NEWSLETTER

The Best Accessory for your PC !

This website is gone: www.azacc.org
The Arizona Alliance of Computer Clubs

Proud member of www.apcug2.org:
Association of PC User Groups

Phoenix PC Users Group

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Steering Committee:

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

MAPS TO MEETINGS **on Page 20**

West Side……...Tue, Oct 20, 2015
College America, 9801 North Metro Pkwy E, Phoenix

East Side……...Wed, Oct 21, 2015
University of Advancing Technology, 2625 W Baseline Road, Tempe (one block west of Fry's Electronics)

Fountain Hills……..Thur, Oct 22, 2015
Fountain Hills Library, 12901 N La Montana Drive, Fountain Hills, Arizona

Presentation this month: Computer topics, Windows 10, Smart Phones, etc.

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

USE STRONG PASSWORDS! Do updates: Java, Adobe Reader, Windows!

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…

FROM YOUR PRESIDENT

Look for Windows 10 articles in this issue!
It is better than Windows 7, 8.1 mostly, but it's not mature yet. **Wait for a Service Pack or its new name!** See page 4, this newsletter.

Needed: Editor or Publisher!! Contact me!!

"**CLONED HARD DRIVES - YOUR BEST PROTECTION !**
My best recommendation, protects against nearly every data problem." Use Carbonite and Acronis True Image.

At the meetings, we'll have a free flowing discussion showing various web sites, do Q&A and give the best advice we can. **Want lots of tech news? Then go to news.google.com - then choose technology: http://tinyurl.com/kru237d,**

Kim Komando & tips this month: **1-888-825-5254**
http://www.komando.com/show-picks

Leo Laporte http://www.techguylabs.com/
http://leoville.com/ http://twit.tv/people/leo-laporte
1-88-88-ASK-LEO Listen, The Tech Guy - TuneIn
http://tinyurl.com/pu8rscc Check his Windows 10 news!

Ask Leo!: Making Technology Work For Everyone
Leo Notenboom https://askleo.com/

Ken Coburn, Data Doctors Tech Tips
http://www.datadoctors.com/media/tips/

June 2014, I tried out **Norton Safe Web**
http://safeweb.norton.com & Online Link Scan - www.onlinelinkscan.com One member emailed me about protecting his PC, both excellent ways to avoid malware, **ransomware**, etc.

Free Internet watchdog warns you about bad sites
http://www.komando.com/downloads/759/free-internet-watchdog-warns-you-about-bad-sites/all

Eye on Windows: http://www.eyeonwindows.com/
http://www.eyeonwindows.com/category/satya-nadella/
http://www.windows10update.com/ We have all the Windows 10 news, tips and updates you need… (a pop-up will happen, sign up - DY) Hardware, Software Reviews & Windows Resources. Last web link is great!

The Kim Komando Show - stations and times - TuneIn, just Google "komando tunein all stations" Listen free on weekends.
www.komando.com/downloads/2321/6-essential-types-of-security-software-you-must-have/all

Tim Greer, Microsupport says Acronis True Image and Carbonite, each has pluses. 602-404-4245, 480-232-1101, microsupport.com

Gene Barlow sells Acronis True Image for Windows 10, 8.1, 8, 7, Vista, XP, Apple Macs. www.ugr.com. Ask for latest email on Windows 10 and user group discounts!

SPSI Computer Specialists - Phoenix
www.spsi-az.com/ , contact Troy, 602-997-7335

Going to Rio Salado College for a GED?
Try http://www.hippocampus.org/ - Math, Natural Science, Social Science, Humanities,
Khan Academy - https://www.khanacademy.org/

One negative feedback a member told me - about Data Doctors, so be careful.

IMPORTANT: DON'T MOVE TOO FAST TO WINDOWS 10, WAIT A FEW MONTHS!!!

We appreciate support by:
College America, collegeamerica.com/phoenix

University of Advancing Technology
www.uat.edu

"A ham - pod?"

BRING A FRIEND!! WE NEED MEMBERS!!
YOU CAN ASK QUESTIONS AT MEETINGS!

David Yamamoto

2015 GENERAL MEETINGS CALENDAR

For date and time changes, check: www.phoenixpcug.org

PRESENTATIONS THIS MONTH

Computer topics, more Windows 10, etc.

WEST SIDE: CollegeAmerica (see map page 22)
- Tuesday, October 20, 2015
- 6:00 PM - Steering Committee and (Election of Officers - Nov & Dec)
- 6:30 PM - Questions and Answers, Viewing websites, etc.

EAST SIDE: University of Advancing Technology (see map page 22)
- Wednesday, October 21, 2015
- 6:30 PM - Questions and Answers, Viewing websites, etc.

FOUNTAIN HILLS: Fountain Hills Library (see map page 22)
- Thursday, October 22, 2015
- 6:30 PM - Questions and Answers, Viewing websites, etc.

Meetings this year 2015: Reserve UAT Sept to Dec- 2015

Jan 20,21,22 Feb 17,18,19 Mar 17,18,19 Apr 14,15,16 May 19,20,21 Jun 16,17,18
Jul 14,15,16 Aug18,19,20 Sep 15,16,17 Oct 20,21,22 Nov 17,18,19 Dec 15,16,17

All meetings based on the 3rd Wednesday of each month

REMEMBER*: PAY YOUR DUES! Thanks, only $36 / year or $3 / month.

July

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

August

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23	24	25	26	27	28	29

September

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27	28	29	30			

October

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18	19	20	21	22	23	24
25	26	27	28	29	30	31

November

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1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

December

S	M	T	W	T	F	S
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13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Introducing Windows® 10 **http://Microsoft.com/Windows10**

Transform the Way You Work & Play. The Future Starts Now. Learn More.

See FAQs
Upgrade To Windows 10
Watch The Video
Top Windows 10 Features

http://www.techrepublic.com/article/upgrade-from-windows-7-to-windows-10-on-the-same-hardware/

More than a million minutes of historical video added to YouTube!

http://www.theverge.com/2015/7/23/9019727/associated-press-historical-video-on-youtube

Windows 10 Tips, Jim McDonnel, Phoenix PC Users Group, www.phoenixpcug.org, Aug 2015

Upgrading to Windows 10 is a snap. Microsoft has already analyzed your computer and found out that it is ready for a Windows 10 upgrade. That was accomplished when you clicked on the little icon that Microsoft put on your computer in the notification area. You can wait until Microsoft sends you a message that says you are ready to upgrade or you can of course go to the Microsoft site and upgrade. www.microsoft.com/Windows10

Here are a few recommended actions:

1. Make a backup image of your system before you do anything. (Or, clone the drive. DY).
2. Install Windows 10.
3. Make sure Windows 10 is operating like you want and that everything you care about is working.
4. Make a backup image of your Windows 10 system.

Your Windows 7 or 8.1 is probably working the way you like to work. In the Control Panel you will find a Backup and Restore icon. That same icon will show up in the Windows 10 Control Panel. Open it. On the left of the page that shows, click on Create an Image. (At this point you have to have an external device connected that has enough memory to store the image of your computer. If you don't have one purchase one, they are cheap.) The Windows 10 install program will find your external hard drive.

The next window gives you an image of what to save. Your system drive will already be selected. If you have other drives, you can select them also. The next window confirms your selections and you can press the button to start creating an image. Depending on how big your hard drives are and how fast your computer is it will take one or more hours to do its thing. A progress bar will show in the window that will assure you that things are working. You don't have to do anything. When it has completed successfully you will see a message.

It will ask you if you want to make a Repair Disc. Insert a writable CD in your optical drive and write the repair disc. (Label the disc and save it). You probably will never need it but if you do or your installation of Windows 10 fails you can boot your machine with the repair disc and restore the image that you created and your computer will be back exactly like it was when you created the backup image. The restore program overwrites the hard drive. Anything you created in the interim will of course be gone, but you probably save that stuff regularly anyway.) Now you can safely install Windows 10 update.

