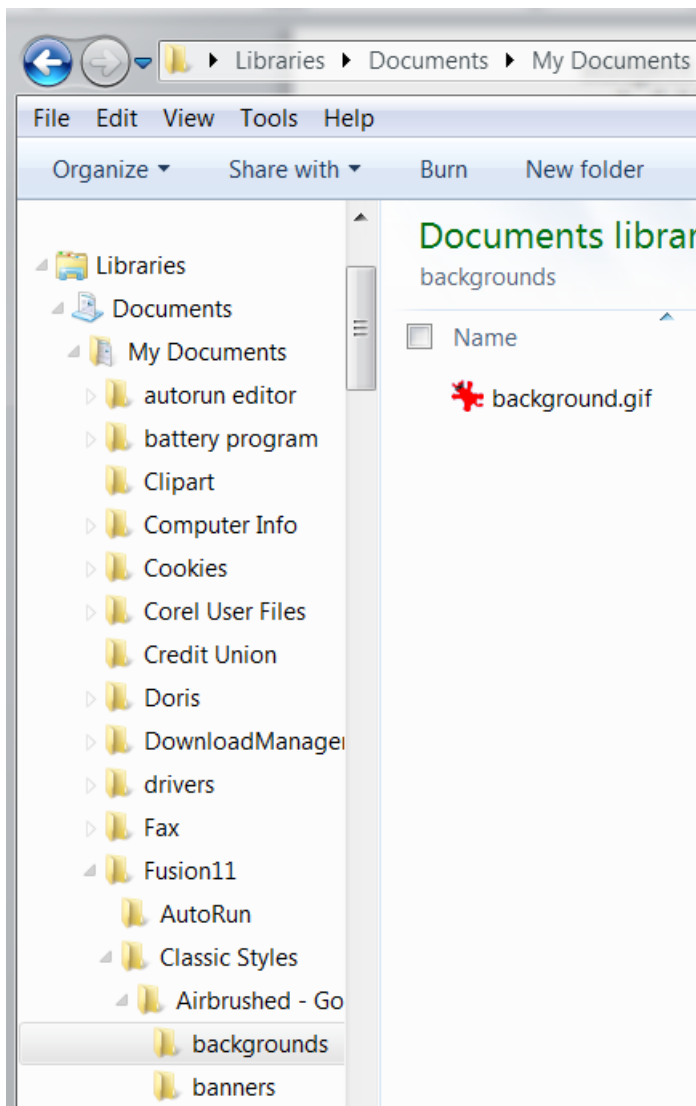
not indexed and the search command on the start menu will not find files on removable devices. Click on any storage device shown in Computer and then type in the file name in the search box.

The address bar in Windows 7 has a new feature called the Bread Crumb Trail. It allows easy navigation back through the path you have traveled. In addition to clicking on the forward and back arrows you can click on any of the separation arrows and it will drop down a menu of what was contained in that folder as illustrated below.



If you double click on any of the folders shown in the Bread Crumb Trail, that folder will immediately open. If you need the conventional view, click on the folder icon at the beginning of the address bar. The above address would then change to C:\Users\Worker\Documents\Manuals\Windows 7 Upgrade course. To return to the Bread Crumb View you will have to exit Windows Explorer.

The navigation pane on the left side makes dragging files from one folder to another much easier. You need to expand the folders in this pane until where you want to go is displayed. Now you can draw any file or folder from the right side to the left side of the window. This will move the selected item(s) into the folder you want.



As you drag the item over, a box will appear under the item being dragged which confirms which folder the file will be moved. Make sure you do not release the mouse button until the correct folder name appears. If you want to copy instead of move, right click and drag. When you release the button, a menu will appear which will allow you to select copy or move. In the example to the left, you have sixteen folders shown. By moving the cursor on the navigation frame down, you could navigate to any folder in your computer.

Class 3: Objectives

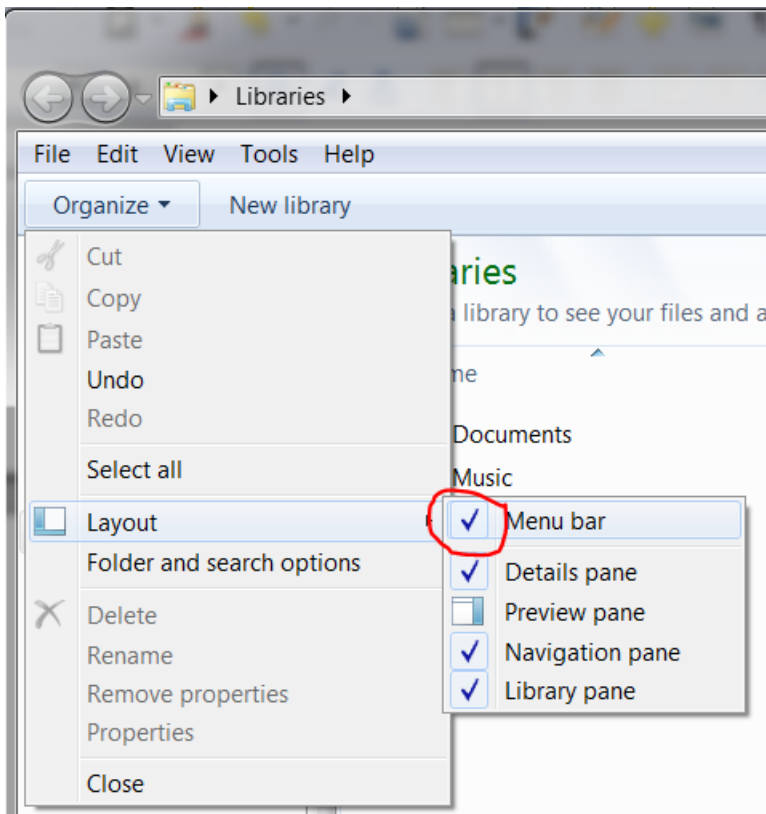
Be able to:

