

If You Missed It

January 17 Fairfax Meeting

by Geof Goodrum

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Treasurer Paul Howard presented a \$250 check on behalf of PATACS to the Friends of the Osher Lifelong Learning Institute (OLLI) at the Fairfax meeting on January 17th in grateful appreciation for providing meeting facilities and support with the OLLI PC User Group (OPCUG). OLLI President Glenn Kamber and Development Chair Lesley Bubenhofer accepted the check and thanked PATACS for the contribution (see photo). Paul also provided the annual OPCUG financial review.

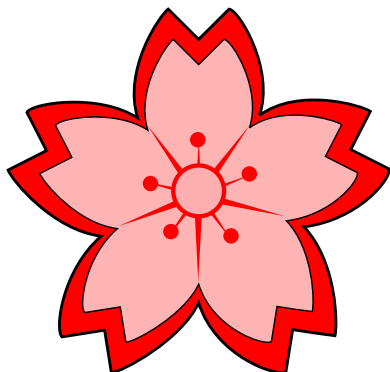
Geof Goodrum attended the 2015 International Consumer Electronics Show

(<http://www.cesweb.org/>) in Las Vegas the previous week and used the “Learn 30” tutorial session to talk about the show with a rapid-fire slideshow of highlights, including the latest 8K resolution HDTVs (some display 3D without requiring 3D glasses), drones, 3D printers, wearable devices (including health and fitness monitoring), and other technology innovations headed for the consumer marketplace this year.

Dan and Jean Feighery addressed the main topic titled, “Planning Our Trip and Trip Tales.” The briefing slides are available for download as a PDF file on the PATACS Recent Meetings page at <http://www.patacs.org/recmtgspat.html>. While Dan provided tips for photographers, the briefing is filled with a wide-range of useful Do’s and Don’ts for all travelers, domestic and international.

The Feighery’s first tip is to plan an itinerary. They prefer organized group tours, recommending Great Performance Tours (<http://www.greatperformancetours.com/>) for musical performances and National Geographic (<http://www.nationalgeographicexpeditions.com/>) for photography, photo workshops, and “Active Adventures,” but map out a personal sightseeing schedule around the tour schedule. Study several tour books and visit <http://photosecrets.com/> to identify “must sees”

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and best places to take “must have” photographs. Also research any restrictions on places to visit, including security sensitivity, dates and times.

For foreign travel, understand the destination country by visiting the US State Department’s site, <http://www.state.gov/travel>, and the Central Intelligence Agency’s World Factbook, <https://www.cia.gov/library/publications/the-world-factbook/>. Although US passports are good for ten years, obtain or renew them early (<http://travel.state.gov/content/passports/english.html/>) and remember that individual countries may not allow entry with passports that are still months before the expiration date. Even though Dan is a skilled photographer, he recommended using a service for passport photos, as the photo requirements are detailed and difficult for do-it-yourselfers to get right. The Feighery’s also suggested using the US State Department’s Smart Traveler Enrollment Program (<https://step.state.gov/step/>), a free service that helps the State Department contact you in case of an emergency while you travel abroad.

Dan also reviewed stuff to bring along for photography. If you are bringing along expensive equipment, Dan suggested getting a camera/lens rider on your homeowner’s insurance policy. You may also need a power converter, and be aware of restrictions on transporting Lithium batteries, particularly in checked luggage. Also, don’t forget to bring the user manual and a small notebook to jot down impressions of the places you visit and pictures you take. However, Dan advised against taking equipment that you are not comfortable using already.

Before leaving, there are things to do to make your return to the US easier. One point Dan made is to file a form with a US Customs office (e.g., Dulles airport, or any other port of entry) in advance of travel for any new items taken abroad. Without this form providing proof of ownership before departure, you may be forced to pay tariffs on those items when you return.

Another way to expedite passing through US Customs on your return is by enrolling in the Trusted Traveler Programs (<http://www.cbp.gov/travel/trusted-traveler-programs>).

Other preparation involves checking with the issuing company about your travel plans and using your credit card outside of the US. Also investigate ATM transaction fees.

There was a discussion about transportation options from Fairfax to New York City’s JFK airport. The Feighery’s like to take the Amtrak train from Fairfax to New York’s Penn Station, then a flat fee taxi to JFK. Gabe Goldberg suggested the bus shuttles to New York provide a less expensive alternative. Those 65 years of age and older qualify for reduced fare cards in the New York City subway and bus system, which are available by mail (<http://web.mta.info/nyct/fare/rfindex.htm>).

There was also discussion about security precautions while traveling, including keeping a copy of travel documents. Dan also likes pants with zippered pockets to thwart pickpockets.

Jean completed the presentation with an abbreviated tale of their trip to Seattle to see Wagner’s four-opera cycle *Der Ring des Nibelungen* (The Ring of the Nibelung). Jean narrated briefing slides that included photos from the trip, but Jean also assembles a hardcopy book of photos and notes from each trip, in this case including sightseeing at Seattle’s famous Pike Place Market, art museums, Seattle Underground, and the EMP Museum.

Shopping on Amazon.com? Don’t Forget PATACS!

If you shop online at Amazon.com, don’t forget to start each session by clicking the Amazon link on the PATACS home page, then continue shopping on Amazon as usual. Doing so earns PATACS a 4 to 6.5% commission on your purchase at no additional cost to you.

Thank you for supporting your user group!

Future Meeting Topics

Refer to the PATACS Event Calendar on the back cover or <http://patacs.org/mtgdetpat.html> for meeting time and location.

March 21, 2015 (Fairfax) Is Your Toaster an Insider Threat?