The Windows 10 install program will be run by Microsoft and they will do everything for you. They will not remove any of your stuff, it says here in fine print. It takes an hour or two or more and it will boot and reboot as necessary until it is finished. When it is done your password and stuff will be as it was before. There are any number of videos in YouTube that you can watch if you would like to be entertained. The startup screen is a combination of Windows 7 and Windows 8.1. The start or Windows button in the bottom left corner can be left clicked or right-clicked.

Lists will show for lots stuff. Spend a little time with both lists. In the search box to the right of the Windows button type CORTANA. From the pop-up list choose Cortana set up. The instructions are pretty straightforward but keep at it until you get Hey Cortana set up. You will love it. Obviously your audio system has to be set up so that you talk and listen. In the process you will speak several sentences so that Cortana will get to know how you say "hey". From then on any time you are using the computer you can ask for something and it will respond. Look at a YouTube video for more information.

The next thing is Microsoft Edge. It is the big E on the taskbar. It is a lot better than Internet Explorer. Watch a YouTube video on Microsoft Edge.

The next thing is virus and malware protection. Windows Defender has an icon on the Control Panel. It is a virus program provided in the operating system by Microsoft. A free version of Malwarebytes combined with Defender will give you pretty good protection. You can only have one virus program running on your computer. If you have one and want to keep it that's fine. Defender service will not be running when you do the Windows 10 install if you have another virus program. So if you want to switch you have to turn on the Windows defender service and then activate defender. Talk to Cortana and she will search Google and provide you with instructions. You can also watch a YouTube video on the subject.

Play around with the tiles, the applications, the programs and everything else that you would like to do in Windows 10 and when you are ready, make a backup image of Windows 10 followed by a rescue disc for Windows 10. Now look at your computer and say "Hey Cortana tell me a joke" and she will. End of tips.

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Many Computer, Technology, and Related Topics:

Edge browser fails to win over Windows 10 users
http://www.computerworld.com/article/2971957/web-browsers/edge-browser-fails-to-win-over-windows-10-users.html

Update: Mozilla slams Microsoft over Windows 10's default browser switcheroo
http://www.computerworld.com/article/2955337/web-browsers/mozilla-slams-microsoft-over-windows-10s-default-browser-switcheroo.html Along with the public displeasure at Windows 10's behavior, Mozilla also posted step-by-step instructions for users who wanted to restore Firefox as the default browser.

"Microsoft sees Bing searches as a chance to promote the Edge browser"
http://www.pcworld.com/article/2980786/browsers/microsoft-sees-bing-searches-as-a-chance-to-promote-the-edge-browser.html

"If you search for a competing browser using Bing on Windows 10, Microsoft will gently nudge you toward its own offering.

Microsoft really, really wants you to try its new Edge browser for Windows 10—so much so that it's urging Bing users to give it a go.

VentureBeat reported Friday that if you do a Bing search for the Mozilla Firefox or Google Chrome, Bing will helpfully note that "Microsoft recommends Microsoft Edge for Windows 10." Because of course it would. When you click the "Learn more" button, you'll get whisked away to a webpage extolling some of Edge's features, such as its annotation tool, Cortana integration, and distraction-eliminating "Reading view."

"First Look at Intel's Laptop Wireless Charging"
http://www.pcmag.com/article2/0,2817,2490600,00.asp

"BERLIN—Ah, wireless charging. It's been a dream for years, hampered by the fact that basically nobody has wireless charging pads, never mind the perpetual flurry of press releases that they're coming soon.

Add 20-watt magnetic resonance charging to your wireless charging dreams. At IFA here, Intel showed the fruit of its partnership with WiTricity. By late 2016, you'll be able to access-orize existing Windows 10-based 2-in-1 computers with wireless charging keyboards, Intel client computing GM Kirk Skaugen said. Just snap off your existing keyboard, and snap a wireless charging one on. Easy."

"Windows 10 Technical Pro Preview Hands-on Demo" - Bill James - APCUG 2015 Winter VTC

https://www.youtube.com/watch?v=RWuSBCTVGIU, Apr 5, 2015

"When Windows 95 was released 20 years ago, it started a PC revolution and Win 10 combines elements of past Operating Systems with Windows 8. Windows 10 starts a new conversation about the Windows operating system that desktop and touch-screen end users are sure to appreciate. Win10 addresses many of the complaints or concerns that occurred with Windows 8. You boot to the Desktop; clicking on Start opens a Windows 7 style menu + Windows 8 tiles - use the view you like."

"10 Windows 10 Hacks That Will Blow Your Mind"
http://www.pcmag.com/sponsoredcontent?prx_t=_M8BA4m4DADFULA

"Anyone that's been using Windows 10 for a few weeks now will realize just how massive of an update the operating system is. Microsoft has made a concerted effort to right the wrongs of Windows 8, bringing back features like the Start menu, while simultaneously adding in great functionality like Cortana, Continuum for tablets, and Task View.

Many of Windows 10's key features have been talked about at length, but the operating system actually comes with a lot of great features that aren't as immediately obvious to everyday users and even enthusiasts. These features don't get the attention that they should, so without further ado, let's get on with the top 10 hidden features of Windows 10."

Microsoft Office Sway - Create and share amazing stories ...https://sway.com/ free in Windows 10

Reimagine the way your ideas come to life. Sway is an intelligent app that helps you easily pull together, format, and present your content on an interactive, interesting manner. Like PowerPoint.

https://sway.com/solar_energy - very interesting PowerPoint-like web page, horizontal
https://sway.com/dBheQgVZ1RQBfiQU - Future Energy Chicago, very interesting, vertical

"Windows 10 patch KB 3081444 and the future of 'service packs' " Woody Leonhard

Microsoft's latest fix holds some surprises under the hood -- and could make us rethink the company's plans for updates and release schedules"
http://www.infoworld.com/article/2973432/microsoft-windows/windows-10-patch-kb-3081444-service-packs.html

"This also brings up the matter of rapid-fire releases of Cumulative Updates for Windows 10. They aren't entirely security patches. They aren't entirely plumbing fixes. They come from both Windows Update and from the Windows Store."

"Windows 10: Public enemy No. 1, or an OS like any other?"
http://www.computerworld.com/article/2979745/microsoft-windows/windows-10-public-enemy-no-1-or-an-os-like-any-other.html

"For example, Windows 10 assigns an advertising ID to users, and then uses that ID to deliver customized ads and information to them. The digital assistant Cortana has to gather information about users in order to do its work, such as reminding people about upcoming flights. All this is not much different from how other operating systems and websites work. "

Microsoft Windows® 10, www.microsoft.com/Windows10
Fast. Compatible. Free! Get The Best Windows Ever. Upgrade To Windows 10, Learn How To Get Started With Your Free Windows 10 Upgrade. FAQs Get Answers To The Most Frequently Asked Questions About Windows 10. Top Windows 10 Features See Highlights Of The Exciting New Features Built Into Windows 10. Watch The TV Ad The Future Starts Now. For All Of Us.

How to Upgrade to Windows 10 - Microsoft - your free upgrade
https://www.microsoft.com/en-us/windows/windows-10-upgrade Also, Google: "komando windows 10" for more info, what works, what doesn't.

