

# PACC TALK

Official Newsletter of the Pittsburgh Area Computer Club

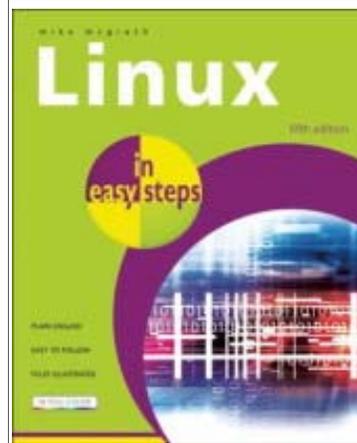
May 2011

## MEETING SCHEDULE

Sunday, May 15, 2011

- 11:00 - 11:25 am Sign In, Pay Dues, Greet visitors, Purchase 50/50  
ROOM # 311 tickets (Optional), Setup Computers, Connect to Internet , Prep for Meetings
- 11:00 - 11:25 pm PACC BOD Meeting  
ROOM # 301
- 11:35 - 12:00 pm Windows New Users  
ROOM # 301 Can we help you? V. Agrawala
- 12:00 - 12:30 pm General Meeting, Raffle. (pg. 1)  
ROOM # 301
- 12:35 - 2:00 pm UltraDefrag, GParted Live,  
ROOM # 301 Hamster Free Zip Archiver, SPlayer (pg. 1)
- 2:05 - 3:30 pm More programs and utilities ..... (pg. 1)  
ROOM # 301
- 2:05 - 3:30 pm Hardware SIG  
ROOM # 311 Users Helping Users - guests included
- 1:00 - 3:30 pm Linux SIG, Members Helping Members,  
ROOM # 311 Computer troubleshooting, Info Exchange
- 3:30 - 4:00 pm Pack Up Equipment, Doors Close

\*\*\* RAFFLE \*\*\*



“Following this book's simple instructions, readers quickly install Linux, learn to explore the desktop, and launch great applications. This fully illustrated primer teaches important know-how, like how to climb the Linux directory tree, navigate with the File Browser, and much more.”

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### Windows SIG

**UltraDefrag - found at Sourceforge web site.** From the web site: “UltraDefrag is the first open source disk defragmenter for Windows which supports defragmentation of locked system files by running during the Windows boot process. Actually all files including registry hives and page-file can be defragmented at Windows boot time.

Also one of the primary goals of the UltraDefrag design is doing the job as fast as possible.”

Go to the following link to find the file **ultradefrag-4.4.0**

<http://sourceforge.net/projects/ultradefrag/files/ultradefrag/>

It is a small 349 KB download.

Go to this link to learn much more about the program:

<http://ultradefrag.sourceforge.net/handbook/Introduction.html>

Volume	Status	Total Space	Free Space	% free
C: [NTFS]	Analyzed	48.82 Gb	9.27 Gb	19 %
D: [NTFS]		195.30 Gb	42.10 Gb	21 %
E: [NTFS]		195.30 Gb	49.07 Gb	25 %
F: [NTFS]		394.38 Gb	31.74 Gb	8 %
G: [NTFS]		146.48 Gb	37.34 Gb	25 %

Cluster map:  Skip removable media

Analyze 100.00 %

24200 folders 122363 files 6028 fragmented 161 compressed 134.75 Mb M

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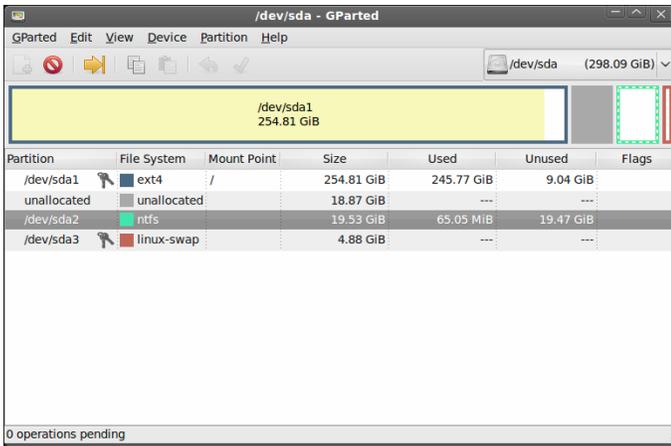
### GPARTED Live - do not live without it!

“GPARTED Live is a small bootable GNU/Linux distribution for x86 based computers. It enables you to use all the features of the latest versions of the GPARTED application.....GPARTED Live can be installed on CD, USB, PXE server, and Hard Disk then run on an x86 machine.” It is a large download of Just under 130 GB, but worth the effort. You can get it here:

<http://sourceforge.net/projects/gparted/files/gparted-live-stable/0.8.0-5/>

Go down the web page a little. Pick which file will be more convenient for you. I recommend the ISO it should be less work.

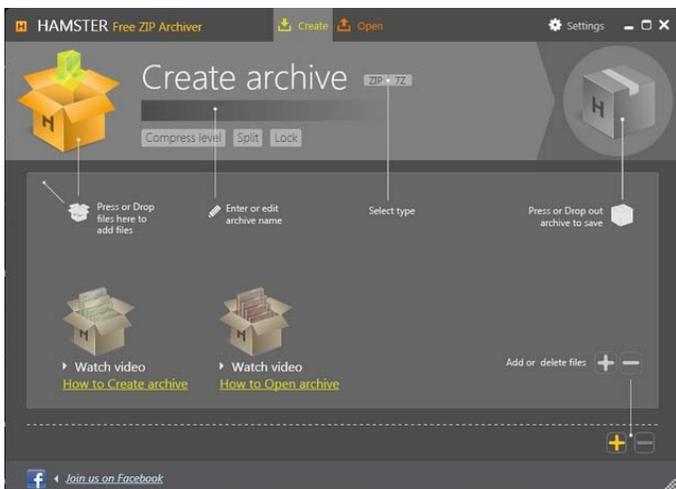
**gparted-live-0.8.0-5.zip — or — gparted-live-0.8.0-5.iso**



 <http://www.hamstersoft.com/>  
From his web site:  
“Hamster Free Zip Archiver is the first archiver in the world to take full advantage of multi-core processors when creating zip-archives. ... Everybody may use Hamster Free Zip Archiver on any computer at home, in business and government organizations without any restrictions and any amount of hosts. You don't need to register or pay for Hamster Free Zip Archiver. No one needs to pay for any further updates and plugins.”