Presented by Bob Flores

This talk will explore the Internet of Things (IoT), also called the Internet of Everything (IoE). What should you be worried about and what do you need to do so that you remain protected as the world becomes more and more connected?

Bob Flores is a Founder and Partner of Cognito, a senior leveraged consulting company. Prior to cofounding Cognito, Bob was the President and CEO of Applicology Incorporated, an independent consulting firm specializing in information technology issues. His 31 years at the Central Intelligence Agency included various positions in the Directorate of Intelligence, Directorate of Support and the National Clandestine Service. Toward the end of his career, Bob spent three years as the CIO's Chief Technology Officer where he was responsible for ensuring that the Agency's technology investments matched the needs of its mission. During this time Bob was also the Agency's representative on several government-wide information sharing committees and councils. In addition to his senior level leadership and management positions, Bob's career included assignments in applications programming, training and education, contract and project management, and both line and staff management roles at various levels of the Agency.

Learn 30: PATACS/OPCUG Spring Social! Food and refreshments will be provided.

April 18, 2015 (Fairfax) What is Computer Forensics?

Presented by Bob Osgood

Help Wanted: Meeting Speakers

Finding presenters for our meeting programs is difficult—your help in the effort to enhance the value we all receive from PATACS membership would be greatly appreciated!

Please consider speaking to your friends at an Arlington or Fairfax meeting. We'd love to feature your take on a smart phone or tablet app. A presentation on these or other topics of interest to you would undoubtedly be welcomed

by your PATACS colleagues. We have space in our schedule for 15, 30, 60 and 75 minute discussions—what are you waiting for?

We also have ready-made paragraphs you could use in e-mail communications to help us find speakers. Contact: [director2\(at\)patacs.org](mailto:director2(at)patacs.org)

Google Earth Pro for Free

by Geof Goodrum

Potomac Area Technology and Computer Society

[Director1\(at\)patacs.org](mailto:Director1(at)patacs.org)



As of 30 January 2015, Google Earth Pro client software for Microsoft® Windows® and Apple® OS X® systems is a free download. This was announced on the Google Earth blog (<http://google-latlong.blogspot.com/>). Not to be confused with the free edition client, the Pro edition is aimed at businesses with features such as high-resolution printing of images, area/distance/3D measurements, data layers, HD movie captures of animations, and data import and export. More information about the Pro edition, including a feature comparison, is at <https://www.google.com/work/mapsearch/products/earthpro.html>.

Download the software from <http://earth.google.com/download-earth-pro.html> and sign in with your e-mail address and the License Key GEPFREE. Note that by doing so, you accept Google Earth's Privacy Policy.

Unfortunately, Google Earth Pro is not offered for GNU/Linux operating systems, but the free edition is available in .rpm (e.g., Fedora) and .deb (e.g., Ubuntu) executable packages (<http://www.google.com/earth/download/ge/agree.html>).

Minimum and recommended system requirements for all platforms are listed at <https://support.google.com/earth/answer/20701?hl=en>.

On a related note (but of little interest to home users), Esri, publisher of Geographic Information System (GIS) software including ArcGIS,

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announced that it is working with Google to transition customers from Google Earth Enterprise edition products to Esri's software, with the first year at no charge. These are products for businesses that host their own GIS servers to visualize private geographic data sets. More information on this transition is at <http://blog.safe.com/2015/02/esri-google-post-google-earth-enterprise-world/>.

Linux and Open Source News

by Geof Goodrum

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Glibc 'GHOST' Vulnerability

Bill Wong e-mailed a link (<http://www.computerworld.com/article/2875782/ghost-linux-glibc-vulnerability-itbwcw.html>) to an article about the GNU C software function library (glibc) remote exploit vulnerability nicknamed 'GHOST' (for the affected gethostbyname function) disclosed in late January. Note that this vulnerability affects any system that uses the affected library, including Apple® OS X®, some Microsoft® Windows® applications, and embedded applications. The public disclosure (<http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2015-0235>) occurred after distributors pushed out updated software, so this is not a "zero day" vulnerability, and anyone who follows system notifications and applies updates regularly is already protected. This vulnerability is somewhat over-hyped as it requires the system to be running an external network service using a function that was deprecated several years ago. The biggest impact is on businesses that don't maintain their servers and embedded network applications that weren't updated.

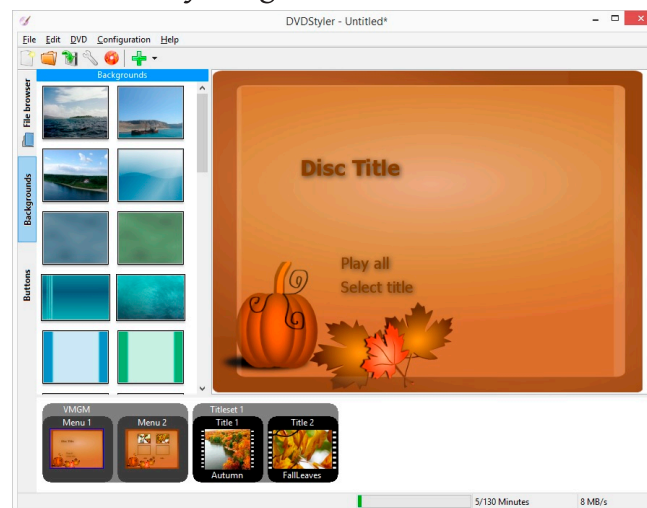
Featured Open Source Software of the Month: March 2015

The software described below can be downloaded at the links provided or copied onto a USB flash drive at the PATACS Fairfax meeting. However,

please check the online package management tool included with your GNU/Linux distribution first, as installation is often just a click away.

