

Musings of an Apple Tyro

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Protection Against Ransomware

Ransomware is malicious software that blocks access to your computer or files, usually by encryption, until money is paid. This type of malevolent software is an increasing threat. Short of paying-up, which is no guarantee of recovery, what can you do if you're hit with this plight? Of course, the best protection is to prevent infection by properly using anti-malware software and employing good user practices (ignore email from unknown sources, don't click on unknown or suspicious links, etc.). Even though ransomware may infect your backup files, if you use versioning backup software, you have a reasonable chance to recover from earlier, un-infected backups. I suggest you have two or three backup drives and cycle them every week or two, leaving only the current drive attached to your computer and thus the Internet. In the Apple world, Time Machine provides versioning and there are numerous backup products in the Windows environment such as Acronis True Image 2016, StorageCraft ShadowProtect 5 Desktop, Genie Timeline Home, and NTI Backup Now 6. Windows

10s File History backup can also be useful for this purpose as can some (most?) Cloud storage systems. See <http://bit.ly/1sy4MYp> and <http://bit.ly/1sr6XME>.

Dangerous Computer Cords

Do you own a Microsoft Surface Pro, Surface Pro 2 or Surface Pro 3 (2013 through early 2015)? Microsoft is replacing about 2 million power cords for these computers because these cords can overheat and shock or cause a fire. For a free replacement, call 855-327-7780 or go to <http://bit.ly/1XzqiaF>.



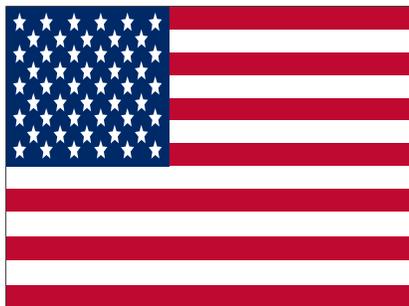
Update to OS X

On May 16th, Apple released an OS X update (from v. 10.11.4 to 10.11.5). This is probably the last release before a major release in October or November. The forthcoming OS, code named Fuji, will likely be revealed at the Worldwide Developer Conference (WWDC) on June 13th.

Update to iTunes

As part of the OS X update, Apple released iTunes 12.4 (v. 12.4.0.119). While improvements have been made, iTunes still remains a generally unloved application. Initial reviews are tepid. See <http://bit.ly/1rTF9Rn>.

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Fastest Internet Speed

What country would you think has the fastest Internet speed? It isn't the U.S.— it's Singapore. This shouldn't be a surprise because Singapore is a very small, rich country. So we're number two, right? Nope. Table 1 shows the 10 countries with the fastest average peak connection speed (from <http://til.ink/1TYolik>).

Table 1

| | Country/Region | Q2 2015 Peak Mbps | QoQ Change | YoY Change |
|----|----------------|-------------------|------------|------------|
| – | Global | 32.5 | 12% | 26% |
| 1 | Singapore | 108.3 | 12% | 60% |
| 2 | Hong Kong | 94.8 | 2.4% | 22% |
| 3 | South Korea | 83.3 | 5.5% | 12% |
| 4 | Japan | 75.1 | 7.2% | 19% |
| 5 | Taiwan | 74.5 | 4.2% | 32% |
| 6 | Romania | 72.1 | 0.6% | 17% |
| 7 | Qatar | 71.7 | 2.6% | 71% |
| 8 | Israel | 71.4 | 6.2% | -14% |
| 9 | Sweden | 62.8 | 0% | 24% |
| 10 | Macao | 62.6 | 7.8% | 36% |

The U.S. is number 24, with an average peak connection speed of 50.4 Mbps, after Bulgaria (51.0 Mbps) and the United Kingdom (50.9 Mbps). Other reports show the U.S. at number 15 (see <http://ti.me/23X7aDd>) and number 21 (<http://bit.ly/1WDYsuu>). For detailed information see <http://akamai.me/205LeoB>.

Adobe Flash Player

Because of the security risks of Flash Player, you may want to frequently check for updates. [Ed. Better yet, uninstall Adobe Flash entirely or disable browser Flash extensions, as Flash is rarely needed except by malware and advertising.] I suggest a weekly check. Also, this is one piece of software you may want to set for automatic updates. For Windows-based computers, search Google for “how to check for updates for flash player win” and pick the appropriate version of the operating system. Windows 10 users may find <http://bit.ly/1rTGV50> of value. For those using

Mac computers, do the following: System Preferences Flash Player Updates Check Now then follow directions presented.