The download is tiny, only 383 KB, which you find at:

<http://ziparchiver.hamstersoft.com/>



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## The Tip Corner

By Bill Sheff, Novice SIG Coordinator,  
Lehigh Valley Computer Group, PA  
March 2011 issue, The LVCG Journal  
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nshell (at) aol.com

### Google Chrome Home Button

If you look at the interface of Google Chrome, as compared to other browsers like Mozilla Firefox and Internet Explorer, you will notice that there is no “home” button. You know, the little house icon on the toolbar? The other browsers have it, but not Chrome? It's ridiculously easy to fix.

- Open Chrome, click on the Wrench icon in the upper right-hand corner and select Options.
- Under Home Page, put a check next to Show Home button on the toolbar.

The effect is instantaneous! Click Close and you now have a home button in Google Chrome!

### PowerPoint does not open?

If you can't open PowerPoint presentations that come in your e-mails you are not alone. This can happen even with the Power Point Viewer. Try some of these tips:

2. How are you checking your e-mail?

The very first thing to look at is the way in which you are checking your e-mail. If you check e-mail via a dedicated e-mail client such as Outlook, Outlook Express, Windows Mail, Eudora, etc., instead of double clicking on and trying to open the PowerPoint file from within the e-mail program, export the PowerPoint file from your e-mail into a folder on your desktop (typically done by dragging and dropping the file from your e-mail message into your desktop folder) then double click to open it. The reason for doing this is that some e-mail clients will try to open a file using its own program features and/or incorrect associations, instead of using the correct program to open the file. As such, you will typically see an error message, or no response. If you are not using an e-mail client, but a web mail interface (such as Hotmail, Gmail, Yahoo, AOL, etc.) to check your e-mail, you will want to download the PowerPoint file from your e-mail to your desktop, then attempt to open the file on your computer instead of in your e-mail. Again, doing so eliminates one more possible misconfigured program (in this case your Internet Explorer, Firefox, Chrome, or other web browser) from attempting to open your PowerPoint file by downloading or moving the file to your computer and trying to open it there.

If either of these steps opens your PowerPoint file, you have just found a solution to your problem. You may still want to look at configuring your e-mail client and/or web browser to associate PowerPoint files with your PowerPoint reader program.

2. Check your file type.

Believe it or not, PowerPoint itself can be the problem. There are currently four distinct types of files commonly output by PowerPoint, each of which have restrictions on how the different versions of PowerPoint can read them. These file types are:

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- PPS - Used to contain a "viewable" PowerPoint presentation. This PowerPoint file will normally open in the PowerPoint Viewer or the full version of PowerPoint without issue.
- PPT - Used to contain an "editable" PowerPoint presentation. This can sometimes be viewed in the PowerPoint Viewer but will only be editable in the full version of the PowerPoint software.
- PPSX/.PPTX - The same as .PPS and .PPT, respectively, but saved in a newer Open XML format introduced in PowerPoint 2007.

Typically, you will not be able to view PowerPoint files of these types without a recent version of the PowerPoint Viewer or PowerPoint 2007 or higher. If you are unsure of which file type you are having trouble opening, right click on the file and select Properties from the menu.

3. Get with the program.

With the above in mind you will want to confirm that you do (or do not) have the correct programs installed on your computer to read them. The quickest way to do so is to update your PowerPoint Viewer to the most current version. After installing the latest PowerPoint Viewer, just about any PowerPoint file should open right up for you to view; simply click on and open the file on your desktop in the PowerPoint viewer. If it does not open, download and install the latest version of OpenOffice, which includes Impress, which is a part of the OpenOffice suite of programs. Impress has many of the same features and editing capabilities of the full version of Microsoft Office PowerPoint, but at a very hard to beat price: FREE!

4. Check your source.

If the file still fails to open, you either have a damaged or corrupt PowerPoint file, or a password protected PowerPoint file. In either case, you will want to contact the sender and have them resend the file and/or give you a password to open it.

I hope all your PowerPoint files can now open without any problem.

### Clear Your Firefox Downloads List

Do you have quite a lot of files you've downloaded via Firefox?. Not sure? Open up Firefox and click **Tools>Downloads** and a window pops up. Is it pretty cluttered and in need of a good clean out? To delete single downloads from your Firefox queue, simply right-click the download you'd like to delete from the list and select Remove From List. You can clear the entire list by clicking the Clear List button at the bottom of the download window.

Note: This doesn't delete the physical file from your computer; just the listing in the Firefox downloads window.

*the end of the story*

#### ATTENTION PACCSTERS:

For some time we have been trying to reach members to confirm their e-mail address, so the PACC TALK notification which goes out to let you know, the newsletter is at the PACC web site ready to download. Some members did not yet confirm getting the notice. Please do so! Thank you, PJK .

## 7 Little Word Annoyances and Their Easy Fixes

By Nancy DeMarte,  
Columnist, Office Talk, Sarasota PCUG, Inc., FL  
March 2011 issue, Sarasota PC Monitor  
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Below is a collection of frustrating things that can happen when using Microsoft Word. These annoyances can occur in any version of Word although most are geared to Word 2007 and 2010. In Word 2003, the fix-it steps may be different.

**Annoyance 1** -- You accidentally press the Caps Lock key on your keyboard before typing a paragraph. When you finish, you find everything in capital letters.

**The Fix:** Rather than retyping the whole paragraph, highlight the text, then click the "Change Case" button (Aa), located on the Home tab in the Font group. Click "Sentence case" to transform your paragraph into normal sentences.

**Annoyance 2** -- You create a party invitation with a light blue background (Page Layout tab - Page Color). But when you print it, the background is white.