DVDStyler – v2.8.1.

<http://www.dvdstyler.org/en/>. Free GNU General Public License source code and executable for Microsoft® Windows®, Apple® OS X®, and GNU/Linux® by Alex Thüring. DVDStyler is a cross-platform DVD authoring application for the creation of professional-looking DVDs. It allows not only burning of video files and photo slideshows on DVD that can be played practically on any standalone DVD player, but also creation of individually designed DVD menus.



Features include:

- Create and burn DVD video with interactive menus
- Design your own DVD menu or select one from the list of ready to use menu templates
- Create photo slideshow
- Add multiple subtitle and audio tracks
- Support of AVI, MOV, MP4, MPEG, OGG, WMV and other file formats
- Support of MPEG-2, MPEG-4, DivX, Xvid, MP2, MP3, AC-3 and other audio and video formats
- Support of multi-core processor
- Use MPEG and VOB files without re-encoding, see FAQ
- Put files with different audio/video format on one DVD (support of titleset)
- User-friendly interface with support of drag & drop

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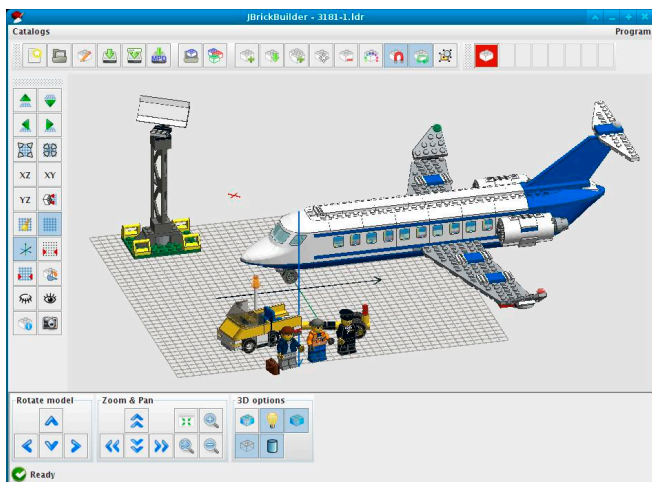
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- Flexible menu creation on the basis of scalable vector graphic
- Import of image file for background
- Place buttons, text, images and other graphic objects anywhere on the menu screen
- Change the font/color and other parameters of buttons and graphic objects
- Scale any button or graphic object
- Copy any menu object or whole menu
- Customize navigation using DVD scripting

JBrickBuilder – v0.1.3beta.

<http://sourceforge.net/projects/jbrickbuilder/>.

Free GNU General Public License Java executable and source code by Mario Pascucci. JBrickBuilder is a Java-based program for virtual building with LEGO bricks.

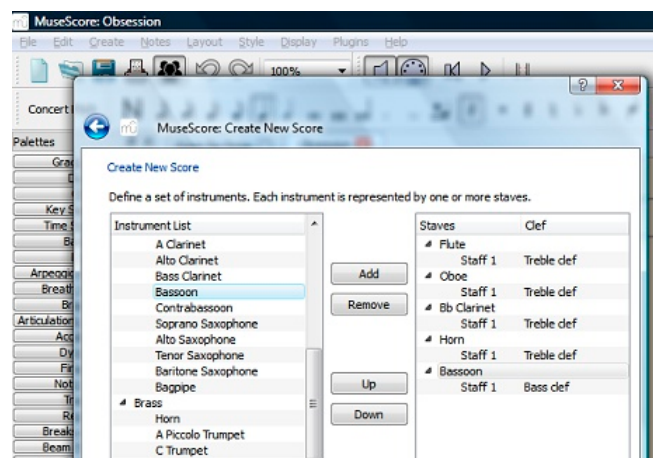


Features include:

- Java based, works on any platform with JVM 6 or newer
- Easy to use
- Full 3D view and editing for models and sub-models
- Autoconnect bricks
- Reads DAT, LDR, MPD, LCD, L3B file formats
- Uses standard LDraw™ part library (<http://www.ldraw.org/>)
- Save in LDR or MPD format

MuseScore – v1.3. <http://musescore.org/>. Free GNU General Public license source code and executables for Microsoft® Windows®, Apple® OS X®, and GNU/Linux® by Marc Sabatella. Create beautiful sheet music for free using MuseScore,

the free and open source notation program! MuseScore is available in over 40 different languages. Whether you are an experienced user of other notation programs like Finale or Sibelius, or a newcomer to the world of music notation programs, MuseScore has the tools you need to make your music look as good as it sounds. MuseScore can import and export MIDI and MusicXML files, and playback scores on computer and mobile devices (MuseScore Player app) using standard MIDI instruments.



Features include:

- Unlimited score length
- Unlimited number of staves per system
- Up to four independent voices per staff
- Score creation wizard and templates
- Automatic part extraction and transposition
- Repeats, including segnos, codas, and measure repeats
- Dynamics, articulations, and other expression markings, with playback support for most
- Custom text markings
- Lyrics
- Chord symbols
- Jazz notation, including lead sheets, slash notation and a “handwritten” font for text
- Swing and shuffle playback
- Mixer for instrument levels and effects
- Percussion notation
- Early music notation
- Cross-staff beaming
- Import of graphics
- Custom key signatures

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- Additive time signatures
- User-defined score styles
- Plug-ins for extended capabilities

Kernel Source – v3.19. <http://www.kernel.org/>. Free GNU General Public License source code for all platforms by the Linux community.

