



NEWSLETTER

The Best Accessory
for your PC!



MAIN MEETINGS

West Side.....Tue. May 17

CollegeAmerica, 9801 North Metro Pkwy E, Phoenix

East Side.....Wed. May 18

University of Advancing Technologies
2625 W Baseline Rd, Tempe
(one block west of Fry's Electronics)

Fountain Hills.....Thu. May 19

Fountain Hills Library, 12901 N La Montana Drive,
Fountain Hills

Presentation this month:

Simple Backup Methods and Centralized Network Storage

David and Lo
Show some clever, uncomplicated, ways to
Backup and Save data for single or multiple PCs

For date and time changes, check our
website: phoenixpcug.org

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Steering Committee:

Officers and Members who are present
at the 6:00 P.M. West Side meeting.

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THOUGHTS FOR THE MONTH

FROM YOUR PRESIDENT

Greetings everybody.

The end of this month starts the traditional beginning of summer after Memorial Day weekend. As recent events explained how our armed forces special operations Seal Team 6 of the United States Navy brought justice to the most wanted man in recent memory for terrorist acts. Special praise is in order for their efforts as well as the entire men and women of U.S. military in the intelligence community. So it is only fitting that we take special time-out on Memorial Day for these special people.

Now on a lighter note, continuing our concept of items of interest for beginners, intermediate and advanced users we will have some very interesting ideas to present at this month's meetings.

Lo plans to demonstrate a network attached storage device with multiple hard drives to store data effectively and share with multiple computers on a small or large network.

Since many users have more than one computer as can be an effective way of centralizing computer backups, audio and video, photographs and documents throughout the house. I think you'll find this very interesting so please bring a friend.

Some ideas I plan to present include very simple backup methods for very beginner level users and shortcuts for Windows, Internet Explorer, Microsoft Office as well as saving the results of searches using Google that you can send in a quick e-mail to your friends. If time permits, we can also demo Google tips and tricks for more effective searching on the Internet.

This also brings to mind Dogpile.com. Come to the meeting and be surprised. Your feedback and interaction will help us round out the meeting that we can post to our website

Finally, on May 26 at College America, where we hold our Westside meeting, Linda Berzi would like us to provide feedback to improve their student learning and help them plan for the future. More details to follow will be posted on our website. We welcome interested participants and this is one way we can support a college that immensely supports us.

David

FROM YOUR EDITOR

The recent successful anti-terrorist operation performed by the Special Forces of the United States Navy, the Seals Team 6, against the long-sought Osama bin Laden, the leader of the militant Al-Qaeda organization, was a largely a result of the advances in electronic technology to a level that was unheard of only a few years ago. Ironically, the original tip that eventually led to the planning and execution of the aerial raid was obtained the old fashioned way, by the diligence and persistence of the human intelligence specialists using much criticized interrogation techniques used at covert detainment facilities, both within and outside of United States territory. But it was the revelation of the name, obtained in that manner, of a special courier, which allowed the use of the most sophisticated (and secret) listening, searching, and tracking techniques of US government agencies to find and follow this person for years. Ultimately, the certain knowledge of the location and presence of the terrorist leader was confirmed. This courier, and a second such courier who was also present at the final military assault, were among the very few humans who were able to pass in and out of the fortress that hid bin Laden for over six years.

Yet it is not only in situations that deal with global events affecting millions of people that the advances in electronic technology, have had and continue to have, significant impacts. Such is also true of more happy instances of which we sometimes become aware. Consider the recent case of a young couple who were joined merely via a social network. She was in Arizona, he was in Alabama. In what apparently passes for casual conversation among teenager youths, the 14 year-old girl said she had just swallowed a large amount of a popular recreational drug. Fortunately for her, the 17 year-old young man was knowledgeable enough to be aware that her purported dose was potentially fatal. He proceeded to call the local Sheriff's office in her hometown. Gratefully enough, the law officer handling the 911 emergency calls was well aware of the possibility that the call was genuine. The officer alerted a patrol car, and the responding officers were able to reach the young woman in time to get her to a hospital where she received medical treatment that, in all likelihood, saved her life.

Sometimes things just work out in our favor in surprising ways.

Michael

MEETINGS

CALENDAR

For date and time changes, check our
website: phoenixpcug.org

PRESENTATION THIS MONTH

Simple Backup Methods and Centralized Network Storage

David and Lo
Show some clever, uncomplicated, ways to
Backup and Save data for single or multiple PCs

GENERAL MEETINGS

WEST SIDE: CollegeAmerica (see map page 18)

- Tuesday, May 17, 2011
- 6:00 PM - Steering Committee and Election of Officers
- 6:30 PM - Q and A
-

EAST SIDE: University of Advancing Technology (see map page 18)

- Wednesday, May 18, 2011
- 6:30 PM - Q and A
-

FOUNTAIN HILLS: Fountain Hills Library (see map page 18)

- Thursday, May 19, 2011
- 6:30 PM - Q and A
-

HIDDEN PITFALLS OF CLOUD COMPUTING

THE HIDDEN PITFALLS OF CLOUD COMPUTING

By Dick Maybach n2nd (at) charter.net

Although you can hardly pick up a computer publication without being assaulted by references to cloud computing, the term has been abducted by marketing organizations to the extent that it means almost nothing. Today, "cloud" is to computing as "natural" is to food.

Although the term means little, the concept is very valuable, and is something that most computer owners use every day. I define cloud computing as using storage or processing resources on the Internet. Most of us already use cloud computing far more than we realize; for example, every e-mail we receive sits on our ISP's disk until we download it to our PCs, and when we use Google Maps, much of the processing and all of the storage occurs on Google's hardware.

In the extreme, cloud computing could evolve to the point where our computer would consist of only a keyboard, mouse, display, and perhaps a printer, with just enough processing power and software to support a Web browser. Google foresaw this as the future of home computing and began developing their Chrome operating system to support it.

Backup to the Cloud

A simple example of cloud computing is a backup service, which continually backs up all your data whenever you are connected to the Internet. You don't have to think about it, and because your backups are stored at a different location, they are safe even in case of a local catastrophe. A similar use is synchronizing data among several computers, where the data might be files, contacts, and your favorite Web sites and (with care) their passwords. Many people also use the cloud to share information with others, for example by using Facebook for personal information, Flickr for photos, or Google Docs for documents. Cloud storage is both convenient and inexpensive; indeed, many vendors offer up to two gigabytes free.

there are also cloud processing services, such as Google Docs. Google Docs supports the common office tasks such as word processing, spreadsheets, and presentations, which means you can perform these without purchasing an office suite and having to keep it updated. It also allows on-line collaboration (where, for example, several people edit the same document), although few home users are likely to need this feature. Like cloud storage, cloud processing is inexpensive or even free.

By now, you may be thinking, "What's the Catch?" Somebody has to pay for these services, as providing them requires non-trivial costs for computer hardware, support staff, and communications. In some cases, the free service is a limited sample to entice you to purchase a more versatile one. In others, you are the product being sold. Your habits and preferences are valuable commodities that advertisers will pay to learn about. For many of us this is a fair trade; in return for the convenience of Google's search engine, we tolerate the ads in the sidebar and being directed to sites that want to sell to us.

Safety and security caveats

However, there are some security and safety caveats involved. Security is complex for a cloud vendor; your data are stored on the same disks, the same memory, and pass through the same processors as everybody else's. The process is much like what happens in a commercial laundry or dry cleaner, where everybody's clothes are tagged and thrown together into a large machine. Afterwards, somebody looks at the tags to get them back to their proper owners.

