BITS AND BYTES

March 2012

Newsletter of the Midland Computer Club

http://mcc.apcug.org/

GENERAL CLUB MEETING
7:00 P.M.

4th Wednesday of the month at the
Midland Community Center
2001 George St., Midland, MI

This month's date:
March 28, 2012

This month's topic:
Setting up and securing your home router - Howard Lewis

What you missed!
Cloud Examples - Larry Piper

Upcoming Activities:
April - Disaster Preparedness in the Digital Age - Laura Hammel

Program Coordinators
Howard Lewis   lewis3ha@chartermi.net
Bill Tower   stressed@tir.com

Please let Howard or Bill know of topics you would like covered at future meetings.

President Piper's Ponderings

Now if I was a traditional leader, I would open this missive with: "Boy, do I have an opportunity for you."

The Midland Computer Club, in conjunction with the Community Center, is going to try (again) to lure PC users to our four, free, 2 hour lab sessions with the idea that one or two will be teaching sessions.

Nicki, the new director at the Senior Center, calls herself an idea person. In a couple individual meetings with her, Howard and I have bounced around some ideas, and we have mutually agreed on some things the Club could do and some things we would not care to do—like creating extensive notes for a formal class.

Once the tax season is over in April, Nicki will be advertising that one or two of our lab sessions will be a somewhat 'formal' Q&A session. We also might schedule specific topics like: How do I use Facebook? or How do I use email? or even Which computer should I buy?

So think about the questions you get asked or the ones you might like to ask. It is a little recognized fact that ALL the members of our Club are way more knowledgeable than the average PC user. Someday each of you may decide to take a shot at covering one of these lab sessions. Or here is an idea you might pursue: many of us in the Club show up at one of these lab sessions even though we are not the person 'in charge.' We get some time to talk 'shop' and maybe try out some ideas in a relaxed atmosphere.

I don't have any idea if anything will come from our efforts to reach out to the 'average' PC user. I know we are fighting the 'you can lead a horse to water, but …' inertia problem, particularly with seniors. But, as I said in the opening, this is an opportunity to showcase the talents of our Club members and at the same time give some payback for the room we use for free. Believe me, you know a lot more than you think you do.

(The above comments are the opinion of the author and do not necessarily reflect the views of the Midland Computer Club.)

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Board Meeting

Next board meeting will be
7 p.m., April 10, 2012, at
Chapel Lane Presbyterian Church,
5501 Jefferson Ave., Midland MI

Useful, useless and strange (in no particular order) Web Sites:

http://sevennaturalwonders.org/
We've all heard about the Seven Natural Wonders of the World. This site is featuring the Seven Natural Wonders of each Continent.

http://www.getnetwise.org/
Learn how to improve your security while on the Internet.

http://oreilly.com/openbook/
O'Reilly Media has launched an "Open Book" project. These are books that have been scanned and made available under an "open" license." Although the list is somewhat short and technical, it will expand as time and authors feel that some of their works should be published under an open license for access by all. These are available in pdf format)

http://www.butterfliesandmoths.org/
Are you interested in butterflies and moths? This site will help you identify the ones you see.

http://tinyurl.com/879lpnv
If you find turning the pages to your newspaper to be to tedious, you might give this Rube Goldberg device a try.

Membership Enrollment Form

NAME _____   PHONE _____

ADDRESS _____

CITY _____   ZIP _____

 EMAIL ADDRESS _____

Membership dues   FAMILY ($20)   STUDENT ($15)   New Member _____   Renewal _____

Please fill out the above form and mail it along with payment of check or money order to :

MIDLAND COMPUTER CLUB   Attn: Membership Chairman
   1816 Bauss Ct
   Midland, MI 48642-4023

You may also pay for membership at a regular club meeting

Tips, Tricks & Techniques

Backing Up Windows Live Mail In Windows 7

When using a local email client, it is important to frequently back up the files where your mail, calendar and contacts are stored. To do this, you will need to know that location. (This tip does not apply if you are using an online mail client like Gmail, Hotmail, Yahoo, etc.)

If you use Windows Live Mail, you can find out where on your computer, your mail is stored by using the following steps:

Click the *dark blue tab* in the upper left corner of the window and then select *Options* and *Mail* (See Figure 1). This will open the **Options** dialog box.