17 Tips to Extend Your iPhone/iPad Battery Life

by Bill Crowe

2nd Vice President, Sarasota TUG, FL
July 2014 issue, Sarasota Technology Monitor
www.thestug.org
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[Editor's Note: Although this article provides instructions specific to Apple iOS devices, the tips also apply to other smartphones and tablets.]

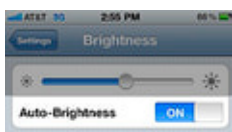
Anyone who's used an iPhone for even a few days has discovered that while these phones are more powerful, and more fun, than perhaps any other cell or smart phone, that fun comes with a price: battery use. Any halfway intensive iPhone user will recharge their phone almost every couple of days.

There are ways to conserve iPhone battery life, but many of them involve turning off services and features, which makes it a choice between all the cool things that the iPhone can do and having enough juice to do them.

Here are 17 tips to help you extend your iPhone's power, including new tips for iOS 7, which has features that can drain battery faster than earlier versions.

You don't need to follow all of them (what fun would that be?)—just use the ones that make sense for how you use your iPhone—but following some will help you conserve juice.

1. Turn on Auto-Brightness

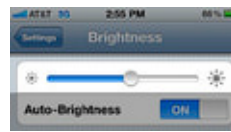


The iPhone has an ambient light sensor that adjusts the brightness of the screen based on the light around it (darker in dark places, brighter when there's more

ambient light) to both save battery and make it easier to see. Turn Auto-Brightness on and you'll save energy because your screen will need to use less power in dark places.

Find it in the Settings app → Brightness & Wallpaper → Auto-Brightness On

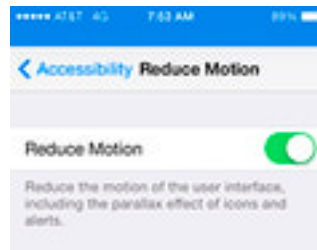
2. Reduce Screen Brightness



You can control the default brightness of your iPhone screen with this slider. Needless to say, the brighter the default setting for the screen, the more power it requires. Keep the screen dimmer to conserve more of your battery.

Find it in Settings → Brightness & Wallpaper

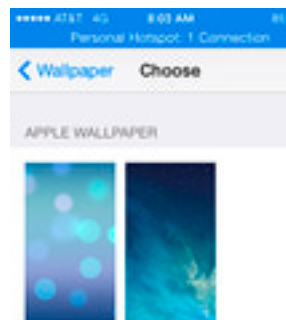
3. Stop Motion (iOS 7)



One of the coolest features of iOS 7 is called Background Motion. It's subtle, but if you move your iPhone and watch the app icons and background image, you'll see them move slightly independently of each other, as if they're on different planes. This is called a parallax effect. It's really cool, but it also drains battery. You may want to leave it on to enjoy the effect, but if not, turn it off this way:

Settings → General → Accessibility → Reduce Motion → move slider to green/on

4. Disable Dynamic Backgrounds (iOS 7)



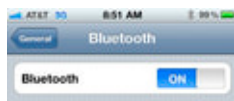
Another neat feature introduced in iOS 7 is animated wallpapers that move underneath your app icons. These dynamic backgrounds offer a cool interface flourish, but they also use more power than a simple static background image. Dynamic Backgrounds aren't a feature you have to turn on or off, just don't select the

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Dynamic Backgrounds in the Wallpapers & Backgrounds menu.

5. Turn Bluetooth Off



Bluetooth wireless networking is especially useful for cell phone users with wireless headsets or earpieces. But transmitting data wirelessly takes battery and leaving Bluetooth on to accept incoming data at all times requires even more juice. Turn off Bluetooth except when you're using it to squeeze more power from your battery.

Find it in Settings → Bluetooth → Move Slider to Off

6. Turn Off 3G/4G



The iPhone 3G and later models can take advantage the speedy 3G and 4G LTE cellular phone networks. Not surprisingly, using 3G, and especially 4G LTE, requires more energy to get the quicker data speeds and higher-quality calls. It's tough to go slower, but if you need more power, turn off 3G/4G or LTE and just use the older, slower networks. Your battery will last longer (though you'll need it when you're downloading websites more slowly!).

Find it in Settings → General → Cellular → Slide Enable 3G to Off on some models or Enable LTE to Off on the iPhone 5 or newer

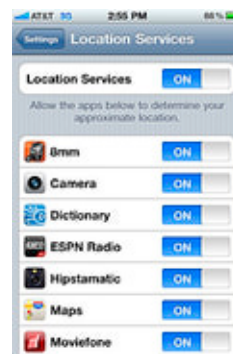
7. Keep Wi-Fi Off



The other kind of high-speed network that the iPhone can connect to is Wi-Fi. Wi-Fi is even faster than 3G or 4G, though it's only available where there's a hotspot (not virtually everywhere like 3G or 4G). Keeping Wi-Fi turned on at all times in hopes that an open hotspot will appear is a sure way to drain your battery life. So, unless you're using it right this second, keep Wi-Fi turned off.

Find it in Settings → WiFi → Slide to Off

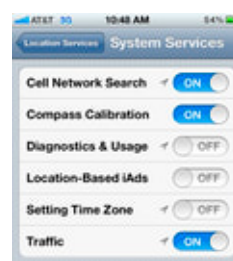
8. Turn Off Location Services



One of the coolest features of the iPhone is its built-in GPS. This allows your phone to know where you are and give you exact driving directions, give that information to apps that help you find restaurants, and more. But, like any service that sends data over a network, it needs battery power to work. If you're not using Location Services, and don't plan to right away, turn them off and save some power.