- Use the bar and ribbon in WordPad and Paint
- Add the top menu to Window Explorer, Internet Explorer and Media Player
- Change line spacing in WordPad
- Indent Paragraphs in WordPad

Restore Top Menus

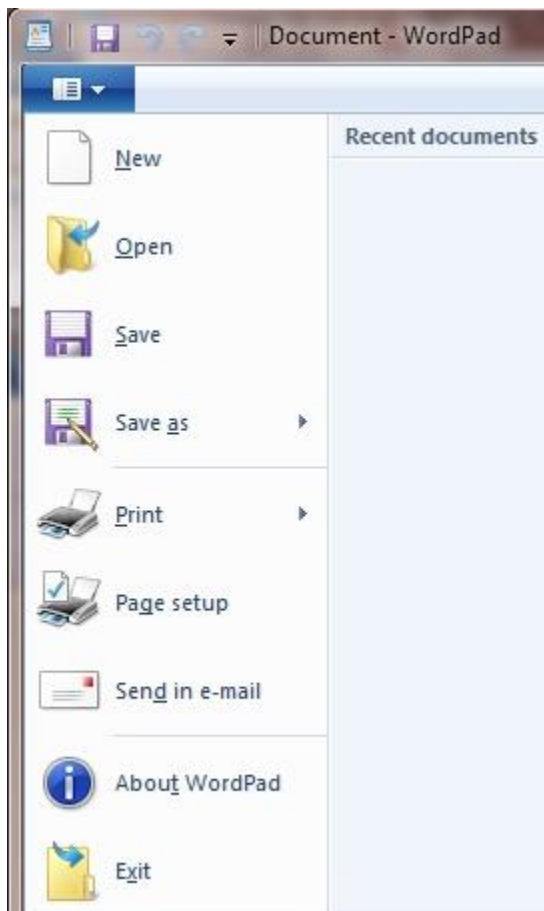
The familiar Top Menu has disappeared in several of Microsoft products in favor of the Bar and Ribbon. However, you can restore them in a few programs. To restore the top menu in Windows Explorer and Media Player, click on the Organize icon and then click on the Layout icon and you will get a sub-menu as shown below. In the default condition, the Menu bar option does not have a check mark.

Clicking in this box will bring the top menu back for this program. In Internet Explorer 9 the Menu Bar can be added by right-click in the top gray area of the title bar and selecting Menu Bar from the resulting context menu.




BAR and Ribbon

So how does the bar and Ribbon compare to the traditional menu and how do you use it if you have Microsoft Office or want to use Wordpad and Paint in Windows 7. First the concept; instead of having each menu drop down when you click on them, one menu is always shown in the form of shortcut icons instead of words (the ribbon). The bar has tabs on it and clicking a tab displays that subjects menu on the ribbon. In the case of Wordpad and Paint, there are only two tabs and the tab you use the most is displayed by default. In the Office suite, there are many tabs. The File menu which is the first tab on the traditional menu is not one of the tabs but an icon in the upper left corner. See figure below. A hand drawn red arrow in the figure below points to the icon.

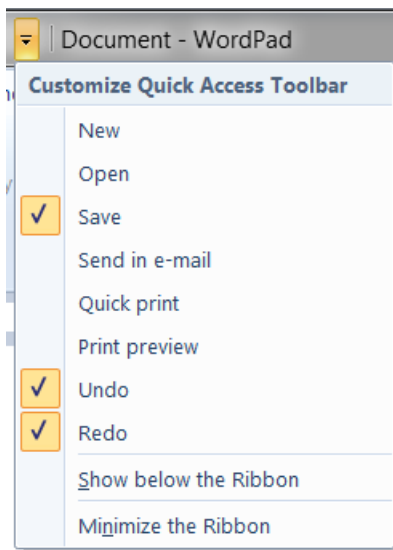


If you click on this icon, a traditional menu will pop down giving you the choices you would normally see under the “File” menu.

See figure below. Another change is that the Help menu seen at the end of the traditional Top Menu has been replaced

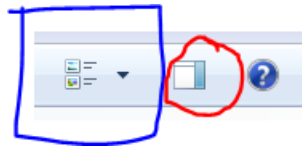
with a blue circle icon  and is located to the far right on the tab bar.

Notice the icon to the left of Document - WordPad. This is a drop down icon to customize the toolbar. It will provide the menu shown below.

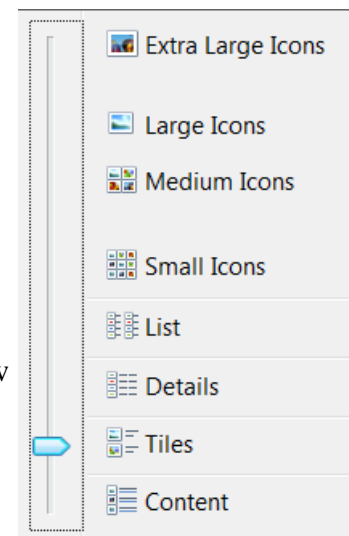


In Office 2007, the “File” menu is located in the same area as wordpad and paint but the Icon is the Office logo.

