Basic Computing

By Dick Evans, February 2015

This White Paper is not meant to cover every topic known to man on computers. It just scratches the surface. There are many additional bits of information you already know or will pick up as you use your computer each day. This is meant to whet your appetite a little and get your started.

The following list shows the topics being covered. Click on any one to jump right to that section of this white paper.

Basic Tricks Using Windows

No matter which version of Windows you are using, XP, Vista, or 7, they all are very similar. The desktop is what you see when you startup Windows before you activate an app. You get to choose the image in the background, the size of the icons on the screen and the size (resolution) of the overall screen. You also can change the timing for switching to a screensaver and whether or not to require a password to come out of the screensaver mode.

To modify the appearance of your desktop right-click on the desktop and choose Properties (XP) or Personalize (Vista and up). No real need to use a screensaver any more as the new LCD monitors do not have a "burn in" issue like the old CRT's. However, it is nice to have the screen switch off after a while, and you can set the timing, and require a password to re enter. This stops someone else from poking around on your computer when you are not there. By the way, you can lock your screen when you are leaving by pressing Win+L. (The Win key is the picture of the flag and is usually located to the left or right of the space bar. Sometimes it is in the upper right corner.

Some other Windows Key shortcuts. Win opens the Start menu. Win+E opens Windows Explorer. Win+D clears the desktop. Win+Pause opens the System window.

The bottom of the desktop in all versions has a taskbar with a start button on the left and the time on the right. In XP it actually says Start. Mouse over the time and you see the date. Right-click the time and you can adjust for different time zones.

Right-click on the start button and select Properties to change the format and size of the Start menu. Another way to open the Start Menu is to press the Win key or Ctrl+Esc. Oh, when pressing multiple keys hold down all but the last key, then tap the last key, then release the others. DO NOT try to press them all at the same time or the results could be a problem.

The taskbar to the right of the taskbar is the System Tray popup arrow. This displays a number of the programs running in the background allowing you access to them when necessary. The network connection, printer, anti-virus, speaker selection, battery life, and more.

In between the Start button and the System Tray is where Windows displays the tasks you have launched like a browser, word processing, etc. All user initiated apps will appear on the taskbar. As you mouse over the taskbar items you might see a miniature window displayed showing what the current window looks like and if you click the task, that screen displays on the desktop. Alt+Tab will also allow you to scroll through the open apps.

When you open a program, a window will appear in one of two modes—full screen or smaller (referred to as the restore size). When in the restore size, the window may be resized by dragging the double arrow on any edge or corner to the size desired. To move a window it must be in Restore size; just drag the title bar. To switch between the two window sizes, double-click the title bar or click the restore or full screen button in the upper right corner of the window. The big X will close the window and the app. Alt+F4 is the same as clicking the Big X.

My Computer Locked Up

It is just stuck and nothing I do does anything! This can be caused by a few things. Often it is just that the computer is waiting for a response from you. A dialog box has popped up but is under another window and you cannot see it. Press Win+M to minimize all open windows. Dialog boxes cannot be minimized so they will be left on the screen for you to deal with. Answer the question and then click on the program you were working with on the taskbar to bring it back in view.

That did not work? It is time to look at the Task Manager. Press Ctrl+Alt+Del or right-click on an open space on the taskbar and select Task Manager. In the Applications tab you can see what apps are open. Click on the one you would like to use, and then in the lower right of the window click Switch To. If that does not work, click on the app again and then click End Task. It might take a while to end it, so be patient.

That does not work? Try the Users tab, click on the user name and then click Logoff. In XP you can use the Shutdown option from the menu bar to force a normal shutdown or restart.

That does not work? Although not the best thing to do, it is the only option left. Hold the power button in for as long as it takes to power off the machine. After waiting about thirty seconds, power it back up. Windows will start up and correct any issues it may have found.

Which Browser Should I Use?

The big blue e is the icon for IE. It comes with Windows and is popular for that main reason. It is also popular with the hacker community. Next in popularity is Firefox. Speed wise is about the same as IE but it is less popular with hackers and there are lots of add-ons to make it even better. Third on the list is Google Chrome. It is the newest of the trio and the fastest to load and use. However some sites may only fork with IE or FF. This is sure to change in the near future.

Browser Basics

All browsers have an address bar, a search capability, tabs, and a status bar. They all allow for bookmarks and keep a history of recently visited sites. You can set the homepage to one or more sites so each time you open the browser those page are located and opened. Typing the site name and pressing Ctrl+Enter adds the http, www, and com to what you typed. Right-click a link and select open in a new tab. Shift+Click the refresh button to duplicate the page in a new tab. Ctrl+ and ctrl- to make the words and images on a page larger or smaller. Shift+click method to copy from the page. Need to get to the address bar and select its content? Use Ctrl+L.