MakeUseOf - Technology, Simplified

www.**makeuseof.com/** ***MakeUseOf*** **is your guide in modern tech. Learn how to *make use of* tech and gadgets around you and discover cool stuff on the Internet.**
Hate Handwriting? Me Too. Here's Why We Should Teach It Anyway.
http://www.makeuseof.com/tag/cursive-handwriting-is-important/

What Are Bad Sectors And How Can You Fix Them? [Part 1]
http://www.makeuseof.com/tag/what-are-bad-sectors-and-how-can-you-fix-them-part-1/
Written by Bruce Epper, September 25, 2015

Remember Quicksilver, The Free Open Source Mac Launcher?
http://www.makeuseof.com/tag/remember-quicksilver-free-open-source-mac-launcher/

9 Mac System Preferences You Haven't Tweaked Yet
http://www.makeuseof.com/tag/x-useful-mac-settings-youll-probably-want-tweak/

10 Default Microsoft Word Settings You Can Optimize
http://www.makeuseof.com/tag/10-default-microsoft-word-settings-can-optimize/

5 Camera Technologies That Will Change The Way You Take Pictures
http://www.makeuseof.com/tag/5-camera-technologies-will-change-way-take-pictures/

Canon's 250 Megapixel Camera
Once every five years, Canon holds an expo that provides a glimpse into the camera future. The Japanese photo manufacturing company did so once again and showed why the world of camera tech is something to be excited about. Megapixels are a big deal, although not the only key factor in camera quality. And while 8, 16, and the industry leading 50.6MP are nice, 250 is a whole lot nicer. The big upshot is the ability to take photographs from far away (up to eleven miles), and still zoom in far enough to see fine details. http://www.canon.com/news/2015/sep07e.html

Taking Color Videos in the Dark
According to Canon, their new full-frame 35mm camera can practically see in the dark. Their site says, "the ME20F-SH camera achieves impressive high-sensitivity performance enabling the capture of color Full HD video with reduced noise in low-light conditions without the need for infrared illumination." Prior technology, which required infrared illumination, produced mostly black and white images. But with this tech, a whole new, colorful world might become available to our cameras.

Canon's First Ultra-High-Sensitivity Multi-Purpose Camera Features ISO Equivalent Of Over 4,000,000
http://www.usa.canon.com/cusa/about_canon/newsroom?pageKeyCode=pressreldetail&docId=0901e02480fb7db6

6 Features Disappearing in Windows 10 (and How to Replace Them)
http://www.pcmag.com/article2/0,2817,2485170,00.asp

Windows 10 Backup youtube
https://www.google.com/#q=Windows+10+Backup+youtube

Windows 10 Feature Focus: Backup and Recovery
Posted on June 23, 2015 by Paul Thurrott in Windows 10 with 42 Comments
https://www.thurrott.com/windows/windows-10/4279/windows-10-feature-focus-backup-and-recovery
"System image backup. In Windows 10, the full Windows Backup toolset has been restored, and you

can now create a full system image backup—and restore your entire PC from it—but also begin a backup regimen that will keep your PC backed up over time. Additionally, you can use this tool to access the files in any backups you previously made in Windows 7 or 8.x.

Windows Recovery Environment. Windows 10 lets you optionally boot the PC into a Windows Recovery Environment that can be used to perform various troubleshooting and system restore activities using advanced recovery tools. This environment hasn't changed since Windows 8, and it can be very useful if something goes wrong with your PC. It provides access to tools like System Restore, System Image Recovery, Startup Repair, a command prompt, and selective startup."

The 11 Best Documentaries on Netflix to Get Your Geek Fix
http://www.makeuseof.com/tag/best-documentaries-netflix-geek-fix/
"No genre of film can portray the eccentricities and impact of geekdom and nerdom as well as the documentary. Sure, the best geek movies in history give us a glimpse into what the average geek on the street enjoys, but when it comes to what the world of geeks and nerds mean to society as a whole, nothing beats a good documentary.

These documentaries have been selected not just for their appeal to geeks and nerds, but also for anyone who wants to peer into the worlds of geekdom or nerdom in order to understand them a little better. The topics of conversation, the points up for debate. The obsessions and compulsions. The dedication to a craft. The impact on the world."

Desert Storage - ever need to store things safely, for a long time?
http://www.desertstorage.com/glendale-az-self-storage?gclid=COfNvPirmMgCFRNrfgodYOYOvA
"LOOP 101 & 59TH AVE High-security air-conditioned indoor storage units in Glendale, AZ. Individual door alarms and security cameras. Free move-in truck with rental!"

Buying an Intel Compute Stick? 7 Pros and Cons You Must Know
http://www.makeuseof.com/tag/buying-an-intel-compute-stick-7-pros-and-cons-you-must-know/

Split PDF files for free: http://www.splitpdf.com/

USER GROUP ARTICLES

The Best Virus Protection…ever

By Phil Sorrentino, Member of The Computer Club, Florida
http://scccomputerclub.org, Philsorr.wordpress.com, philsorr (at) yahoo.com

Virus Protection isn't really a very popular topic, until you've concluded that your computer has just been infected by one of those nasty viruses. You know the symptoms: strange pop ups, abnormal operations, and/or very slow responses. It seems like computer viruses have been around for a very long time. As it turns out, computer viruses have been around longer than personal computers. Here is just a little computer virus history. The first experimental self-replicating program, called "Creeper", was written in 1971, and was intended to infect Digital Equipment Corp. (DEC) PDP-10 computers running the TENET Operating System. How's that for a bit of history trivia? Fast forward to the personal computer era, when in 1981 a virus called "Elk Cloner" was written for the then very popular Apple II personal computer. Followed, in 1983, by a very early Trojan Horse designed for the IBM PC. This virus deleted all of the files on the computer's diskette (remember 5 1/4'" floppy diskettes?), cleared the screen and typed ARF – ARF. (ARF was a reference to the common "Abort, Retry, Fail" message you would get when a PC could not boot properly.) Also, in 1983, the term "virus" was

coined, to describe self-replicating computer programs. And in 1984 the operation of these viruses, that of including a copy of itself, was termed "infection". And so computer viruses have been with us, infecting our computers ever since.

The term "Malware, which is short for malicious software, is currently used as an umbrella to describe any software that is used to disrupt computer operation, gather sensitive information, or gain access to private computer systems. (Malware usually does not include software that causes unintentional harm due to some design deficiency; that's just bad design.) Malware does not usually include all those programs that come along for the ride when you are downloading something of interest. These are typically termed Potentially Unwanted Programs, or PUPs. And, just for completeness, the term "spyware" refers to malware that aids in gathering information about a person or organization without their knowledge and that may send such information to another entity without the owner's consent.

So, even though we all use virus and spyware protection, most of us, maybe all of us, have been the victim of some type of infection. So, what's a person to do when all of a sudden the computer seems to be operating strangely or unusually slow? Well, as most of you know there are a few very useful tools that you can try. Tools like MalwareBytes, SuperAntiSpyware, and Panda. Sometimes they may do the job, by eliminating or quarantining the virus, and sometimes they just may not help at all. What happens when they don't help? I know there are some very capable computer experts out there who have toolboxes full of very capable software tools that could probably fix any type of virus infection, but those experts may not always be available when you need them. And, virus removal by an expert may be a very costly undertaking.

So, we need to have a fall back plan for this eventuality if, or rather when, our computer becomes infected and there seems to be either no easy out, or the cost is too dear. This kind of plan would truly be the best virus protection. One plan of approach is to have a recent Image of the computer System, so that it can be restored to the computer. Yes, I know this will take time, and you will have to reload anything that isn't included in the recent Image, but this will always work, no matter what type of virus is present (as long as the virus hasn't been included in the previously saved Image). Note too, this is also a good solution for a crashed disk drive, a hardware problem. This is a good solution only if you have backed up all of your valuable data, but I'm sure you regularly do this.

