

# SPECIAL LIFELOCK PRESENTATION ON WED AT UAT



## NEWSLETTER

*The Best Accessory  
for your PC!*



### MAIN MEETINGS

**West Side.....Tue, May 15**

CollegeAmerica, 9801 North Metro Pkwy E, Phoenix

**East Side.....Wed, May 16**

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

**Fountain Hills.....Thu, May 17**

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

### Presentation this month:

At the Wed UAT Meeting  
We will have the special presentation  
Originally planned for last month.  
LifeLock will present a very  
Informative and entertaining  
Program on Identity Theft  
And how to protect yourself  
David has some surprise videos  
Plus more about Windows 8

For date and time changes, check our  
website: [phoenixpcug.org](http://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

Hello Everybody & Happy Mother's Day.

This month we will feature Lifelock at our Wed presentation at UAT (see map in back) so please attend, it should be quite interesting and valuable. Tues & Thur we will feature Abby Stokes and her appearance at Computer Tech Conference (CTC) this March and if time permits, CTC excerpts from a panel discussion from 4 computer experts and previews of possible topics for June and July, such as improving Windows performance, how to: DVD photo slide shows playable on any DVD player, etc.

Well, computing has been marching along, in spite of hard drives in short supply:

PC Magazine - Apr 18, 2012 In February, analysts noted that *hard-drive* prices were up almost 28 percent "with newer CPU chips for computers featuring Sandy Bridge & Ivy Bridge (from Wikipedia):

"**Sandy Bridge** is the codename for a microarchitecture developed by Intel beginning in 2005 for central processing units in computers to replace the Nehalem microarchitecture. Intel demonstrated a Sandy Bridge processor in 2009, and released first products based on the architecture in January 2011 under the Core brand. " "Subsequent products, codenamed Ivy Bridge, use a 22 nanometer process."

The Official Windows Magazine, Summer 2012, is featuring some latest laptops with Quad Core and Dual Core CPUs from Dell, Acer, Samsung, HP, etc. with ultrabooks getting big attention for being light, trim competitors to Apple MacBooks and lower cost. Also with a great article on Windows 8 which I hope to demo more of in June.

Finally of some note: please Google this article and clean your hard drive of any viruses:

"Protect Yourself From DNSChanger"  
PCWorld - 1 day ago

The DNSChanger Check-Up websites will automatically check which DNS servers ... you can consult the FBI's list of DNSChanger Check-Up websites to find an ...

It is always a good idea to double virus check with "online virus scanners" (use Google) such as ESET, Bitdefender, etc. to minimize these nasty malware.

David

## FROM YOUR EDITOR

Now, a decade after the dot.com boom and bust, the electronics industry seems to have recovered and is again showing record sales numbers. However, with the never-ending deflation of the dollar relative to the cost of everyday living expenses, it is difficult to evaluate whether or not the industry is actually growing.

There also seems to be an undercurrent of a "wait and see" attitude in the public mind. For instance, the eagerly anticipated, first-ever, dividend to be paid by Apple may fall short of expectations. Even if the dividend may be large enough to make some long-term employees instant millionaires, it will still be considered to be a pittance considering the billions of dollars resting in the company vaults. In addition, the matter of whether the Steve Jobs' talent of producing and marketing "must have" electronic devices is going to continue, will be unanswered for some time. In another situation, the number of sign-ups for Facebook, the acknowledged winner in the social network industry, is approaching one billion. But the recent activities linked to the expected Initial Public Offering (IPO) of Facebook stock do not seem to bode well for investors, particularly for individuals, i.e., non-institutional buyers. It is possible that the IPO prediction - billions of dollars of investment funds - may not be attained. (Not to worry, there are at least 336 other social networks, as listed on my browser log-in page available!)

The most significant impact of these macro-electronics industry events upon my micro-everyday usage of electronic devices is a constant growth in the amount of personal time that I have to waste and that I have no ability to control. No matter how fast my computer is internally, or how fast is my browser connection, I have to wait for the advertisements, public announcements, and other unwanted drivel to load before my desired page is loaded. One may look at the number of information (?) pieces that are being opened upon sign-in. (Don't look at bottom of the screen where the scroll number of items loaded is being given, if you are in a hurry and have high blood pressure. My personal best, to date, is 1,270.) But the most annoying and worst case is when an unsolicited sales pitch is plastered over the sought information even before it can be read. It is funny,(ha,ha) when an unwanted ad is covered by a second unwanted ad. Maybe if the advertisers learn such is happening, perhaps the medium will become less popular. I certainly hope so.

Michael

## MEETINGS

# CALENDAR

For date and time changes, check our  
website: [phoenixpcug.org](http://phoenixpcug.org)

## *PRESENTATION THIS MONTH*

A Special Presentation is planned  
for our Eastside Wednesday meeting at UAT.  
Originally planned for last month.  
LifeLock will present a very  
Informative and entertaining  
Program on Identity Theft  
And how to protect yourself  
David has some surprise videos  
Plus more about Windows 8

## *GENERAL MEETINGS*

WEST SIDE: CollegeAmerica (see map page 16)

- Tuesday, May 15, 2012
- 6:00 PM - Steering Committee and Election of Officers
- 6:30 PM - Q and A
- 

EAST SIDE: University of Advancing Technology (see map page 16)

- Wednesday, May 16, 2012
- 6:30 PM - Q and A
- 

FOUNTAIN HILLS: Fountain Hills Library (see map page 16)

- Thursday, May 17, 2012
- 6:30 PM - Q and A
-

## SHUTDOWN, SLEEP, HIBERNATE

Shut down, Sleep, Hibernate - Which one, when and why?

By Phil Sorrentino, President, Sarasota PCUG, Florida  
November 2011 issue, Sarasota PC Monitor  
www.spcug.org  
president (at) spcug.org

Shut-down is pretty straight forward, it removes power from your computer and ensures that the next time the power is turned on, the computer will go through the normal "boot up" process. Sleep and Hibernate are different and are "Powered Down" modes. The reason for using one of these powered down modes will differ depending on the type of computer, desktop or laptop, and the need to quickly get back to the operating mode after a pause in operation. Power usage, though always important, is mostly a consideration when using a laptop. How much operating time, before the batteries must be recharged, can be a big consideration for a laptop user. It can determine how useful the computer may be on a long flight, or how many movies the kids can watch on a cross-country road trip. Even with desktops, the increased cost of electricity can become a key factor for customers who are under pressure to manage their total cost of ownership (purchase price plus operating expenses).

The hardware that makes up today's laptops has gotten quite efficient and the Windows Operating System software's ability to manage that hardware's power usage has constantly been improved. One of the biggest improvements since the early 1990's has been the addition of these power down modes, to help provide longer battery life.