The biggest mistake most of us make is allowing additional toolbars to be added to our browser. They slow down your Internet access and take up valuable real estate. I see some browser windows where half the available space it used up with toolbars! Now you can hide all that junk by pressing F11. Now all you see is your actual page. Mouse to the top to display them temporarily or F11 to bring them back.

Why Use a Free Email Like Yahoo or Gmail?

Everyone gets an email address from their internet provider. Like windstream.net. You do not have to use this email address. You are paying for internet access and can use any email service on the net. When you use your provider's email you generally use Outlook Express to get your mail and it is transferred to your computer. With an email account with Yahoo, Gmail, Hotmail, or even AOL or Juno, they maintain all your mail on their server. It is not downloaded on your machine. If your computer crashes, you still have access to your mail. Switch providers and you still have the same email address. Use a friends computer or the local library and you have full access to all your mail.

Understanding Copy and Paste

First let's define some key concepts:

Right-click means to point at something on the screen with the mouse pointer and then clicking the right button on the mouse. Click means to click the left button on the mouse.

Drag means to point at something with the mouse pointer and then, while holding down the left button on the mouse, moving the mouse. This is generally used move what is being pointed to or to select what is dragged over. Right-drag means to use the right button instead of the left.

Select means to drag across a series of words or objects on the screen with the left button held down. This action causes what is dragged over to change color indicating it has been selected.

Copy and Paste is such a simple but misunderstood concept. Your computer has a hidden from view area called the clipboard. To copy something, select it—words in a document, an image, the URL of a Web site, or even text on a Web page. Then right-click on the selected piece and select Copy. You can also use the keyboard command that has been around since the beginning; Ctrl+C. To use it, hold down the Ctrl key, tap C, and then release both keys. Do not attempt to press both keys at the same time.

What you had selected is now in the clipboard. You cannot see it, but just take it on faith. It is there and will stay there until you either copy something else which replaces the content of the clipboard or you turn off your computer which clears memory.

Open the app you wish to copy the material to, like Word. Click to place the insertion point (that vertical line indicating where your next keystroke will appear) where you want the pasted material to be located, and then right-click and select Paste. You can also Ctrl+V to paste from the clipboard.

This same method can be used to copy a file to another location on your computer.

The Shift+Click Method

This method works whenever you want to select multiple items. It could be file names in a list of files, a series of sentences or paragraphs in a document, or even a part of a Web page to use in a document.

Locate the first word in the section to be copied and mouse over it to select it. Without touching any button on the mouse, bring the pointer down to the end of the section to be copied.

The key is to hold down the shift key, point to the ending position, and then click the mouse and all between the first selected entry and the place you last clicked have been selected.

Now that you have selected all of it, you can right-click and select Copy or simply Ctrl+C to copy it to the clipboard for pasting in another application.

Copying from a Web Page

When copying from a Web page even the behind the scenes coding is copied. You cannot see this information, but when you paste the selection into another app, like a Word Processor, the results are not just the text. Included are all the formatting, links, images, and often other things we may not understand.

To avoid this "mess", I suggest pasting first into a pure text app like NOTEPAD. This app accepts only the raw text dropping any other coding and images. Then select all the new data. Another shortcut is Ctrl+A which selects all data in the window having focus. Then right-click and copy to place that text data into the clipboard for pasting elsewhere. You can find an online version at http://notepad.cc/

Uploading Pictures to Email and Facebook

Uploading images is always a two-step process.

1. Browse to the location of the image
2. Upload the image

However, before uploading a picture you might want to resize the image to speed up the process.

I use an image resized called Prish Image Resizer. There are others and Vista and up includes the Snipping Tool that lets you grab a piece of the screen and paste it into another app. You can copy it to the clipboard or even save it as an image. It will be much smaller in size than the camera original, but as sharp as it was on your screen.

Also useful are these two Web sites: tinypic.com and tinyurl.com. Use them to include images inside the body of your email and to shorten an otherwise very long URL you want to send to someone else.

Why is my Computer Running Slow?

The speed is dependent on a number of factors. The first has to do with the OS and its updates. Each time Microsoft sends you an update the amount of memory needed to run the OS is increased. So 512MB of RAM may have been great when you got your computer, but now it needs a GB or more to do the tasks. The more RAM the better your machine will run. Use the Task Manager to see how much is used--right-click the taskbar and select task manager.