There are a few ways to get a System Image. The first possibility is that you may have an original Image of your system. It may be a D: partition that may be called a Rescue or Restore partition or something similar, or it may only be labeled with the manufacturer's name. Restoring this Image will bring your computer operation back to the way it was when you bought it. Unless you've had an unusual early disk drive failure or just bad luck to have become infected with a nasty virus, this Image is probably not very "recent". If the computer has been around for a while, the update process that needs to follow the restored image will probably take a good amount of time. I've restored some computers that needed 12 to 14 hours of updates to get back to current operation. So, though this operation will always work, it may be very time consuming, and take a lot of patience.

The second way of getting a System Image is to use a commercial System Imaging application to create a system image whenever your software system changes (or at least every 6 months). Most of these have a one-time cost, usually between $40 and $50, but it will probably be less than an hour or two of an expert's time needed to try to remove a virus. Some of these applications are Acronis True Image, Paragon Hard Disk Manager, O&O Disk Image, Active@ Disk Image, and Macrium Reflect. If you create an Image every 6 months, your latest Image will always be less than 6 months old and the time to update the restored software system should be reasonable. Always keep the last 2, 3 or 4 images, just in case something unexpected happens to one of them.

The third way of getting a System Image is to use Microsoft's "Backup and Restore" software included in Windows 7 and 8.

In Windows 7 you can find "Create a system image" on the Backup and Restore Applet, in Control Panel. Click this and you can select a hard drive or set of DVDs as the destination for the Image. An external hard drive is the best destination, but sometimes it feels good to have a copy on DVDs also. Once the destination is selected, select the C: drive as the Image, and finally click "Start backup". Make sure you get back to the Backup and Restore screen to "Create a system repair disk", which is what you will use to boot up the system in order to restore the Image.

–In Windows 8, you will find "Create a recovery drive" on the Recovery Applet, in Control Panel. Click this and click "Yes" at the "User Account Control" window, then uncheck "Copy the recovery partition from the PC to the recovery drive", click Next, and then choose the destination drive, and finally click "create".

Creating the Image in either OS is relatively straightforward. Restoring the Image is a little more complicated, but with perseverance and maybe some advice and direction from someone who has previously done it, it will be easy enough to do, and it will become routine. Now, with an Image on an external drive, bring on the viruses.

BitTorrent

By Dick Maybach, Member, Brookdale Computer Users' Group, NJ
January 2015 issue, BUG Bytes, www.bcug.com n2nd (at) att.net

BitTorrent, http://www.bittorrent.org/ , is a peer-to-peer file sharing protocol for transferring files over the Internet. The conventional way of transferring data is for one site to act as a file server, which stores the files and transmits them on demand. If many people want the file, this requires a high bandwidth connection to avoid long download times. In the BitTorrent scheme, the central site is called an indexer, and it functions as a file director rather than a file server. (Actually, the situation is somewhat more complex. There are also sites called trackers that work with and assist indexers. Most people blur this distinction and use the term tracker for both indexers and trackers, and I'll do the same for the rest of this article.) When a user requests a file from a tracker, he or she receives a Torrent Descriptor File that contains a list of sites, called seeders, that currently are making the file available for transfer. On the user's computer a program called a BitTorrent Client uses information in the descriptor file to request pieces of the desired file from the seeders. Since each of the many seeders supply only a few pieces of the file, their upload volumes and rates are low. The descriptor file also contains a checksum for each piece of the file and the client uses these to ensure that the downloaded file has no errors. BitTorrent allows individuals to share files with many others without requiring the use of expensive facilities. By spreading the distribution task among many servers, BitTorrent reduces traffic congestion on the Internet thus speeds up data rates for everyone, including those that aren't using peer-to-peer sharing. Peer-to-peer file sharing is so widely used that by some estimates it accounts for half or more of all Internet traffic. As of January 2012, there were 150 million active BitTorrent Users.

Some people use peer-to-peer file sharing to distribute illegal material. Don't do this. Media corporations have convinced some courts to make examples of individuals who illegally obtain copyrighted work, and the resulting fines have been truly punitive. The same corporations actively monitor Internet peer-to-peer sharing activity. The risks far outweighs the rewards of watching a movie

or listing to music that you don't think is worth paying for. In addition, the sites that distribute such material are dishonest and won't hesitate to infect your computer with malware.

I use BitTorrent to download Linux distributions, which are often occupy several Gigabytes. When a new distribution is first released, the official sites are often overloaded, and this of course is when I'm most interested in obtaining it. Many sites anticipate this, and make it convenient to use BitTorrent as an alternate to a direct download.

Security

The BitTorrent client software resides on your PC, and you should take the same precautions installing it as with any other program. In addition to the usual worries about malware, you depend on this program to upload only the files you designate and only at those times you allow. Windows users should obtain it from a reliable source and check it for malware before using it. Linux and OS X users have fewer concerns since they use the client Transmission, which is in the official repositories. Regardless of your confidence in the package, do not install it on a corporate machine, as most businesses prohibit file sharing. The Windows client µTorrent, available at www.utorrent.com/downloads/win?us is a safe choice. Unfortunately, it changes your default search engine to Ask.com and installs the Ask.com toolbar in your browser. You will want to undo this, as a search using Ask.com produces mostly marketing sites having little or no relation to your search. An alternative Windows client is available at http://www.bittorrent.com/, but the free version displays advertising; a deluxe version without advertising is available for $20. Before using BitTorrent, install and configure a software firewall, such as ZoneAlarm, www.zonealarm.com/, for Windows. This will limit the access to your PC and will help ensure that only what you intend is uploaded.

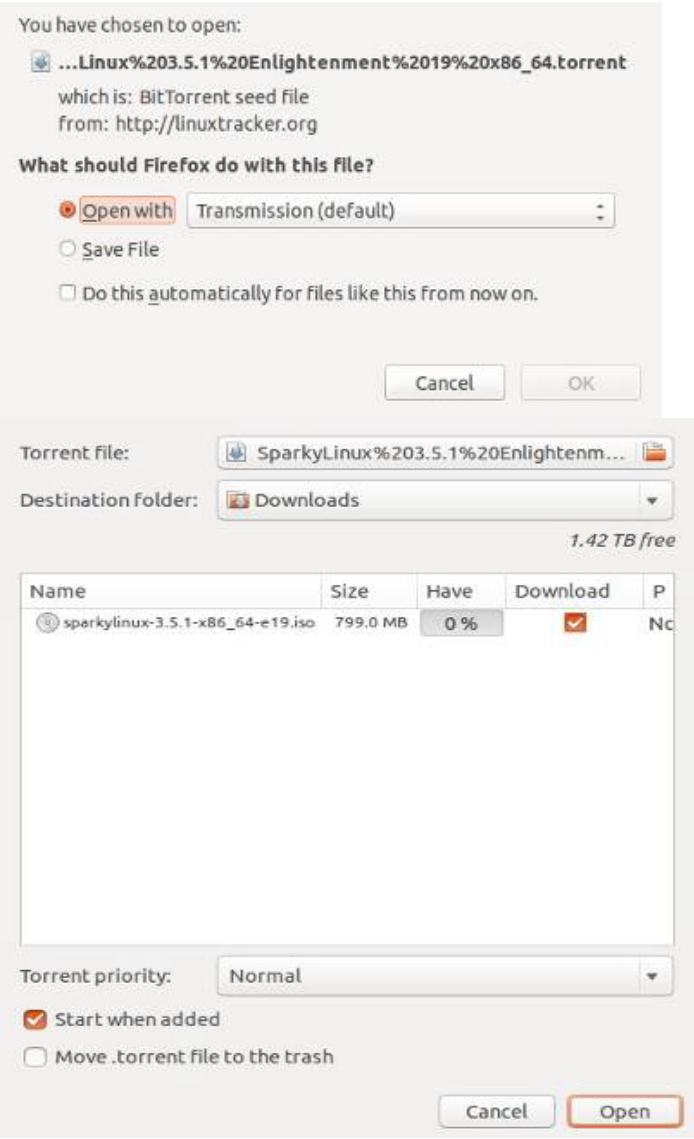
Be careful choosing a tracker, as many specialize in downloading illegal material. You could consider Jamendo (www.jamendo.com/en/welcome),which distributes Creative Commons licensed albums and Linux Tracker (linuxtracker.org/), which distributes Linux distributions. An Internet search will show many other trackers, but again be careful. The BitTorrent Descriptor File that the tracker sends you contains checksums for each piece you obtain from individual seeders, which guarantees the integrity of the pieces. Thus you aren't dependent on the nature of the seeders.