Contrast this to a bank deposit vault, where only your key can open the box where you

place your documents. Even at such competent vendors as Google, there have been instances of data leaking from one customer to another, and many cloud vendors are start-ups who have much less expertise than Google. This means that you should take responsibility for safeguarding your data.

For example, if you back up your disk in the cloud,

All the above examples are data storage ones, but

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TRY A LINUX-BASED ANTIVIRUS CD

TRY A LINUX-BASED ANTIVIRUS CD

By Lee Maxwell leemaxwell (at) gladmax.com

We've all learned of stories of Windows users who receive a glaring, blaring warning that their PC is infected with a virus, and they must immediately download a certain antivirus program to remove the infection. Then they find that neither the virus nor antivirus program go away, probably because they are one and the same, and they can no longer use their PC. It may even have happened to you, dear reader.

Microsoft describes this insidious malware as "rogue security software"; others call it "scareware". This link is to Microsoft's web page describing the problem and what they recommend to do about it: <http://www.microsoft.com/security/pc-security/antivirus-rogue.aspx>.

Basically, this kind of malware can take over your computer so completely, you can't control it at all, other than shut it down, as Merle Nicholson describes in his article on pages 8-9 about the trojan horse antivirus program called "Safe Startup," which infected his friend's PC, disabled any existing antivirus software, prevented other programs from launching or even viewing the desktop. Infections like this also prevent invoking the Windows task manager, so you can't forcibly terminate a program or process.

Malware like this often get on PCs because the default antivirus program that came with the PC, invariably some flavor of Symantec's Norton Antivirus or McAfee, had either not been updated with current virus definitions, or had not been re-licensed by the owner because of the cost involved. In any event, the antivirus software stopped doing its job and left the owner vulnerable to attack.

Infected PC, heal thyself

Merle did not describe how he removed Safe Startup from his friend's PC, except to say it took a lot of time and effort. But he probably tried to work with the infected operating system. Removing such malware while the infected Windows is still running is very difficult. The virus is so entrenched, it can counter attempts to boot into safe mode, return to an earlier restore point [if one exists] or run a downloaded, legitimate virus scanning program.

However, there are many software tools you can download for free to clean up an infected PC. These tools all work basically the same way; they can run the infected computer from Linux, that other operating

system, on the CD, then use the antivirus program on the CD to disinfect Windows on the computer's hard drive.

Some well-known antivirus companies provide you with software packages you can make into a live CD with Linux, including Avira Antivir, AVG, BitDefender, Dr. Web, F-Secure, and Kaspersky. Each of these companies has posted on their websites software packages called ISO files which can be downloaded and burned onto a CD. There are a couple of free programs you can download that burn ISO files onto CDs, including ISO Burner, InfraRecorder and others mentioned at this web page: <http://www.thefreecountry.com/utilities/dvdcdburning.shtml>

Live CDs the best solution

A live CD is an ideal method to deal with viruses; the operating system is protected from infection because it loads from the CD, which cannot be altered, unlike software on a hard drive. Likewise, Linux is ideal for running antivirus software because Linux is immune to attack from Windows-based malware. Finally, because neither Windows nor the virus is operating, the virus is unable to protect itself.

If you have a netbook or other PC lacking an optical drive, fear not; some of these products, notably AVG, also offer a version that can be put onto a USB flash drive, and there are instructions with others on how to do so. This Tech Republic blog post by Michael Kassner gives more information: <http://www.techrepublic.com/blog/security/rescue-cds-tips-for-fighting-malware/3> 803

A couple of other live CDs do come with a modified version of Windows that works from the CD, including Panda and Symantec's Norton antivirus software. These Windows-based CDs are outside the scope of this article.

The live CDs covered in this article are mostly one-trick ponies; their only function is to scan for and remove malware on computer hard drives, which makes them easier to use. There are other free, Linux-based live CDs available that combine anti-malware capabilities with many other tools for disk management, testing and recovery, and file recovery. BitDefender's rescue CD is like these. These multiple-tool CDs are complex, require some learning to use, and also do not come within the scope of this article. I tested products from these six developers, with

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TRY A LINUX-BASED ANTIVIRUS CD

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various degrees of success. My tests were performed on two PCs, both Toshiba laptops. All but one CD worked OK on at least one laptop; for some reason, the Kaspersky only worked on one laptop, and the Dr. Web CD froze during boot on both laptops. It may have been two badly burned CDs, and I will try again with reburned CDs sometime in the future.

Check the system requirements

When considering whether to download a particular anti-malware ISO file, you should check the system requirements for the software. The Linux OS used with each ISO is designed to run on a wide variety of PCs, but may not work on older PCs or on PCs lacking a minimum amount of RAM, a fast-enough processor, a CD-DVD drive, a high enough display resolution, and the ability to connect to the internet.

Booting from the CD will take longer than booting from the computer's own hard drive, because the CD drive takes longer to read information into the computer. Also, if the CD is not burned correctly by the disk-burning program, the computer may not be able to boot from the CD. And it's assumed you know how to override the computer's default boot sequence, which usually looks to the hard drive first to boot, and to force it to boot from the CD.

The Linux interface may not be familiar to a Windows user, but the CDs I tried were all simple to use, with fairly clear choices on what to do. AVG's graphic user interface was surprisingly primitive, with a DOS-like appearance. F-Secure's was a little more detailed but also based on a text interaction. On the other hand, BitDefender and Kaspersky both had much more polished GUIs. BitDefender also went directly into a malware scan, while all of the others waited for the user to start and configure the scan.

Each program will require a good internet connection in order, if necessary, to download and install updates to the program itself, and up-to-date malware definitions. Be warned: Some of these products may not check for software updates, so you may not get the full benefit of the latest version unless you download it just before you begin. Also, every disk I tried failed to connect to my encrypted wireless network; I couldn't even scan for a network. So be prepared to connect the computer to a network

router via an Ethernet cable or unencrypt your wireless network [not advised].

Running a virus scan can take a very long time, depending on the hardware capabilities of the computer upon which you use the software, including the amount of RAM, processor speed, size of the hard drive being scanned, the speed of the optical drive, and speed of the internet connection. It could take hours, and you may want to do it overnight. Also, some malware is so persistent, you may want to run the same scan several times over, or use more than one live CD.

6 Antivirus Live CD packages tested

Avira AntiVir **Rescue System**

Information: <http://www.avira.com/en/support-download-avira-antivirus-rescue-system>

Download: <http://download.avira.com/download/vdf/rescuecd/rescuecd.iso>

AVG Rescue CD

Info: <http://www.avg.com/us-en/avg-rescue-cd>

Download: <http://www.avg.com/ww-en/avg-rescue-cd-download>

Cebit LinuxDefender [BitDefender] Live

Info: <http://forum.bitdefender.com/index.php?showtopic=16602>

Download: <http://www.bitdefender.com/bd/site/products.php>

Dr. Web

Info: <http://www.freedrweb.com/livecd/?Ing=en>

Download: <http://download.geo.drweb.com/pub/drweb/livecd/>

F-Secure Rescue CD

Info: <http://www.f-secure.com/en/EMEA-Labs/security-threats/tools/rescue-cd/>

Download: <http://www.f-secure.com/linux-weblog/files/f-secure-rescue-cd-3.11.23804.zip>

Kaspersky Rescue Disk 10

Info: <http://forum.kaspersky.com/index.php?s=27187224f3262a8ae05c-c591e6e68471&showtopic=178968>

Download: <http://rescuedisk.kaspersky-labs.com/rescuedisk/updatable>

Also, be warned that nobody, including the developers of these anti-malware tools and this author, can guarantee any kind of success in removing the malware and making your PC operable again.