See <http://bit.ly/1OHNv8F> for a good description of Flash Player.

An AI Rembrandt Painting

A deep-learning algorithm, coupled with a 3D printer, has produced a new “Rembrandt” painting that is remarkably like something the Dutch master would produce (see Figure 1).



Figure 1

The computer-based painting is based on computer analysis of 346 known Rembrandt paintings. The “painting” was created with a 3D printer using special paint-based UV ink with 13 layers of ink—148 million pixels. See <http://bit.ly/1TjIhgb> for an explanation. See <https://www.nextrembrandt.com> for a video describing the project.

Aging Mac Pro

It's hard to believe that the Mac Pro is aging, but it was introduced in 2013 and now it is

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competing with Windows desk top machines from Lenovo, Dell and HP that are superior. The Mac Pro is for the professional computing market where users often require very substantial compute power and often demand the latest and greatest. See <http://bit.ly/1rTIS1d>.

Amazon Top Provider of Cloud Services

Most of us think of Amazon as the online store that seemingly sells everything imaginable. However, it is by far the largest provider of Cloud services having ten times the computing capacity than the next 14 largest Cloud companies combined. Amazon's Cloud is generally used by large corporations, but individuals can also use their services. Amazon Prime Members (\$99/year) can store an unlimited number of photos, videos and files at no extra cost. Not a Prime Member? You can rent 5 GB of storage for \$11.99/year or unlimited storage for \$59.99/year. See pricing at <https://www.amazon.com/clouddrive/home>. Also see <http://for.tn/1TjKqs1> and <http://bit.ly/1qtD4tP>.

Upcoming Meetings

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

July 16, 2016 (Fairfax)

Learn 30: Android Apps on Windows PCs
Presented by Stan Schretter

Stan will demonstrate the Remix tablet, which has a Windows tablet body with an Android heart. This is just one example of how the Android OS and its large base of free and paid apps will be soon coming to you on different hardware platforms.

Stan Schretter is an OLLI member and has been avidly exploring technology since attaching ham radio antennas to his parents house roof at age 13.

Presentation: [Topic to be Announced] by Cherie Lejeune

July 27, 2016 (Arlington) **Technology & PC Help Desk**

Extended Question and Answer session; discuss topics of interest, share knowledge and get help with technology issues.

August 20, 2016 (Fairfax) **Presentation: Expert Q&A Panel**

NOTE: Due to parking lot repairs at the OLLI facility, the August 20 meeting will be held at the Fairfax County Government Center, 12000 Government Center Parkway. More information will be provided in August.

If You Missed It

by Geof Goodrum
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If you can't make a meeting in person, remember that members can participate in meetings remotely and for free via Zoom teleconferencing (see <http://zoom.us/>, for Apple® OS X® and iOS, GNU/Linux®, Google Android™ and Microsoft® Windows®). Details are provided in e-mailed meeting announcements.

Remember: you must be physically present at the end of the meeting to be eligible for door prizes.

May 21, 2016 (Fairfax)

Although it was a rainy day, we had an excellent turnout with several new OLLI members as guests.

Gabe Goldberg offered a cautionary tale to keep an up-to-date backup. He endured a neighborhood power outage on May 16th from which his Microsoft Windows XP [?!] system did not recover due to a failed motherboard. It took some work to restore his files and he was still working on little bits.

Another participant said that her Comcast email service was down, but this appeared to be a local area problem, as it is working for others. Gabe suggested avoiding the Internet Service Provider's (ISP's) email service in favor of alternatives like Google's Gmail, so you keep your

email address even if you change your ISP. Gabe registered his own Internet domain (gabegold.com) for a nominal cost, which includes an email address. Another option if you are affiliated with a college or university is to check with the alumni relations office whether it can provide you with a free email address (e.g., joe.smith@mycollege.edu).

Paul Howard announced that the OLLI facility in Fairfax will be closed to repave the parking lot during the August Meeting, so the August meeting will move to the Fairfax County Government Center. Due to rules for meetings at the county facility, a sign language interpreter must be available, if requested. PATACS is seeking leads on anyone who could volunteer as a sign language interpreter.