Limit which files and directories you share by setting the preferences in your BitTorrent client. In my case, I allow sharing only from my Downloads directory and only those files I've obtained using BitTorrent, which are the defaults in the Linux client. Some clients by default allow sharing everything on your PC, and you must change this before beginning a download. After the download is complete, scan it with an anti-virus program as you would with any software, regardless of the means by which you obtain it. Many Linux software providers provide MD5 checksums that you can use to be sure every bit in the file is correct. Unfortunately, this is rare in the Windows world.

Process

To obtain a file, go to the tracker's Website and select the desired BitTorrent descriptor file, which will have the extension .torrent, and will have a size of 30 Kbytes or so. How you get this to the BitTorrent client program on your PC depends on how you have set things up. You may accomplish it just by double-clicking on the file name on the Website; in the worst case, you will download the file to your PC and open it with the client. The client should start and within a few seconds you should see both the file you want coming in and some of the files you've decided to share going out. It's considered good manners to send at least as much data as you receive, in fact some trackers insist on it to the extent that they will limit your downloads if your upload volume isn't sufficient. Because the upload

rate is much less than that of the download, you will have to let the client run long after the download is complete to satisfy this.



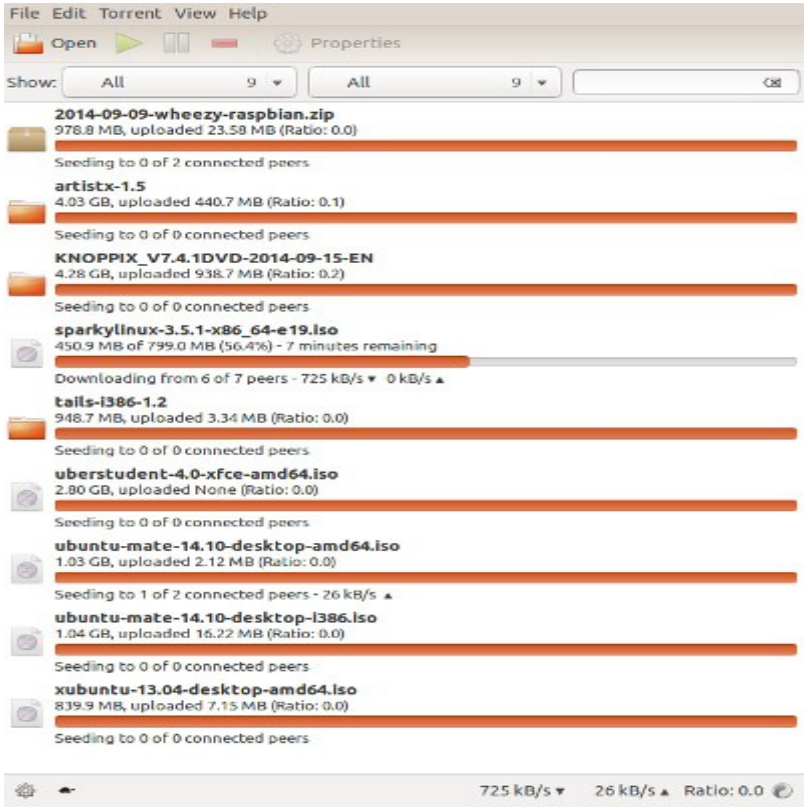
The following example uses Linux to download a file using BitTorrent. The process is the same for OS X and Windows, although the screens will be different. The first step is to go to a tracker Website and click on the file you want, which will produce the window below, giving you the usual choice of opening the file with Transmission (the BitTorrent client for both Linux and OS X) or downloading it to your PC. Note that this is a small BitTorrent descriptor file, not the large one you want to download. Usually, you'll choose the first option.

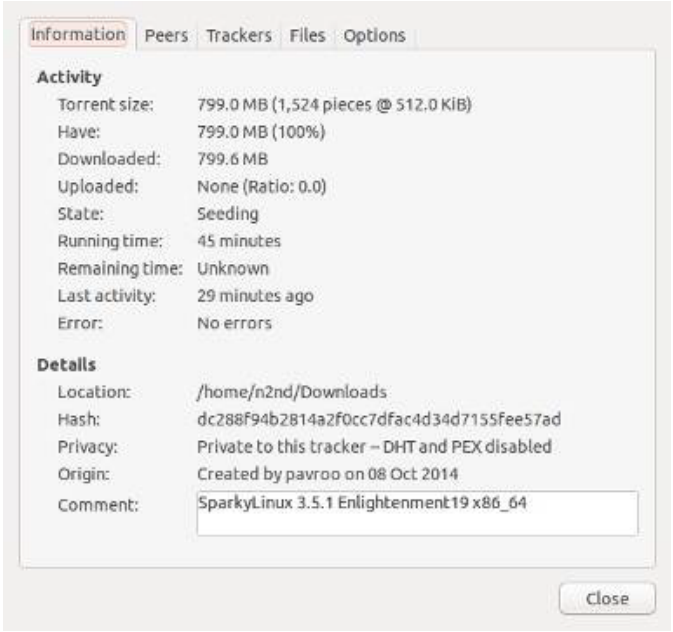
Assuming you choose the Open with option, the next screen will show the file to be downloaded and give you an opportunity to change the destination folder from the default (in this case Downloads). If you had aborted an earlier download of the same file, the Have amount would not be 0 %, and you would have only to download the pieces you didn't already have.

The next screen shows BitTorrent downloading the sparkylinux file. You can see that I've previously obtained eight other files using BitTorrent, that ubuntu-mate is being uploaded, and that although two peers are interested in wheezy-raspbian the upload rate is zero. At the time of the screen-shot, nobody connected to this tracker wanted the other files.

Right-clicking on the sparky-linux item on the download screen after the download was complete and selecting properties shows the next screen. We can see that the 799 Mbyte file was downloaded as 1524 pieces of 512 Kbytes each and there were no errors.

Should you use BitTorrent? I've found that it takes a fraction of the time to download large files as direct transfer, especially if the file server is busy, which seems to be the usual case for the files I want. Also, some files are available only by peer-to-peer transfer. You do have to be careful to obtain a BitTorrent client you can trust, to set up your firewall properly, to use reliable trackers, and to check the download for malware. These precautions are similar to what you would do with any new file regardless of how you obtained it. Ultimately, the choice is yours; if BitTorrent makes you uneasy, don't use it.





Computer Experiments

By Dick Maybach, Member, Brookdale Computer Users' Group, NJ
March 2015 issue, BUG Bytes www.bcug.com n2nd (at) att.net

In the early days of PCs, we had no choice but to experiment with them. Back then, what today are simple changes required changing hardware and software configurations. Since a PC was more of a toy than an essential appliance and stored no important information, if a problem arose it affected nothing except the PC itself. Contrast this with today, where we rely on our PCs for essential communication, for filing our taxes, and for storing important information. All this makes us reluctant to experiment lest we lose an important asset. The result is that as we come to depend more and more on our PCs, we tend to know less and less about them.

The solution is to use a safe "sandbox" where we can experiment without risk, and we can implement one with either hardware or software. This isn't always necessary; for example writing computer gaming software usually doesn't endanger the PC on which it runs. In fact, all modern operating systems restrict what applications can do, in particular, they are usually prevented from making changes in the operating system or other applications. However, applications are allowed to modify user files. If this concerns you, create a separate account for your experiments.