When your computer starts up it loads the OS and a number of processes and apps that load before you can get startered. The longer startup takes the more stuff is being started and the more RAM is being used. Often a number of these apps are not needed and were started because of some web sites you clicked or some other app that was installed.

Some of these apps may be advertising apps (adware) or even malware of some type.

RAM contains the operating system, all those startup processes, and each application you have opened up. They may not show on the window because they are hidden behind your current screen, but they are on the taskbar ready to be switched to. If Windows cannot find enough RAM to hold everything that is running is uses a swap area on the hard disk to move bits of programs and data back and forth and this takes a lot of time. Hard disk access is MUCH slower than RAM access time. So if you are running slow, close down a few apps and see it helps. By the way, having many tabs open on the browser is the same as having many apps open on the taskbar.

Run a cleaning program like ccleaner and adware often to keep your system clean of these issues. ccleaner also cleans up registry issues.

Also run a defragging program often to keep disk access of your files a quick process. NEVER defrag a solid state drive like a flash drive or SD card.

Another issue has to do with hard disk space. You should have no less than 10% free space on each Drive. Any less will cause your system to be slow.

Cleaning up the Hard Drive

There are a couple of apps in Windows you can use on a regular basis to clean up junk from the hard drive—disk cleanup and defrag. These have nothing to do with malware or virus checking. They simply remove unneeded files from your hard drive and reorganize the drive so file access is quicker.

What are these junk files? Temporary files left over from apps like browsing the Internet, installation files, deleted files from the recycle bin, etc.

What is fragmentation? Files are not always stored in contiguous areas of the hard disk. When you add something to a file, like when you change a document in Word, the additions go somewhere on the hard disk and are gathered together when you open the document. Defrag brings those pieces together. Windows has a pretty good defrag that runs automatically, but I like the one in Glary Utilities.

Make sure you are getting the Microsoft updates for your computer—either automatically installed or downloaded awaiting your agreement to install.

Also useful is www.microsoft.com/fixit which will check your computer for Microsoft software issues and fix them.

Using Security Software

There is no doubt that there are persons out there looking to attack your computer for no apparent reason except that they can. When you purchase a new computer it comes with a 30-90 days trial version of Norton or McAfee. They are excellent products, but they are also costly.

If you have Windows 8 or better, Microsoft includes antivirus software included. I dumped my "free" trial and turned Defender on. If you have an older OS like 7 or Vista, Microsoft Security Essentials is free and works great.

Microsoft has a free application called Microsoft Security Essentials you can download and it will take care of checking for viruses and malware as you use your computer.

In addition I use a number of free programs to keep my system running quickly. They include Malware Bytes, Glary Utilities, CCleaner, ADWcleaner, and Superantispyware. In addition I use EaseUS ToDo backup to make a complete image of my computer regularly. And I let Mozy cloud backup run a couple of times a day to upload new files in between images.

Reading and Creating a PDF

A PDF reader does NOT come with Windows. Your computer probably had a copy of Adobe Reader installed when you bought it and you are constantly asked if you want to upgrade to the latest version. Always do so to get the latest features and be protected from malware associated with PDFs.

Why care about creating a PDF? Not everyone has the same word processing application as you. So when you send them your document, they cannot read it. Or you do not want them to take your document and make changes to it. PDFs are an easy and safe way to send documents to others.

If you are using a new version of MS Word, you can save any document as a PDF. Older versions cannot do this and there is no free PDF writer from Adobe. Open Office and other office suites will create PDFs.

However there are a number of free apps available to allow you to create a PDF out of anything you can print. They install a "printer" on your computer which you can choose when you click Print. It creates a PDF instead of actually printing.

The one I use is on Ninite.com. Not only does it create a PDF from printer output, it will add password protection to the file and allow you to merge multiple PDFs into one.

Using the Cloud

First of all, the cloud refers to accessing apps through your Internet connection and not having them reside on your own computer. Second, it refers to storing your live data off of your own computer. In other words, all your programs like word processing and picture editing are accessed through your browser. No Internet connection? Then, there are no apps to run. Even if you have an app on your computer, with all your files in the cloud, you do not have the data on your computer.

But with today's easy access to the Web either through a home connection or a WiFi connection at a local coffee shop or bookstore this should not be a problem. And you can keep your data in both places, should you decide to play it safe.

There are a number of free office suites available in the cloud. The one I use is Google Docs and it can be accessed at docs.google.com. Another is zoho.com. They are free and compatible with Microsoft apps. Microsoft has its own on their SkyDrive. You get a stripped down version of Office and 25gb of space to store your files.