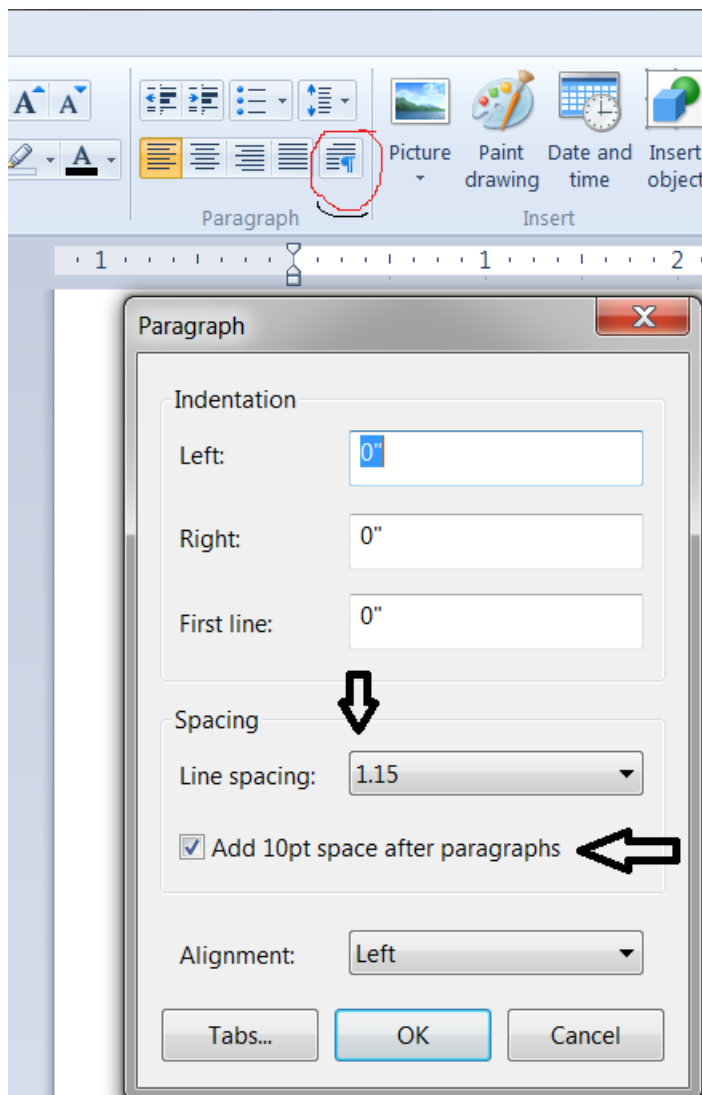
The Ribbon is the same as the tool bar in the conventional top menu except it contains all options instead of select few. You should also look at the title bar which contains some often used tool bar icons.



The icon shown in the blue square gives you the drop down View menu, the red circle will turn on/off the new preview pane



One of the changes in WordPad that most people do not like is that Microsoft has pre-programmed extra space between lines. This is fine if you are using WordPad to write a quick small note. If you want to write something larger you will need the change the document before you start. If you forget, you can do a Ctrl+A . and accomplish the same task after the fact.



Click on the paragraph shortcut shown circled in red to bring up the Paragraph Menu. Notice in the illustration there are two black arrows added. The default Line spacing is set to 1.15. If you want single line spacing click on the down arrow and select. The larger culprit is the box that says “Add 10pt space after paragraphs”. If you are using a 10 or 12 point font that is like an extra line space.

If you want a complete paragraph to be indented you can also use this screen to accomplish that. Just highlight (select) the paragraph to be indented, open this dialog box and type in the size of the indent in inches. You can use decimal sizes like .25 or .5. To really may a paragraph standout on a page indent the right side also. This is much easier than trying to use Tabs and Carriage return to control the spacing.

Networking

Microsoft continues to make home networks easier to implement for the layman. The latest entry is called the Homegroup. The bad news is that to use this feature requires all computers on the network to be running Windows 7. The good news is that if you have all Windows 7 machines on your network Homegroup will automatically set up all security protocols for all computers on the network to be able to share internally but protect your computers from outside penetration. When you first connect your computer into your network it will detect the router and ask if this is a Home, Work or Public network. Home and Work locations provide identical features and are the same except for the name and the Homegroup function. Having both allows you to set up separate restrictions for your system when you have your computer at home or work. The Public choice automatically sets up a higher level of security that you would need at an airport or Internet cafe. If you have XP and Vista computers on you network you should choose the Work option so that you can see and work with these computers. You will have to manually set the Workgroup name to the same name you were using

on your XP or Vista computers. The Home choice will automatically set Homegroup as your workgroup name and set up security that it will allow other Windows 7 machines to join but **will not** allow you to see your XP and Vista machines. If you have already selected homegroup you can exit the group and reset your network to Work from the “Network and Sharing Center” icon in the Control Panel.