Next, click the *Maintenance* tab and then the *Store Folder* button. (See Figure 2). This will open up a dialog box which will show the path to your email store. Unless you have changed the storage location, it will probably be at *C:\Users\logonid\AppData\Local\Microsoft\Windows Live Mail*. (Substitute your logon id in place of logonid.) With the standard Windows 7 configuration, the **AppData** folder will be hidden. However, by keying or copying the path into **Windows Explorer** you can still get to it.

Once you have gotten to the proper location, simply copy those files to your offline storage location (CD, DVD, external disk, DropBox, etc.).
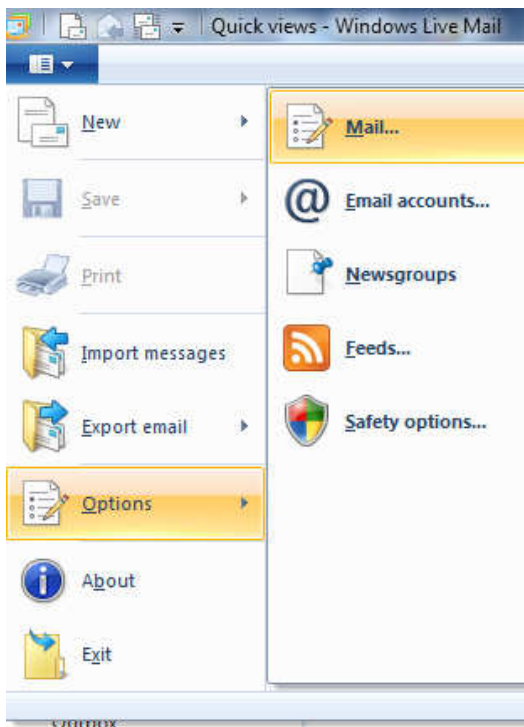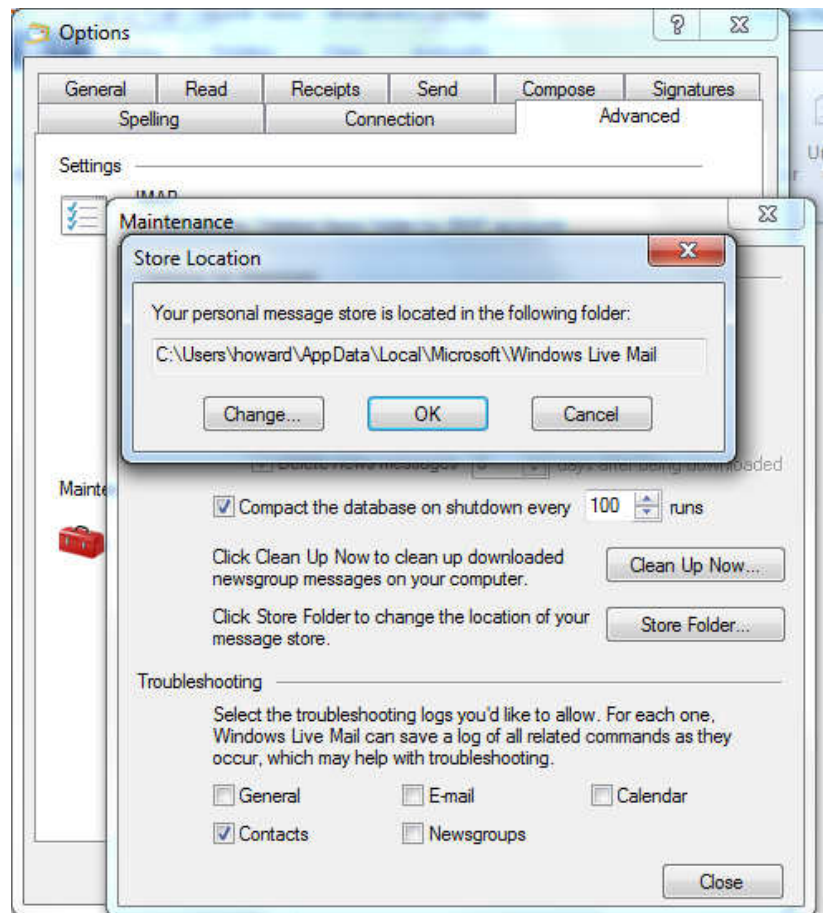

Figure 1

Figure 2

Tips, Tricks & Techniques *(Continued from page 3)*

Roll Back a Driver in Windows 7
Usually you update a device driver for a good reason. In Windows 7, the default drivers usually work pretty good, however, sometimes you need additional functionality that the default driver doesn't support. In most cases, a driver update goes without any problems. But occasionally (although very rarely), the device will go wonky (don't you love these high-tech terms!) and won't work properly after an update. In that case, it may be necessary to "roll back" the driver to use the one that was in use before the update.