**The Fix:** Office has set Word to not print full page background colors, probably to save users from wasting ink. You can, however, make the colored background print. Click the Office button, then Word Options -- Display. Put a check mark next to "Print background colors and images," then click OK. Until you remove this checkmark, all colored backgrounds will print.

**Annoyance 3** -- You're working on a document where you've set the text size to be a fairly small 10 points. But you find that the text is too small to view comfortably while you're typing.

**The Fix:** Drag the Zoom slider located in the bottom right corner of the Word window to the right to enlarge the screen view of the text. When printed, the text will be 10 points no matter how big it appears on the screen.

**Annoyance 4** -- You find that the spaces between lines of text in your document are wider than you want.

**The Fix:** If all the spaces are wider than expected, you can change the line spacing for the whole document at once. On the Home tab, in the Editing group, click Select -- All to highlight all the text. Next click the Line Spacing button in the Paragraph group and select 1.0 for single-spacing or one of the other choices.

Note: Word will not remove extra space after paragraphs when you choose a line spacing size. To remove extra space after a paragraph, select the paragraph before the extra space, click the Line Spacing button and choose "Remove Space After Paragraph." A more permanent way to create no extra space between paragraphs is to open the Paragraph group dialog box launcher (small diagonal arrow) on the Home tab and put a checkmark in front of "Don't add space between paragraphs of the same style."

**Annoyance 5** -- Every time you type an email or web address into a document, it turns into a clickable hyperlink with underlined blue text, even if that isn't your intention.

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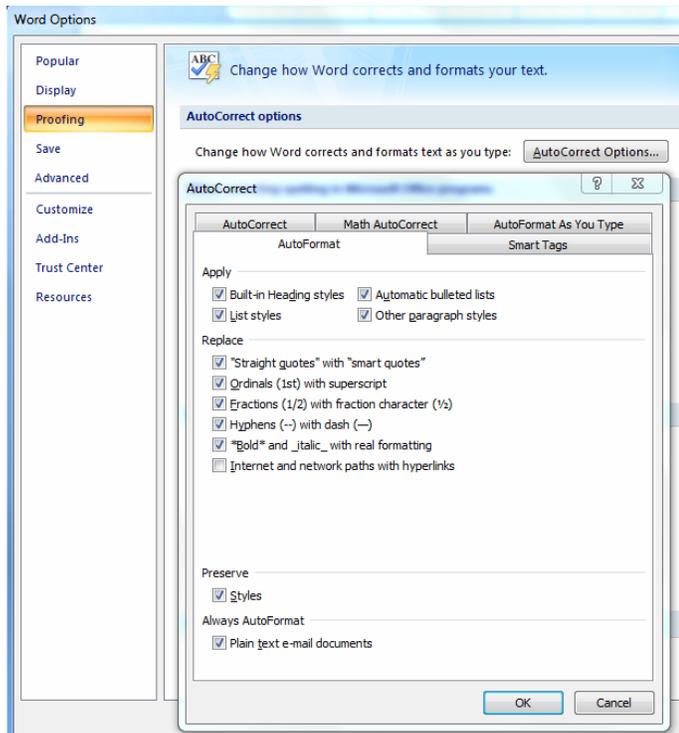
(Continued from page 3)

**The Fix:** The quickest fix is to right click the address and select "Remove Hyperlink." But this is only a one time remedy. To remove this action permanently, click the Windows button, then this sequence: Word Options -- Proofing -- AutoCorrect Options -- AutoFormat As You Type. Remove the checkmark next to "Internet and Network paths with hyperlinks" and click OK.

**Annoyance 6** -- You find that as you type, distracting wavy red and green lines show up under words and phrases.

**The Fix:** Word is set to check spelling (red lines) and grammar (green lines) as you type. This is another Proofing option which comes enabled from the factory. To turn off one or both of these features, go to Word Options (Office button - Word Options) and click Proofing. Remove the checkmarks next to "Mark grammar errors as you type" and "Check spelling as you type." You can always check spelling and grammar after your document is complete by clicking Spelling & Grammar at the left end of the Review tab.

Several of these fixes involve the settings found in the Options area of the Office 2007 menu (File menu in 2010). Options are available for all the Office programs (Word Options, Excel Options, Access Options, etc.) These default settings were determined by interviews with thousands of people who use Office regularly in the workplace. If you find that the factory settings are causing you more trouble than help, changing them is a simple task. All Office users should take a personal tour of the Options menus, which resemble this Word Options window with the AutoCorrect box open:



**Annoyance 7** -- You often save documents to the same folder which is buried within other folders in My Documents. It takes several clicks to find this folder each time you want to open or save a document to it.

**Fix 1:** You can find almost any folder on your Windows Vista or 7 computer by typing its name into the Start Menu search box just above the Start button. Often it takes only a letter or two before the folder appears in the search results. On the downside, you have to do this each time you want to open the folder.

**Fix 2:** A way to make any folder immediately available is to add it to the Favorites section of the navigation pane. This pane appears on the left side of any explorer window where you are viewing, opening or saving files and folders. To make a folder a Favorite, start by creating or opening a file, like a document, and click Save As, which opens the Save As dialog box. This reveals the navigation pane on the left, showing a list of possible places to save the file. Navigate to the folder you want to make a favorite so that it is the last item in the history bar across the top. Then right click the word Favorites in the left pane. From the drop down menu, click "Add current location to Favorites." Your special folder will now appear in the Favorites list. It will also appear in the Favorites list of the other MS Office programs on your computer, such as Excel and PowerPoint. To remove a folder from Favorites, right click the folder and select Remove.

Using a computer should be fun as well as useful. Take a few minutes to think what your personal computer annoyances are and try to find fixes for them. Customizing your programs makes using the computer much more enjoyable and efficient.

the end of the story

## Add Text on a Photo in Word 2007

By Lynn Page, Editor, Crystal River Users Group, Florida  
December 2010 issue, CRUG newsletter  
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newsletter (at) crug.com

When creating a document it may be useful to place text with or on top of a photo. You could create a new photo with the text in a digital photo editing application and then save it for use. But if you will just use that image once why go to the bother. Within Word 2007 you can add the text on top of your photo using either WordArt or a text box. Which method to use depends on the effect desired. For text that is short and an interesting stylized look is what you want WordArt is a good option. For plain and simple text a text box can match the text to that in the rest of the document.