The cloud is a great place to store pictures. They are backed up in the cloud while you can still have a copy on your home computer. While in the cloud you can send links to others to view them or even view them on your own TV if you have a streaming device like Roku. Want a nice print of one of your pictures or maybe a calendar with your pictures included or even a book to give as a present with picture relevant to the person getting the present? The cloud based service can print and mail them for you.

So all we need is a computer with an Internet connection to access the Web. With nothing else on our computer we can access the cloud to run applications, save our pictures and documents, and even watch movies and television shows.

Finding Lost Files

You created it a few weeks ago, but do not remember where you saved it or what you called it? No problem, Windows can find that file for you using its robust search capability. From the start menu, select Search or open a file window and click the Search button.

First place to look is in your Recent Items. If you have not worked on too many things, it might be right there.

Second is in the app you were using. If it was a Word document, open Word and look in the Recent list. This will contain a lot more documents than the Recent Items list off the Start menu.

Type in what you think the file name is and it will look for it. Not sure? Enter the type of file like .doc and enter a time frame. It will show you all the files of that type you worked on in that time period. Do not know the name, but you do know something that is in the body of the document? Enter it and have Search look inside the documents for you.

Moving and Copying Files

Although we talked about using Copy and Paste with files, there is a better way. Open two windows on the desktop. One with the folder showing the file(s) to be copied or moved and the other the destination folder. Select the files or folders to be copied/moved. Click to select one file, Ctrl+Click to select additional files, drag a box around the files to be selected, or use the Shift+Click method to select a contiguous range of files/folders.

Holding the right mouse button down, drag the selected batch of files/folders to the destination folders. A menu will display giving you the option of copying or moving. Copying makes an exact copy of the original so you have both the original and the copy. Moving makes an exact copy, but removes the original when the operation is finished.

If you simply hold down the left mouse button and drag, the files will be moved if both source and destination folders are on the same disk. If not you will see a plus sign as you drag and the files will be copied. Shift and left mouse dragging will do the opposite.

Using a Flash Drive

Years ago the only way to move data between computers was a floppy diskette. It stored 1.44mb of data. Today a digital image made with your camera is often larger than 1.44mb and would never fit. Flash drives, like diskettes, require no energy to keep data stored. Their capacity ranges up to 128gb, but the typical and affordable size are between 2gb and 16gb.

A flash drive is an external storage device. It is a disk drive that can store anything you can store on your machine's internal hard drive provided the flash drive is large enough. They come in many names and forms—thumb drives, USB flash drives, SD cards, memory cards, and even inside your cell phone and camera. Using Copy and Paste you can move data to and from computers—referred to as a "sneaker network"!

In the newer operating systems of Vista and up, a flash drive can be used to increase the available RAM on your computer. It is slower than internal RAM, but much faster than letting the system use your hard disk drive as memory when it runs out of available RAM.

Backing up Data to a CD, Flash Drive, or in the Cloud

The lowest cost method to backing up locally is to use a blank CD-R. They cost about 20 cents each but only store about 700 mb. For many, this is plenty of room to save all the important documents. Since most digital images from today's cameras create pictures of 1 to 2 mb, one CD-R will hold about 350 pictures. If your computer came with a CD or DVD burner, it also came with the software to copy and burn files to it. Windows has built in backup software you can use.

This is not a daily routine. Every once in a while create a fresh copy of your files just in case your machine crashes because of a hard disk error or more likely a virus. All you will lose is the data that was created since the last backup.

Another method is to use a USB flash drive. This is like the above, but all you have to do is Copy the folders you want to save over to the flash drive. Like the CD-R approach, this is not a daily routine and you should have at least two flash drives that you rotate. You would not want to have the machine crash in the middle of backing up to your only flash drive—you would lose the backup and the original. With two (or more) flash drives you would always have the last one to fall back to.

There are free synchronizing apps out there that will copy only the changed data to your backup drive. This you would do daily. One I have used is called GoodSync and it can be downloaded at goodsync.com. be careful to only sync with one computer.

Another backup approach is online. There are many online backup sites to choose from. The one I use is called Mozy. You can access it at free.mozy.com. They give you 2gb for free and if you use my code GFBU22 you get an additional .25gb free. Now 2.25gb may not seem like a lot, but for most of us it is plenty if we store our pictures somewhere else. It is the equivalent of 1,777 diskettes!

I use Facebook and Flickr and Shutterfly as places to put my images. I also back them up to an external hard disk from time to time. But all my normal data is backed up 3-4 times a day automatically to Mozy.