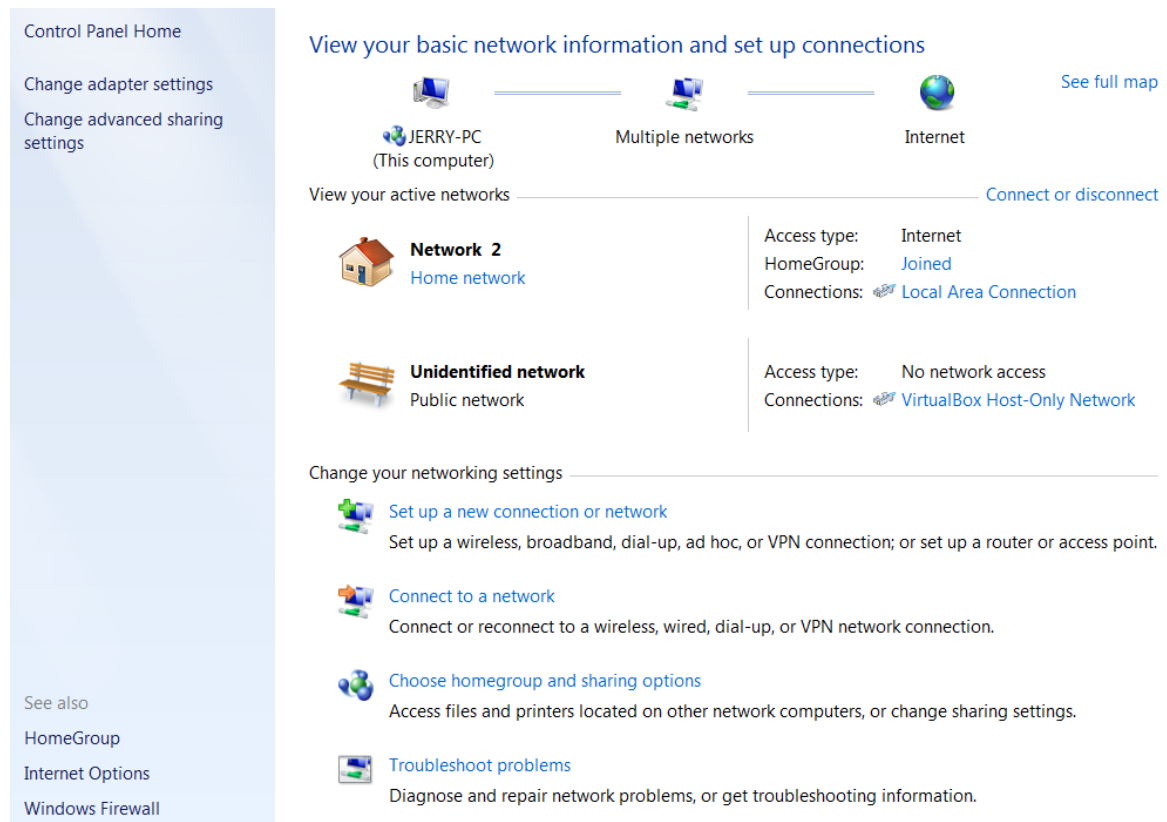
If you are using a portable computer be aware that Windows 7 is “location aware”. It does this by looking at tcp/ip number and checking to see where it is registered. In addition to letting your Internet Browser to displays sites closest to you first, it enables the OS to know when you connect to a new network. Before you connect to a new site it will ask if it is Work, Home or Public again. This allows you to select “Public” when you are at a location other than home. Depending on your ISP, your computer may say you are in Salt Lake City instead of Sandy.

The Help and Support program has excellent tutorials on networking and wizards are included in the Control Panel to change and modify your network. There are three basic types of hardware available for home use, the wired method where you have to run cables between your computers, wireless, and power-line. The power-line is the most expensive. You will have to buy adapters that plug into a wall socket near each computer. The adapter put the signal on top of the 115v power line and takes it off on the other end. You can use a single method or combine them. The wired method is the least expensive and easiest if the running of the wires is not a problem. If your computer does not have a Ethernet connector, you can add a card into your computer or an USB to Ethernet adapter externally. If you have a modem with a hub/switch built in, you can use straight Ethernet cables and connect direct to the hub/switch. Many modems have 4 wired connections and a wireless access capability. With this setup up you could wire 2 to 4 computers connected to the hub/switch and run 1 or more wireless computers at the same time. If you have a network printer it can plug into one of these ports. If you do not have a network printer, you can plug the printer into one machine and share it. For someone else on the network to use the printer, the machine that is connected to the printer must be turned on and Windows running. The wireless method replaces the wires with radio wave just like your wireless phone or cell phone. Many laptops come with built in wireless adapters. Desktop computer normally do not but it is becoming more common. If you have more than two devices, then you will need a wireless access device to act as a traffic cop. As mentioned before, many DSL modems and cable Modems come with this capability. The hub or switch provides this function for wired systems. A switch is just a smart hub that increases the speed at which you network works.

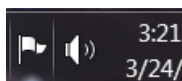
The local wireless capability standard is described by IEEE 801.11x. There are currently 4 levels. IEEE 801.11a is the oldest and slowest; 801.11n is the fastest and latest. IEEE 801.11 b and g are still very common and most wireless access

points or backward compatible to these standards.

Now it is even possible to connect to the internet via internal or external cell phone adapters that work like the wireless modem but do not require an outside antenna.

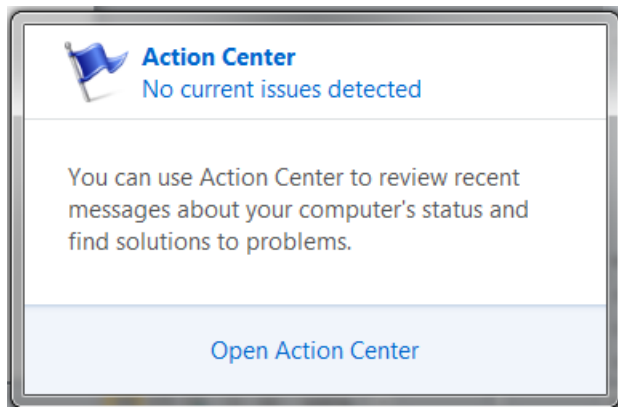


When you connect to the HomeGroup the first time it will generate a password for the homegroup. You will need this password for each computer when it first joins the network. If you forget this password or want to change it you can click on the HomeGroup hyperlink in the bottom left hand corner of the Network Sharing Center page shown above or type in homegroup in the search box of the start menu.