### Text Box on Top of a Photo

Placing a text box on a photo can be as easy as inserting the photo, creating a text box and dragging the text box onto the photo.



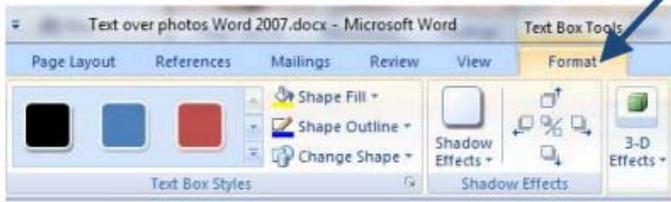
To add a photo to a document place the insertion point in the document where the photo is to be located and click the Picture icon in the Illustrations group on the Insert tab. Browse to the photo in the Insert Picture dialog box, select it and click the Insert button.

To place a text box on the photo first create the text box. Place the insertion point on a line below the photo. Then in the Text group on the Insert tab, click text box and then click to select Simple Text Box. In the inserted Text Box type the text. To change the font or style of the text, highlight the text and then select the desired text formatting as with any other text. Drag the text box sizing handles to resize it as necessary. Finally click the outside edge of the text box and drag it to

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the proper location on top of the photo.



The default Text Box will have white fill and a black border. For use over a photo you will probably want no fill color or border. With the Text Box still selected click Text Box Tools and on the Format tab, in the Text Box Styles group, click Shape Fill and select No Fill. Then click Shape Outline and select No Outline.

With the Text Box you can add text on top of a photo and move the text to position it over the photo, but you can't rotate it. To be able to rotate the text or use text that is more stylized use WordArt.



### WordArt on Top of a Photo

To place WordArt on the photo first create a Drawing Canvas. Place the insertion point in the document and then in the Illustrations group on the Insert tab open the Shapes drop down menu and click New Drawing Canvas.

With the new drawing canvas still selected on the Insert tab, in the Illustrations group, click Picture. In the dialog box browse to and select the photo to use and click the Insert button. Again on the Insert tab, but in the Text group, click WordArt, select the style desired, and type the text. Select either piece of art and use the sizing handles to resize as desired. Click the outside edge of the WordArt to select it and drag it over the photo. Use the rotation handle to rotate the text to the angle that works best for the photo.

Once the graphics are correctly formatted and positioned group them. That creates a single graphic that can be moved or resized. The text stays with the photo. To create a group click the outside edge of the photo, press and hold the CTRL key, and click the edge of the WordArt so both items are selected. Under Drawing Tools, on the Format tab, in the Arrange group, click the arrow next to Group, and then click Group.



the end of the story

(Continued from page 2)

### SPlayer - not a real competition to VLC, but still interesting.

From [fileforum.betanews.com](http://fileforum.betanews.com) review ....

"SPlayer is a simple and yet practical media player, which supports all the popular media formats, including DVDRip, HDTV, RMVB, QuickTime, MPEG-2, MPEG-4, AC3/DTS, VP3/6/7, Indeo, XVD, OGG/OGM, APE, FLAC, TTA, AAC, MPC, 3GP/AMR, and subtitles."

Download of 6.7 MB, which can be had here:

<http://www.splayer.org/index.en.html>



the end of the story

## A “Light Peak” at Thunderbolt

TechTip by Ryan Morse, March 13, 2011  
www.geeks.com

Apple has been stealing recent headlines with two product line refreshes in the past few weeks. The bigger of the two was probably the iPad 2, but it's the I/O technology introduced in the new MacBook Pro I'm interested in. Thunderbolt, a collaborative effort between Intel and Apple, dubbed “the fastest connection to your PC experience,” is the newest high-speed I/O protocol and in this TechTip we're getting to know this interface and what it's bringing to the table.

### History



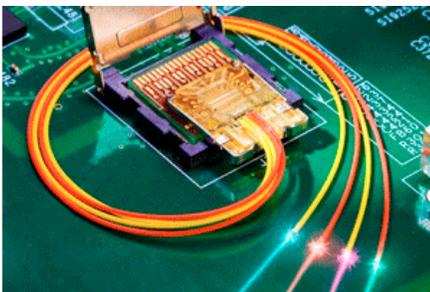
Thunderbolt

Intel announced Thunderbolt, which was code-named at the time, at their Intel Developers Forum (IDF) in 2009 on a system that was displaying two 1080p HD video streams at once over optical cables (hence the “light” in Light Peak), that used modified USB connectors. Intel intended it to replace the many different cables, especially **video cables**, on the market and that it would be in PCs by 2010.

The cables were initially designed to bundle optical and copper wiring together, pairing the speed of light with the electrical conductivity of copper, to provide a low-latency, high-speed connection that provides power for devices.

### What is it

Thunderbolt combines the existing fundamental technologies of PCI Express bandwidth and Mini DisplayPort connectors to provide two-channel 10 Gb/s bandwidth upstream and downstream per port, double that of USB 3.0, over copper wire cables with optical cables coming later. You will be able to daisy-chain up to seven devices together, anything from high-resolution displays to cameras, scanners, and data storage devices, all without a hub, because Thunderbolt controllers will be able to transmit video and data signals are the same time over the same cable. A “power-only” copper cable will carry up to 10 watts of power at up to 3 meters and optical cables will be able to carry signals at what Intel says will be “tens of meters.” If you scoffed at the previously-mentioned 10 Gb/s bandwidth, Intel has al-



ready demonstrated 700 Mb/s on its prototype hardware. Since Thunderbolt uses existing technology, it's designed to work seamlessly with your operating system. A Thunderbolt device will work as either a PCI Express or DisplayPort device on a non-Thunderbolt system, which solves the problem of port-sharing. If you accidentally plug a Thunderbolt device into a regular Mini DisplayPort, it should work, provided the device isn't relying on power through that port. You can also use non-Thunderbolt devices in your daisy-chain by adding them to the end of the chain. You can also use the wide variety of DisplayPort, DVI, and VGA adapters so your older displays will work with it as well.