Improvements in battery technology has greatly increased battery capacity as well as battery lifetime. Besides improvements in battery technology, the Operating System control over the hardware can also improve the battery life. A job for the Operating System is to make the system as efficient as possible while still maintaining an acceptable user experience when turning the system on and off. (With the advent of Solid State Devices, in place of disk drives, we will eventually get to a very fast on and off experience. You can actually have it now, but it is very costly. By the way, try a tablet PC and see how fast it turns on and off; no moving parts in a tablet PC.)

The Windows 7 power management goals are simple:

- 1) make turning a computer off/on as reliable, simple, and fast as turning a TV off/on, and
- 2) maximize the battery usage if on battery, and reduce the energy consumption if on A/C power.

The first goal involves changing the model for what "off" and "on" really mean. By now, most everyone knows that turning a TV off doesn't *really* turn it *off*. It is still available to receive the remote control signal, so that it can come back on quickly. To the degree possible, "off" is really "sleep", in Windows. When a PC goes into the sleep mode, the system state is saved in RAM; part of that 2 or 3 Gigabytes typically available in modern PCs. This arrangement creates the best balance between speed of resuming operation, and lowest power usage.

Currently, Windows 7 defines three power-down modes:

*Sleep* – a power-saving state that allows a computer to quickly resume full-power operation (typically within several seconds) when you want to start working again. Putting your computer into the sleep state is like pausing a DVD player—the computer immediately stops what it's doing and is ready to start again when you want to resume working.

*Hibernate* – a power-saving state designed primarily for laptops. While sleep puts your work and settings in memory and draws a small amount of power, Hibernation puts your open documents and programs on your hard disk, and then turns off your computer. Of all the power-saving states in Windows, hibernation uses the least amount of power. On a laptop, use hibernation when you know that you won't use your laptop for an extended period and won't have an opportunity to charge the battery during that time.

*Hybrid Sleep* – is designed primarily for desktop computers, is a combination of sleep and hibernate—it puts any open documents and programs (the system state) into memory and onto your hard disk (so nothing can be lost if power goes out), and then puts your computer into a low-power state so that you can quickly resume your work.

That way, if a power failure occurs, Windows can restore your work from your hard disk. Normally,

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## TOO SCARED TO BUY ANYTHING ON LINE?

### Too Scared to Buy Anything Online?

By Lee Seidman, Vice President, Business Professional Microcomputer UG, CT  
November 2011 issue, The Help Key  
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Lots of consumers find purchasing goods online intimidating; news reports of identity theft, online piracy, and privacy concerns only deteriorates people's confidence in buying things on the Internet. Using free software tools combined with some education and common sense is all one needs to build to become a savvy and safe e-consumer.

The secure e-consumer first needs to recognize when a web site represents a reputable merchant. Using online reviews from epinions.com, bizrate.com, resellerratings.com, or even just a search on Google will help one gauge a vendor's trustworthiness based on the experiences of others. Peruse the commentary and read what people say and how they rate their transactions with that supplier; what may initially be perceived as a negative review may be little more than someone griping about something irrelevant or inconsequential (like it was delivered a day later than expected, which may be the responsibility of the transporting service instead). If there appears to be a pattern of complaints about a particular vendor, it is sensible to take that into account before ordering anything.



In the above example, we are "window shopping" on a popular technology vendor web site called newegg.com. Note what the address bar reads at the top: <http://www.newegg.com>. This means the site

offers no security presently; no sensitive information is being exchanged at this time.

When we decide on an item to procure, most web sites (like newegg.com) will request for the purchaser to sign in (some sites will offer an opt-out area for this, but many do not). IF YOU CREATE AN ACCOUNT ON THESE SITES, DO NOT USE THE SAME PASSWORD AS YOU WOULD USE TO ACCESS YOUR E-MAIL. Note the address bar has now changed to read <https://> and a lock appears in the browser as well (at least with Internet Explorer).



Clicking on that lock reveals information about the web site and its security.

This tells the consumer that this web site has been verified as who they say they are and that the connection is encrypted (we are no longer just "window shopping"). VeriSign and a handful of other similar companies are the Internet's certificate authorities (CA), which substantiate the identities of companies on the web. By viewing the certificate (which is how the web browser on your computer knows to trust the web site it is displaying), you can see its validity and when it expires. Once that certificate expires, your web browser will alert you that the site is no longer trusted as it once was (this should rarely happen with the big-name sites). Note that web sites that request any form of identification (like logging into a webmail, bank, or paystub account) or financial transaction should use <https://> and certificates.

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## TOO SCARED TO BUY ANYTHING ON LINE?

## SHUTDOWN, SLEEP, HIBERNATE

(Continued from page 5)

When it comes time to actually buy an item online, a credit card offers the best peace of mind available. Most of the major credit card companies offer "zero liability protection" for unauthorized purchases (read



the fine lines carefully, MasterCard states on its web site that one's account must be "in good standing," the consumer "exercised reasonable care in safeguarding" the card from unauthorized use, and that there must not be more than two unauthorized events reported in the past twelve months). While the legal verbiage may present a chill, many issuers offer temporary credit card numbers specifically for use online (Citigroup calls their "Virtual Credit Card" while Bank of America markets it as "ShopSafe"). These temporary credit card numbers expire quickly or have whatever transaction limit you wish to assign. When it is time to purchase an item from an online merchant, open another web browser, log into your credit card issuer's web site, and look for the section to open the tool for a virtual credit card.

This virtual card number appears and functions as an authentic credit card to the vendor; its purpose is to keep its use limited to that particular transaction and to keep your actual credit card number a secret from that vendor. If the virtual credit card is compromised by an unscrupulous third party, it is not as much of an intrusion into one's financial existence as if the actual credit card number was used (there is no need to replace a credit card, change accounts, etc.) Using this tool satisfies the card issuer's requirement for "exercising reasonable care in safeguarding" the authentic credit number, limits the amount of uses it can be tried (usually just once), and makes online shopping less frightening. The web may present dangers, but using your savvy skills and online tools should take the fear out of shopping!

(Continued from page 4)

when the user returns and "wakes" the machine, the system state is just restored from RAM, and the responsiveness to the user is fast. However, if for some reason power is lost (for example, if the PC is unplugged to move it - like you might move your TV), the system can still resume from the system state previously saved to disk with all context and data intact. (When Hybrid Sleep is turned on, putting your computer into sleep automatically puts your computer into Hybrid Sleep. Hybrid Sleep is typically turned on by default on desktop computers.) While Hybrid Sleep can be used on a laptop computer, it isn't as applicable. A desktop is vulnerable to power loss, while a laptop can, of course, run on its internal battery.

So, although there is a lot going on to produce and provide the power down modes, there really isn't much to think about. For desktops, let it go into, or select, sleep (which should be hybrid sleep) and for laptops take advantage of hibernate (your battery will thank you).