F-Secure warns you that will rename any Windows

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components infected with malware so they no longer work, which could destroy Windows and require re-installation. Hopefully, if you get this kind of malware, you were making periodic backups of at least your important files, if not the entire disk, and you can restore what you backed up once the malware is removed.

No guarantees

Finally, while I would like to report detailed results trying each of these products, I can't, because the PCs didn't have malware, and so the programs found nothing. [And if you think I'm going to shut down antivirus software on a PC with the hope of getting malware installed, just to test each product, you're nuts!] Plus, my circumstances could never be indicative of general use. You will have to try these on your own, with the hope that the programs can remove the malware without damaging Windows on the hard drive.

I can report that I used the F-Secure CD on a friend's older Dell laptop running Windows XP Pro. After a six-hour scan, all sorts of malware that had found their way on were removed, and it booted up fine thereafter and she was happy. Your results may vary; try any of these at your own risk.

However, each of these live CDs offers you a probable last chance to remove a nasty malware and get your PC back whole. If you have recently backed up your important or irreplaceable data, then the risks are relatively small, only the inconvenience of re-installing Windows and all of the programs from third-party developers. These anti-malware developers provide a public service by offering their software for free to help people escape nasty malware

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encrypt any files (such as those containing passwords or on-line banking data) that present security risks. I store my passwords using KeePassX, <http://www.KEEPASSX.org/>. Its file is always encrypted on your PC's disk, and you can safely back it up anywhere. I also use Gnu Privacy Guard (gpg), <http://www.gnupg.org/>, to encrypt files and e-mail. (Both of these programs are available for the Windows, Mac, and Linux platforms.) By the way, when you encrypt a file, be sure that only the encrypted version is ever placed in a directory that is backed up in the cloud.

Safety also is not trivial. Vendors do go out of business and, even if they keep operating, they may find that providing cloud services isn't profitable. Not all of them back up their storage, which means that their hardware failures and software bugs can destroy your data. If you use the service for backup or synchronization, this isn't a problem because the chances of simultaneous failures in the cloud and on your PC is negligible. However, if you store your only copy of your photograph or music collection in the cloud, you are risking disaster.

In the case of cloud processing, you should also be concerned about the format in which your data is stored. It does little good to download the file containing your novel if it's stored in a format that only the (now out of business cloud vendor) could read.

References

KeePassX, <http://www.KEEPASSX.org/>

Gnu Privacy Guard (gpg), <http://www.gnupg.org/>

**WE WANT TO INCREASE OUR MEMBERSHIP
IF EACH MEMBER BROUGHT JUST ONE
INTERESTED GUEST TO A MEETING
WE WOULD ACCOMPLISH OUR GOAL**

SMART COMPUTING MAGAZINE - SUPPORT



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For each paid subscription using the source code 8305, our user group will be credited one credit. Results are calculated each quarter, and credits will accumulate until the group reaches five paid subscriptions, at which time they will contact the PPCUG.

In the event our group does not reach the five paid subscription mark by the end of the quarter, credits will be carried over into the following quarter until the amount reaches five paid subscriptions, at which time a free subscription will be issued.



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SAMSUNG 256 GB SOLID STATE DRIVE

SAMSUNG 256 GB SOLID STATE DRIVE

by Alice Hamilton HAL-PC <http://www.hal-pc.org/>
Houston Area League of PC Users, Inc

If you want something that's fast, energy-efficient,



lightweight and durable, and don't mind the hefty prices, Samsung's outstanding performance will make it worth the investment. This is simply the best drive on the market and performance to back it up.

It's mighty fast, light, and, like all SSDs, designed to be durable and save energy, since it has no moving parts. It a 2.5" format, solid state (basic technology: think flash drive) and supports: Windows, Mac and Linux. If for no other reason, laptop owners – it generates less heat than your palm!

Like all SSDs, the Samsung has no moving parts, so it potentially can endure shocks, vibration, and even water damage much better than traditional hard drives. The drive supports the most popular SATA 3Gbps standard, also known as SATA2. This is a little disappointing since the new, much faster SATA 6Gbps standard has been available for a while and Samsung doesn't support it. Samsung – how come?

It is S.M.A.R.T. compliant, a feature I'd like to see more of on mechanical hard drives..

When it comes to storage devices, the length of the warranty is the most important factor, and Samsung offers a decent one - a three-year warranty, although less than the five-year warranty by Seagate. "Samsung claims a MTBF (Mean Time Between Failures) of 1.5 million hours. This is a typical estimate that most manufacturers label their SSDs with. Samsung also claims that the drive will withstand 1500G shock resistance, also standard amongst SSDs." We didn't test for this one!

Big news: Samsung has a new controller in all three SSDs as of last summer and features a revised NAND flash memory. All three models use just fraction of a single watt and a meager watt when active. Do not format this or any SSD. If you are running Windows 7, it understands how to take care of a SSD. This drive is very **green**. Nice touch Samsung!

Should the *drive need to be tuned up*, the performance you should use the optimization option to restore original performance. This is a very handy feature for those **not** using [Windows 7](#). Introducing the: *SSD Magician* software. It is a small application (less than 10MB) that provides those who operate Windows XP/SP3 and above, Windows Server 2003/SP2 and Windows Server 2008 the ability to use the TRIM function to restore lost performance. This makes it very easy for users to keep an eye on their Samsung SSD is performing and any kind of drive degradation is occurring. Very well designed program and user friendly. Go to Samsung's site for information on the TRIM feature.

On the other hand: The Samsung SSD is significantly more expensive than mechanical hard drives and its storage capacity is a fairly meager 256GB. The drive doesn't support the new SATA 6Gbps data transfer rate. Samsung, that could have really put you out front...way out front.

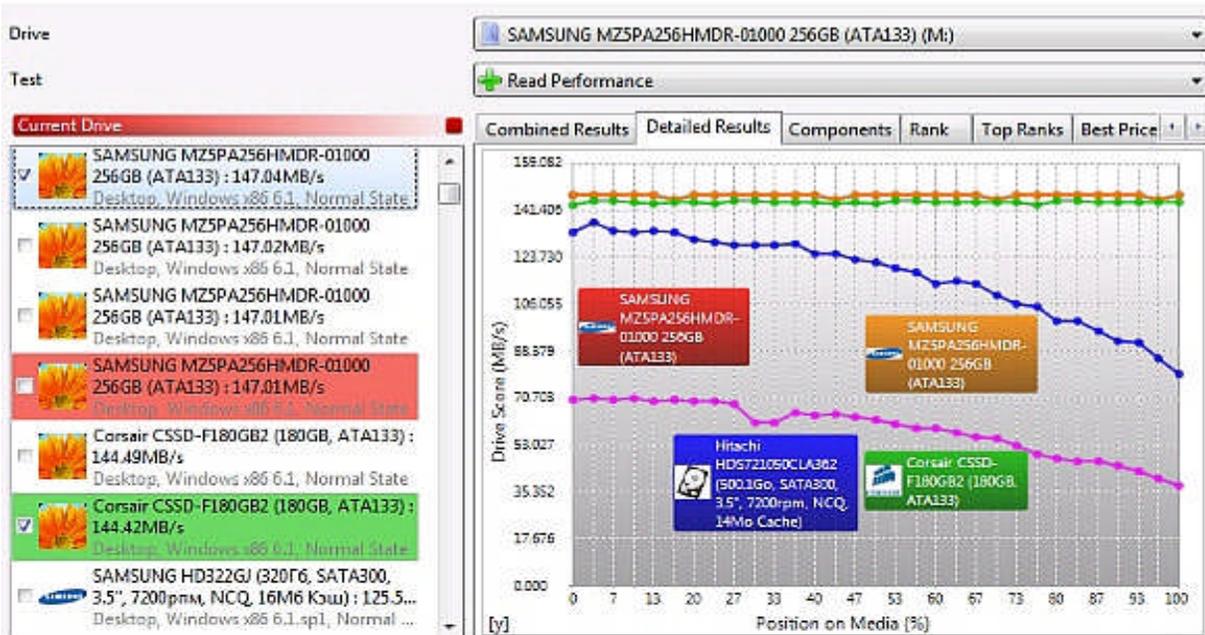
See test chart for many details – in fact, take it with you when you are ready to buy a SSD. The retail package comes with an installation bracket to fit it

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SAMSUNG 256 GB SOLID STATE DRIVE

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into any 3.5" slot. This exceptional solid state hard drive has set the gold standard. It is fast and furious



Parameter	Value
Benchmark Results	
Drive Score	147MB/s (145.39MB/s - 147.35MB/s)
Results Interpretation	Higher scores are better.
Random Access Time	77µs (131µs - 132µs)
Results Interpretation	Lower scores are better.