### Impact

Since Thunderbolt is debuting on the MacBook Pro and will double as the system's Mini DisplayPort, it's primary use is going to be connecting to high-definition displays and HDTVs, but with its ability to handle extremely high bandwidth transfers, it's perfectly suited for carrying high-definition audio as well, making it a viable competitor to both HDMI and FireWire, as its functionality serves both of their functions. Intel also claims that Thunderbolt is a complement USB\_3.0, as opposed to being a replacement. It isn't clear if Apple is going to phase FireWire out of its products in the future, but Thunderbolt seems like a logical step forward because it's designed to accomplish the same thing and is twelve times as fast, and its Mini DisplayPorts consume very little space.



### Conclusion

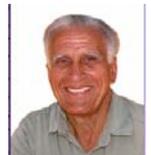
Thunderbolt essentially brings PCI Express connectivity out through Mini DisplayPorts, but it's not designed for every home user just yet. Instead, it's aimed at the professional and workstation market segment, especially those who are editing high-definition audio and video.

This may not have an immediate effect on the home user, but as it is said, “a rising tide lifts all boats.”

*the end of the story*

## Broadband2Go

By John Roy, President, The PCUG of Connecticut  
March issue, The Program  
www.tpcug-ct.org  
johnroy1 (at) comcast.net



I have been itching to purchase an AirCard® for my laptop computer. We take several trips during the year with our Roadtrek motor home and, while Wi-Fi hotspots are more abundant these days, Instant Internet access is really appealing. Unfortunately for this instant gratification you have to pay a big price. Being frugal I wasn't prepared to commit to a two-year contract at \$60 per month for the privilege.

For those of you not familiar with an AirCard, it is a high-speed wireless broadband card that gives users mobile Internet access on their laptops, using a cellular data service. AirCards can be purchased from wireless providers in various styles such as USB, PCMCIA, ExpressCards and as a portable router. It's interesting to note that AirCard is a registered trademark but used generically to describe these devices such as we use Xerox and Kleenex.

Last year my daughter needed daily email and texting capability that her present cell phone did not provide. She already had an iPod Touch but Wi-Fi hotspots were limited. I researched various options to find a



MiFi 2200

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minimal cost solution and focused on Virgin Mobile's Broadband2Go MiFi 2200 credit card router. The driving factor was Virgin Mobile had the cheapest data plans without any contract obligations.

The MiFi 2200 router is unbelievably small just like a credit card and can serve five computers at the same time. There is an initial cost of \$150 for the device but then you can buy air time to fit your needs. This device is extremely portable and will run four or more hours without a recharge.

After monitoring my daughter's success with the MiFi 2200, and knowing we were taking an extended trip with our motor home, I decided the time and price was right for my purchase. Virgin Mobile sells two broadband products with the same data plan options. In addition to the \$150 MiFi 2200 they sell a \$80 USB MC760 device. The MC760 plugs into any USB port but unlike the MiFi router it is dedicated to the one computer.



After reviewing the pros and cons for my situation, I chose the MC760. I didn't have a need for sharing my hotspot with five computers, the USB device didn't require a battery, and I saved myself \$70. Of course the best part is I was not locked into a contract and could buy time as needed.

Is buying an AirCard from Virgin Mobile a "no brainer" for everyone? The answer is no but it should be on everyone's evaluation list. Here are some key considerations beyond the primary driver of saving money. Their cellular service is the Sprint 3G network with good coverage in populated areas or primary highway corridors but poor coverage in other less populated areas. You should check their coverage map to be sure you will have a good signal for your specific needs.

There is some good news and a little concern on their data plans. Last year they offered a \$10 (10 day 100MB) and a \$40 (30 day unlimited) plan. This February they increased the \$40 plan to \$50 and put some speed restrictions beyond 5GB but the deal is better than competing providers. While the price hike was concerning, there is an unpublicized secret you should know. If you purchase either device from Wal-Mart you are offered an optional \$20 (30 day 1GB) plan.

How the plans work is when you start using a plan it will end when either the time period or data limit is met. On the \$50, 30-day unlimited data plan when you reach 5GB of data use your speed will be limited to 256kbps for the remainder of the time period.

One final note is both devices have several neat software options beyond the basic application.

The MC760 has a micro SDHC memory card slot and the capability of adding an optional antenna to increase range. Documentation is less than meager and only includes startup instructions but once initiated the setup is interactive. Most importantly you can find a detailed manual on line. If you are in the market for an AirCard or curious for more details, visit their website.

<http://www.virginmobileusa.com/mobile-broadband/>

the end of the story

## Cell Phone Lingo

By Wil Wakely, President, Seniors Computer Group, CA  
March 2011 issue, Bits and Bytes, The Official Electronic Newsletter of the Seniors Computer Group  
[www.SCGsd.org](http://www.SCGsd.org)  
[wilw\(at\)adnc.com](mailto:wilw(at)adnc.com)

When it's time to buy or upgrade to a new cell phone, are you as confused as I am with all the fancy terms and acronyms in the sales pitch? They make my head spin. Some of the terms you will encounter refer to the technology generation of the phone, as in G0 to G5. About every 10 years the next larger G (generation) number appears denoting a major improvement in cell phone technology. Each generation improves the speed, security, power usage, range and reliability of cell phones.

G0 refers to the original mobile telephone, a large unit stored in the car trunk with a hand-set between the driver and passenger seat. Remember those? Essentially it was a souped-up short-wave radio. These first made the scene via Motorola and Bell Telephone in the 50's.

Next came G1 using GMS tech (see below) which also was analog, first introduced in Japan in 1979 and later in the USA in 1983. In 1992, G2 was a major improvement using digital technology vs. analog that was used in G1. So what's the difference? Analog is a continuous smooth signal like whistling a tune. Digital rapidly samples the song and converts each small time segment into a series of ones and zeros, or digits. Through some clever complex calculations, these digits are converted back to the original sound tone and volume. The advantages of digital are that the data can be compressed and encoded for security and no information is lost as long as the 1/0 signal can be detected, even from a lot of accompanying noise.