Find it in Settings → Privacy → Location Services → Slide to Off

9. Turn Off Other Location Settings (iOS 5 and up)

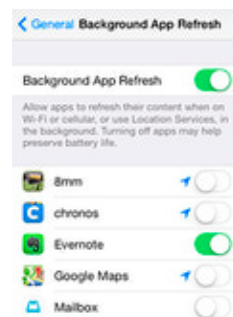


Use this tip if your iPhone or other devices upgraded to iOS 5 are burning through battery life too quickly. It's probably a software bug, so Apple may fix it and this tip may go away, but in the meantime, here it is.

A number of additional location services introduced in iOS 5 seem to be draining too quickly. Turn them off and you should regain some battery life.

Find it in Settings → Privacy → Location Services → System Services → Turn off Diagnostics & Usage, Location-Based iAds, and Setting Time Zone

10. Prevent Background App Refresh (iOS 7)



There are a number of new features in iOS 7 designed to make your iPhone smarter and ready for you whenever you need it. One of these features is Background App Refresh. This feature looks at the apps you use most often, the time of day

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that you use them, and then automatically updates them for you so that the next time you open the app, the latest information is waiting for you. For instance, if you always check social media at 7:30 am, iOS 7 learns that and automatically updates your social apps before 7:30 am. Needless to say, this useful feature drains battery. To turn it off:

Settings → General → Background App Refresh → Either disable the feature entirely or for specific apps

11. Don't Automatically Update Apps (iOS 7)

If you've got iOS 7, you can forget needing to update your apps by hand. There's now a feature that automatically updates them for you when new versions are released. Convenient, but also a drain on your battery. To only update apps when you want to, and thus manage your power better:

Settings → iTunes & App Store → Updates → move slider to off/white

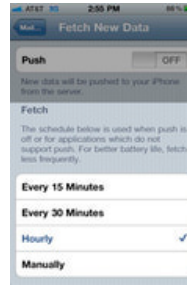
12. Turn Data Push Off

The iPhone can be set to automatically suck email and other data down to it or, for some kinds of accounts, have data pushed out to it whenever new data becomes available. You're probably realized by now that accessing wireless networks costs you energy, so turning data push off, and thus reducing the number of times your phone connects to the network, will extend your battery's life. With push off, you'll need to set your email to check periodically or do it manually (see the next tip for more on this).

Find it in Settings → Mail, Contacts, Calendar → Fetch New Data → Slide to Off

13. Fetch Email Less Often

The less often your phone accesses a network, the less battery it uses. Save battery life by setting The less often your phone accesses a



network, the less battery it uses. Save battery life by setting your phone to check your email accounts less often. Try checking every hour or, if you're really serious about saving battery, manually. Manual checks means you'll never have email waiting for you on your phone, but you'll also stave off the red battery icon.

Find it in Settings → Mail, Contacts, Calendar → Fetch New Data → Select Your Preference

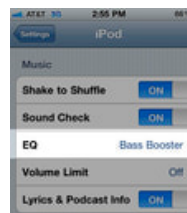
14. Auto-Lock Sooner



You can set your iPhone to automatically go to sleep – a feature known as Auto-Lock – after a certain amount of time. The sooner it sleeps, the less power is used to run the screen or other services. Try setting Auto-Lock to 1 or 2 minutes.

Find it in Settings → General → Auto-Lock → Tap your Preference

15. Turn off Equalizer



The iPod app on the iPhone has an Equalizer feature that can adjust music to increase bass, decrease treble, etc. Because these adjustments are made on the fly, they require extra battery. Turn the equalizer off to conserve battery. This means you'll have a slightly modified listening experience—the power savings might not be worth it to true audiophiles—but for those hoarding battery power, it's a good deal.

Find it in Settings → Music → EQ → Tap off

16. Buy an Extended Life Battery



If all else fails, just get more battery. A few accessory makers like mophie and Kensington offer extended life batteries for the

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iPhone. If you need so much battery life that none of these tips help you enough, an extended life battery is your best bet. With one, you'll get days more standby time and many hours more use.

17. Do Less-Battery-Intensive Things

Not all ways to save battery life involve settings. Some of them involve the way you use the phone. Things that require the phone be on for long periods of time, or use a lot of system resources, suck the most battery. These things include movies, games, and browsing the web. If you need to conserve battery, limit your use of battery-intensive apps.

Federal Agencies Post Security Warnings and Recommendations for Mobile Phones

by Ira Wilsker

WEBSITES:

<http://www.fcc.gov/smartphone-security>

http://www.fcc.gov/sites/default/files/12.14%20Mobile%20Security%20Tips%20%28Android%20-%20Links%29_0.pdf

<http://www.fcc.gov/blog/fcc-and-public-private-partners-launch-smartphone-security-checker-help-consumers-protect-mobil>

http://www.fcc.gov/sites/default/files/smartphone_master_document.pdf

<http://www.dhs.gov/stothinkconnect>

<http://www.healthit.gov/providers-professionals/how-can-you-protect-and-secure-health-information-when-using-mobile-device>

<http://www.fcc.gov/guides/mobile-wallet-services-protection>

<http://transition.fcc.gov/cgb/consumerfacts/Mobile-Wallet-Services-Protection.pdf>

<http://www.fcc.gov/guides/stolen-and-lost-wireless-devices>

https://en.wikipedia.org/wiki/Near_field_communication

Now that the spring semester is starting, it is quite obvious that almost all of my college students have and are using smart phones and other digital communications devices for much more than the traditional calling function. One of my daughters is teaching high school, and almost all of her students have a smart phone. Going to a nice restaurant for dinner shows that almost all of the patrons check their smart phones to some degree. We are seeing frequent TV commercials about using the "Near Field Communications" (NFC) feature now built into most newer smart phones as a method of secure retail payment instead of swiping a plastic credit card or writing a check. With the near universal use of smart phones and related devices in our daily lives, it is inevitable that crooks and other dishonest people will find a way to illicitly capitalize on the popularity of these devices. The security risks prevalent on the use of these devices has caught the attention of several federal agencies, including the Federal Communications Commission (FCC), Department of Homeland Security (DHS), and other federal agencies, all of whom have posted "security checkers" and other tips on properly securing our smart devices.