The steps are quite easy:
1. Right-click on *Computer* in the **Start** menu and select *Manage*.
2. Provide *Administrator* permission (if necessary).
3. Select *Device Manager* in the left-hand pane and find the malfunctioning device.
4. Right-click the device, select *Properties* and then the *Driver* tab.
5. Click on *Roll Back Driver* and *agree* to the statement that appears.

That's all there is to it. One note to remember is that Windows only keeps one copy of the previous driver. You cannot go back multiple versions. To do that you would have to either have the older version stored someplace on your computer or download a previous version.

Super Control Panel

If you use Control Panel very much, you will frequently find it frustrating to get to what you want to do. There is a neat little trick, which will allow you to start up Control Panel and go directly to the program that you wish. To accomplish this, right-click on the *Desktop* and select *New* and then *Folder*. Press *Enter*. This will create a new folder on your desktop. Now give the folder the following name: *Super Control Panel .{ED7BA470-8E54-465E-825C-99712043E01C}*. You can replace "Super Control Panel" with whatever name you want to give it, but there must be a period directly in front of the hexadecimal string. Also, this string must be enclosed in braces ({}). Now you will have an icon that looks like the Control Panel icon, but once you open it, you will find a couple hundred programs that you can run directly. (My system has 274 programs.) You can now run one of these and go directly to the program rather than navigating through multiple screens.

ARTICLE INDEX

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but, is Siri a Google killer?

By Linda Gonse, Editor/Webmaster, Orange County PCUG, California
December 2011 issue, nibbles & bits, www.orcopug.org, editor (at) orcopug.org

The following two points of view offer interesting observations projecting the value and usefulness, and duplication of Siri in other OSs. Siri is an artificial intelligence feature built into the iPhone 4S. David Coursey begins. He has been a tech writer for the past 25 years for major computer publications. Rebutting Coursey's article is Jon Jones, NCMUG's newsletter editor and president of Lunarparcel Media. His videos explaining 4S iPhone features, such as Siri, are at http://tinyurl.com/7p9mrjf . — Linda Gonse

To start, in his Five Reasons Siri Is Not A Google Killer on Forbes.com, David Coursey said, "I don't mean to minimize the impact Siri will have on mobile devices, remote controls, etc. But, we are very early in the game and saying that Siri is going to kill anything is way premature. Let's revisit this in a year and see what the competitive landscape and Siri's market share look like then. "I understand how much many in the Apple community want something bad — really bad — to happen to Google, but I don't think it's Siri, at least not yet." http://onforb.es/v7mAuK

Jon Jones responds: "Interesting points. I think he's mostly right, but not all of the points are on target. In Point 3, he seems to make the mistake of categorizing iPhone users as the "typical Apple devotee" niche, and that's just not the case at all. Most iPhone users couldn't care less about Apple, and don't own or use other Apple products.

"He's also a bit zealous in his statement about Google's inherent wisdom in Point 4. I wouldn't give them such latitude. They do their share of experimentation to see what sticks, and will continue to make bad calls along the way, just as everyone else exploring new territory will as well.

"While it is definitely true that Siri heralds the developing method in which folks will typically engage their technology, it will in no way be a Google killer. I think folks just use that type of terminology to be sensationalistic and baiting. While Eric Schmidt has categorized Siri as a threat to Google, the reality is that some of Siri's functionality still finds Google's fingerprints under the hood, as well as a significant helping of Wolfram Alpha's mojo, which was also posited as a Google killer, which was never to be. They're different animals living in the same zoo. In broadcast news terms, Google is the info coming off the wire, and Wolfram Alpha is the guest commentator framing it for viewers. Siri is up on the roof re-positioning the rabbit ears.

"By that analogy, I mean both Google and Wolfram Alpha have demonstrated their unique approaches to gathering and presenting their data. I equate Google with a straight up clinical presentation of data. Wolfram Alpha serves more to contextualize the data for practical use, and Siri provides a more convenient method of tuning in to these pre-existing channels of accessing data — whether that is through a simple search, or a more intelligent and nuanced exploration of relevance.