Others suggested meeting site alternatives including a Fairfax library, and the George Mason University center office, which Washington Apple Pi (<http://wap.org/>) uses.

The OLLI TA-1 meeting room should have a fresh coat of paint for the June meeting. Several volunteers helped stacking chairs away from the walls after May meeting to make room for room painting. THANK YOU!

Q&A Session



Q: Why am I having trouble opening PDF files in Adobe Reader with Windows 10?

A: Can't really answer without seeing the problem, but suggest installing another reader program such as FoxIT or Nitro (see next answer). Another member reported that PDF readers work in Windows 10. There is also a PDF Reader built into the new Microsoft Edge web browser, though Paul Howard said he sometimes has issues with PDF readers built into a browser. [Ed. PDF readers built into browsers provide better security but are less functional than most standalone readers.]

Q: I have two different Adobe PDF readers installed, Adobe Acrobat XI and DC. Do I need both?

A: See Paul Howard's July 18, 2015 presentation

about PDF from the PATACS Recent Meetings web page (http://patacs.org/pdf/pdf_150718_verb_via%20oo.pdf).

[Ed. Adobe has a product comparison page at <https://acrobat.adobe.com/us/en/acrobat/pricing/compare-versions.html>.]

Learn 30: Google Docs by Geof Goodrum



Geof unintentionally demonstrated the offline capabilities of Google's web-based word processing application. While the wired Internet connection worked during meeting setup, he was unable to establish a connection during the demo and therefore could not demonstrate many of the features.

However, offline editing is possible using the Google Chrome web browser (or other Chrome device such as a Chromebook) and a free extension (<https://support.google.com/a/answer/1642623?hl=en>), and Geof was able to load a sample document he created that listed Google Doc features.

Prerequisites for creating a document in Google Docs is a Google account (which you have if you use Gmail), a supported web browser (the most current two versions of Mozilla Firefox, Microsoft Internet Explorer, Apple Safari and Google Chrome), and an Internet connection.

Google Docs can import documents uploaded in Microsoft Word (.doc versions later than Office 95 and .docx), Portable Document Format (PDF), and OpenDocument (.odt, as used in OpenOffice, LibreOffice, and many other word processors). Geof was pleasantly surprised to discover that Google Docs includes Optical Character Recognition, so it can import images (photos, scans) of printed text pages in .png, .gif, .jpg, and .pdf formats. Geof showed a Google Doc that he created previously from an imperfect photo of a magazine page, which accurately captured the text, including some formatting. As a bonus, the document imported the source photo as well, which made it easy to proof the results.

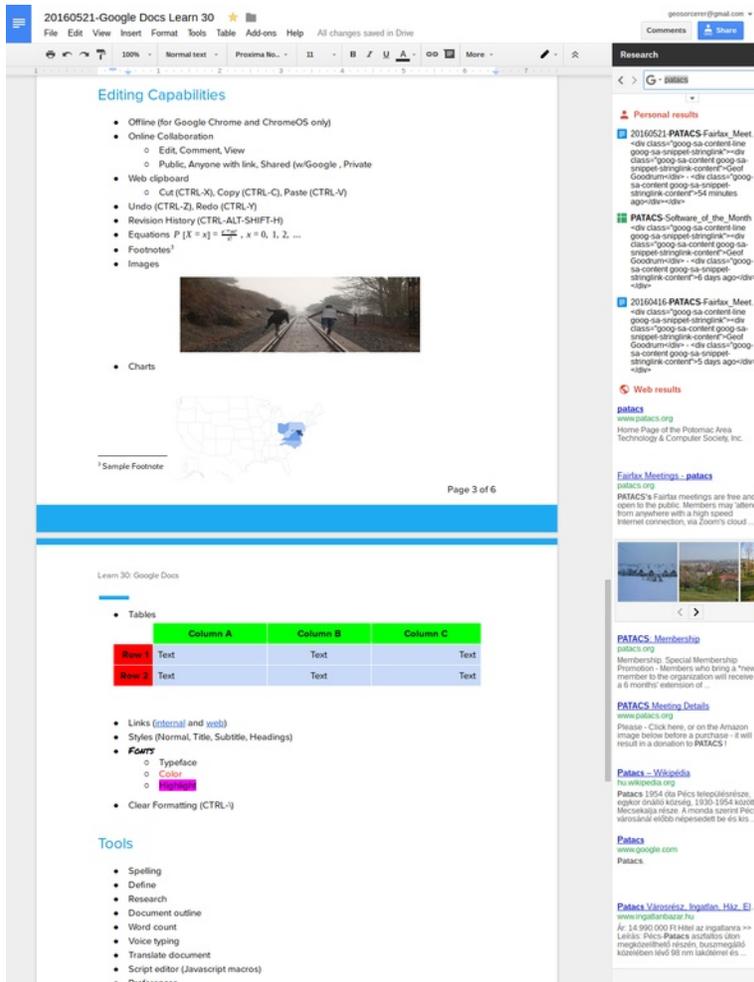
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Google Docs can export documents in Microsoft Word (.docx only), OpenDocument (.odt), Rich Text (.rtf), PDF, HTML, plain text, and ePub (used for eBooks). Another option is to “Publish to the Web,” which creates a public copy of the document that can be embedded in web sites, with an option to update when the original document is changed. Documents can also be printed on local and network printers.