Detailed Benchmark Results	
Speed at position 0%	142.19MB/s (125.67MB/s - 144.88MB/s) (100%)
Speed at position 3%	142.38MB/s (140MB/s - 145.11MB/s) (100%)
Speed at position 7%	142.31MB/s (140MB/s - 144.84MB/s) (100%)
Speed at position 10%	142.37MB/s (141MB/s - 144.83MB/s) (100%)
Speed at position 13%	142.35MB/s (139.42MB/s - 144.66MB/s) (100%)
Speed at position 17%	140.71MB/s (138.78MB/s - 143.17MB/s) (99%)
Speed at position 20%	142.34MB/s (139.88MB/s - 144.8MB/s) (100%)
Speed at position 87%	142.57MB/s (140MB/s - 145.17MB/s) (100%)
Speed at position 90%	142.5MB/s (140.47MB/s - 144.87MB/s) (100%)
Speed at position 93%	142.39MB/s (141.22MB/s - 144.87MB/s) (100%)
Speed at position 97%	140.72MB/s (138.57MB/s - 143.18MB/s) (99%)
Speed at position 100%	142.44MB/s (139.9MB/s - 144.82MB/s) (100%)
Random Access Time	95µs
Full Stroke Access Time	152µs

and will work its heart out for you – just keep it away from heat! For more info, updates and support go www.samsung.com.

Alice Hamilton is a HAL-PC family member who is a computer hardware instructor at a local community

WHAT IS A SMART PHONE?

WHAT IS A SMART PHONE?

By FUD's Follies

Portland PC Users Group, Portland , OR

Editor (at) ppcug.org

A smart phone is a computer that you carry in your pocket. Besides being a computer it is a phone. Besides being a phone it has a separate data connection (radio), so you can use a browser to get on the Internet or deal with your email. Each has a way to hold all your contacts and make phone calls or email or text messages from your contact lists. Both have calendars and can remember your wedding anniversary. It is popular to have a camera and a way to show your pictures. It is common to have a movie camera. Apple has an excellent display and so does Android. Both can play stored movies or You Tube videos or typical Internet content. Most streaming video from the Internet, such as Hulu (television shows) and the network websites, do not work with smart phones. You Tube works fine with either iPhone or Android and HULU suggests that it may work in the future for Android phones, but it currently doesn't.

With either kind, the fastest communication for email or Internet use is with a Wi-Fi connection. The data rates for the cell tower data plans are (by comparison) slow and expensive (compared to "free Wi-Fi"). The data speed for T-Mobile and AT&T is fast enough to let you use a second camera that shows your face as you talk and still do a video call on their data plan. With AT&T iPhone or Verizon iPhone, you can make face-to-face video calls in a Wi-Fi hotspot, such as McDonald's or Starbucks or at home, of course. More about video calls later...
BANDWIDTH

I've been making cryptic comments about data plan bandwidth for about a year, now. The basic idea is that a year or two from now we'll finally have decent speeds. Until then, the phone carriers are just jockeying for position, like at the first lap of a race. A few weeks ago AT&T announced they will try to buy out T-Mobile and form the largest phone company in the US. The strengths and weaknesses of the two companies suspiciously combine "perfectly". Anytime that a merger goes through it is of questionable value for the general consumer but this is a perfect situation if you hold a lot of AT&T stock. They are the only two carriers that use the popular "GSM" transmission system and they both use the "HPSA+" method of speeding up transmissions of data. I won't go into either of those, because the meaning of the

terms is unimportant to me. Most of Europe uses the GSM system and I like it because you can swap a "SIM" card from one GSM phone into another and you've made the other phone, now, your phone, with the same phone plan and the same number. That just appeals to me because I don't like the phone company telling me what to do with my own phone. For similar reasons, I would rather not manage and purchase all my movies and music (did I forget to mention music?) in iTunes. Some of you out there might prefer a more open system than Apple wants to sell you. I'm not on a stump, here, but I find it easier to put music and pictures and my movies, both self-created and blockbusters on the Android phone. Or, at least, it is just as easy as dealing with my iPod Touch, which is equivalent to iPhone for that sort of thing (but no phone). Oddly enough, the movies I created for my iPod Touch work fine in the Android phone, with no change to the (MP4-style) format. (For you technical types in the AV SIG, it is an ".m4v" file, just like the ones you can create with popular applications like (free) "Handbreak". There are forums that will give the specifics.) AND IT'S ANDROID BY A NECK...

What am I missing? Well, let's see. For me the real tiebreakers are things that many of you could probably care less about, but I'll have a stab at it, anyway. CHEAP** As I've probably mentioned before, that I'm, err, "thrifty". I have not made the leap into spending the better part of a hundred dollars a month for a phone I can put in my pocket. If people in Santiago Chile can ride in an ox cart (on the back roads) talking on a cell phone, why should it cost me an arm and a leg? So I share a little of my parent's attitude about recovering from a depression, err - "recession". I don't intend to commit to future debt until all my past debt is zero. For that reason, I don't want any two year contracts. My thinking is, I guess, way "backwards" from the norm. In my humble opinion, the *data* plans are too expensive for their slow rate. Don't get me wrong; I was an early adaptor to DSL and cable. And I'm hooked on cable at this time (fiber would be just fine, also), but phone *data* is awfully slow and limited for what you pay for it, and I'm already paying for unlimited data with Comcast, so what gives? ESCARGOT I can only type at a snail's pace on a smart phone, so I'm only willing to pay a "snail's pace" of a price for a data plan to support my email typing speed. LIGHTNING FAST

(Continued on page 12)

WHAT IS A SMART PHONE?