## EDUCATIONAL PRESENTATION ON IDENTITY THEFT

The identity theft expert will help you better understand:

- Current Identity theft trends
- The many ways identity theft can happen
- The risks individuals face
- What you can do to help protect yourself and your family

Each speaker is an identity theft education expert and reveals how personal information is lost or stolen. Other components of the presentation discuss the ways information is used fraudulently, how to minimize one's risk by using modes of protection.

*"The LifeLock Speakers Series was very informative and entertaining. The delivery was straightforward and the presentation did not come across like a sales pitch. Identity theft is a topic that touched everyone in the room at some level and we all benefited from the information that was shared."*

—T. Hughes,  
Atlanta, Georgia

Hosted by: Phoenix PC User Group

Date: Wednesday, May 16th

Time: 6:30pm

Location: The University of Advancing Technology  
2625 W. Baseline Road, Tempe, AZ 85283



## BUYING A NEW COMPUTER (PART 3)

Buying a New Computer – Things to think about (Part 3 of 3)

By Phil Sorrentino, Past President, Sarasota PCUG, Florida

March 2012 issue, Sarasota PCUG Monitor

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Last month we looked in depth at the things to be considered when buying a laptop, and the previous month we discussed manufacturers, laptop vs. desktop, and looked at the CPU. Now it's time to think about considerations for a desktop. A desktop usually is comprised of a tower, a display, a keyboard, and a mouse. But because a desktop usually has plenty of space, it can usually be found in the company of a printer, an Uninterruptable Power Supply (UPS), external hard drives, and special purpose peripherals like a slide scanner, or a VHS to DVD converter.

A desktop minimally consists of a Tower, a display, a keyboard and a mouse. The keyboard and mouse could be wired or wireless. The tower is the heart of the desktop computer. It houses a motherboard which is a large printed-circuit board that includes all the basic computer functions, as well as expansion slots for adding features. The boards that are plugged into these expansion slots are called daughter boards (get it?). These daughter boards can provide other interfaces and capabilities. The tower also houses all the Hard Drives and Optical Drives (and a Floppy drive if you need that kind of backward-looking compatibility). RAM, or Random Access Memory, is located on the mother board, so on the motherboard you will find a number of memory slots. These memory slots are usually there to hold a specific type of memory like DDR2 or DDR3, although the amount of memory may vary. For a Windows 7 computer, the minimum RAM is really 2 GB, although Microsoft indicates it will run fine with 1 GB (on a 32-bit CPU). (As was stated last month, the CPU type, 32-bit or 64-bit, along with the Windows OS version and the motherboard, will determine the maximum RAM for a given computer.) When deciding on a desktop, the only thing that is usually advertised is the amount of RAM, so the amount of RAM is the deciding consideration; the more RAM, the better. (The memory types may differ among different com

puters, and that may be why the costs differ.) The motherboard also contains other miscellaneous electronics for audio, USB ports, internet connection, and boot Programmable Read-Only Memories that control the bootstrap process. The motherboard is never a decision consideration because very little is advertised about the motherboard, but it is a crucial part

of the tower.

Because the desktop usually has plenty of space, the Display can be as large as you like, and you may even want more than one. A second display can expand the desktop size or be a copy of the first display. The copy of the first display might really be an HD large screen TV, which might be good for viewing those episodes of shows you missed when they were broadcast. Usually you can find those episodes on [hulu.com](http://hulu.com) or [abc.com](http://abc.com), [nbc.com](http://nbc.com) and [abc.com](http://abc.com). Very good displays in the 22 to 24 inch category can be found from all of the large display manufacturers like HP, Samsung, Dell, Viewsonic, and Sony. With a display, "size counts", so try to get the largest display that will fit into the space available.

The display is driven by a Graphics Adapter which is either on the motherboard or is provided by a Graphics Adapter daughter board. Today, most desktop computers are configured to use the on-board graphics adapter, which usually does a pretty good basic job. If you are looking for improved graphics, like multiple display support, better resolution, or faster performance for gaming, it is up to you to add a daughter board graphics adapter to the motherboard. Graphics Adapters are available from ATI, nVidia, and Matrox, as well as others.

Now for the Hard Disk Drive (HDD). This is where the desktop really starts to show its value. (As we stated last month, for a Windows 7 computer, it is suggested that the HDD size be at least 200 GB, but because we are talking about a desktop, consider much larger drives.) Most desktops will come with one large HDD, but there is usually enough room in the tower to add typically up to 3 more drives. Adding just one other drive gives you the ability to backup your data within the tower, making the backup process so easy that you might actually do it regularly. Once you commit to more than one HDD, there are a lot of ways you could use the drives. If the drives are large, say greater than 500 GB, you can partition the first drive so you have a C: drive of about 100 GB for the OS and applications, and then use the rest, the D: drive, for data (documents, pictures, videos, music). Then the second drive, the E: drive, could be for backup.

Almost all computers are called upon to access the Internet. Because the desktop is usually in one place, and usually near the router, this can be easily accomplished by a wired connection to an Internet Service Provider (ISP). (Wired connections are faster and more secure than wireless connections.) All of

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## BUYING A NEW COMPUTER (PART 3)

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today's desktops provide this type of connection by an RJ-45 plug somewhere on the back of the tower.

Desktops again, because of their size, can accommodate multiple optical drives. Having two CD/DVD Drives can make the process of copying CDs or DVD easier. One drive can be read-only, which will keep the cost down, and the other can be read/write. With two drives, you don't have to interrupt the copying process to exchange the disks; the software just copies from the read-only to the read/write and lets you know when it is done. So, if a second optical drive is available, that may become a good decision consideration. Most towers include a CD/DVD drive, but some of the newer, more expensive towers are including newer, more expensive, Blue-ray drives. (As stated last month, CDs hold 700 MB. DVDs hold 4.7 GB, and BDs hold about 25 GB.) The optical drive is only a decision point if you are specifically interested in reading and/or writing BD disks, otherwise there is little difference between manufacturers' optical drive products.

As discussed last month, all computers have audio capabilities, usually a microphone input, provided by a 1/8<sup>th</sup> inch mono mini-jack, and a stereo output provided by a 1/8<sup>th</sup> inch stereo mini-jack. The microphone input can be used for audio/video telecommunications like Skype and Google Talk. If you want to enjoy audio from a desktop, you'll have to add a set of computer speakers, which are easily connected to the stereo output, and fairly inexpensive.

All desktops have USB 2.0 interface ports. The number of ports may be a decision point. And the newer USB 3.0 may show up on some newer, more expensive towers. Other types of interface ports such as Firewire or eSATA, can be added to a tower's motherboard, using an expansion slot, so that the interface connector is available on the rear of the tower. This is definitely a decision point if these types of interfaces are needed.

The desktop tower's power supply is not usually a decision point, but a desktop's power supply can be easily replaced. If one adds a lot of expansion slot capabilities, the power requirement may increase beyond the original capacity. Replacement power supplies are fairly inexpensive and available from many sources.