Google Docs does not support macros, including import and export of Microsoft Office macros. However, Google Docs supports “Apps Script” using a Javascript-based language to extend the functionality of Google applications with custom menus, dialogs, sidebars, and interaction with other Google web services. A script editor is built-into Google Docs. There are also many optional Add-ons that others have created for Google Docs using the scripting language. Geof uses add-ons to the Openclipart library of free clip-art (as used in this newsletter), a URL shortener, and Remove Line Breaks (to remove hard line breaks from text copied from web pages, etc.).

Google Docs supports many of the features expected in a word processing application, including a large selection of fonts (no local PC installation needed), a variety of preformatted



document templates, a limited selection of styles (Title, Subtitle, Headings, Normal Text), paint format (to apply selected text formatting to other text), cut, copy and paste with clipboard, spell checking with optional user dictionary, Undo and Redo, footnotes, tables, page headers and footers, and image import. Additional niceties include an equation editor, automatic table of contents generation (if styles are used), internal and external bookmarks/hyperlinks,

revision history (can view the entire edit history of the document and rollback/restore previous versions), and charts dynamically linked to Google spreadsheets. Google Docs also supports “Voice typing,” voice recognition text entry that Geof found to be quite good using the built-in microphone on his laptop. Google Docs can also translate documents into other languages (dozens from Afrikaans to Zulu), but Geof cautions it would be wise to have the translations proofed by someone

who knows the translated language.

Since documents are stored and backed up in Google Drive online storage, they can be shared without resorting to email. There are four privileges: owner, edit, comment and view. The document owner can grant edit, comment, and view privileges to specific users with a Google account (sign-in required), anyone with the

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document link (URL), and public (discoverable with an Internet search). Combinations are possible and very flexible, such as allow only specified Google account owners to edit, but anyone with the link can view. Documents are not encrypted, but are private (owner access only) by default. However, there is an add-on that offers encryption.

There is extensive searchable online help in articles written by Google staff and links to messages posted in Google Product Forums. However, only the keyboard shortcut list and menu search are available while offline.

Overall, Geof finds that Google Docs satisfies nearly every word processor function for the typical user. However, some advanced features such as automatic generation of index, bibliography, and table of tables and figures are lacking or require add-ons, so authors needing these features may still need a standalone word processor application.

Presentation: Recent Activities of the Federal Agencies Digitization Guidelines Initiative (FADGI) Still Image Working Group by Thomas Rieger



Guest speaker Tom Rieger gave an interesting presentation about the complexities of creating and preserving digitized images and text.

The United States National Archives (<http://www.archives.gov/>) was the first to get a handle on prototype benchmarks and standards for digitizing images and text, starting from nothing. The Library of Congress (<http://www.loc.gov/>) joined the effort with other agencies. By 2005, there was an early set of guidelines from the National Archives, which became the Federal Agencies Digitization Guidelines Initiative (FADGI, <http://www.digitizationguidelines.gov/>) on digital imaging.