Action Center

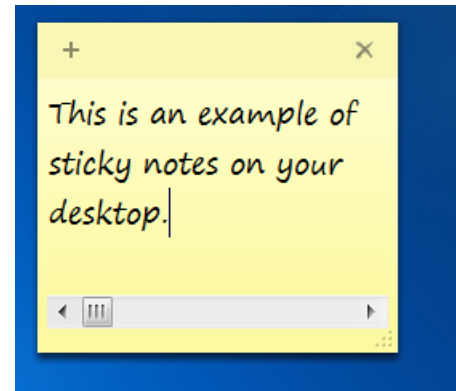
Windows 7 has added a function called Action Center to consolidated system errors and notifications. Click on the white flag in the taskbar notification area and any actions that need to be taken will be shown. One of the actions will be to setup your backup system. This will be covered in the last class. If a program or driver creates an error, a message is sent to Microsoft and an error database is searched. If a fix for the problem has been found, a link to the fix will be included in the Action Center.



To the left is what you want to see when you click on the flag. If there are errors listed in the middle, click on “Open Action Center” to correct any problems. If you have no antivirus program installed or working correctly, the box will display that problem. The Action Center is also available via the control panel icons view.

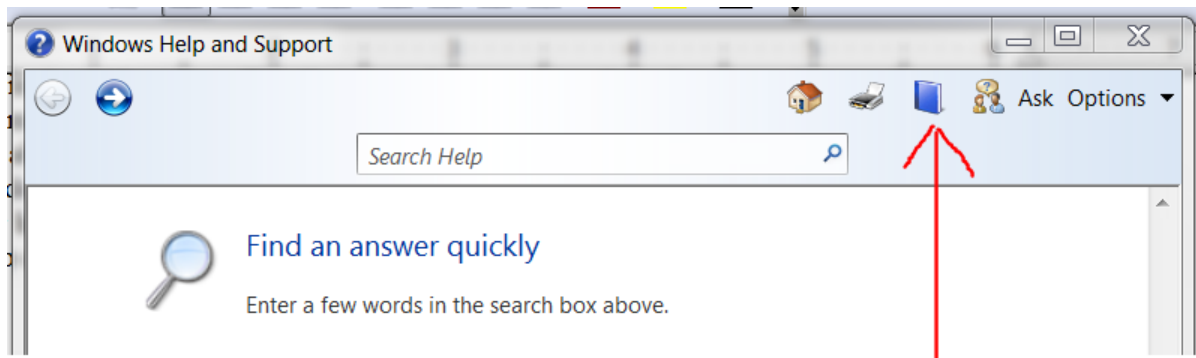
Sticky Notes

Another free program included with Windows 7 is Sticky Notes. Those who love a messy desktop will love this program. Notepad which has been included with Windows for generations is primarily there for programmers for writing scripts and other programming tasks. It can be used for simple note taking but the resulting file is stored in the documents folder by default. Sticky Notes saves the data written to the desktop with the wording visible without having to open any file. Great for reminding yourself to pick up some milk, pay the bills, etc. If the program is not on the start menu, just type “sti” in the search box. Click on Sticky Notes and write your note. If you already have a sticky note on the desktop you can just click on the plus sign in the upper left hand corner to generate a new one. To delete a sticky note just click on the “x” in the upper right hand corner.