There are several approaches you could use: boot from a live CD-ROM, dual boot two operating systems on one PC, or use a virtual machine, an old PC, a Raspberry Pi, or an Arduino. One or more of these probably suits your purposes.

In the live CD-ROM approach, you use a special operating system that runs from a read-only medium rather than a hard disk. Such media also include live DVDs and live memory sticks. You can use these on any PC that will boot from a CD-ROM or a USB device. (Booting a live media on a Mac can be problematic, with many people reporting problems. There is a utility that creates a live USB memory stick that boots on a Mac, http://www.makeuseof.com/tag/how-to-boot-a-linux-live-usb-stick-on-your-mac/ , but I haven't tried it.) The advantages of this approach are that it doesn't require any changes to the host hardware or software and that when you power down and remove the live medium, the host system is unchanged. However, there is a substantial performance penalty because of the low data-transfer rate of the live medium, especially if it's a CD-ROM or DVD. Also it is generally not possible to update the live OS or to add applications to it. Almost all live CD-ROMs are Linux, and the main uses are to see if your hardware is Linux compatible and to run diagnostic or high-security software.

In the dual-boot approach, you either partition your hard disk or add a second disk, install a second operating system, and modify the disk boot record to allow you to choose which system to run at boot time. Because this requires making substantial changes to your software configuration, you must proceed carefully. The best time to do it is on a new PC that isn't storing any vital data. Thus, when you acquire a new PC, if you think you might be interested in trying dual boot at some later time, you might set it up for it immediately.

This is also possible on a Mac, see http://www.notebookreview.com/howto/in-progress-how-to-dual-boot-from-a-mac-into-windows/ , but again I have no experience with this. There is no performance penalty here, except for the disk space that the second operating system occupies, since whichever one is running has the full use of the PC. Only one operating system can be running at any time, and switching between them requires a reboot. Files can usually be transferred between the operating systems by reading from and/or writing to the idle operating system disk area, but in some situations you may have to transfer using a USB memory stick or external disk.

If you have a fairly powerful computer, using a virtual machine is the most convenient way of experimenting. A virtual machine manager is an application program that runs on your main operating system (called a "host") and provides an environment for a second operating system (called a "guest"). As far as the guest knows it has its own hardware. This does not require modifying the host hardware or software, as the virtual machine manager is just another application. A popular VM program is the free VirtualBox, http://www.virtualbox.org/ , with versions available for Linux, OS X, and Windows.

The performance penalty is small provided the host CPU has virtual machine support features. The host computer also must have enough resources to run the host and guest OS simultaneously, in particular enough RAM (at least four and preferably eight Gigabytes) and disk space (allow at least eight Gigabytes for each guest). It's very easy to add and remove guests, and the guests can be updated and can accept the installation of new applications. Since both guest and host operate at the same time, you can simultaneously run tasks on both. If the host PC is networked, the guest appears as a separate PC on the network.

If you have an old PC, you can use this for your experiments. It probably isn't fast and may have limited RAM and disk capacity, and you probably can't run the latest operating system, but this may not affect your experimenting at all. If it is very slow, try to figure out why. Often, the problem is not enough RAM, and this is cheap to fix. Since you are probably reluctant to put much money into a relic, you should consider switching it to Linux, which reduces all your future software expenses to zero, and at the same time makes available hundreds of applications. Some Linux distributions are designed to run well on old, slow hardware.

Rather than reuse an old PC, you could purchase a Raspberry Pi, http://www.raspberrypi.org/, a complete PC available for less than $100 if you can use an existing display. Although it's tiny, about the size of a credit card, it has similar performance to an old PC, and since it uses Linux, the software is free. Because it has an Ethernet port, it's suitable for building network servers (multi-media, file sharing, Web, etc.). And because it's completely separate from your home PC, it's safe for hardware experiments where it's connected to external devices. If you completely destroy the Raspberry Pi card, it can be replaced for about $40. There is an active community interested in the Pi with the result that many books, magazine articles, and support Website are available.

Another hardware solution is the Arduino, http://www.arduino.cc/, which like the Pi is credit-card sized, but this is a programmable controller rather than a computer. It runs as a USB peripheral to a Linux, OS X, or Windows machine, and is programmed in a variant of C++ using free software. It has no operating system but typically runs only one program, which starts at power-on and runs until power-off. There is a free compiler to code applications for Linux, OS X, and Windows using essentially the same language as does the Arduino. Thus learning a single language allows you to process on a PC data that you input from an Arduino. While you would experiment with networks, servers, and operating systems with the Pi, you would use the Arduino to explore programming and electronics. This approach is especially attractive for controlling external devices, since unlike a PC, it has terminals that can input and output voltages. It too has an active community, with many books, magazine articles, and support Websites available.

As you can see, you have many ways to experiment without endangering your tax records or your collections of photos, video, or music. You can choose the one that fits your purpose and your pocketbook. Remember that both Windows and OS X have restrictive licenses that limit where they can be used. Before you spend significant time or money, be sure your use conforms to the appropriate license. With Linux, you can ignore this issue.

IFA - Official Partner of the Future http://b2b.ifa-berlin.com/IFA/AboutIFA/

IFA in Berlin, the global trade show for consumer electronics and home appliances, presents the latest products and innovations in the heart of Europe‘s most important regional market. Only IFA offers such a comprehensive overview of the international market and attracts the attention of trade visitors each year from more than 100 countries https://www.google.com/#q=ifa+best+of+2015

The Best Gadgets of IFA 2015

http://www.pcmag.com/slideshow/story/337504/the-best-gadgets-of-ifa-2015

“For the past week, the international tech press has been roaming the halls of the Messe Berlin at IFA, trying out and playing with the gadgets that the world's biggest tech companies hope you'll pick up this holiday season. Long ago, IFA was a European home-goods trade show. Now it's basically Fall CES: the big moment before the holidays when large electronics companies get their product lines in order for later in the year. While the Berlin-based show still has a strong European focus, plenty of U.S. products appear at IFA as well.

There are plenty of bizarre and forgettable items lining the show floor, but every year there are standouts that make us drool. PCMag's Sascha Segan and Will Greenwald were in Berlin this week, and they (along with our camera expert Jim Fisher) selected the products that impressed them most. Read on for their picks.”

Computing…Yesterday and Today

By Phil Sorrentino, Member of The Computer Club, Florida
http://scccomputerclub.org Philsorr.wordpress.com philsorr (at) yahoo.com

Yesterday, circa 1965, computing was mostly programming to solve simple problems, to do simple accounting like running a payroll, to match items from a list, and maybe even to print results on multi-colored, fan-fold, wide computer paper. (I bet some of you even remember that kind of computer output.) In fact in those days, you never even saw the computer because it was enshrined in a temperature and humidity controlled room or rooms with a flooring system that allowed many, many heavy cables to be run beneath the computers, so they could go the shortest distance between the massive computer cabinets.

Computing in the 70s, 80s, (and maybe part way into the 90s), was still running special software on computers and printing the results. During this time, thanks to integrated circuits, computers got a lot smaller, and some even moved from the cavernous computer room to the smaller computer lab, where it only took up the space of one desk or so. Anyone remember the Digital Equipment PDP-8? And, during this time, we did start to use the computer for many office tasks like word processing (Word and Word Perfect) and data analysis (Excel and 1-2-3). If you are relatively new to computing, you probably are not aware of this, but the first personal computer that showed up in 1975, the MITS Altair 8080, was available as a kit for $395, (soldering iron and tools not included). No keyboard or monitor, input was done by setting a bank of switches and output was just a bank of lights. This was the humble beginning of a major change in computing.