In 2001, 3G was introduced using a new technology called CDMA (code division multiple access) developed by our local Qualcomm company. This is a very complex encoding that allows many more users on the same channel at the same time. G3 is probably the most common system in use today.

G4 arrived in 2006 and allows 1 Gbt/s (one gigabit per second) downloads from a fixed location or 100 mbt/s (megabits per second) from a moving vehicle. These high speeds allow streaming high-definition video (HD movies) on your cell phone. Also, connections to the Internet are faster and better. G5 is still in the lab and promises even more features, but may not arrive before 2020.

The cell phone field is rampant with 3, 4, and 5 letter acronyms. Here are a few that a salesman may try to impress you with:

**GMS** (global mobile system): still widely used in older phones.

**TDMA** (time domain multiple access): sharing the airwave in small time slots.

**FDMA** (frequency domain multiple access): sharing the airwave in different frequencies.

**CDMA** (see above).

An analogy to the problem of multiple access is a room (channel) in which people wish to talk to each other simultaneously. To avoid confusion, people could take turns speaking (time division), speak at different pitches (frequency division), or speak in different languages (code division). Other terms you may encounter are LTE (long term

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## Your Computer's Health - What Junk Files?

### Part 3

By Bob Woods, Webmaster, UCHUG  
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March 2011 issue, UCHUG Drive Light  
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The UCHUG Drive Light is presenting a series of articles on the general topic of Your Computer's Health. I have a Compaq laptop that is around 7 months old that I use for reading e-mail, surfing the web, publishing the changes to the UCHUG web site and occasionally playing games. Since I have any important files backed up on external devices I have not been too concerned with making a full backup image of the hard drive on this PC. I also have not run any cleanup utilities. After all, if it ain't broke, why fix it? But, after having the PC for 7 months I thought it might be time to take on these tasks. In the January 2011 edition of Drive Light, Art Gresham started a series of articles on PC maintenance. Part 1 of the series was tips for basic hard drive and OS data cleaning. I figured that there is no better time to do a cleanup than before imaging the hard drive.

Following Art's advice I first loaded CCleaner. I am a volunteer in the IT department at the USS Midway Museum; we use CCleaner to start data cleanup on the computers in use by the staff so I am familiar with its use. When run, CCleaner gives you a nice interface with a number of options for cleaning temporary files left behind by Internet browsers (IE, Firefox, etc.), Windows Explorer, Windows itself and other applications that use temp files. To check on what it finds you can click on "Analyze" vice "Run Cleaner." That way you have a chance to determine what the application will be doing. I expected it to list a number of IE and Firefox temp files, but was surprised at how many system and application temp files it found. In all over 350 MB would be cleaned off the drive. After running the cleaning function I clicked to scan the registry for problems. During this scan CCleaner looks for unused items, missing shared DLL's and application paths, obsolete software references, leftover installation references, fragments and a few other items. CCleaner lists all that it finds for you to review.

Again, given that the PC was only 7 months old I was surprised by the number of leftovers from updates and software removals. Cleaning these items will result in a cleaner registry which will speed bootup and shutdown times and increase system stability. When you click to "Fix selected issues." you will be given the option to save the registry prior to the cleanup or cancel the operation. It took about 10 minutes to do the all of the cleanup.

The next application to install and run is Advanced System Care. This application will allow you to further clean up the registry, remove Spyware, clean up more junk files and past browser history. You may ask why do this as CCleaner did some of the same functions? Each of the applications will take a slightly different approach to scanning your system and find different items the other did not find. Sure enough, there were a few more registry issues and temp files missed by CCleaner. Advanced System Care also has a system diagnosis section not in CCleaner that will analyze and fix system performance, system configuration and security problems. Another few issues were cleaned up. Advanced System Care also took about 10 minutes for the cleanup. I could have also used it for disk defragment, but wanted to use a separate defrag program so loaded IOBit Smart Defrag.

Smart Defrag is another application that has a nice clean interface that is easy to use and understand. When ran it I found fragmentation after 7 months was less than 1 % (only .71%). Back in the earlier versions

of Windows I would have expected at least 10-15% fragmentation. It seems that the OS may be getting better at not fragmenting files. Still, any fragmentation will use extra space and take extra time for the hard drive heads to move to pick up bits and pieces. So even at less than 1% fragmentation I was willing to take the time to perform the defragmentation. Total time was about 15 minutes to defrag the 50 GB of data stored on a 220 GB drive.

At the end of the whole process I saved hard drive space, cleaned up the registry, and eased the burden on the hard drive. So, did I see a performance improvement? Without running a benchmark it would be hard to tell, but the system does seem a bit quicker. But the overall benefits to the health of the system should result in better performance and longer hard drive life. As for the backup, it went smoothly and is much cleaner as I did not back up un-necessary temp files and junk in the registry.

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*the end of the story*

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## Your Computer's Health

### Part 4

#### Comprehensive Computer Maintenance

By Greg Skalka, President, UCHUG  
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March 2011 issue, Drive Light  
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People need computers. Computers need maintenance. Unless you want to gamble with your email, continued access to the Internet, your finances and the other things we have come to depend on from our personal computers, you should consider some preventative maintenance. Even if you are unconcerned about a temporary loss of computer use, if you use it to access your financial accounts, you could be risking those assets and your financial reputation by failing to maintain your computer's resistance to viruses and malware.

Just as a car requires maintenance to provide reliable transportation, a computer needs regular care to insure it can safely and reliably negotiate the Information Superhighway. The concern is not only for making sure the computer works when you need it to and does not lose valuable information, but it also must protect you from attacks by information thieves. Neglecting basic computer maintenance can increase the risk of problems resulting from hardware and software failures, and can leave you open to theft of your identity and finances.