A desktop is usually cheaper than a laptop of similar capabilities, and the desktop capabilities can be ex-

panded to provide many more capabilities. These capabilities are only limited by your imagination and sometime your wallet. Good luck with your next computer purchase.

You might think we're finished because we've covered most of the technical aspects of the computer purchase. But there is still one thing to be considered: What if things don't work the way you expected after you open all the boxes, remove all the parts and put it all together (even with a laptop you typically have to install the battery). Now it may be a matter of where you bought your equipment. It seems there are at least three choices: the "big box" stores (Best Buy, Office Depot, Office Max, Staples, etc.); on-line retail websites (Amazon, Buy.com, Newegg, etc.); and Local computer stores (Discount Computers, Computer Repair, - see their Ads in this issue). The concern here is support after the purchase. With all of these options, there is typically 15 to 30 days where you can return your equipment for a refund or at least store credit. If you bought from a website you'll have to package it all up and get an RMA (return material authorization) or something similar. Returning it to a "big-box" or Local store is probably a little easier. After the initial "return period" comes the time of ownership. I can't speak from a position of great authority here, because I have not used either "big-box" or local help, but support is readily available from both "big-box" stores and Local computer stores. (I have been told of some excellent experiences friends have had with local stores.) Local computer stores might have an edge in follow-on support because of the smaller number of people involved, but I'm sure there are many success stories using both alternatives. (Personally, I like the ability to call someone I know, and have a relationship with, to discuss the problem.) Local stores may even include a number of hours of training with the purchase.

No matter where you purchased the computer, sometime in the future you will have a problem (I'm intentionally using the word "will" rather than "may"). Where you purchased the computer may then play a very important role in getting the computer back up and running. The problem may be hardware (disk drive, or CPU chip), or software (virus effects or simply slowed down operations), so one of the last things to think about would be a backup plan. This is a good opportunity to go back and re-read the backup articles published right here in the Monitor. Now that you've got all bases covered, go out and buy that computer and look forward to many years of happy, successful computer use.

# HOME COMPUTER SECURITY

## Home Computer Security

By Wil Wakely, President, Seniors Computer Group, California

April 2011 issue, Bits and Bytes, The Official Electronic Newsletter of the Seniors Computer Group  
www.SCGsd.org  
wilw(at)adnc.com

For this article I will be quoting extensively from work that was produced by Carnegie Mellon University for FedCIRC and the General Services Administration, because they say it much better than I can.

Your home computer is a popular target for intruders. Why? Because intruders want what you have stored there. They look for credit card numbers, bank account information, and anything else they can find. By stealing that information, intruders can use your money to buy themselves goods and services. But it's not just money-related information they're after. Intruders also want your computer's resources, meaning your hard disk space, your fast processor, and your Internet connection. These are called

TROJANS and WORMS. They use these resources to attack other computers on the Internet. In fact, the more computers an intruder uses, the harder it is for law enforcement to figure out where the attack is really coming from.

How do intruders break into your computer? In some cases, they send you email with a virus. In other cases, they take advantage of a flaw or weakness in one of your computer's programs – a vulnerability – to gain access. Once they're on your computer, they often install new programs that let them continue to use your computer – even after you plug the holes they used to get onto your computer in the first place. These 'backdoors' are usually cleverly disguised so that they blend in with the other programs running on your computer. Following are things you should do to protect your computer:

### · **Task 1 - Install an Anti-Virus Program**

These programs look at the contents of each file, searching for specific patterns that match a profile – called a virus signature – of a program known to be harmful.

For each file that matches a signature, the anti-virus program typically provides several options on how to respond, such as removing the offending patterns or destroying the file.

Viruses can reach your computer in many ways, through floppy disks (flash drive), CD-ROMs, DVDs, email, web sites, and downloaded files. There are many thousands of new viruses created each day!

Never go on the Internet without active anti-virus protection.

### · **Task 2 - Keep Your System Patched**

Patches, or small modifications of programs are often supplied by the software vendors. These close security 'holes' in the programs that would allow illegal entry into your computer. Microsoft and Adobe offer frequent patches which should be installed when provided.

### · **Task 3 - Use Care When Reading Email with Attachments**

Do not open attachments that you are not sure about. Do not respond to emails by clicking on a LINK, which is a blue underlined word or phrase. Identify and remove SPAM (unwanted emails). Many programs are available to accomplish this. Be aware of PHISHING whereby an email tricks you into providing confidential information by impersonating a valid website. These become more sophisticated each day.

### · **Task 4 - Install and Use a Firewall Program**

On a computer, the firewall acts much like a guard when it looks at network traffic destined for or received from another computer. The firewall determines if that traffic should continue on to its destination or be stopped. The firewall 'guard' is important because it also keeps the unwanted out and permits only appropriate traffic to enter and leave the computer.

### · **Task 5 - Use Strong Passwords**

Passwords should contain both letters, numbers and/or symbols and should be at least 5 characters long. Use an encrypted password keeper program so you don't forget them.

There are programs which will automatically insert your user name and password when requested.

### · **Task 6 - Install and Use a Hardware Firewall**

Complement your firewall program by installing a hardware firewall. Together, these two firewalls stand between your home computer and the Internet. A ROUTER acts as a hardware firewall.

### · **Task 7 - Install and Use a File Encryption Program**

Consider encrypting sensitive files such as your financial data and passwords. Many encryption programs are available and some are free.

In summary, take computer security seriously – many thousand skilled programmers are out there constantly seeking out your computer vulnerabilities. Don't be a victim.

## THE GOOGLE 2-STEP!

The Google 2-step!

By Drew Kwashnak, Member, Danbury Area Computer Society, CT

June 2011 issue, DACS.doc

[www.dacs.org](http://www.dacs.org)

[dacseditor \(at\) dacs.org](mailto:dacseditor@dac.org)

If you are one of those users with "password" as your password, might I suggest you use Google for your email, calendar and other online needs! Even if you use a password not on the list of "The Top 500 Worst Passwords of All Time" it might be a good idea to use Google's 2-step verification.

The 2-Step Verification is, in Google's own words:

2-step verification adds an extra layer of security to your users' Google Apps accounts by requiring them to enter a verification code in addition to their username and password, when signing in to their account.

This Verification code is not another password to memorize. Instead, the verification code is generated at the time you try logging in, and is only valid for a short period of time. Even if somebody were to pluck your username, password AND verification code out of the air they are to act quickly before the verification code is expired.

Corporations have made use of this verification method for years but have had to rely on distributing a keychain FOB with an automatically changing verification code. Google uses something more readily available; your phone.

When turning on 2-step verification for your Google Account you are walked through the set up process. At minimum you have to supply a phone number and you have the option receiving the verification code either as an SMS (text) message, or an automated voice message.

While you can change which method to receive the verification code when logging in, you cannot change where it is sent. This also means anybody trying to log into your account cannot redirect the verification code to their phone. You can, however, set up a sec

ond backup phone and method. This is helpful just in case you don't have your phone handy.