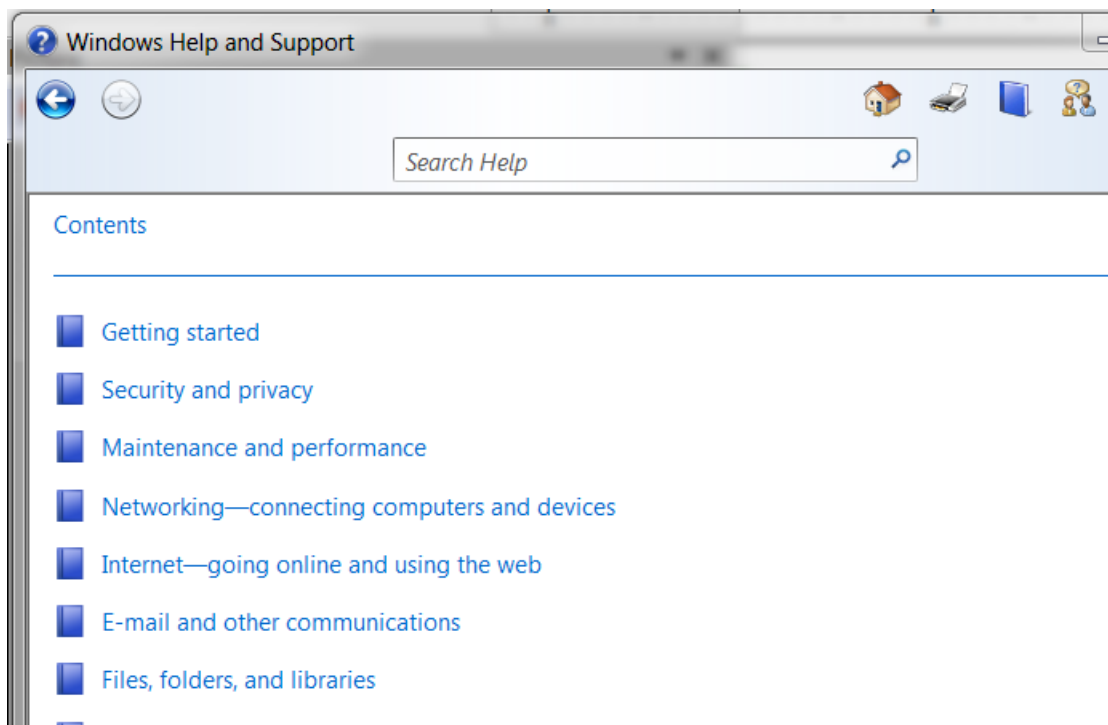


Help and Support

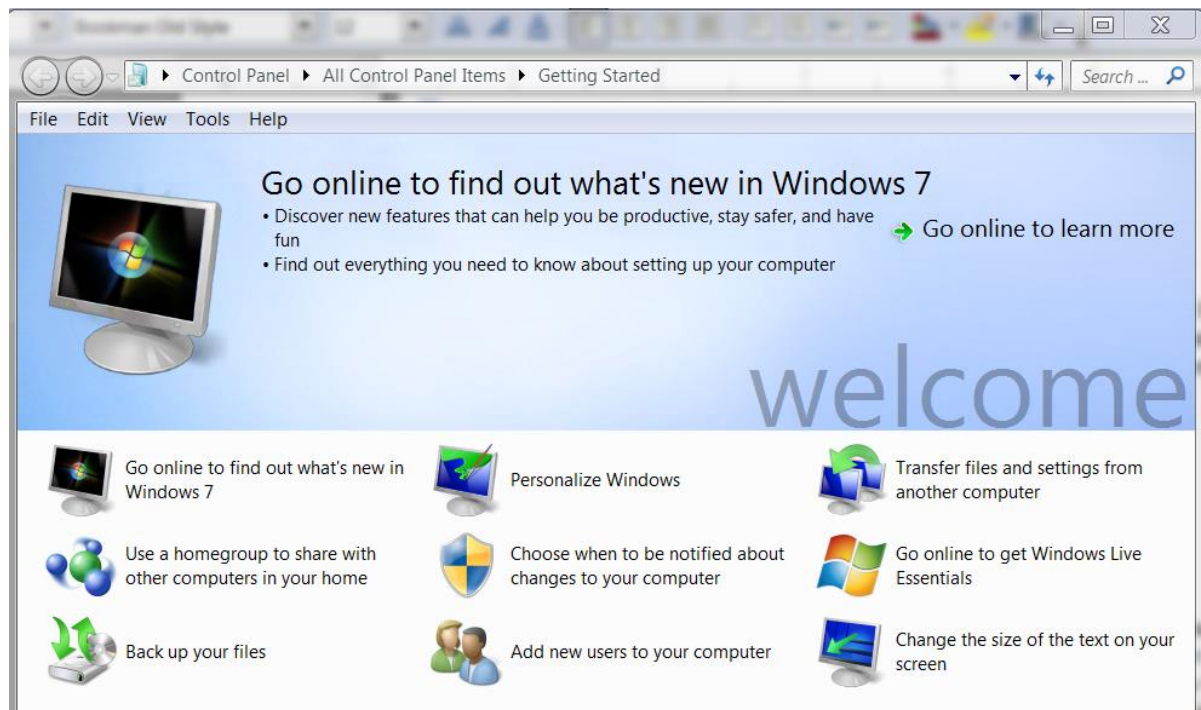
The Windows help function continues to be the most changed item in each version of Windows. Microsoft is still trying to figure out the best way. The Table of Contents has been hidden and the index function is no longer available. To get the table of contents back, click on the book at the top of the window. See **red** arrow in picture below. The list provided in the table of contents is very useful and clicking on the book icon in front of each topic will expand the list. The content in these help files are text but extremely informative. See second illustration below.



The audio/video tutorials that were in XP and Vista have now been moved to the internet. Just another way to reduce the size of the software stored on your hard drive.