Since I must provide the maintenance and IT support for all the computers and users in my household, I've developed a basic process for computer care that provides a lot of protection for minimal cost and effort. It has evolved over the years, as computers and the threats to their well-being have changed, and has allowed me to prevent any serious computer problems from occurring. There is nothing you can do to completely prevent problems like hard drive failures, but you can take steps that will insure against the loss of data and allow you to be computing again soon.

My computer maintenance philosophy involves three basic computer maintenance principles I call the three up's: setup, backup and cleanup. Setup requires that each computer be configured as much as possible to make maintenance easier and operations safer. This can involve not only your computer's hardware and software, but your home network's hardware and configuration as well. Backup provides a reliable way to safeguard your computer's data and configuration, allowing you to

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recover easily from most any problem with minimal data loss. It can not only prevent information loss resulting from hardware failures, but can also protect your computer's configuration from alteration during the installation of questionable software. Cleanup involves regular maintenance activities performed to prevent hardware problems, keep your software running smoothly and repel cyber attacks. Implemented appropriately, these three aspects of computer maintenance can keep bad things from happening to your computers and the information they contain.

## Setup

A thoughtfully conceived computer setup is the foundation on which the other two maintenance activities are based. For best effect, it should be implemented on your computers when they are first put into service. To make the backup and cleanup operations easier, I always - Partition the main physical hard drive into separate partitions for each "Function" - Provide a second physical hard drive for each computer for backup storage I typically create 7 to 8 partitions on the primary hard drive, each allocated to a particular function. One will contain only the operating system, another only data and others programs of different types. For best results, this must be done before any applications are installed, so that the OS can remain separate in its own partition.

These partitions can be created by Windows in most cases, but I prefer the versatility of a partition management program such as Acronis Disk Director. The OS partition is the only primary partition, with the remaining partitions consisting of logical drives in a secondary partition. A typical partition set for a Windows 7 computer with a 1 TB hard drive might be:

120 GB - OS	(operating system and drivers only; no programs installed here if possible)
50 GB - APPS1	(utility and system programs, like firewalls, anti-virus, anti-malware and browsers)
22 GB - GAMES	(games)
50 GB - APPS2	(office and productivity applications, including email clients and financial apps)
100 GB - DATA	(user data, such as documents, email, photos, source audio / video files and config files)
50 GB - APPS3	(mapping and misc. applications)
50 GB - APPS4	(multimedia applications, like photo / audio / video editors, scanning and VoIP software)
477 GB - LOCAL	(scratch or working partition, for work in progress or temporary backup storage)

I never store anything in the My Documents folder created by Windows, as it is on the OS partition. I instead create folders in each partition to help organize files and programs, so I can avoid having to resort to using search to find things. If a desktop computer can accommodate it, I always install a second physical hard drive in the case for low-cost backup storage. For laptops and small desktops, I provide a dedicated external hard drive (eSATA or USB 3.0 preferred) for backup files. To protect my most sensitive personal and financial files, I never store them on a computer, but instead keep them on a hardware-encrypted external USB hard drive.

I also configure my computer and home network for maximum security. All security functions available in your router should be enabled. I configure my network's router for strong wireless security, and prefer to use a wired connection when possible. I don't allow sharing of drives or resources on my computers, but instead use stand-alone network drives to share files and network printers to share printing capabilities. Each computer runs a software firewall (I like ZoneAlarm), an

antivirus and several anti-malware programs. I try to keep the cabling between my computer and network devices neat and labeled. It is often good to add an additional fan to some computers for improved cooling. I've found placing a laptop on a laptop cooler allows better airflow to the bottom and keeps it cooler (even without running the extra fans). I run my primary desktop computer on a low-cost UPS (uninterruptable power supply), so if the power goes out while computing, I have extra time to shut down properly and avoid data loss.

## Backup

If you use computers long enough, you will have a hardware failure, the most common and devastating of which is a hard drive failure. To avoid the loss of my data, I make reliable backups of my computers as often as is reasonable.

Only you can decide how often your backups should be made, based on how much data you want to gamble with. Backing up more often puts less of your recent data at risk, but is less convenient and takes time. It is easier to strike a reasonable balance between risk and time with your hard drive partitioned and segregated.

You can back up the more critical user data partition more often than the others, and with only user data in it, the backup file is created much faster. All partitions should be backed up periodically, and it often helps to label the backup files you make with source and date in the file name, and to maintain a backup log (text file).

If a computer hard drive fails, I want to be able to put in a new drive and be running again as soon as possible, with minimal data loss. To do that, I make image backups of each hard drive partition, rather than simply copy the files. There are several backup applications that can do this; the one I prefer is Acronis True Image. I make my partition image backups on the second internal hard drive or the external hard drive, so a hard drive failure does not result in the loss of my backups along with the primary data. I only make my backups while running the bootable CD version of True Image, so that I am familiar with the program when tragedy strikes. If a primary hard drive fails, I can replace the drive in my computer, boot from the Acronis True Image CD and restore all primary drive partitions from the backup files on the secondary or external drive to the new drive. I might have lost a few of my most recent files (created since the last backup was made), but I can be running again the same day.

I also like to make backups of the OS and application partitions right before installing new programs. If I don't like a program soon after installing, I'll simply restore the OS and application partition with the last backup files made, sending my computer back in time to a point before the installation. I like this better than using any of the uninstall methods, which often leave behind files and registry entries to clutter my drives and slow performance.

It is a good idea to periodically transfer backup files to external drives or other removable media, in case a computer power supply failure takes out both internal physical drives. Transferring these backups to another physical location (perhaps at least once a year) provides cheap protection for your data should your computer be stolen or you lose your home from fire or other disaster.

For protection of my most sensitive financial files stored on a small external hard drive, I maintain another two identical drives as backups. I copy the new files to these backup drives weekly, and store them in a fire safe or off site. To insure adequate backups, it is best to develop a schedule for making each of your backup types and stick with it.

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## Cleanup

The final piece of the computer maintenance puzzle is cleanup. This involves the periodic maintenance required to insure your computer continues to run safely and efficiently. Just as with backups, you should establish a schedule to follow to insure the proper maintenance is performed. Most of the required maintenance is done to the computer software, but there are also a few hardware maintenance items that should not be neglected.