"Google already has some of the basic framework on how a similar interface might be realized, and they've been ahead of the game on that front for quite a while. What they are lacking is the AI component that Apple invested in, but I know that both they, as well as Microsoft, have been exploring similar avenues for a while. I personally don't see this in the context of competitiveness, though each of the businesses will continue to frame it that way. Each of them will seek methods to keep their product locked into its own ecosystem….even Google with their "free," "open source," platform will be undergoing some growing pains trying to leverage control in the arena. But I think there is still a lot of room for all the contenders to continue to grow and develop. The core of the article is accurate. Google is in no danger of being killed by Siri. "Basically, Siri itself doesn't pose a threat to Google. It is an Assistant, not a search engine. It utilizes pre-existing search mechanisms to access and acquire information."

Discovering Windows 7 – Part 22

By Neil Stahfest, Vice President, Tacoma Area PC User Group, Washington
December 2011 issue, the Data Line, NCStahfest (at) msn.com, www.tapcug.org

The Windows operating system contains a number of built-in functions to display files, change display settings, change mouse settings, etc. Most of these functions can be accessed in more than one way. By pressing the Windows logo key (the key with the waving Windows flag – usually to the left of the space bar) either alone or in combination with another key enables you to work with Windows without using a mouse or other pointer device. For example, instead of clicking on the Windows Start Button to open the Start Menu, just press the Windows logo key. More examples follow:

File search - If you want to find a file you could click on the Windows Start button and then type the name of the file in the search box that appears above the Start button. This requires that you take one hand off the keyboard, grab the mouse, point at the button, left click and then take your hand off the mouse to enter the file name.

Using the Windows logo key, you can search without removing your fingers from the keyboard. All you have to do is simultaneously press the Windows logo key and the F key. When the search box appears, just enter the file name you are looking for.

Copying between folders - Do you ever need to move files from one folder to another? I frequently copy or move files to a flash drive. I also move pictures from my digital camera to my computer.

The usual way to copy or move files is to open both folders at the same time so you can see the contents. To do this you is to open one folder, click to reduce the size of the folder to less than full screen, then move your mouse pointer to the top of the windows and click and drag the folder to the side until it "snaps" to fill one side of the screen. Then you open the second folder, reduce the size, click and drag it to the other side of the screen. Then you click and drag to copy or move files from one folder to the other.

Using the Windows logo key method, you open one folder, hold down the Windows logo key and press the right arrow key to move it to one side of the screen. Next you open the second folder, hold down the Windows logo key and press the left arrow key to move it to the left side of the screen. Then you copy or move files from one folder to another in the usual manner.

Windows mobility center - Do you have a portable computer? Try pressing the Windows logo key and the X key. This opens the Windows Mobility Center. From this menu you can adjust screen brightness, check battery power and turn on or off your wireless network connection.

Connecting to multiple displays - Do you ever connect your computer to more than one display or a projector? Try pressing the Windows logo key and the P key. This brings up Windows projection controls. Use the arrow keys to switch between the choices available.

Windows properties - Do you know what your computer's system properties are? What version of Windows are you using? Is it 32-bit or 64-bit operating system? How much RAM (memory) is installed? What processor is installed in your computer? These are questions I frequently ask when I'm looking at someone else's computer. There are several ways to find this information but the easiest way is to simultaneously press the Windows logo key and the Pause key (you may have to scroll to see all the contents of this Window).

As you can see the Windows logo key can be pretty useful. It lets you directly access many Windows functions without going through the Windows Control Panel or using your mouse and provides a faster way to control Windows. To learn more, click on the Start button, select "Help and Support" and type "shortcut keys" in the search box.

Using SANDBOXIE to Safely Browse the Internet (Based on ver 3.60)
www.sandboxie.com

By Jim McKnight, Director, Los Angeles Computer Society, California
December 2011 issue, User Friendly, www.jimopi.net, jim.mcknight (at) lacspc.org

GENERAL:
Once Sandboxie is set up, all you have to do is click the Sandboxie Icon on the desktop and your regular Internet Browser opens safely in a sandbox.

Sandboxie uses your regular Internet Browser to go on the Internet without the fear that you will be tricked into infecting your PC by malicious websites, or by infected downloads.

Although Sandboxie does some amazing things with many kinds of programs, this article focuses on using the Sandboxie program to make your Internet browsing safe from malware infections.