That's it! The next time you log into your Google Account, or any of the numerous Google Apps, you will get the familiar login request except when you click Sign In, you will see a page asking for your Verification code and within moments your phone will be receiving this code.

Once you have successfully logged in, you don't have to worry about going through this process every time. It remembers the computer you are using and afterwards it will function with just your username and password, unless you log completely out.

Since most local applications, such as email or chat clients, do not know how to handle a verification code, you can create what is called Application Passwords. These are randomly generated, strong passwords that allow only applications to access your Google Applications, not a browser and not your account settings.

These passwords can be easily created and deleted as necessary only after logging into the account using the 2-step Verification. This could be used for temporary use, easily changing the password every so often, or having each system or application use their password.

So not only does Google add a layer of security with the additional verification code, it also separates application-level access with the account settings controls to limit the damage somebody can do if they were to gain access to your username and password.

Once set up it is not a difficult process to follow, and the return of greater security is well worth it in my opinion.

*Drew Kwashnak spends way too much time on the web and ran across this feature from Google when his account was closed for "suspicious activity". Since then, he hasn't had any issues with "suspicious activity" or the like.*

## WINDOWS LIVE SKY DRIVE: AN OFFICE IN THE CLOUD

Windows Live SkyDrive: An Office in the Cloud

By Nancy DeMarte, a member of the Sarasota PCUG, Florida

December 2011 issue, Sarasota PC Monitor

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A quiet, steady evolution is taking place in the data storage world. Soon CD's and external hard drives may be replaced by storage on the Internet, or, as we say, the "cloud." In this era of mobile devices like smart phones, laptops, and tablets, it is natural for us to want to have access to the files and photos on our base computer when we are in some remote location. SkyDrive is Microsoft's password-protected, free online storage area, complete with abbreviated versions of popular Microsoft Office programs for editing the stored files. It is also equipped for sharing files with others and is a convenient way to transfer files from an old computer to a new one. Microsoft Office users should get to know Windows Live SkyDrive as a solid option for online backup.

Online storage has been around for awhile, primarily purchased by businesses as a backup for large amounts of data. Carbonite, for example, is a well-respected online storage company popular with businesses which also offers a package for home clients. The home client pays an annual fee of about \$60 per computer to upload user-created files to a secure spot. Free online storage is not as common, but Google and Microsoft are competing for the title of most popular free cloud storage. I have used Microsoft's SkyDrive for a couple of years and have found it to be a user friendly, flexible service with many good features and being updated all the time.

### Windows Live

Before we explore how SkyDrive works, let's take a minute to review the concept of "Windows Live," of which SkyDrive is a part. Microsoft has been reworking the "Live" idea since 2005. It is a group of online services and software downloads which complement Microsoft's operating systems. When Windows 7 was introduced, several applications which had been part

of earlier Windows versions were removed, among them Windows Mail and Photo Gallery. Instead, Microsoft offered a suite of programs and services called Microsoft Live Essentials and made it available for free downloads, as long as the person joined the Live community with a username and password. (I have belonged for years and have not received spam as a result.) Users can choose the programs they want from a long list. Many of these are online services, such as SkyDrive and Hotmail. Others are downloadable programs, such as Windows Live Mail and Movie Maker. All are free. Microsoft has announced recently that Windows 8 will have the Live Essentials package included with the system.

### SkyDrive: Free Storage

SkyDrive lets a Microsoft Office user add Word documents, Excel spreadsheets, PowerPoint presentations, OneNote documents, and photos to a password-protected place on the Internet at [skydrive.live.com](http://skydrive.live.com). You can add a single file up to 100MB in size and can store a total of 25GB at no charge. These limits were recently raised, and the prediction is that storage space on SkyDrive may be unlimited very soon. Isn't competition great?

To add files to SkyDrive, you must first create a free Live account, then log on to SkyDrive and create folders to hold your files. You then select the files, including photos, from your computer and upload copies of them into these folders using an easy-to-follow wizard on the SkyDrive home page. You can even upload a whole folder at once as a local zip drive. Next you set permissions for each folder using a simple slider and folksy categories: Everyone (public), People I selected, People with a link, or Just me.

Once files are in SkyDrive, they can be deleted, organized, and renamed. Plus, they can be edited with the Office web apps, mini-versions of Office programs located on the SkyDrive home page, using any version of Office back to 2003. If you have Office 2010, you can open a file that you have stored in SkyDrive in the appropriate web app, and then

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## WINDOWS LIVE SKY DRIVE: AN OFFICE IN THE CLOUD

## THE KEY TO WINDOWS 8 WITHOUT A TOUCH SCREEN

*(Continued from page 11)*

click the "Open in ..." button to open it with your full version of program on your computer. If you have an earlier version of Office, you can download a plug-in program from Microsoft that allows you to open a file with your full program. I tried this on my laptop with Word 2007, however, and found it cumbersome. I guess they want us to buy Office 2010. As a workaround, you can always download a file from SkyDrive to your computer for full editing capabilities.

### Sharing Files

If you want to share a file, whether an Office file for a photo, on SkyDrive with someone, you can either send him a link or set the permission so he can view and/or edit it. I experimented by sharing a Word 2007 document with a friend who is not a member of Windows Live. In SkyDrive, I highlighted the file I wanted to send. From the Sharing menu, I clicked 'Send a Link'. An email message opened ready to address. It contained a link to the file with a spot for me to type a message. My friend received the message with no problem and merely clicked the link to go directly to the folder on SkyDrive. She now has permission to view documents in that folder.

Currently, the only Office web app that allows for shared editing is Excel. This involves editing a spreadsheet in SkyDrive with selected people. Names of those working on the file at the same time show up in the toolbar.

SkyDrive is greatly improved from its predecessor, Windows Live Workspace. I would expect it to get even better as the competition heats up with its rival Google. The reviews show that although Google made a huge push a couple of years ago, with its array of services like Google Apps and Google Calendar, Microsoft is catching up. Its latest version of SkyDrive, plus two new related synchronization services, Live Sync and Live Mesh, are a good start. Microsoft now offers 25 GB of free storage compared with Google's 1 GB (although there is the option to purchase more). If you are a Microsoft Office fan, then you can't go wrong by giving SkyDrive a try.

I'm always ready for a new challenge so when Windows 8 Consumer Preview was available I immediately installed it on one of my laptops.

Once I observed Win 8 Preview on my laptop it was apparent that Win 8 was a combination of the windows desktop we all are comfortable with and a new desktop "Metro Start" with large tiles. Clicking on the tile or if you have a Touch Screen touching a tile activates it.

OK, I was on the conventional windows desktop so I moused down and left to activate the start menu. Oops, no start menu.

I played with my win 8 for hours and read as much about it as I could find on the Internet. It all finally has come together and here are some of the things one should know to work efficiently with the new operating system.