The Library's Still Image Working Group (<http://www.digitizationguidelines.gov/still->

[image/](#)) supports FADGI. Tom noted that there is an exceptional imaging scientist on the Library staff. The Library is quite academic, with staff members who focus on one particular specialty for their entire career. The Library respects knowledge and has lots of older workers—nobody is forced to retire. The Library is the research arm for and a branch of Congress, as well as the unofficial US national library. The Library catalogs history as it unfolds, digitizing newspapers, original microfilm/microfiche, and supports a large ongoing digitization effort on the world's most advanced equipment.

FADGI expanded beyond US Federal agencies, and became an “international hit.” However, a group in Europe came out with standards a little later that created chaos. There was a need for a standard for long time preservation without inconsistencies.

Enter the International Organization for Standardization (ISO, <http://iso.org/>), which develops and publishes worldwide standards. Seemingly simple things like how to define color can be reinterpreted over and over and not be applied consistently. Several major companies participate in the effort (in response to questions, Tom said that National Geographic is not involved, but some parts of the Defense Department are involved). Specifications have been organized in table format for specific types of imaging. The Still Image Technical Guidelines are at the final draft stage (the September 2015 draft is at http://www.digitizationguidelines.gov/guidelines/FADGI_Still_Image_Tech_Guidelines_2015-09-02_v4.pdf).

There are tradeoffs to consider, as highest quality imaging costs more and may not be desired when digitizing large quantities of material. There are different standards for different types of imaging (e.g., book vs. a still image).

Over four hundred different file formats for digital imaging have been created, but not many are still viewable. Sustainability of digitized

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material is part of FADGI's work. A recent accomplishment was the approval of the Joint Photographic Experts Group (JPEG) 2000 as an archival image format (JPEG 2000 is not the common JPEG image format, see <http://www.digitizationguidelines.gov/still-image/documents/JP2LossyCompression.pdf>), but it is only endorsed under specific conditions. An average page of text scans in color to be a 100 MB Tagged Image File Format (TIFF) file (see https://en.wikipedia.org/wiki/Tagged_Image_File_Format#Digital_preservation). With millions of pages scanned, the Library would run out of storage space for TIFF files. The JPEG 2000 file only required 5 MB with no discernible difference. The Library will continue to use TIFF for images.

Another important aspect of image preservation is color measurement to accurately reproduce the colors in the original image. The Library has multispectral capability to capture images (old maps, etc). Color calibration traces to a machine at the US National Institute of Standards and Technology (NIST, see <http://www.nist.gov/pml/div685/grp03/color.cfm>). Otherwise, the Library does not have a lot of contact with NIST. The Library implemented a method to calibrate its own references to FADGI, and uses a QR code to indicate reference values. The Library provides a reference service to the public, improving measurement standards. Target color references printed on paper change over time or after they come in contact with matte papers. Mr. Rieger said that acetate requires five cleanings before it is stable enough for color targets.

Digital Image Conformance Evaluation (DICE) is a software program required to be FADGI compliant. However, DICE is a rather expensive commercial product, which is beyond the budget for small organizations. The imaging scientist and an intern at the Library are creating OpenDICE, which will be available for free. OpenDICE is in the final stages of vetting against the original DICE platform, and will be available

for Microsoft Windows and Apple OS X. See <https://blogs.loc.gov/loc/2015/08/dice-y-digitization/> for more information.

A new concept for still image digitization is process control, which means watching the entire scanning process, fixing problems, and maintaining quality. Total Quality Management (TQM) is included in FADGI 2016 guidelines (http://www.digitizationguidelines.gov/about/FADGI-impacts_20160524.pdf).

Below are some of the other discussion points.

- The Library has nearly every book published since 1800.
- The Library's card catalog is still there, but it is all digitized.
- The Library's microfilm of newspapers is searchable.
- Some material kept at the Library is classified, and some staff is cleared to handle it.
- Books with included DVDs are a challenge for the Library, which needs to preserve the book and the DVD content.
- The amount of "born digital" material (i.e., only published in digital form) is overwhelming.
- Mr. Rieger guesses that less than 1% of the Library's holdings are digitized. Older digitized material may not get re-digitized; it depends upon public demand.
- Committees review if there is sufficient metadata (i.e., background information about the material) before beginning a digitization project.
- Not everything the Library digitizes is available online, though there is an effort to get content online. Content may have rights restrictions.
- Google abandoned their book digitization project.
- Technologies for long term digital storage is improving (e.g., Moore's Law) as volume increases.
- Regarding media life, storage tape is rated to

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be good for forty years, but the hardware is only good for five to ten years. The Library verifies media integrity, and keeps multiple copies. The Library is always searching for a “better way.” No digital media is known to last one hundred years. There is an ISO test for rating longevity of CD/DVD media.