The tips in this article are for the FREE version of Sandboxie. The paid version offers many bells and whistles, but for safe Internet browsing, the FREE version is adequate. Be aware that some programs do not play well with Sandboxie. For details, see: http://www.sandboxie.com/index.php?KnownConflicts

NAG SCREEN: The only downside to the FREE version of Sandboxie is that 30 days after installation, a Nag screen pops up most every time you use it with a 5 second delay telling you that the Nag delay will go away permanently if you buy Sandboxie. (Currently about $42.00 for a lifetime license that works for all your PC's (as an Individual owner).

HELP AND TUTORIALS:
For an overview of what a sandbox is, go to the http://www.sandboxie.com home page.
Also see the Sandboxie Help pages at: http://www.sandboxie.com/index.php?HelpTopics

See this Tutorial video set (3 parts; About 20 min total). It is very good:
http://www.securitytube.net/video/578

You can get to the 6-part "Getting Started" tutorial for the Sandboxie program at any time as follows:
(Double-click the Sandboxie Control Icon on the Task bar > Help > Getting Started Tutorial)

DOWNLOAD AND INSTALL SANDBOXIE
You can download the SANDBOXIE program from: http://www.sandboxie.com
During the installation, you may be notified of software compatibility conflicts between Sandboxie and some other program/s. You will be asked to give permission to automatically change some configuration settings to fix it. Just click OK. Note: You can get to this screen anytime: (click Sandbox > Configure > Software Compatibility).

SETTING UP SANDBOXIE TO "AUTO-DELETE" FILES:
By default, Sandboxie does NOT Auto-delete anything. Everything is saved in the sandbox until you delete it.

Using SANDBOXIE to Safely Browse the Internet (Continued from page 7)

I highly recommend setting up Sandboxie to "Automatically delete contents of sandbox" when the sandboxed browser is closed. This will delete all browser changes, add-ons, downloads, and program installs (including malware) each time you close Sandboxie.

To set up Sandboxie to always Auto-Delete:
1) Double-click the Sandboxie Control Icon in the System Notification area.
2) In the Sandboxie window; (click Sandbox > Default Box > Sandbox Settings > Delete > Delete Invocation).
3) Click to check the box for _ Automatically delete contents of sandbox, and click OK.

NOTE: "Auto-delete" usually does not include manually downloaded files. They are kept in the sandbox until you manually either Recover them or Delete them.

MANUALLY DELETE EVERYTHING IN THE SANDBOX:
Double-click the "Sandboxie Control" system tray Icon, then; (click Sandbox > Default Box >Delete Contents) Close the Sandboxie Control window.

SAVE (RECOVER) DOWNLOADED FILES:
Sandboxie offers you the opportunity to save "for real" any downloaded files both after you download the file and when you close the browser. If you do not save them, they disappear when you close Sandboxie (but by default stay in the sandbox for you to recover or delete later). Saving for real is called Quick Recovery.

Each time you download files to the Desktop, you are usually (but not always) prompted to "Quick Recover" that file (save for real).

If you download files to anywhere other than the Desktop, you will NOT be prompted for "Quick Recovery". Later, you can get to the Quick Recovery (save for real) screen by double-clicking the Sandboxie Control Icon in the notification area, then select (Sandbox >Default Box > Quick Recovery). Click on the desired Item/s (to highlight them), then click either "Recover to Same Folder" or "Recover to Any Folder".

Last resort: If you are still having trouble saving a file "for real" AND if you trust the download website AND if you trust the file: Close sandboxie, browse to that site without Sandboxie, and download your file. Scan it for malware before using.

EXPLORING DOWNLOADED FILES
It is best to explore downloaded files that are in the sandbox by using the "Sandboxed" version of Windows Explorer:
1) Open the Sandboxie Control program by double-clicking its Icon in the System Tray.
2) Click (Sandbox > Default Box > Run Sandboxed > Run Windows Explorer) .

Now as you explore the system using Windows Explorer in sandboxed mode, you will see your downloaded and sandboxed files right alongside regular files in the same folder where you downloaded them. This can be confusing so hang in there.

CHECK DOWNLOADED FILES FOR MALWARE
There are two ways to scan downloaded files for malware:
1) You can get to the file using the sandboxed Windows Explorer shown above, then right-click the file and run your normal Anti-malware program scan on it to make sure it is safe before "Saving it for real".

Using SANDBOXIE to Safely Browse the Internet (Continued from page 8)

2) Everything that is sandboxed is actually hidden in a folder called C:\Sandbox. Your antivirus scanner can be run against that folder and will inspect all the files in it for malware. It should then be safe to save those downloaded files "for real".