The "key to the kingdom" is the "Windows Key". That is the key next to the "alt key". Push it alone and it toggles between the two desktops. Push it in combination with a single letter and you get the following.

Win Key+B Opens Windows Desktop from Metro Start screen. Does not clear open windows.

Win Key+C Open Charms menu from Metro Screen or Windows Desktop.

Win Key+D Open Windows Desktop then toggle open windows.

Win Key+E Open Windows File Explorer at Computer. Control Panel button appears on ribbon interface.

Win Key+F Search files from Metro Start or Windows Desktop

Open Windows File Explorer at Computer.

Control Panel button appears on ribbon interface.

Win Key+F Search files from Metro Start or Windows Desktop in Metro Start screen.

Win Key+H Open Share.

Win Key+I Open Settings.

Win Key+K Open Devices.

+L Lock (log off).

Win Key+M Open Windows Desktop clears windows.

Win Key+P Second screen.

Win Key+Q Search Apps.

Win Key+R Run.

Win Key+T Tab to next open app (Metro and Desktop.)

ALT+F4 Shut or Close

Bill Aulepp — Publisher

## IMPROVE INTERNET SPEED BY CHANGING DNS

Improve Internet Speed by Changing DNS  
by Ira Wilsker

WEBSITES:

[http://en.wikipedia.org/wiki/Domain\\_Name\\_System](http://en.wikipedia.org/wiki/Domain_Name_System)

<http://en.wikipedia.org/wiki/Url>

[http://en.wikipedia.org/wiki/IP\\_address](http://en.wikipedia.org/wiki/IP_address)

<http://www.opendns.com>

<http://use.opendns.com>

<http://code.google.com/speed/public-dns>

<http://code.google.com/p/namebench>

Most of us are blissfully ignorant about the inner workings of the internet. We are quite happy when we turn on our computers and access the internet to surf the web or read our email. There are several utilities that can optimize the computer's and browser's settings to maximize their performance, and I have discussed these in past columns. What many of us are unaware of is that there is a setting that we can configure that may significantly improve our internet performance, and that is to find the fastest "DNS" freely available to us.

"DNS" is an acronym for "Domain Name Server" (or "Domain Name System"), more commonly referred to by the moniker "nameserver". According to Wikipedia, DNS "... serves as the phone book for the Internet by translating human-friendly computer hostnames into IP addresses. For example, the domain name [www.example.com](http://www.example.com) translates to the addresses 192.0.32.10 (IPv4) and 2620:0:2d0:200::10 (IPv6)." Simply, when the user types a web address, or "URL" (Uniform Resource Locator) in the address bar of the browser, the browser checks the computer's default DNS, and converts the website address from words to a numerical address (IP address); thus [www.yahoo.com](http://www.yahoo.com) is converted to the Internet Protocol (IP) address of 209.191.122.70, a format that can efficiently be used by the internet to connect the user to the desired website. The default DNS is typically configured for a specific internet service provider (ISP) when the user first subscribes to that particular ISP. Normally these ISP specific DNS work just fine, but many of them are not the fastest available, and

many of the ISP providers' DNS are also vulnerable to hijacking, or misdirecting the innocent user to a rogue website, opening the user to a variety of attacks or identity theft. Some DNS are unfiltered, and let the user connect anywhere they desire, while other DNS offer selective filtering, which can block access to undesired websites, such as pornography and phishing (identity theft). Many adults are perfectly satisfied being able to connect where they want, but families with children and others may want filtered access, and some DNS provide that service.

What is possibly the largest and most widely used alternative DNS is OpenDNS ([www.opendns.com](http://www.opendns.com)). Anyone can configure his computer to use OpenDNS instead of his ISP's default DNS, and may experience faster and more secure internet connections. The basic OpenDNS services are free to individuals, and enhanced commercial (pay) services are available to everyone. Thousands of businesses, government agencies, K-12 schools, college and universities, non-profits, and others utilize the commercial OpenDNS services. OpenDNS says that, "OpenDNS is the leading provider of free security and infrastructure services that make the Internet safer through integrated Web content filtering, anti-phishing and DNS. OpenDNS services enable consumers and network administrators to secure their networks from online threats, reduce costs and enforce Internet-use policies. OpenDNS is used today by millions of users and organizations around the world." A comparison of the free and commercial OpenDNS services is available at [www.opendns.com/start](http://www.opendns.com/start). The basic free service includes selectable web content filtering, phishing (identity theft) protection, defense against botnets, and can correct many "typo" errors which can protect the user from connecting to rogue websites with close web names. The paid service with additional features and protection is very reasonable at about \$10 per year for a family (5 computers), and \$5 per user per year for commercial (business) accounts. Special pricing is available for K-12 schools.

For those who would like to change their default DNS to OpenDNS, easy to follow instructions are provided by OpenDNS at [use.opendns.com](http://use.opendns.com) or

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## IMPROVE INTERNET SPEED BY CHANGING DNS

*(Continued from page 13)*

the actual IP address of 208.69.38.205. OpenDNS is compatible with almost every operating system, and simple directions are provided for Mac OS X, Windows 7, Windows XP, Windows Vista, Generic Routers, Linksys Routers, Netgear Routers, and D-Link Routers. One warning; although OpenDNS is extremely reliable and trouble free, I strongly recommend that users write down their default ISP information, before changing the DNS settings to OpenDNS or any other nameserver. It might also be a good practice to print the OpenDNS instructions just in case the current DNS used by your ISP becomes unavailable, and then you can easily switch to OpenDNS and probably be back online in seconds. Anyone can change his default DNS to OpenDNS by using 208.67.222.222 and 208.67.220.220 as his default DNS.

There are several excellent DNS available to the typical user, and Google is now offering DNS services to anyone who would like to use them with its Google Public DNS service ([code.google.com/speed/public-dns](http://code.google.com/speed/public-dns)). With all of the necessary information online including benefits and setup instructions for almost every operating system ([code.google.com/speed/public-dns/docs/using.html](http://code.google.com/speed/public-dns/docs/using.html)), Google Public DNS may be a good choice instead of the default DNS provided by your ISP, and generally offers better security and protection from purloined websites, as well as better speed and general performance than the ISP provided DNS. Google Public DNS offers many of the same benefits of OpenDNS, including the integral enhanced security features. Google Public DNS uses the IP addresses of 8.8.8.8 and 8.8.4.4 which anyone can set as his default and freely use.

There are many other DNS available to users, and Google provides a free open-source utility it calls "Namebench" that can automatically test the available combinations of DNS from the user's computer, and determine which ones provide the best overall performance for the specific user. This free utility is available from Google at [code.google.com/p/namebench](http://code.google.com/p/namebench), and runs on Windows, Mac OS X, and UNIX. I downloaded and ran the Windows version of Namebench from my Windows 7-64 computer, and in about five minutes Namebench tested hundreds of DNS combinations, and found a combination that

was 31.8% faster than the DNS provided by my ISP. In my case, OpenDNS-2 (208.67.222.222) provided the fastest service, with Internet America FDDI-2 US (207.158.92.18) recommended by Namebench as my secondary DNS. Each user should run Namebench on his own computer to determine the best combination for his machine, as results will vary from machine to machine.