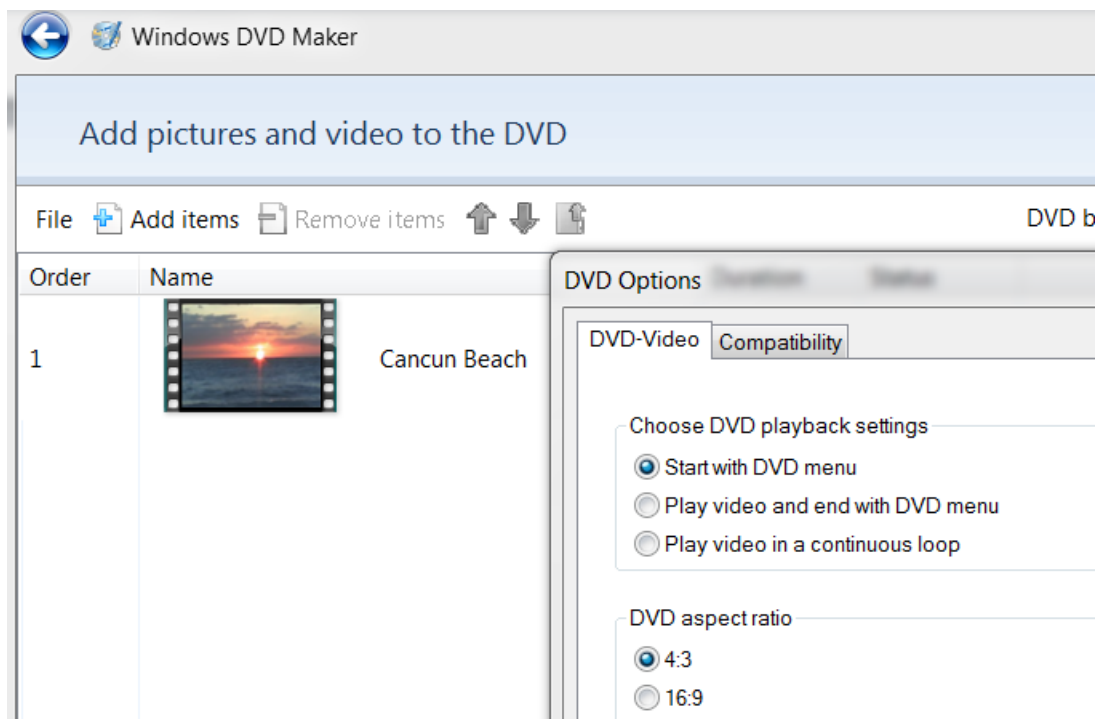


The easiest way to get to the on line tutorials is to type "getting started" in the search block. It will link you to the Whats New in Window 7 and other Demos which are now located on the Internet. Help still contains plenty of help in the written and pictorial form but very little video.



Windows DVD Maker

One of the new programs added to the OS is DVD Maker. This program will allow you to put videos and or slides together and burn them to a DVD in a format that will play on a standard TV DVD Player. The program will allow you to add titles and menus so they can be controlled by your DVD remote.



Options also permit the format to be adjusted and set to play in the 16:9 format which is now the standard for high definition TV sets. Audio contained within any video clip will also be available. If you want to put a lot of pictures on a DVD so they can be displayed on your TV this program will do the job. However, if you want to do a slide show with music and or narration you need to load the free Windows Live Photo Gallery from Microsoft. That program will allow you to do much more editing of both videos, slides and audio. Once you are satisfied with your project it can direct the output to DVD Maker for TV DVD players or to it own save options that can be played back on your computer, cell phone, media player, or posted on line. Windows Live Photo Gallery is one of the free programs available via Windows Live Essentials. More on that subject in the last class.

Class 4 Objectives

Terms

NAS
image

Be able to:

Back up your PC
Make a Rescue Disk
Recover your PC
Use the snipping program
Install gadgets

Understand

What is available in Windows Live Essentials

Backing up your PC

The good news is that Windows 7 now includes an easy to use backup program and external hard drives are relatively inexpensive. The most common and least expensive is the USB external hard drive. If your system has USB 3.0, make sure you purchased an external hard drive with USB 3.0 because it is up to ten times faster than USB 2.0. You may want to do this anyway since the USB 3.0 external hard drives will also work with a USB 2.0 computer at the USB 2.0 speeds. USB Flash (thumb, pen, travel) drives can be used to backup files but are not currently large enough for a full system backup. There are also network hard drives on the market. They are called *Network-attached storage* or NAS devices. They are more expensive but have the advantage if your household has two or more computers. A NAS drive can be used to store all of your music, picture, and movies so that any computer can access them.

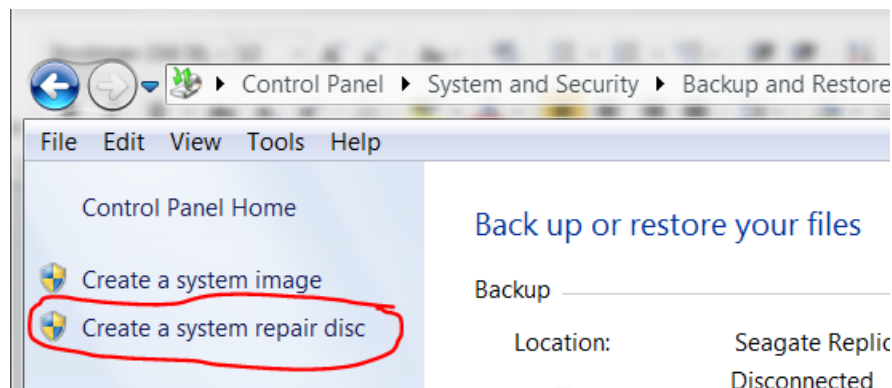
You should do a full backup (or image) of your hard drive so that if the hard drive fails, you can use this backup to restore your computer back to the condition that it was in at the time of the full backup. This type of backup will restore any data that you have generated or downloaded and will also restore the operating system and all programs that have been installed on your computer. Just think of all of the windows updates and virus updates you do every week.

Step 1. Plug in your external hard drive or make sure your NAS drive is turned on.

Step 2. Type in backup in your search box or go to the control panel and click on "Back up your computer"

Step 2a. This step is only required the first time you do a backup or if you lose your system repair disc. You will need a DVD so that you can burn this disk. In the past many companies would provide you with the original Microsoft CD/DVD,

but very few do it now. Many companies will provide you a second partition on the hard drive to recovery the system back to the original factory condition but will not include any programs, data or updates that you have installed. To make the System Repair Disc, click on the link shown in the illustration shown below and follow the instructions. This disc can also be used to repair startup problems.





Step 2b. The first time you backup, the program will ask you where to backup. Although you can backup on DVDs or CDs it will take much longer and take many discs. For example if you have used up 250 Gbytes on your hard drive it make take 25 DVDs.

Select where you want to save your backup

We recommend that you save your backup on an external hard drive. [Guidelines for choosing a backup destination](#)

Save backup on:

Backup Destination	Free Space	Total Size
 CD Drive (D:)		
 Seagate Replica (E:)	1.63 TB	1.82 TB

Step 2c Set your schedule or select no schedule.

Step 3. Select backup now. Depending on how much data you have, the speed of your backup device the backup could take an hour or 15 minutes.

After you have backed up once, steps 2a, 2b, and 2c or not required and starting a maunal backup takes only seconds. If you set it for automatic backup, all you have to do is make sure that you have your backup device turned on and plugged

in on the backup day and time.