HOW DO YOU KNOW IF ARE RUNNING IN THE SANDBOX?
Two ways:
1. Look for # (pound signs) before and after the Browser's name in the Title Bar.
2. Hover the mouse pointer near the top of the active browser window. If you are running in the sandbox, the window frame will be outlined in a YELLOW border.

MAKING E-MAIL LINKS OPEN IN A SANDBOXED BROWSER:
My preferred way is to first open your default browser in the sandbox. Then if you click any links in your e-mail, they will open in the sandboxed browser.

If the default browser is not already open in the sandbox when you click an e-mail link, then the link will open the default browser WITHOUT being sandboxed.

RUN A DIFFERENT BROWSER "SANDBOXED"
The Sandboxie Icon (Free version) always uses the system's "Default" browser. You cannot specify different browsers for the Sandboxie "Sandboxed Web Browser" Icon. (The paid version of Sandboxie has more flexibility).

If you want to use a different browser with Sandboxie, you have two choices:
1) Right-click the desired browser Icon (Context Menu), then select "Run Sandboxed".
   Note: Depending on your Operating System, the context menu option for Sandboxie may not show up.
   (IE: Quick launch Icons or the Start Menu Favorites Icons). It does always work with the Desktop Icons.
2) Change the Default browser:
   a. Close the sandboxed browser.
   b. Change the default browsing program to the one you desire. The method varies for different operating systems.
   c. Double-click the Sandboxie "Sandboxed Web Browser" Icon. The new browser should now open.

CHANGES TO THE BROWSER:
With Auto-Delete turned ON, Sandboxie will NOT save your Browsing History or any added Bookmarks, or any other changes to the Browser when Sandboxie closes.

With Auto-Delete turned OFF, your Browser changes will be remembered, but only within the Sandboxie browsing session. If you open the Browser without Sandboxie, the changes will not be visible.

PERMANENT CHANGES: Any Browser customizations such as (Add-ons, Favorites, Bookmarks, Toolbars, etc.) that you want to be permanently changed in your Browser must be installed by opening the Browser WITHOUT using Sandboxie, and then making the changes. Otherwise, any changes you make will be sandboxed and will disappear.

PRINTING: Yes, you can print stuff as usual from your Browser (even PDF's from the sandboxed Adobe Reader).

BROWSER IS SLOW TO CLOSE: This is normal from time to time. Make sure there are no open windows hidden behind the main browser window awaiting user action.

Using SANDBOXIE to Safely Browse the Internet (Continued from page 9)

DESKTOP "INTERNET" SHORTCUT ICONS: If you like to use various different browsers to go on the internet, be aware that your regular Desktop Internet Browser Icons do NOT use Sandboxie to open them. To create new Desktop Internet Icons that WILL use Sandboxie to open a specific Browser program, try this:

Open the Sandboxie Control program by double-clicking its Icon in the System Tray. Click (Configure > Windows Shell Integration > click the "Add Shortcut Icons" button.).

Click OK a couple times until you get to the window titled "Sandboxie Start Menu Default box" and select "Desktop".

Click to highlight the desktop Icon you want to duplicate. The new Icon will immediately appear on the Desktop.

Be sure to rename each Icon after you create it. This is so Sandboxie will not overwrite it when you create another Icon.

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Too Many Choices
By Wil Wakely, President, Seniors Computer Group, California
December 2011 issue, Bits and Bytes, www.SCGsd.org, wilw31 (at) gmail.com

Choosing a computer used to be relatively easy: Do you want a desktop with a tower or a flat unit that fits under your monitor? This is no longer true. Now we have a plethora of choices: Desktop, Laptop, Notebook, Tablet, Smart Phone, and smart e-Book Reader. Perhaps I have missed a late comer; if so, forgive me. Let's review the features, pros and cons of each.

Desktop
For a fixed location, non-portable computer a Desktop is the best choice. It is the least expensive computer and can be easily customized to whatever your computing needs might be. It is a necessity for gamers and heavy-duty computing such as photo and video processing, CAD (computer-aided design), and data processing. There are wide choices of software and hardware which results in lower costs and greater availability of these items. Larger displays, multiple ones if desired, are available along with specialty multi-function keyboards and a variety of mice, all of which can be easily attached. More powerful computer chips, memory chips, video processors, large, multiple hard drives and powerful wireless adaptors are choices only available with Desktops.

The choice between proprietary brands such as Dell or HP vs. a "plain vanilla" custom machine depends upon your budget and how much technical support you may need.