(Continued from page 11)

My phone, as with many others, works great for the Internet at home and at McDonalds and Starbucks, etc.** Many workplaces have a "guest account" Wi-Fi for the work area, that you may need a password, but, so what? You enter the password once and the phone finds it if the phone's Wi-Fi is turned on. Most phones now have wireless "N", by the way. I got into this a year or so ago, using my iPod Touch and the Skype application for (almost) free calls across the US. It really helps to use Skype for laptop or mobile device calls to long-winded relatives. Instead of ten cents a minute, it costs (approximately) zero. With a 1000 minutes a month phone plan, you can get the cost per minute down to three or four cents, but I use a 1000 minutes a YEAR, not a MONTH, so that sort of thing isn't for me. VIDEO CALLS Like I mentioned, a couple of the phones and data plans are fast enough to use the data plan for a video call. Right now T-Mobile has such a plan. AT&T (the suitor) do not have enough bandwidth to offer video calls, but they are selling, I believe, phones that *could* do it *if* they had a bigger network, such as all of T-Mobile's network. They do have the same kind of network ("HPSA+") so, the acquisition is a "no-brainer", except for the people that enjoy the lower rates at T-Mobile. AT&T will migrate the very top of the T-Mobile smart phones to their network in a year or so when the acquisition would occur, but the weaker smart phones with "3G" labels may become orphans, with no carrier left to support them. I don't want to sound alarmist, but as much as I admire the earlier Android phones on GSM, they may be in trouble if this acquisition goes through. I'll keep you informed. They're pretty tight lipped about it at this point until they can get the government to fall for the acquisition plot.** The easiest application for doing video calls is TANGO. It operates a little similar to SKYPE and is free. SKYPE hasn't offered a video phone application, yet. I'm not sure why. TANGO works fine with either or both people on Wi-Fi or the data plan and with either or both phones, or neither, having a back-facing camera (a second camera). You either see the other person's face or what they're looking at (like the Grand Canyon). And it's bonehead simple to set up. It worked for me the first time.** With any of these types of communication, SKYPE, APPLE FACETIME, TANGO, you have to have other people signed up to the same application. So these sorts of things mean that, for APPLE FACETIME, you need two people that own iPhones (and have Wi-Fi). TANGO works between iPhone and Android and it even works with the iPhone 3G on a 3G network data plan and an Android on whatever

network. For this reason, I think TANGO is the current leader and the other applications are "also-rans" (way behind, to continue the horse-race metaphor).

To sign up for TANGO, you send the other person an invitation by email and they accept and the registration process is over. My phone keeps track of who is a TANGO "member" and gives me some sort of indication if I can video call (I'm sure they would want me to say "TANGO") with them.

VIDEO DATA USAGE

Sorry, I don't know. With an unlimited data plan it wouldn't cost any more. It may be too expensive with a limited data plan. It would be a shame to burn up your monthly allotment on a few calls. I just don't have the information at this writing. With Wi-Fi, the cost is nothing (except maybe a cup of coffee or a burger).

HOW MUCH DO ANDROID PHONES COST?

Boy, there's a loaded question. The answer is typically, "well how much do you have?" You can buy any of these phones from the carrier outright (with no contract) for an arm and a leg. My phone, I think, is \$499. There are some rebates offered, but I think you have to sign up for a 2-year contract, which is nonsense. There may be a way to get the \$200 discount, but read the fine print carefully. I found it easier to buy it on EBAY for considerably less and just swap my the SIM card out of my old T-Mobile phone and continue paying ten cents a minute with *zero* trips to the T-Mobile office to make the transition. If I want data, I can (currently with T-Mobile) buy a day-pass for \$1.50 or a weekly or monthly data plan. There are also combo plans that you pay monthly but can quit at any time. Depending on my work circumstances (if I need the phone for work or work email) one of those might be ideal. Right now I don't need to check such things on my phone at work because I sit at a computer all day, so I'm using my phone as a phone at work currently and the usual, "get a loaf of bread on the way home" sort of thing.

BUSINESS OVER SEAS

GSM phones work fine overseas in Europe and South America. But read the fine print and get it in writing. A fellow worker got a thousand dollar bill

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WHAT IS A SMART PHONE?

(Continued from page 12)

(charge) when they double-talked his wife into thinking she'd be charged one price in Japan and they charged the entire two week trip to roaming. For GSM phones, I think you can do it pretty easily by purchasing a pay-as-you-go SIM card when you get there, but you may have to make arrangements to get your phone "unlocked" so it will work on other networks. It's also easy to just buy a "burn phone" when you get there and add cash to it as needed while in Europe or South America. That was the easy way in Chile a few years ago; just buy a phone at the airport. I haven't been to Europe lately so I don't know for sure. My relatives had an okay experience with iPhones in Italy, but they had to set something up ahead of time before going. This isn't something that "just works", you have to get the details to "make it work". Of course Wi-Fi and SKYPE, etc. work fine with (approximately) zero cost for the call. This is where it's going, but, of course, they're not going to mention the option at your local cell phone store.

FREEWAYS AND JET PLANES

The obvious outgrowth is that "free" calls on the Internet will eventually drive the costs way down, like what happened to "long distance charges" for most of us. Give it a few more years to settle out. Phone companies will charge what they can get until the competition drives the price down. I personally think it will be about ten years. Are you starting to see why I have been mysteriously promoting Wi-Fi for the last few years? It's a bit like freeways and jet planes; it's the obvious choice for some things.

HOW ABOUT MY** PICTURES AND MUSIC?

Just plug the USB cable into your computer and the micro-USB end of it into your Android phone. That will start the phone charging circuit going. There is a setting in the phone for "PC-connector" where you can select "charge only" or "disc drive" or "USB tethering" (to use the Internet from your PC if you don't want to use Wi-Fi in your home or office). Select "disc drive". Now you simply move your MP3 music folders onto your root folder of the flash card in you Android phone. It is exactly like using a USB thumb drive. Be sure to use the proper drive eject button (as you always do with a thumb drive) down in the lower right of you windows machine, before you disconnect the tether cord. You may have to disconnect the USB "tether" for the phone to be able to "see" the flash card from the phone to listen to

your music. It's an either/or sort of thing. For that reason, I tend to leave the phone in "charge only" mode, usually, to keep it simple.

CREATE MUSIC MP3s

I didn't want to bother re-ripping my music from CDs if I chose not to use an Apple device, so all my music was ripped into high data rate MP3s in iTunes. You have to tell it to do that somewhere in the ripping options. You can use any of several pc applications to make MP3s or some other format that you think will be easy to use. The general format is Artist folder with the albums by that artist inside that and the individual songs on each album in each of the album folder. Fortunately everybody seems to agree with that filing method. It is up to your phone to set up the "favorite's lists" or whatever.

PHOTOS

First decide how big you want the photos. Sounds simple. But if you want to send a picture to someone else bigger than your phone screen size (typically 800X600) then you better store a larger photo. As hard as it is to think first, I'm recommending it. You can, of course, store 5 mega-pixel photos, but you use a lot of space if you're only going to show them on the 800X600 screen. The best place to put them is either in the root folder or where the camera application puts them, perhaps the "dcim" folder (don't ask). Just read the manual; it's not that painful to read it once.

BY THE WAY, REGARDING IMAGE AND SOUND QUALITY

Of course, the pictures you take with a "real" camera will look better than the ones you take with the cell phone. That goes also for videos and music. You can easily make better recordings than you can buy for the same price from the various download sites. I just don't want you to get home from that Hawaii vacation and then realize that your pictures are blurry. "5 mega-pixels" on the dinky imaging chip in the cell phone can't hope to compete with (at the other end of the scale) your D-SLR (removable lens) camera. The chip in the expensive camera is bigger than a postage stamp. The one in the cell phone is closer to the size of the head of a pin. Everything's in focus and it works on a sunny day, but it has it's limitations, for sure.

(Continued on page 14)

WHAT IS A SMART PHONE?