The Federal Communications Commission (FCC) has posted online an operating system specific "Smartphone Security Checker" at fcc.gov/smartphone-security. This security checker offers explicit information and recommendations for devices running Android, Apple iOS, BlackBerry, and Windows Phone. Selecting one of the operating systems, and then clicking on the "Generate Your Checker" icon will display appropriate instructions for your device. Since I have both an Android phone and an Android tablet, and Android has over 75% of the smart device market, I selected the Android option. The recommendations displayed for the other operating systems was very similar to that displayed for Android.

The security checker displayed for Android devices was headed, "Ten Steps to Smartphone Security for Android," and explains how these

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security guidelines could reduce the exposure and risk of mobile cybersecurity threats if they are implemented. The 10 steps recommended by the FCC for Android devices (and very similar to those for the other smart device operating systems), are:

1. Set PINs and passwords. To prevent unauthorized access to your phone, set a password or Personal Identification Number (PIN) on your phone's home screen as a first line of defense in case your phone is lost or stolen. Configure your phone to automatically lock after five minutes or less when your phone is idle, as well as use the SIM password capability.
2. Do not modify your smartphone's security settings. Tampering with your phone's factory settings, jailbreaking, or rooting your phone undermines the built-in security features offered by your wireless service and smartphone.
3. Backup and secure your data. You should backup all of the data stored on your phone – such as your contacts, documents, and photos. These files can be stored on your computer, on a removal storage card, or in the cloud.
4. Only install apps from trusted sources. Many apps from untrusted sources contain malware that once installed can steal information, install viruses, and cause harm to your phone's contents.
5. Understand app permissions before accepting them. You should be cautious about granting applications access to personal information on your phone or otherwise letting the application have access to perform functions on your phone. Make sure to also check the privacy settings for each app before installing.
6. Install security apps that enable remote location and wiping. An important security feature widely available is the ability to remotely locate and erase all of the data stored on your phone, even if the phone's GPS is off. In the case that you misplace your phone, some applications

can activate a loud alarm, even if your phone is on silent.

7. Accept updates and patches to your smartphone's software.
8. Be smart on open Wi-Fi networks. When you access a Wi-Fi network that is open to the public, your phone can be an easy target of cybercriminals. You should limit your use of public hotspots and instead use protected Wi-Fi from a network operator you trust or mobile wireless connection to reduce your risk of exposure, especially when accessing personal or sensitive information.
9. Wipe data on your old phone before you donate, resell, or recycle it. Your smartphone contains personal data you want to keep private when you dispose your old phone.
10. Report a stolen smartphone. The major wireless service providers, in coordination with the FCC, have established a stolen phone database. If your phone is stolen, you should report the theft to your local law enforcement authorities and then register the stolen phone with your wireless provider. This will provide notice to all the major wireless service providers that the phone has been stolen and will allow for remote "bricking" of the phone so that it cannot be activated on any wireless network without your permission.

As more of us are using the Near Field Communications (NFC) feature available on most of our smart phones as a secure method of payment at retail stores, restaurants, gas stations, and at other sellers of goods and services, we must also be cognizant of the security threats and safety precautions necessary when using these "mobile wallets." Some of the widely used mobile wallets include Google Wallet, Apple's Apple Pay, eBay's PayPal, CurrentC (a joint effort of Sears, Target, and WalMart, CVS, and others), GoSoftCard (joint effort of American Express, Chase, and Wells Fargo), and several others. Supposedly these mobile payment services provide greater

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security and benefits than using a plastic credit or debit card, and award appropriate “points” on the credit card backing several of the services. The method of using the NFC features on many of our phones is quick and simple; the appropriate app (probably connected to an existing credit or debit card account) is opened, and the phone is held near the point of sale (POS) terminal to complete the transaction. As an added level of security, most of the payment apps also require the user to enter a PIN, fingerprint, or other method of verification on the phone prior to completing the transaction. The seller only has verification that a payment to them has been processed, but does not have access to credit card numbers and other personal information. Since the seller does not have this information from the payment process, cyber hacks such as what happened at Target, Home Depot, and other retailers would not capture our private, financial, and personal information.

Being aware of the rapidly increasing use of these alternative digital payment systems, the FCC published “Mobile Wallet Services Protection” online at fcc.gov/guides/mobile-wallet-services-protection. While the actual point of sale transactions are reasonably secure when these digital wallets are used, the primary risk is the loss or theft of a smartphone containing the electronic wallet apps. The use of a PIN, fingerprint, or other verification at the time of the transaction provides good security, they are not perfect, and may be vulnerable to a miscreant in possession of a lost or stolen smart phone. Since many consumers are inherently complacent, and use the same or other easy to guess PIN numbers to access multiple resources (such as an ATM), PIN numbers are the most vulnerable of the primary verification methods.