Laptop
Portable laptop computers come in a variety of sizes, prices and features. Many of the more expensive ones rival some Desktop machines in capability. The display screens are smaller than Desktops and the keyboards with the integrated touchpad mouse are not as user friendly as those on Desktops. Newer models have built-in Wi-Fi for connection to the Internet, whereas older models required a USB Wi-Fi adapter. Most Laptops have a built-in video camera for video messaging with friends via Skype. For equivalent features, Laptops are always more expensive than Desktops as are any repairs or upgrades.

However, if portability of a powerful computer is a requirement, a Laptop is a good choice. An auxiliary USB external hard drive or large thumb drive (flash drive) is useful for backup and storage for Laptops.

Too Many Choices *(Continued from page 10)*

Notebook
The Notebook is just a smaller, lighter version of a Laptop with a smaller screen and keyboard. It is not recommended for heavy duty use, but is fine for travel and is less expensive than Laptops, Tablets or Smart Phones. Most of the Laptop features are also found in Notebooks. Some Notebooks come with electronic memory instead of hard drives. This memory is faster and lighter, but holds much less data than hard drives. The Chromebook by Google is a Notebook that utilizes the Cloud for much of its power and capability.

Tablet
A Tablet has no external keyboard, but the screen is touch sensitive so a virtual keyboard on the screen is provided instead. However, the touch-screen eliminates much of the standard keyboard activity. The availability of software for Tablets is growing rapidly, but there is nowhere near the number of titles available for the computers described above. For casual use, Tablets are fine for email, Web browsing, limited word processing and spreadsheet work. Most Tablets are less expensive than Laptops, but often cost more than Notebooks. Tablets also have e-Book reading capability. They have no hard drive but Cloud storage via the Internet somewhat replaces this function. The iPad by Apple seems to be the leader in Tablets, but many competitors are coming on-line with similar features at lower prices.

Smart Phone
There are two major varieties of Smart Phones: iPhone and Android. The iPhone is a proprietary operating system by Apple and is more expensive than other Smart Phones, but is claimed to be more user friendly. The Android phone is an "open source" operating system developed by Google and as such has many more Apps, (software applications). The major drawback to these phones is the small display screen. They have touch screens in lieu of a keyboard. However, they are cell phones, which none of the above are. They are also connected to the Internet for email and Web browsing and can play music and video. The phones can be quite inexpensive because the carriers (Verizon, ATT, etc.) require signing a two year contract for the reduced cost. Breaking the contract early can be very expensive. There is a basic cost for the phone service and an equivalent monthly charge for Internet service. There also can be an additional service charge for data usage. Look for unlimited data-use contracts, if available.

Smart e-Book
Older e-Book readers were just that — monochrome digital book readers, e.g., early models of the Amazon Kindle. Newer Readers such as the Amazon Fire and Barns & Noble Nook have full color touch screens with Wi-Fi along with their e-Book reader function. The Fire also has free Internet connectivity via Sprint. So the e-Books are now competing with the Tablets, having similar features but with a display size intermediate between Tablets and Smart Phones. Look for e-Book Readers to become even smarter in the near future.

So what's next? I predict expanded speech recognition and generation will soon be incorporated in most computers, as an alternate to touch-screen, mouse and keyboard. A larger selection of Apps will become available as software programmers jump on this lucrative bandwagon. Faster Internet connections are already available in selected locations and will come to your area soon. Look for LTE, 4G, 5G and even faster connections. Better displays that don't wash out in sunlight are being developed and we should see them soon. Lower prices and enhanced features due to competition favor the consumer and should happen very quickly. Decisions, decisions…

Stay tuned!

Glissando and the Art of Hacking
By Larry Piper, President, Midland Computer Club, Midland MI

Problem #1:
The computer won't start and you need to retrieve some data from the hard drive. What do you do? Let me suggest some ways.

1 – You take the PC to a repair shop. 2 – You ask a guru friend. 3 – You are the guru.

Your approach to this and similar type problems says volumes about you to behavioral scientists and marketing consultants, but for now let's set aside all the commentary about geeks, blonds and the 1% and focus on the problem at hand.

My approach has always been to remove the hard drive (HD), install it in an external hard drive case and read this HD on a second PC. When I am sure I have access to the data, I can continue on with the traditional solutions: try an operating system (OS) recovery CD, an anti-virus boot CD or a Linux bootable CD.

Problem #2:
You don't know the password to start a PC. Unless it is a BIOS password, the above CD solutions again come to mind.