To protect your computer from the external threats of viruses, spyware and other malware, the installation of good antivirus and anti-malware software is required. Although it seems the risk from viruses has diminished, running antivirus software and keeping its virus signatures updated is still important. Only one antivirus program should be installed on a PC, as conflicts can result from multiple programs. There are many good programs to choose from, some of which are free. I presently use the one that comes with ZoneAlarm Internet Security Suite.

There are also plenty of choices available for anti-malware software, with many excellent ones available for free non-commercial use. More is better with anti-malware software. Since they typically don't run in the background, many different programs can be installed and used separately without conflicts. Since some work better on different threats than others, having a variety of anti-malware programs in your arsenal will provide the best detection and elimination of these threats. It is best to update your threat definitions and run your antivirus and anti-malware software at least once a week, preferably on a set schedule. I presently run Webroot Spy Sweeper, Safer Networking Spybot - Search & Destroy, Lavasoft Ad-Aware, Malwarebytes Anti-Malware and Microsoft Windows Defender.

Your computer is like a living organism that starts out quick and vibrant, but becomes slow and develops ailments with age and use. The OS, applications and hard drive storage combine to form something like a nervous system. To detect and prevent the equivalent of computer headaches, nervous breakdowns and Alzheimer, some basic system maintenance should be performed regularly. Your hard drives should be scanned for bad sectors and other drive errors and defragmented periodically. Operating system updates should be applied as they become available, to improve operation and close security holes. As your computer gets older and slower, running a registry cleaner or PC tune-up suite can clean out your OS and improve performance.

Ultimately, however, your computer may reach the point after a few years where "the body is willing but the mind is weak." If your hardware is too good to replace but performance has been greatly diminished, a computer reincarnation may be appropriate. If you partitioned your hard drive as I described and have kept your early backup files, you can restore your computer's performance to its early days with no more effort than would be required to set up a new computer.

To give your computer a second life, simply restore your OS and all application (non-data) partitions, using backup files created soon after you got the PC. Having a backup log to refer to will help you pick a point in time that will minimize the reinstallation of applications. Your data should remain on its partition unaltered.

After restoring, you will need to apply all OS updates since that backup time and reinstall applications added since, but you will soon be running again with a computer that feels much younger. You can also use this opportunity to upgrade to a larger hard drive with little extra effort.



## From the President ... ... Editor's desk



Hi PACCsters!

### Required reading list:

**The Tip Corner - by Bill Sheff,**  
**7 Little Word Annoyances and Their Easy Fixes by - N. DeMarte**  
**Add Text on a Photo in Word 2007 - by Lynn Page**  
**A "Light Peak" at Thunderbolt - by Ryan Morse**  
**Broadband2Go - by John Roy,**  
**Cell Phone Lingo - by Wil Wakely**  
**Your Computer's Health - What Junk Files?- Part 3**  
**- by Bob Woods**

**Your Computer's Health Part 4**  
**Comprehensive Computer Maintenance - by Greg Skalka**

**If you think the newsletter is too long, please let me know. PJK**

### ATTENTION PACCSTERS:

For some time we have been trying to reach members to confirm their e-mail address, so the PACC TALK notification which goes out to let you know, the newsletter is at the PACC web site ready to download. Some members did not yet confirm getting the notice. Please do so! Thank you, PJK.

#### IMPORTANT NOTICE

**The PITTSBURGH AREA COMPUTER CLUB web site is accessible and working. It needs updating in many areas, but it is functional. You are again able to get your copy of PACC TALK there. If you have a problem with viewing it with adobe reader, use another PDF reader, such as Nitro. It is much smaller and faster to open, to view the PACC TALK.**

**The web address of PACC Web Site:**  
**<http://pacc.apcug.org/>**

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evolution), OTDMA (orthogonal TDMA) and WiMax (similar to WiFi). These are fancy names for some of the latest improvements in the field. So the best strategy for buying a new cell phone is to read the reviews and then find a salesman you can trust. Some of the above information may help you understand his pitch and also impress him with your knowledge.

*the end of the story*

The final cleanup item to remember is your computer hardware. All computers should be opened up periodically so that dust can be vacuumed out or blown out with canned air. This also applies to laptops, though you may want to avoid disassembly, and only blow air into ventilation inlets and outlets. This will help your computer keep its cool and last much longer.

By following the three "ups" of computer maintenance, setup, backup and cleanup, you can keep your computer's performance at maximum with a minimum of effort, while protecting your data, finances and identity. By using a regular schedule of maintenance, little bits of time over its useful life spent taking care of your computer can keep it out of intensive care. Better Ups than OOPS.

*the end of the story*

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Help is available to PACC members on various computer topics by contacting one of those listed below. It is recommended that the initial contact with any of these experts should be made via the PACC WEB SITE. In this way others can benefit from the questions and responses. Be courteous and call only during the listed times.

<b>NAME</b>	<b>COMPUTER AREA</b>	<b>PHONE</b>	<b>TIME</b>
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Fisher, Bill	Cobol, Word Perfect	367-8996	7 - 9:00 pm
Konecny, P.	Windows, DOS 6.2x, MS IE., Hardware	795-6075	8 - 9:00 pm

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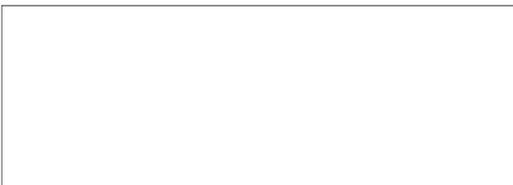


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## NEXT PACC MEETING IS ON MAY 15, 2011

PACC 1975 - 2011  
IN ITS THIRTY-SIXTH YEAR



# PACC TALK

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***NEXT MEETING: May 15, 2011***

The Pittsburgh Area Computer Club (PACC) holds its meetings the **THIRD** Sunday of each month. The next meeting will be in room 311 at **Point Park University**, Wood St. and Blvd. of the Allies. The doors open at 11:00 am and close at 4:30 pm. Bring your PC!  
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