- The Library has backup storage offsite.
- The Library has branches all over the world to assist with collection efforts and preservation. There is a branch of the Library in Culpeper, VA that preserves audio and motion picture material. They have their “hands full.”

[*Ed.* On a personal note, my father, Charles A. Goodrum, made his career as a research librarian at the Library of Congress, including service as the Assistant Director of the Congressional Research Service and Director of the Office of Planning and Development. I recommend checking out two of the books he authored that delve into Library holdings, *Treasures of the Library of Congress* (ISBN-13: 978-0810916616) and *Advertising in America: The First 200 Years* (ISBN-13: 978-0810911871).]

Open Source Software of the Month

by Geof Goodrum

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Gargoyle – v2011.1.

<http://www.ifarchive.org/indexes/if-archiveXinterpreters-multiXgargoyle.html>. Free GNU General Public License source code and executables for Microsoft® Windows®, Apple® OS X® and GNU/Linux® by Tor Andersson and Ben Cressey. Gargoyle is a cross-platform player for text and illustrated text games, also known as Interactive Fiction (IF), that supports all of the major formats, including Agility, Alan 2 and 3, Frotz (glk port), Glulxe, Hugo, Level 9, Magnetic, Scare, Tads 2 and 3. Gargoyle is based on the standard interpreters for the formats it supports, which are copyrighted and freely distributable under various open source licenses. The Gargoyle home page is at <http://ccxvii.net/gargoyle/>.

IF content is available for download at the Interactive Fiction Database (<http://ifdb.tads.org/>) and the Interactive Fiction Archive (<http://www.ifarchive.org/>).

KeePass – v2.33. <http://keepass.info/>. Free GNU General Public License source code and executables for Microsoft® Windows®, Apple® OS X® and GNU/Linux® by Dominik Reichl. KeePass is a password manager, which helps you to manage your passwords in a secure way. You can put all your passwords in one database, which is locked with one master key or a key file. So you only have to remember one single master password or select the key file to unlock the whole database. The databases are encrypted using the best and most secure encryption algorithms currently known (AES and Twofish). You can drag and drop passwords into most windows or use a hot key to type your login information into windows automatically. You can also quick copy user names and passwords to the clipboard with a double-click on a field in the password list. And KeePass can import data from a variety of formats like CSV, while the password list can be exported to formats such as TXT, HTML, XML, and CSV. KeePass also includes a strong password generator.

Kernel Source – v4.6.2. <http://www.kernel.org/>. Free GNU General Public License source code for all platforms by the Linux community.

Krita – v3.0. <https://krita.org/>. Free GNU General Public License source code and executables for Microsoft® Windows®, Apple® OS X® and GNU/Linux® by the Krita Foundation. Krita is a 2D sketching and painting application designed for concept artists, illustrators, matte and texture artists, and the VFX industry. Krita has been in development for over 10 years and has had an explosion in growth recently. It offers many common and innovative features to help the amateur and professional alike. Krita 3.0, the Animation Release, includes animation support integrated into Krita’s core with animatable raster layers and onion skinning, Instant Preview

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for better performance painting and drawing with big brushes on big canvases, an improved user interface, broader tablet support and more multilayer features. NOTE: OS X will support Instant Preview and Big Canvas scaling in the 3.1 release.

Lua – v5.3.3. <http://www.lua.org/>. Free MIT License source code and executables for Microsoft® Windows®, Apple® OS X® and GNU/Linux® by PUC-Rio. Lua is a powerful and fast programming language that is easy to learn and use and to embed into your application.

Lua is designed to be a lightweight embeddable scripting language and is used for all sorts of applications from games to web applications and image processing. It supports procedural programming, object-oriented programming, functional programming, data-driven programming, and data description.