While all of this DNS business may sound complex, it is really very easy for users to change their DNS settings to a safer, more secure, and faster connection. While OpenDNS and Google Public DNS are both fast, excellent, and reliable, and either may be a good choice for a default DNS over the one provided by the ISP, I would recommend that Google's free Namebench be run to really determine which DNS combination is best for a particular computer. Since ISPs and the other providers of DNS services are subject to the rapid changes extant in the internet, it would be a good idea to periodically rerun Namebench to verify that the currently selected DNS are still the best combination for your computer. Always remember to write down the current DNS settings before changing them, just in case you might ever want to go back to the original settings, but this is not likely with OpenDNS, Google Public DNS, and the results from Namebench.

**WE WANT TO KNOW**

**LET'S DISCUSS AT THE  
NEXT MEETING**

**WHAT SUBJECTS DO YOU  
WANT COVERED  
AS PRESENTATIONS**

**THAT CAN BE  
IMPLEMENTED  
AT FUTURE MEETINGS**

## Short Circuits...zzzt!

**Not Here.** It seems NATO may also stand for Not All That Observant. A video that was that was posted on the website of the North Atlantic Treaty Organization ahead of its upcoming summit in Chicago got a few things wrong: identifying Chicago as Illinois' capital, identifying the city as the place President Barack Obama grew up and identifying the wrong man as the founder of the Chicago Tribune. But NATO showed it could also stand for Not About To Offend after it scrubbed those mistakes from the video. The corrections: Springfield is Illinois' capital. Obama spent his childhood in Hawaii and Indonesia and only moved to Chicago later. And also Col. Robert McCormick, for whom the host convention center is named, did not found the Tribune, as the video first stated.

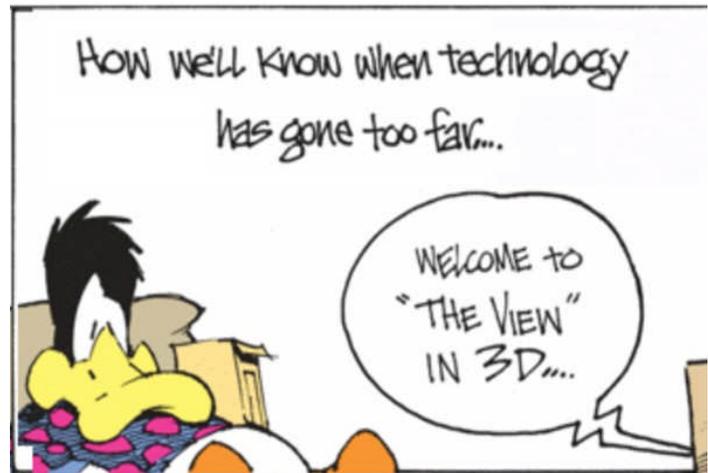
*Associated Press* May. 4, 2012

**Not My Choice.** A commercial going viral on YouTube tells kids to say "no" to crack and "yes" to a Reno, Nevada roller rink. The 90-second spot was developed by a local comedy duo. It had nearly 240,000 views on YouTube four days after it was posted online. The campy video features a drug dealer offering pills to a boy, a man trying to lure children into a van with candy, and gang members inviting kids to spray paint bridges. The children tell the bad guys they'd rather be roller skating. The roller rink owner said that the duo offered to produce the commercial for free so they could show it on their own cable TV show.

*Associated Press* Apr. 28, 2012



"Ever since you got more Facebook friends than me, you've had an attitude!"



**Not a Joke.** The American Civil Liberties Union is suing a northwest Indiana school district that it says expelled three eighth-graders for joking on Facebook about which of their classmates they would like to kill. The lawsuit filed in federal court in Hammond alleges the expulsion violated the three 14-year-old girls' free speech rights. The girls were suspended and later expelled after a classmate's mother alerted school officials to the Facebook posts. The suit says school officials told the girls they had violated school policy against bullying, harassment and intimidation. The ACLU attorney says it was clear the girls were joking because their remarks were accompanied by smiley faces and other emoticons. School officials have not yet commented on the matter.

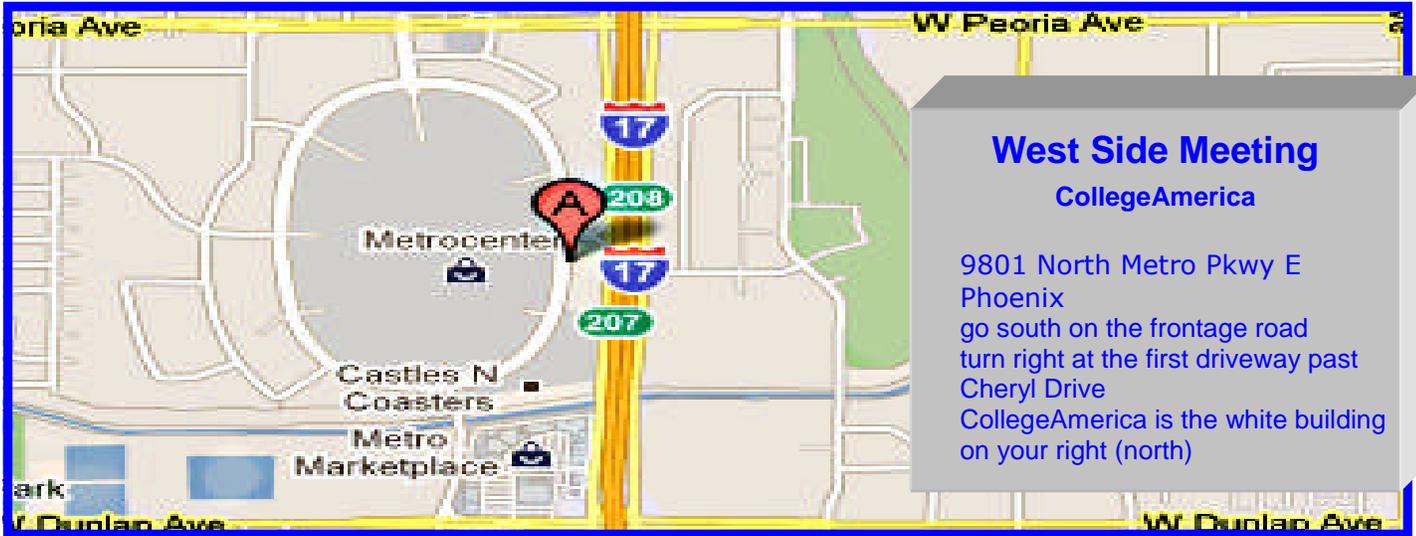
*Associated Press* April 25, 2012

**Not In Sight.** Ocean City, New Jersey police say a Pennsylvania man was trying to find his lost cell phone when he drove down the resort city's boardwalk and crashed onto the beach. The man and his friend had been walking on the beach when they lost the phone. Believing the car's headlights would help them see the phone, the driver steered the car onto the boardwalk. But he lost control as he drove off and went through a railing, damaging about 25 feet of railing and board decking. Both men were treated at a hospital for minor injuries. Each was charged with hindering apprehension, while the driver was also charged with drunken driving.