(Continued from page 13)

BATTERY AND MEMORY CARD

Here again, Android leaves Apple in the dust. It's really easy to change batteries in the Android. They don't have the built-in obsolescence that is in iPhone. I have a spare with mine and an additional charger, but I've never had to use them. They would definitely travel with me in my carry-on luggage for a long flight or a trip into the mountains (with the car shut off for a few days). In a word, battery life is abysmal for pretty much all smart phones. They have active displays, GPS units, Wi-Fi radios, data radios, telephone radios and music players and they can play movies. They definitely make the Star Trek tricorders seem lame in their capabilities. I couldn't comment on what Intel is up to in the future, even if I knew, but it is a major, major problem that, once somebody comes out with a chip that will get remarkably-better battery life, they will rule the market. You can't fix the power draw from all those gizmos in one device, (the screen is the biggest battery draw by far), but you can put your money into better integrated video cards and maybe, better power handling capabilities (shut down the Wi-Fi when not in use). As you know, my pet peeve is the displays in bright light. A switch to (now too expensive) a display that works well in bright light and doesn't need so much light behind it would be a major improvement. You can expect to charge your smart phone daily. The faster ones, not too surprisingly, have shorter battery life.** I have good news to report for the flash memory inside Android phones. Unlike iPhone, the Android can take more memory my just plugging in a bigger card. For the latest and greatest, that size is a 32GB micro-SDHC. Right now the "sweet spot" in price is the 16GB size, in around the \$30 range. Here's a overview:

SDHC (FOR NERDS ONLY)

There are 4 (that I can think of) kinds of SD (secure data) cards. The original ones are from 4 or 6 years ago and are about postage stamp size. They were replaced by SDHC cards in the same physical size but with more storage capacity. Also came thumb nail sized mini-SD cards and then micro-SDHC cards about little-fingernail sized. These two types fit into adaptors to be the same size as the original SDHC cards. None of the SDHC's will work in earlier SD devices. I think the SD cards will work in full sized SDHC devices (I think). The largest capacity SD device is 2GB. SDHC and micro-SDHC devices use FAT32 for their file format. (I don't know about an SDHC card smaller than 2GB and whether it is

FAT16.) They come in three standard speed ranges, 2,4 and 6. Use 6 for HD movie making. I hate slow flash memory, but buy the cheapest stuff if you don't move much stuff around, it's your call. I'm only interested in the 6 (and 10!) speed flash memory from reputable dealers. Make certain you can get a replacement/refund if it fails within a couple years. It's a bit like buying a car battery, part of the cost is for a replacement if it fails early. There are only a couple companies that I really trust, like Sandisk and Lexar, and with them I read the fine print on the speed, anyway, because they make some pretty slow stuff along with the "good" stuff. It is truly a horse race in flash memory, with a lot of competition and plummeting prices, but that doesn't mean everything is a good deal (just because it's cheap). The names I mentioned above will always be reliable and tend to not fail, but that doesn't guarantee speed. Flash memory is an evolution of the old electrically-erasable Programmable Read-Only Memory (EEPROM). It relies on the quality of the silicon and the accuracy of the production method to "hold" the memory. With really good stuff it can hold a memory for about 10 years. That means the little capacitor that stores the "1" or "0" doesn't let the charge bleed off for 10 years. Now when you try to make that "gate" (they call them that in a semi-conductor device) also be able to open and close really fast, it gets hard to make it work perfectly.

WHAT TO DO?

As a generality, stick with a reputable company that will give you your money back if the flash memory fails. Buy reliability if you can't afford to have a failure. Professional photographers way over-pay for flash memory because they can't afford a single failure. Get memory that is fast enough for your needs. As I mentioned, class 6, for HD movie capture. If you only have music on your cell phone, then go for capacity. There is a caveat not to run big applications in slow flash memory. I think that is beyond the scope of this simple article.** Some people have mentioned that the Android market has outpaced the installed RAM in earlier cell phones being upgraded to later operating systems (the typical current OS is 2.2). I don't know much about this other than to suggest to check this before buying, as it may become a "gotcha" with the next few upgrades to the operating system

CONCLUSION

Well, there you go. I thought I didn't have anything to say about the Android and it ended up one of my larger articles. The secret phrase is "battery life".

EMAIL HACKED? AN OUNCE OF PROTECTION

EMAIL HACKED? AN OUNCE OF PROTECTION

By Lee Seidman VP, Business & Professional
Microcomputer Users Group Inc (BPMUG), CT
Man (at) yahoo.com www.bpmug.org

Recently, some unsuspecting e-mail users may have experienced dismaying and shocking notifications suggesting that his or her e-mail has been hacked and used to send spam (or worse), even if the e-mail system is web-based rather than downloaded directly to one's computer via a local application like Microsoft Mail, Outlook, Outlook Express, Apple Mail, Entourage, Thunderbird, etc. (and hence, susceptible to operating system-level vulnerabilities). The primary suspect is the password used to access the account.

People tend to try to keep things simple by using the same password to access a variety of sites, but at the risk of security. People's e-mail account password should never be used for any other account or web site.

Like a postcard

Generally, e-mail can be compared to a postcard; although the message is destined for a particular recipient, it has the potential to be read by anyone as it traverses the Internet. Additionally, if one joins a web site that requests a password to subscribe, a confirmation e-mail is often generated clearly presenting the username (often an e-mail address) and the proper password.

The postcard analogy applies to that non-encrypted e-mail — it is open for anyone to read. A typical malicious-minded hacker (the "Black Hat") who either intercepts that e-mail or accesses that web site's consumer database would first attempt to use that password associated with that e-mail address to access the e-mail account.

For example, if someone is whomever@aol.com registers to join community web site or message board site-whatever.com, generally he or she is asked to use his or her e-mail address as the user name.Site-whatever.com will ask the person to generate a password and often will send a confirmation e-mail identifying the username and password in clear text (meaning it is not obscured).

Break in with the key

The first thing a third-party (in other words, someone who is not the subscriber or a representative of the web site) may try to do is use the password contained in that e-mail to access whomever@aol.com itself.

Once a hacker with bad intentions gets into the e-mail, he or she may start slowly to not get noticed, however, it does not require much effort for the "Black Hat" to change the password AND security questions (for password resets) to effectively lock the account owner out of his or her own e-mail.

Things you can do

If nefarious activity is suspected to take place with one's e-mail account:

> Inform those in your contact list of the circumstances, preferably by voice or an alternate e-mail account and make sure they understand not to engage the questionable content (usually seeking money in one form or another — especially via embedded hyperlinks); get as much help to act as quickly as possible as time is of the essence and everyone in that contact list is potentially at risk since they trust the e-mail is coming from you when in actuality it does not

> Change the password to access the e-mail account (and make it complex and very difficult to guess)

> Change the security questions to change the password

> Notify the e-mail provider

> If this is a commonly used password for online financial transactions (banking, purchasing, etc.), change the password for those e-commerce sites

> Keep all correspondence between the "Black Hat" and any contacts as evidence

> If money is involved, contact local and federal authorities at the Internet Crime Complaint Center (<http://www.ic3.gov/default.aspx>), especially if the "Black Hat" actually defrauded someone out of money.

Use multiple email accounts

In general, it is a good idea to have an e-mail account for personal correspondence and a separate one for web-based subscriptions (or use a temporary/disposable e-mail address offered by the majority of providers).

The key is to use distinct passwords; the online world can be a dangerous place in which to operate, but one's own behavior usually determines the level of jeopardy one will risk in such an environment.

A little forethought can prevent a whole lot of hind-sight consternation.

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911 "MY COMPUTER DOESN'T START"

WHAT TO DO IF YOUR COMPUTER WILL NOT START

by Bob Rankin <http://askbobrankin.com/>

There's an old joke about a TV repairman who makes a house call, and after a few seconds he gives the lady of the house a bill for \$75 and says it's all fixed. When she asks what the problem was he says "Your unit was isolated from the primary power supply." The woman asks what that means and he says "Your TV was unplugged."