In the “How to Safeguard Your Mobile Wallet Smartphone” guidelines are several “common sense” tips to protect our mobile digital wallets. We need to be aware of our surroundings, and protect our PIN and other verification modes from prying eyes, as well as very short range

electronic interception (sometimes an innocuous looking device adjacent to the POS terminal), often within about four inches or 10 centimeters. If using an electronic wallet for paying for online purchases or other remote financial transactions, do not use an insecure, open, Wi-Fi network, as the information can be readily intercepted at distances of up to several hundred feet.

Smartphones are popular items to steal, and can also be innocently lost. The FCC says, “Never leave your smartphone unattended in a public place. Don’t leave it visible in an unattended car; lock it up in the glove compartment or trunk.” If you have not already done so, write down the identifiers of your device, and store them in a secure but accessible location; these identifiers can often be found on the device in the battery compartment, or under Settings - About Phone, as well as on the box the phone came in. This information may be needed in a police report, which should be filed if the phone is stolen. All phones have a unique serial number called an International Mobile Equipment Identifier (IMEI), sometimes also called a Mobile Equipment Identifier (MEID). This unique IMEI or MEID can also be displayed on most phones by dialing *#06# (asterisk-pound-zero-six-pound), which should be recorded, and used to definitively identify a phone. Provide this information to your carrier when reporting the loss of the device to them.

In terms of financial liability for the illicit use of a digital wallet on a lost or stolen phone, the terms of service for that app should be reviewed, but in general the limitations on financial loss are similar to those for the use of the plastic credit or debit card behind the app. As with any other debit or credit instrument, check the online and monthly statements for questionable or unauthorized charges, and follow the issuer’s instructions for resolving the discrepancies.

The FCC also recommends that smart device users install and maintain security software and appropriate apps that can be used to locate a missing device (even if the GPS is turned off);

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remotely lock the device (even if only “temporarily” lost); wipe sensitive information off of the device after sending a remote command; and even sound a loud alarm or other sound (some apps call it a “scream”), which will be sounded even if the device is on “silent” or “vibrate”, which can be used to locate a device, especially if “lost” at home, work, or in the car. Users may also want to display limited contact information on the “lock screen,” which may allow an honest person to return a found phone. The FCC also warns about the personal information stored by social networking sites and internal apps that may allow unauthorized access to personal information. Also, in the event of a theft or loss, go online using another device and change all of your critical and wallet passwords and security questions.

Our smart phones and other intelligent devices have (arguably) done much to enhance our daily lives, as we make more use of them and find new and innovative ways to benefit from them. As important as these devices have become to us personally, we must also do what we can to secure them and their data, and protect the devices from loss.

ANDROID SECURITY APPS (directory, reviews, and ratings):

<http://www.techsupportalert.com/content/best-free-antivirus-app-android.htm>

iOS (Apple) SECURITY APPS (directory, reviews, and ratings):

<http://www.techsupportalert.com/best-free-iphone-apps.htm#iPhone-Finder>

<http://www.techsupportalert.com/best-free-iphone-apps.htm#prey>

Windows 8.1: Downloading, Purchasing and Installing Apps

by Rosita Herrick

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In addition to being a computer operating system, Windows 8.1 is blurring the line between

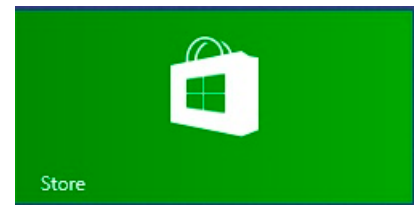
the old ways of working on a computer and the access to information used by tablets and smart phones. The distribution of apps that perform individual tasks is one of the ways.

In additions to apps that come with the operating system, Microsoft has created a store for apps distribution.

The Store App

The Store app can be found either on the Start screen or on the Task bar.

Access to the Internet is required for accessing the Store.



You access the store app by clicking on the tile/icon.

When the app opens you have quite a few options to search for items of interest.

Once you find an app of interest, just click on it and on the page that opens you will find information about the app such as number of downloads, reviews with rating and a description of the app. The app might be free, might have a price or it can be downloaded for trial.

Usually a Microsoft account is required. To install the app, just click on the **Install** button.

Maintaining Apps

Periodically, there are updates for apps to either enhance them or fix some problem.

To check for updates go to the Store app.

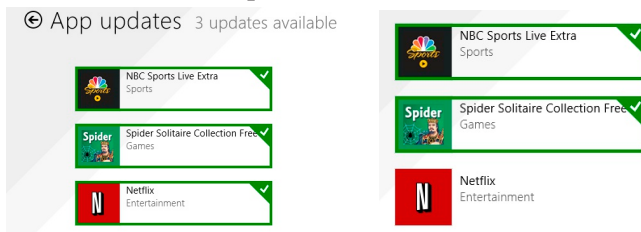
On the upper right side of the screen, if there are updates available for any of the apps, you will see a link in green.

In this case there are updates available for three of my installed apps (not distributed with the system).

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Clicking on this link displays the 3 apps that are scheduled for an update.

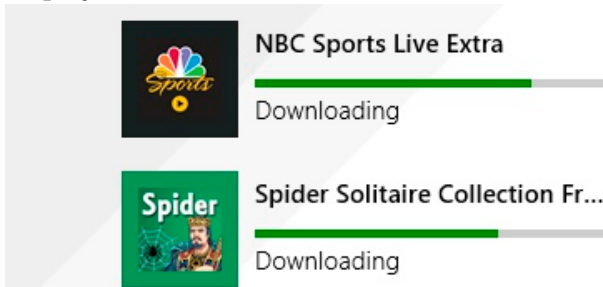


The check mark on the right corner shows that the update is selected to install. It can be unchecked with a right click.