*Associated Press* Apr. 25, 2012

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

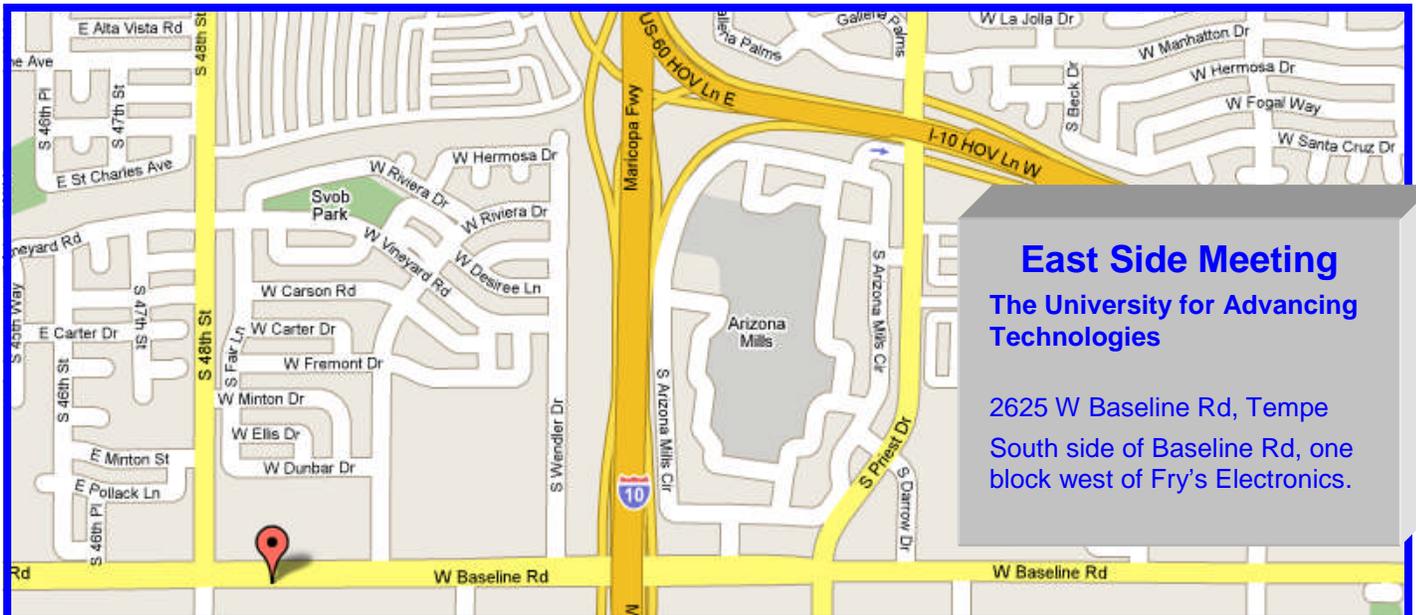
# HOW TO GET THERE



## West Side Meeting

CollegeAmerica

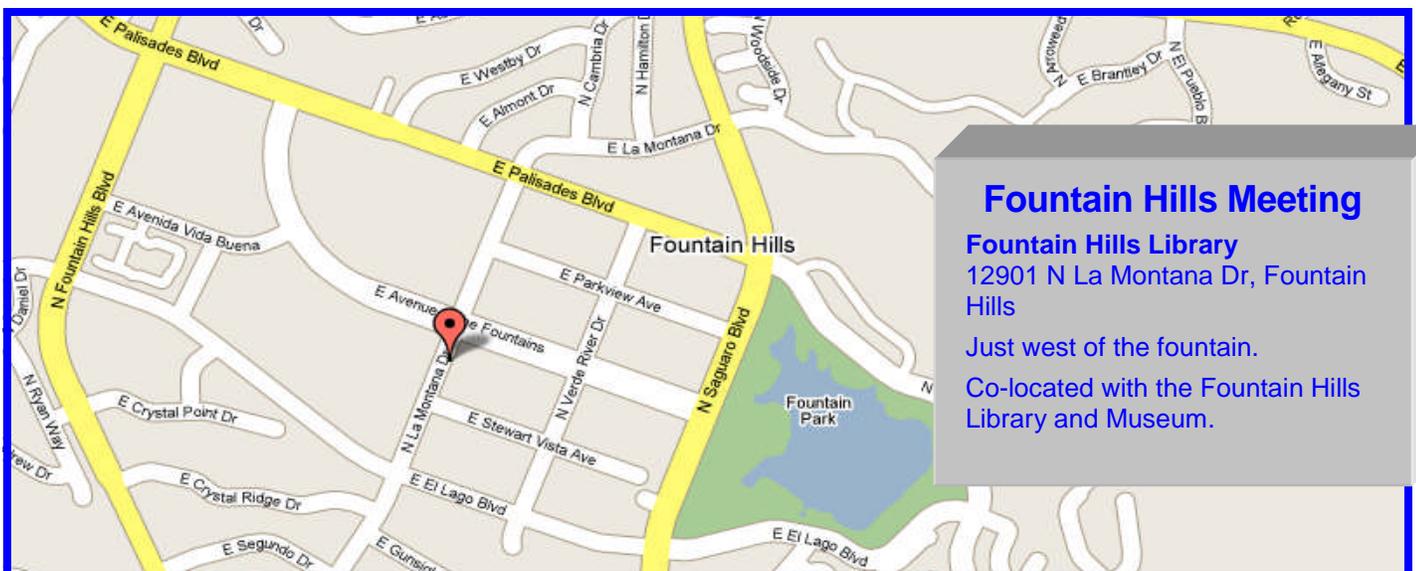
9801 North Metro Pkwy E  
 Phoenix  
 go south on the frontage road  
 turn right at the first driveway past  
 Cheryll Drive  
 CollegeAmerica is the white building  
 on your right (north)



## 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, 2012*

## 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:

**Phoenix PC Users Group**  
PO Box 45451  
Phoenix, AZ 85064—5451



*The Best Accessory  
for your PC!*

Web address:  
[phoenixpcug.org](http://phoenixpcug.org)

May 2012

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

STAMP

PLEASE NOTE OUR NEW ADDRESS

PHOENIX PC USERS GROUP  
PO BOX 45451  
PHOENIX, AZ 85064-5451