So if nothing at all happens when you turn on the power, check the electrical supply before embarrassing yourself. Begin at the wall outlet. Plug a lamp or other small appliance into the outlet and verify that power is flowing. Check the circuit breaker switch on your surge protector. Check both ends of the computer's power cord. On some computers, it plugs into both the wall and the back of the [system](#) unit. If you still see no lights and hear no fan, the system's internal power supply may need to be replaced. See my related article [Replace Your Power Supply](#) for help with that.

http://askbobrankin.com/replace_your_power_supply.html

You may get power but see only a cryptic [text message](#) on a dark screen. That's usually an error message from your computer's BIOS telling you it cannot find the boot drive. This could mean the BIOS has lost its stored settings for your hard drive. Worst case, your hard drive controller has died and must be replaced. But don't worry; your data is probably still safely stored on the drive. If the [BIOS error](#) occurs right after you install a new piece of hardware, try removing that hardware and re-installing it firmly. In fact, you should check all cable connections inside of the computer to make sure none is loose.

If the computer stops while loading [Windows](#), try rebooting in Safe mode. If Safe mode works, the problem may be a corrupted file that is trying to load during [startup](#). Run the disk error check and clean-up utility by following this procedure:

- Right-click on the boot drive in Computer

- Click on Properties and the Tools tab
- Click the "Check now" button under "error-checking" and check "automatically fix errors"

Reboot

System Recovery Options

If Windows won't load in Safe mode, try the Recovery Console option **on the startup options menu that appears right before Windows loads. You may be able to restore an earlier Restore Point when things were working. See my article on [Windows 7 Hard Drive Recovery](#)**

http://askbobrankin.com/windows_7_hard_drive_recovery.html

for help with the recovery options.

A virus may be preventing your computer from starting. If you have a bootable removable drive (sometimes called an Emergency Disk) with an anti-virus [program](#) on it, start up your computer with that disk in the CD/DVD drive and let it scan and remove any viruses. Alternatively, you can remove the drive from your computer, attach it as an external drive to a working computer, and scan it for viruses.

A computer that won't start can be a maddening experience. Even a hands-on soldering iron type of geek can easily spend hours troubleshooting [startup problems](#). Non-technical users may make things worse while trying to fix them.

If none of these suggestions get you up and running, you may need to reformat and re-[install](#) everything from backup copies. But if you're not comfortable with doing that yourself, the best solution for a computer that won't start may be taking it to a qualified repair shop.

Editors Note: Of course if you belong to The Phoenix PC Users Group bring your problem and, if possible, your computer to the next meeting and you will get expert help from one of our more experienced members.

Short Circuits...zzzt!

A missstake. The Bronx Zoo may still be looking for its missing cobra, but a tongue-in-cheek Twitter user posing as the 20-inch, highly venomous snake, has been tweeting. "On top of the Empire State Building!" he posted. "All the people look like little mice down there. Delicious little mice." The Reptile House at the Zoo closed after workers searched but did not find the Egyptian cobra. Zoo officials said they were confident the snake was hiding in the Reptile House but conceded that finding it would be difficult.

Associated Press – March 29, 2011

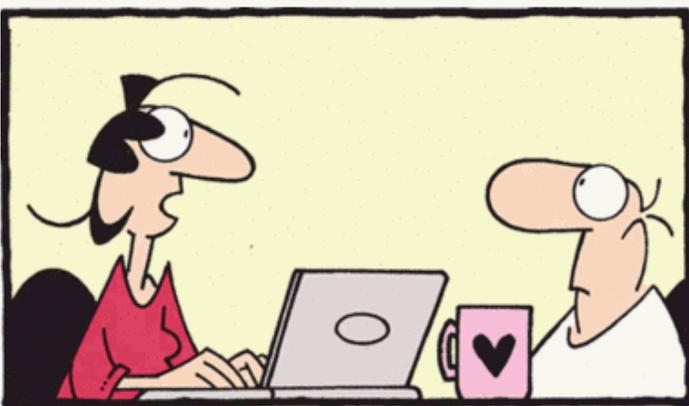
Just the thing for it. It is said that there is a gadget for just about everything. That now includes boots which detect radiation and a kangaroo tail for weary humans who'd like a rest but can't be bothered to sit down. These and a thousand other devices went on display at the world's biggest inventions fair, where exhibitors from 45 countries showed off their weird and wacky designs in Geneva in the hope of attracting investors or buyers. One individual showed off his "super smart boot," which he hopes will become the Swiss army knife of footwear. Equipped with sensors, it collects data on air temperature, humidity, location and the wearer's blood pressure, and then sends the information to a base camp. It can heat or cool the feet and can also measure radiation levels. Another inventor presented a portable backrest that allows its wearer to take a break from standing by leaning back onto a telescopic pole. "The kangaroo can rest its weight on its tail, so we've made the same thing for humans," he said.

Associated Press – April 6, 2011



"That mommy needs to reply to her tweets!"

I Gotta Tell Ya. Some Facebook bragging about bucks has led to four suspects accused of holding up a Houston bank. The arrests included two bank employees. Security video shows two armed, masked suspects robbing the bank and fleeing with about \$62,000. A tip directed law officers to a pair of social networks. Investigators say one suspect's Facebook page boasted: "IM RICH." Another said: "WIPE MY TEETH WITH HUNDREDS." *Associated Press* – April 22, 2011

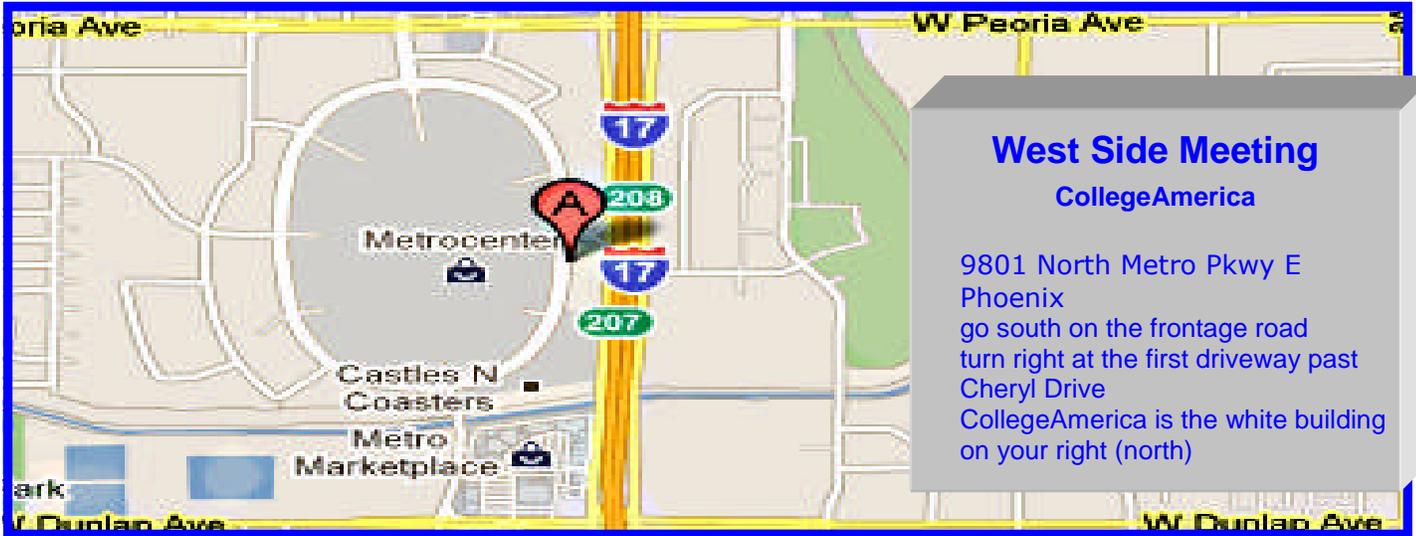


"When everyone in the world is Facebook friends with everyone else in the world, there will be no more wars."