Recovery

After you make your System Repair disc should try to boot from it. This will allow you to learn how your computer is set up. Some computers are set up to try to boot from the DVD/CD drive first. If this is the case, you will see a message to hit any key to boot from the CD/DVD. This message is from the System Repair disk and means your computer is set up to do this. If not, you need to determine what key to hit to enable the boot function. When you first turn on your computer a screen should flash on and describe what options you have. If you have a very fast computer you may have to hit the “pause” key on your keyboard to read all the options. Look for one that provides you the option of booting your DVD. Many times this is one of the function keys like F10 or F12.

When your computer will not boot, the first step to try is boot off the System Repair DVD you made on the first backup. After the DVD loads you will get a screen that asks you to select a keyboard. The default should be US and all you have to do is select next. It will then look to see if it can find your Windows 7 installation. If it does, select next and it will try to repair your installation. Many times this is all you have to do. Sometimes it may find more than one problem and ask you to repeat this procedure until it fixes all the problems.

If it does not, your hard drive may have crashed because of a virus or fails due to mechanical or electrical reasons. First try to reinstall of your hard drive by choosing “Restore your computer by using a system image that you have created earlier”. This will put the computer back to where it was on the day you last backed up. If this does not work it means your hard drive has failed. Hard drives in a desktop computer are very easy to replace. Laptops are a little more difficult because getting the case open and locating the drive is more difficult, but in both cases there are only the power cable and data cable to unplug and replug. Your manual should give you instructions on how to open your case. Once you are ready to recovery the following steps should be followed.

1. Plug in your external hard drive.
2. Power up your computer with the Recovery DVD in the player.
3. Click on Restore.

Snipping Tool

On the Accessories sub-menu, you will find a new program called the Snipping Tool. This tool is handy to cut pieces out of screen displays and automatically

transfer them to the clipboard. If you only want to save a small area of an Internet page, use the Snipping Tool to capture, modify, save and other options. The Snipping Tool is a combination of enhancements to the Print Screen Key function and some of the features of the Paint program. Most of the screen shots shown in this manual were obtained by the snipping tool. If you plan to use it often, the options menu will allow you to add this icon to the taskbar.

To use just open the snipping program, the screen should change to a lighter color. Now use the mouse cursor to drag over the desired area. The area to be captured will change back to its original color. When you release the mouse button, the area selected will go to your clipboard and the snipping program. The snipping program will allow you to annotate your drawing with a “Pen” and a “Highlighter”. The erasure will allow you to undo your annotations.

If you want to capture a snip of a menu, such as the Start menu or other pop-up that disappears when you click on anything else, follow these steps:

1. After you open Snipping Tool, press Esc, and then open the menu that you want to capture.
2. Press Ctrl+PrtScn.
3. Click the arrow next to the New button, select Free-form Snip, Rectangular Snip, Window Snip, or Full-screen Snip from the list, and then select the area of your screen that you want to capture.

Desktop Gadget Gallery

Windows 7 has eliminated the Windows Sidebar that was in Vista. Programs called gadgets were installed in this area in Vista. Gadgets are still available and can be placed anywhere on your desktop. Type Gadgets into the search box and you will see the Desktop Gadget Gallery option. Double click on this program and you will get a list of gadgets that you can add to your desktop. Easier yet, you can right click on an empty area of your desktop and select Gadgets from this menu.

After you add a gadget to your display place your cursor over the gadget. To the right of the gadget will be icons that will allow you to modify the gadget. An icon that looks like a wrench will allow you to modify the settings, the X will delete it. Several of the Gadgets require that you have continuous Internet access to work. Examples of this are the Currency, Feed Headlines, Weather and Stocks gadgets. Since gadgets are programs that are running all the time, you may want to skip this feature if you have a slow computer or at least only pick gadgets that do not require Internet access.



Windows Live Essentials

Windows Live Essentials were established even before Windows 7 was released. Complaints about Vista were that it was slow and bloated and required too many hardware resources. Of course everyone has forgotten that is exactly what they said about XP when it came out and Windows 98, Windows 95, etc. when they came out. In the past the new operating systems always came out to match the new and better hardware that was available. Today, users range from people who need everything to those that only need a few functions. You have probably forgotten that Windows 95 did not have Internet or email capabilities. They were extra programs that you had to buy. Netbooks are a new class of computers that use small screens, keyboards, low powered processors, video processors and other limitations that prevent full service Operating Systems like Vista from working. They are great for carrying on a trip for checking email via the Internet, word processing and displaying presentation but fall short in doing many tasks that many users now take for granted, like burning CD's. By removing several large programs from the base installation of Windows 7 and making them free downloads from the Internet, the base version of Windows 7 can be loaded on a netbook. Also, when you run this base version on a desktop, it will run much faster than Vista. As you load more programs on the computer, it will slow down just like XP will slow down if you load all the programs that would make XP have the same features that Vista or Windows 7 come equipped with. When you buy a version of Windows 7 you are buying a list of features that are installed by default and those that you can download for free. The advantage of this approach is twofold. You install only what you want and do not suffer the speed penalty of having programs installed that you never use. Second, to upgrade these features, Microsoft no longer has to wait until a new operating system is released to upgrade a specific feature. For example, Windows Live Photo Gallery at the Microsoft's website is much better than the Photo Gallery installed in Vista. The same is true of the Live Movie Maker over the Movie maker installed in XP media center edition or Vista premium. If you had it before (or in the case of Windows 7 were authorized by your version) the website will allow you to install the newer better version. The bad news is that they are large programs and would take forever on dial up.