Problem #3:
Your PC is seriously infected with a virus. You boot the affected PC with an anti-virus CD which scans the HD and, hopefully, cleans up the virus.

Problem #4:
You are on a public or 'foreign' PC or you don't want to leave a 'footprint' while working on it. Again, the CD solution will likely work, but by now you are thinking there must be a better solution than carrying around a CD all the time. You have heard that PCs can also be booted from a small, flash drive, and that idea sounds better all the time.

Problem #5:
You just plain want to start a PC that you should not have access to. The thought of pulling this gadget out of your pocket, popping it into a USB slot and pressing CTL-ALT-DEL is very appealing; you know it works because you have see it done all the time on the detective TV shows.

Solution:
These five problems have a pattern; it suggests that, if one carries around a bootable CD, you can start most PCs. For some time I have been doing just that with what I call the 'Goldilocks' CD solution: a mini-CD of 185 M that will hold either the Puppy or Tiny Linux OS and yet is portable enough to carry in your pocket. But PCs made in the last 3-4 years can also be booted from a flash (also called a thumb, jump or stick) drive. So now we have reached the meat of this article: how to quickly start any PC with a flash drive. You need two things: a PC that can be booted from a flash drive and a flash drive that can be made bootable. Let's attack each requirement individually.

If a PC is very old, the BIOS will not let you boot from a flash drive and there is nothing you can do about that. If the PC is flash drive bootable, you still may have a problem getting it to do so. That's where the glissando comes in.* The boot sequence must be set so any USB flash drive will be tried before the HD,

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and that may require entering a Set Up mode to change this boot sequence. Different computer and BIOS manufacturers use different keys, but usually they are ESC, F2, F9, F10 or F12. So within a couple seconds of the PC starting, I do a glissando on the F-keys, thus guaranteeing I have interrupted the normal boot cycle. They I select the USB boot choice and continue on.

The second part, making a flash drive bootable, can be a crap shoot since all flash drives are not created equal. At least this was the case for the instructions I had previously read. Then I learned of Universal USB Installer, (UUI), a 1 M download that does all the heavy lifting for you. You buy any flash drive; 1 G will work, but you may want to use 2 G or 4 G for your boot drive. Plug in the flash drive and let your PC install the necessary drivers. Then run UUI. It does not install on your system, but rather gives you a choice of which OS you wish to install on the flash drive. Now you are presented with way too many choices. I counted 20 current Ubuntu choices, 15 older Ubuntu choices, six other major Linux OS options, a few from Puppy and other smaller Linux OSs, 7 anti-virus choices and even Vista and Win 7. The choice you make requires you have the ISO file for that choice. If the ISO file is not on your system, you are offered the opportunity to download it. Next, tell the program which drive is your flash drive (get this correct because UUI is going to format it). In a couple minutes you have a bootable flash drive.

I have so far created only the Puppy OS, but I intend to create flash drives for Tiny Linux, Ubuntu Linux and one of the anti-virus programs. I will also try the Vista and Win 7 options, but that will require me using my own (legitimate) copy of those operating systems. The Puppy OS boots a PC in a couple minutes; that includes some setup time. You can subsequently save your work to the extra space on the flash drive, so that is a reason for having a 2 or 4 G flash drive to start with.

I hear you saying, "I don't know how to run Linux." Believe me, you can run Puppy Linux. I would also bet that after you try Puppy or any other of the Linux distributions, you soon will be thinking about how you could run OpenOffice (OO.org). OpenOffice will allow you to read, edit and save ANY Microsoft office suite program. Of course, all the software mentioned is open source, as in free, so your only expense is in a couple flash drives.

OK, so my title to this article was a little misleading, but the idea is that FOR WHATEVER REASON, you can painlessly start most PCs without the time and cost of a repair shop. I would venture a bet that you will use this solution far more often that any backups which you have diligently created.

Final Flash: I discovered that ANYTHING plugged into a USB port can boot your PC. An external, USB hard drive, if it has a boot sector, will boot your PC. But more important for us, an SD disc, plugged into a USB reader, can also be made bootable. The current costs of SD and flash drives are similar, but it is likely you can more easily find old 1G SD discs that you used to use in your camera.

Final, Final Flash: It appears that one can copy/burn the contents of a newly created, bootable flash drive to a CD/DVD. That might give the ability to boot an older PC which does not have a USB device in the book sequence.

* glissando is when the piano player runs his/her thumb/finger across a consecutive series of keys