Zzzt 2 U. Taser International is introducing a new generation of stun gun that is capable of firing second shots, in case law enforcement officers miss the first time or they need to hit more than one person. The new model also offers dual lasers for improved accuracy in aiming and an enhanced power magazine that allows the gun to be fired more than five hundred times before replacement is needed. A warning arc of electricity arc on the front of the gun displays whether cartridges are loaded to help prevent conflicts from escalating, the company said. *Associated Press* – April 22, 2011.

These items are based on articles from the noted sources and have been adapted by the Editor.

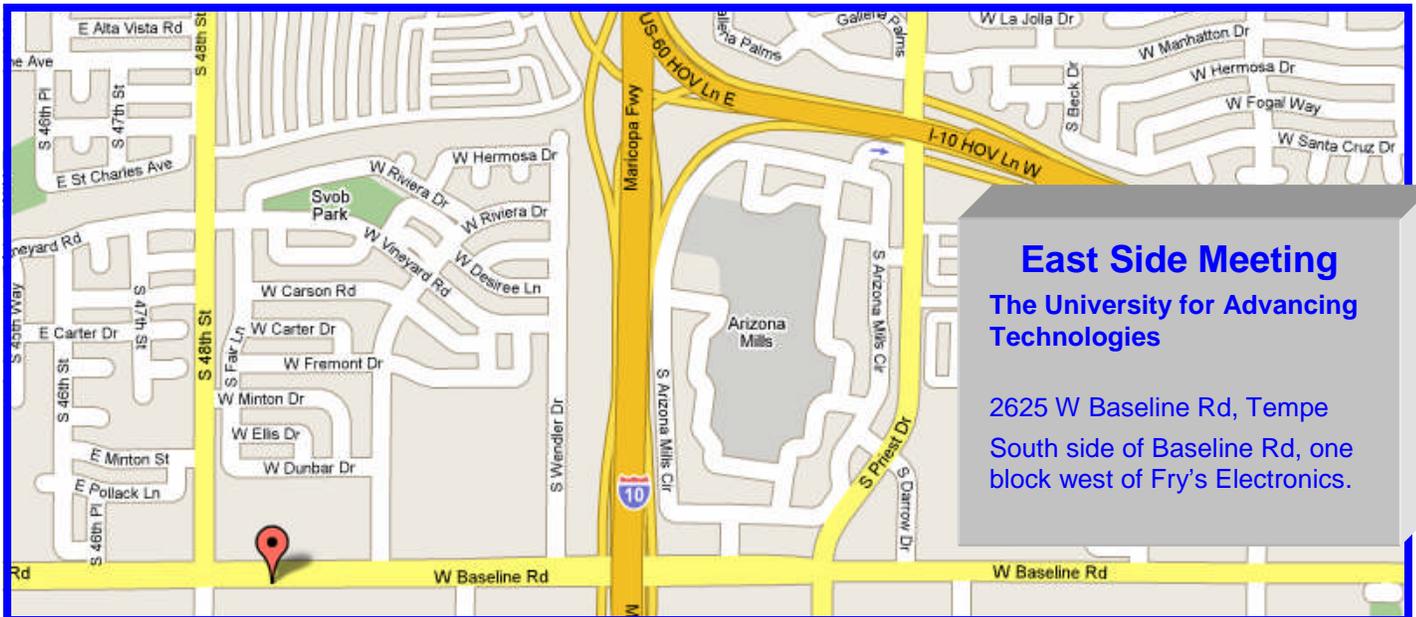
HOW TO GET THERE



West Side Meeting

CollegeAmerica

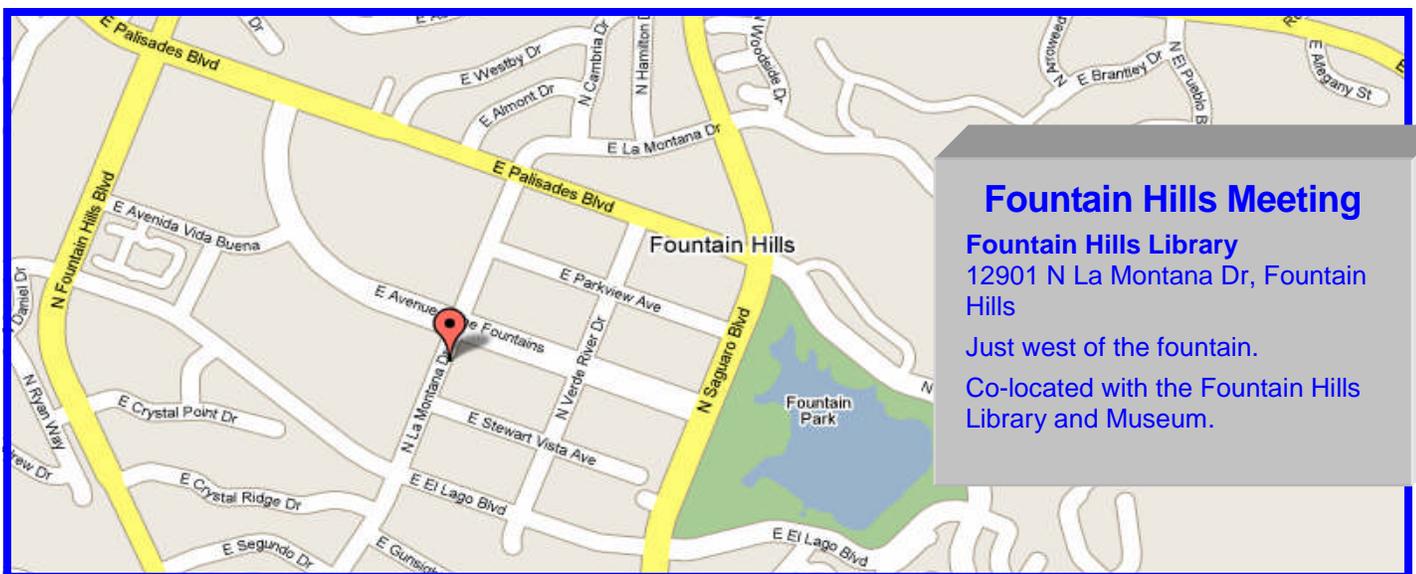
9801 North Metro Pkwy E
 Phoenix
 go south on the frontage road
 turn right at the first driveway past
 Cheryl Drive
 CollegeAmerica is the white building
 on your right (north)



East Side Meeting

The University for Advancing Technologies

2625 W Baseline Rd, Tempe
 South side of Baseline Rd, one
 block west of Fry's Electronics.



Fountain Hills Meeting

Fountain Hills Library
 12901 N La Montana Dr, Fountain Hills
 Just west of the fountain.
 Co-located with the Fountain Hills Library and Museum.

MEMBERSHIP DUES

The Official Policy of the Phoenix PC Users Group is that we do not condone software piracy in any form.

*DUES \$36
THROUGH
DEC 31, 2011*

Phoenix PC Users Group Membership Application

First: (Print Legibly) _____ Initial: ___ Last: _____

Address: _____

City, State: _____ Zip Code: _____

Home Phone: _____ Work Phone: _____ Ext: _____

Please note: We DO-NOT share phone numbers outside the club, and will generally only use your phone information, if we cannot contact you in timely fashion, via e-mail, or the club web-site

Receive Electronic newsletter in place of printed one: Yes No

E-mail address: _____ (Print Legibly)

Signature _____ Date ___/___/___

Release my address to vendors ? Yes No Note: Phone numbers **will not** be listed.

May the club share your e-mail address with other members only? Yes No

With club approved vendors? Yes No

Please do not share my e-mail address

Mail this completed form with payment to:

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PO Box 7127
Phoenix, AZ 85011-7127



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May 2011

The Newsletter of the Phoenix Personal Computer Users Group
"Users helping users to understand computers"

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