Soon after this, Apple released the Apple 2, which was a major improvement in the way data got into and out of the computer. It had a keyboard for input and the output was displayed on a TV monitor. During this period, the early 80s, there were many start-up computer companies. If you leafed through a computer magazine (like PC Magazine) in 1980 you may have seen almost 100 different manufacturers of incompatible computers advertised. Radio Shack was even a player with its TRS-80 computer system. (Does anyone have or remember the Atari or Osborne or Commodore computers?)

Finally, in 1981, the IBM-PC arrived and from then on it has been the platform of choice for computing, (at least from these computers-in-use statistics).

The original IBM-PC was an 8-bit computer, although it did have a 16-bit bus. (Anyone remember the Intel 8088 microprocessor chip?). During this period, Apple also released some very successful computers such as the Apple 2e, and finally the Apple Mac. (The Apple Lisa didn't fare too well, even with its forward looking Graphical User Interface, which, as it turns out, is a forerunner of our modern Windows User Interface). How is that for digital computer nostalgia?

Today, things are a little different in what we wish to accomplish with, and in what we expect from, our computers. Today, we still expect to accomplish problem solving, but we also expect to communicate the results to, and collaborate with, others nearby, and halfway around the globe. Over the last few decades, our computers have gone in several directions and morphed into several "computing devices" such as desktops, laptops, tablets, and smartphones. Today our computing devices have become the focal point of our virtual digital existence and provide, for us, both computing and communications capabilities. These communications capabilities are now an integral part of our computing devices. Where would we be without smartphones, Wi-Fi, cell towers, and Starbucks?

So what is computing, today? Well, computing today is multi-faceted and quite ingrained in our daily lives. Much of it revolves around the home as well as the office. In the office we still use the computer to solve simple and complex problems like organizing a small business's finances, or tracking the latest hurricanes across the globe. The results, however, are typically provided as softcopy output on a flat panel, touch sensitive display, and only sometimes as hardcopy printouts. But, we also expect to communicate with other workers, and sometimes the public, using our computer. Office networks, Wi-Fi, the Internet and Social Networking Apps allow us to communicate with others across the hall and across the globe. At home we communicate with others, mostly by email, but very often by texting, (especially if we are trying to keep in contact with grandchildren), or video conferencing, aka Skype or Face Time.

Our home computer is the repository and focal point for all our digital information: documents, pictures, and videos. Documents that we create or collect are stored on the home computer for easy access, and long term storage. Pictures that we take with our digital cameras, smartphones, tablets, and scanners are all centrally housed on the home computer. At least, that is one way of keeping track of the large number of pictures we take using multiple devices. (When was the last time you moved your pictures from your smartphone to the computer? No excuses now.) Videos that we create or acquire are also housed on the home computer. Where else would you be able to store a bunch of 2 to 3 Gigabyte files? We communicate, entertain, and keep track of our home activities, all with the home computer. Not so long ago, the computer in the home was considered the "personal computer". But, today, the desktop or laptop, in our home is really a "home computer" while our smartphone (or tablet) has taken on the role of "personal computer.

Upgrade to Windows 10 for free for Windows 7, 8, 8.1
http://www.microsoft.com/en-us/windows/windows-10-upgrade
Excellent article Windows 10 info: Bits and Bytes June 2015 Page 3, Tips, Tricks & Techniques (submitted by Carol Picard) http://mcc.apcug.org/pdf/bb1506.pdf
Also, see: http://www.windows10update.com/getting-started-with-windows-10/
Intel And Microsoft Fixing A Battery Draining Bug In Windows 10:
http://www.windows10update.com/2015/07/intel-and-microsoft-fixing-a-battery-draining-bug-in-windows-10/
http://www.windows10update.com/

Will my PC run Windows 10?
https://www.google.com/?gws_rd=ssl#q=will%20my%20pc%20run%20windows%2010

Prepare for the migration to Windows 10

Gene & Linda Barlow, User Group Relations, PO Box 910444, St George, UT 84791-0444
http://www.ugr.com, gene@ugr.com **July 2015, (Editor: Windows 10 version now available).**

Dear Friends, Microsoft plans to release their new Windows 10 operating system on July 29th. This new offering should correct some of the problems that users had with the Windows 8/8.1 operating system as well as to introduce some exciting new features to Windows. We expect that many of you will want to move to this new Windows 10 system as soon as it becomes available.

To prepare for the migration to Windows 10, Acronis will be releasing their new True Image 2016 for PC backup utility. While the exact date of the release of True Image 2016 is not known, we expect it to be shortly after Windows 10 becomes available. True Image 2016 for PC will support the new Windows 10 system and prior releases of True Image will not run on the new Windows 10 operating system. So, if you plan to move to Windows 10, you will need to get the new True Image 2016 for PC from us, to protect you in this migration.

You may also want to read an article I wrote a couple of years ago about the steps you should follow to move to a new Windows operating system. This article can be found at http://www.ugr.com/nl0511.html . While the article focuses on moving from Win XP to Win7, the same steps are needed in any migration to a new operating system. In next month's newsletter, I will describe for you all of the new features in True Image 2016 for PC besides Windows 10 support.

This month's article, "Beyond Doing Basic Backups", emphasizes the best way to use Acronis True Image to do your main backups, but also describes three additional ways to use the product to do additional backups to give you added protection. By themselves, these three addition backup approaches are not adequate protection, but when used in addition to the Image Backup Approach, they can improve your backup systems.

July Special 2015: For our July Special, we are offering anyone that purchased Acronis True Image 2015 for PC from us anytime after June 10, 2015 a Free Upgrade to the new True Image 2016 for PC as soon as it becomes available. We will notify those eligible on how to request their free upgrade. If you are using an older version of True Image, you should order a copy of True Image 2015 for PC from us now and get it installed on your current Windows system. Then as soon as the new True Image 2016 for PC becomes available, you can easily install your free upgrade to replace it. To order True Image 2015 just go to our website at www.ugr.com/TrueImage.html and clicking on the Buy Now button next to the appropriate package. If you have problems ordering, contact me at support@ugr.com and I will assist you.

True Image 2015 for PC Starter Guide: Last month I finished the final draft of my long delayed **"True Image 2015 for PC Starter Guide"**. You can find this on my website to download. The address of this new document is mentioned in the email I sent you with your serial number or in the first paragraph of the initial draft of the Starter Guide. If you have trouble finding it, send me an email and I will send you the exact address needed.

A lot of exciting changes are coming for Windows and True Image users. Get ready for these changes by making sure you are doing regular backup images of your current system. Then you will be prepared for the migrations ahead.

(NOTE: Smaller hard drives or solid state drives such as 128 GB or 256 GB, do a full backup each time rather than full plus incrementals. I feel this is best. Ever lost data? It's awful. Gene's $'s are great).

Short Circuits….zzzt! Will return in November issue

How Edge's reading view compares with to other full-screen readers- in web browsers
http://www.cnet.com/how-to/how-edges-reading-view-compares-to-other-full-screen-readers/
"The book's pages will flutter, the icon will turn blue, and the webpage you're viewing will be transformed into a nicely laid out, ad-free article."