Now I can update the two remaining apps by clicking on the install icon at the bottom of the page.



Once I click on install, the following page displays.



The amount of time that download and install takes depends on the speed of your Internet connection, the size of the update and the speed of your computer.

Once the download and install are completed the next message on the screen will be:

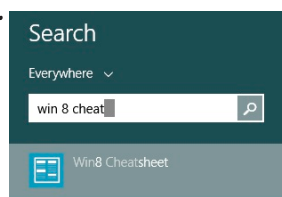
Your apps were installed

You can now close the Store app.

Uninstalling an App

This process is very simple.

1. Find the app with the search charm.



2. Right click on the icon and this box will appear.

Unpin from Start

Pin to Taskbar

Uninstall

3. Click on Uninstall and Windows will remove the app from your system.

Merging Photos

by Larry Piper

President, Midland Computer Club, MI
 April 2014 issue, Bits and Bytes Newsletter
 mcc.apcug.org
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Ever see a row of photos at the top of a Facebook or website page? I'll bet it crossed your mind that this would be a good idea for one of your own projects.

I'll bet your next thought was that it would take a powerful photo editing tool, most likely Photoshop, to accomplish this horizontal photo montage. Sure enough, when you did some cursory checking, words like 'layers' and 'flattening' began to appear. Or maybe you found how-to ideas for creating a photo collage, which is NOT what you had in mind.

I too went down this same road. I also discovered that the most recommended solution is to use Paint, a free program that comes with Windows. I found the Paint solution not very intuitive and a little time consuming to use. Then I discovered another solution that had been right in front of me for a number of years. It is also a free program, IrfanView. This little utility has been around since the days of Windows 95. It will open virtually every graphic file type—as well as most sound and video file types. I use it as a fast image resizer. But right there in the opening screen under the Image drop-down menu is the choice Create Panoramic Image. Perfect!

IrfanView gives you the choice of horizontal or vertical merging of photos. You add the photos you want, rearrange their order and then hit the Create key. Save the resulting photo-merge, give it a name and you are good to go. You could even resize the final image if it is too big or too small for your application.

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So what about merging photos of different pixel size or resolution. No problem. I ran a few tests where the height dimensions were five times different. IrfanView makes the horizontal photo montage a constant height. The same thing occurred when merging photos of very different resolution. Again, the merged photos were a nearly constant total pixel size. The overall picture quality has been reduced substantially, but who cares when it is being viewed over the Internet.

IrfanView is the product of Irfan Skiljan, who lists himself as a graduate of Vienna University. Be sure to get the latest version, which is 4.37 as of this writing.

<http://www.irfanview.com/>

OTG Cable/Adapter (On-the-Go)

by Frank Ramsey

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How do you accomplish the transfer of files between a mobile device and your PC?

There are a number of methods, including connecting the device to a PC/MAC via a USB cable, use an application to connect over Wi-Fi and others.

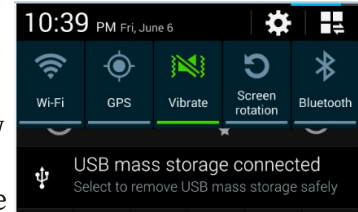
An additional method would be to transfer files to a USB Flash drive. Since few Android devices have a full- size USB Type A port, how do you connect a flash?

Enter the OTG Cable. A typical OTB cable is shown here. One end is the USB Type A female, the other end typically USB micro male. These are available from a number of sources including eBay for prices ranging from under a \$1 to \$5 or more.



You plug the flash drive into the Type A female connection and plug the USB micro male into the Android device.

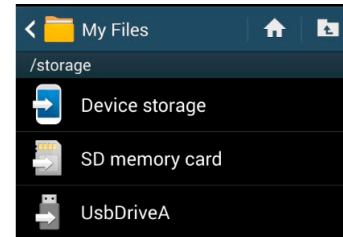
Typically the Android device will recognize the flash drive and eventually it will show up in File Manager. I say eventually because



the flash drive must be scanned by the Android device. Depending on the size of the flash drive and the speed of the Android device, it may take

a little time for the USB drive to show up. Be patient.

Now you can copy files to/from the flash drive.



Micro Center® In Store Clinics

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A link for store locations is at the top center of the home page, www.microcenter.com. For those in the Washington, D.C. area, the only store in Virginia is in the Pan Am Plaza at 3089 Nutley Street, Fairfax, VA 22031, phone (703) 204-8400, and the only store in Maryland is in the Federal Plaza at 1776 E. Jefferson #203, Rockville, MD 20852, phone (301) 692-2130.

Micro Center Clinics are held on most weekends, except during holidays. The same topic is usually presented on both Saturday and Sunday. Topics may change and clinics may be cancelled without notice. Please verify the schedule with the store before leaving and register online for e-mail updates (http://www.microcenter.com/instore_clinic/sign_up.html).

Signing up in advance reserves a seat, recommended as space is limited. This can only be done at a store, either at the Tech Support or Customer Support area.

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Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4 7-9pm Arlington General Meeting	5	6	7
8 +1 hour Begin Daylight Saving Time 	9	10	11 7-9pm Online Zoom Meeting	12	13	14
15	16 7-9pm Arlington Board Meeting	17 St. Patrick's Day 	18	19	20 Spring Equinox	21 12:30-3:30pm Fairfax General Meeting
22	23	24	25 7-9pm Arlington Technology & PC Help Desk	26	27	28 May Newsletter Articles Due
29	30	31				

Arlington: Carlin Hall Community Center
 5711 4th Street South
 Arlington VA 22204

Fairfax: Osher Lifelong Learning Institute
 4210 Roberts Road
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