Microsoft's new Edge browser: Boon, bust or both?
http://www.computerworld.com/article/2979848/web-browsers/microsofts-new-edge-browser-boon-bust-or-both.html Microsoft Edge is already good enough for me to drop Chrome
http://thenextweb.com/microsoft/2015/07/03/microsoft-edge-is-already-good-enough-for-me-to-drop-chrome/

Microsoft finally renames Project Spartan browser to Edge in latest Windows 10 preview
http://thenextweb.com/microsoft/2015/06/30/you-can-finally-try-microsoft-edge-project-spartan-in-the-newest-windows-10-preview/

"First off, Project Spartan is finally called Microsoft Edge in this build. It's not just a name change either; there are several notable updates over previous Spartan builds: You can add a 'Home' button to the browser via the Advanced Settings menu. Bookmark importing from other browsers is now supported. There's a cool new dark theme. You can choose to open the browser with a Start page, the New Tab page, previous pages or a specific set of pages. New Tab pages can feature either top sites or suggested content. There's a password manager on board. Tabs can be dragged and dropped to new windows"

A multi-billion-dollar company you never heard of wants to change the way you eat
http://www.techradar.com/us/news/world-of-tech/future-tech/a-multi-billion-dollar-company-you-never-heard-of-wants-to-change-the-way-you-eat-1303621 "This time, Shen said, they want to go further and allow the end user to grow their own veg at home using a miniature, self-sustainable version of the plant factory that New Kinpo owns.

Beyond that, one could envisage growing any type of food (including artificial meat) at home. "We work on many such [food-related] ideas in our laboratories, some of them may make it, some of them won't". The food printer being one that graduated to a finished, demonstrable prototype. For the veg box though, it is a no-brainer, you end up with fresher, cleaner produce available when you need them.

In a not-so-distant future, a robot might prepare food, based on your health data (collected via smart clothing) and using ingredients picked up from a smart vegetable box. Or you could just 3D print your cake and eat it."

CES 2016 Innovation Awards http://cesweb.org/innovation
"The CES Innovation Awards is an annual competition honoring outstanding design and engineering in consumer technology products. On-site, you can view the honorees at CES Tech West in the Innovation Awards Showcase."

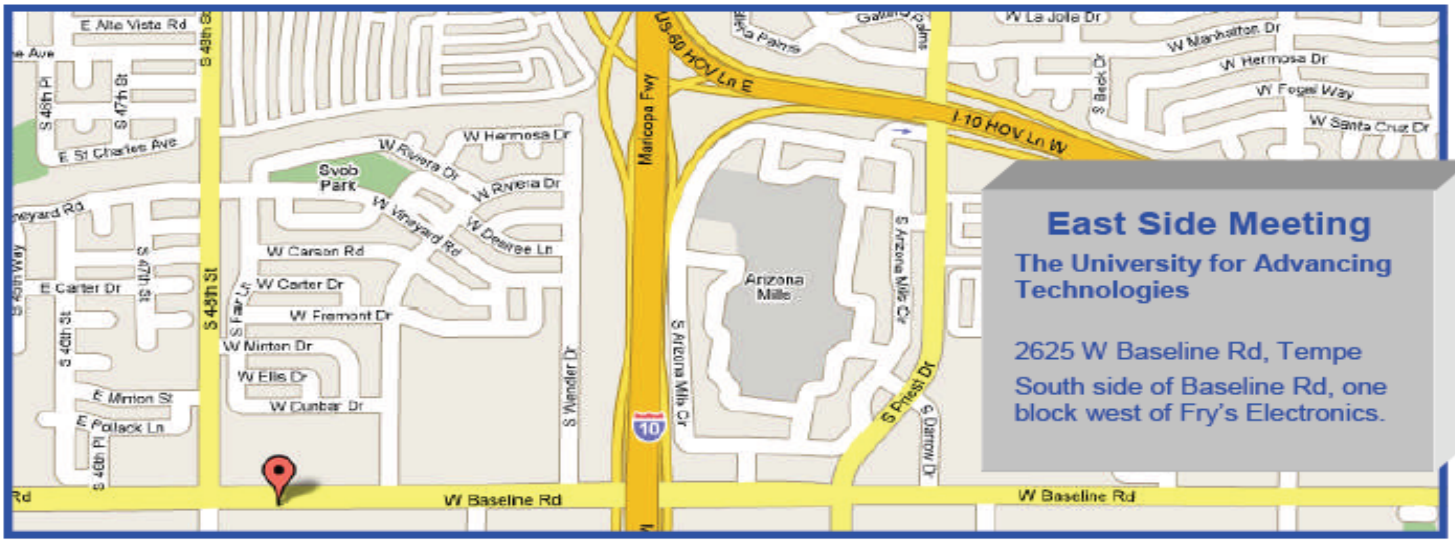
Getting strange phone calls? Check them. Try www.numberguru.com, www.callercenter.com

HOW TO GET THERE - MAPS TO MEETINGS

West Side Meeting

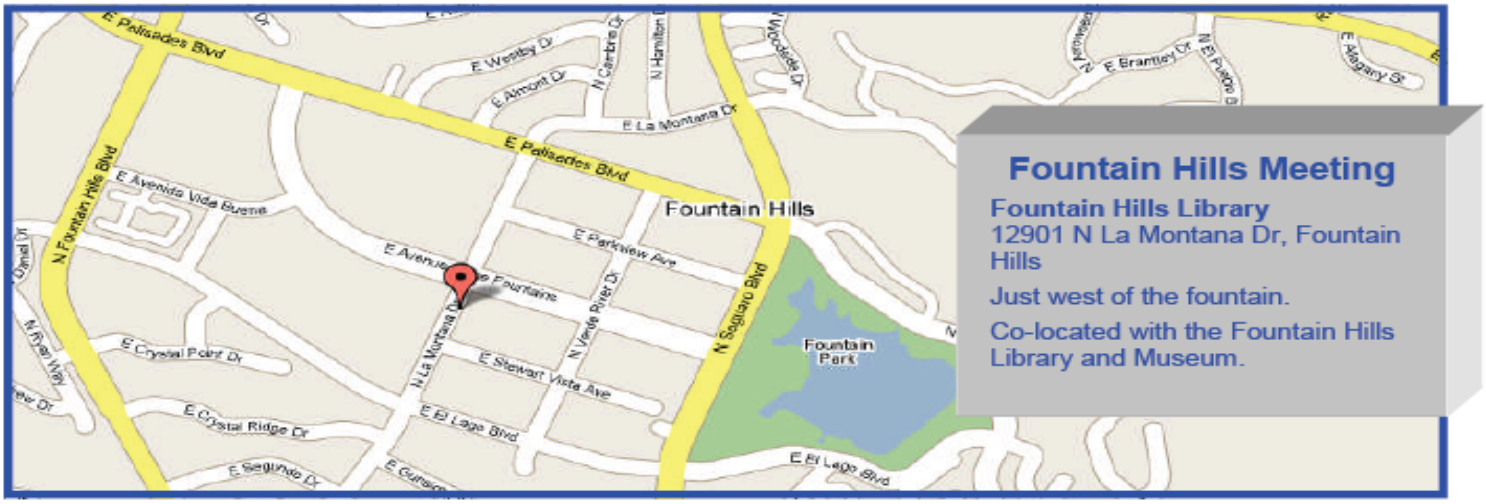
CollegeAmerica
www.collegeamerica.edu/phoenix
9801 N Metro Parkway East
Phoenix, AZ 85051
Phone: (602) 257-7522
Google map error, "the red A" is actually east side of Metro Parkway

Exit **Peoria Ave** west, past I-17, turn first left, go south on the frontage road, turn right at the first driveway past Cheryl Drive, CollegeAmerica is the white building on your right (north). North of Castles & Coasters amusement park.



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.

2015 DUES $36, prorated
Example - $9 for 3 months

Phoenix PC Users Group Membership Application

First: (Print Legibly) _____Initial: ____ Last:_____

Address: _____

City, State: _____ Zip Code:_____

Home or Cell 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 a timely fashion, via email, or the club website.

Receive Electronic PDF newsletter in place of a 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 ____

Mail this completed form with payment to:

Phoenix PC Users Group
PO Box 45451
Phoenix, AZ 85064-5451

APCUG2.ORG and AZACC.com member.
Our Web address: www.phoenixpcug.org also see www.phoenixpcug.org/newsletters

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PLEASE NOTE - OUR NEW ADDRESS