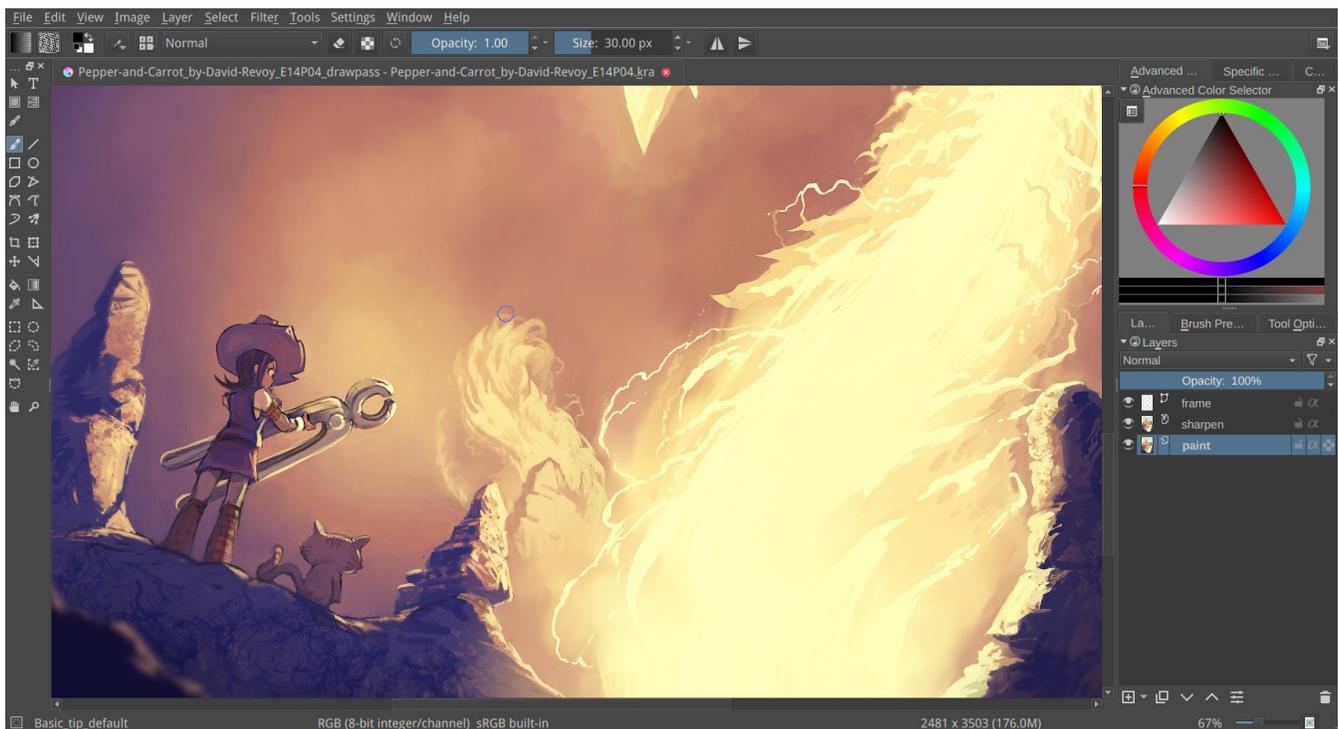
Lua combines simple procedural syntax with powerful data description constructs based on

associative arrays and extensible semantics. Lua is dynamically typed, runs by interpreting bytecode with a register-based virtual machine, and has automatic memory management with incremental garbage collection, making it ideal for configuration, scripting, and rapid prototyping.

Tesseract OCR – v3.0.4.01.

<https://github.com/tesseract-ocr/tesseract>. Free Apache License source code and executables for Microsoft® Windows®, Apple® OS X® and GNU/Linux® by Ray Smith, Zdenko Podobny et al. Tesseract is an Optical Character Recognition (OCR) engine and command line program to convert images of printed text (e.g., photos, scanner output) into documents in plain text, HTML, or as PDF images with searchable text. Hewlett-Packard originally developed Tesseract and released the software as Open Source in 2005. Google oversees current code development. Graphic interfaces are available (see <https://github.com/tesseract-ocr/tesseract/wiki/3rdParty>).

Krita 3.0



Ad/Popup Blockers and the Internet Advertising War

by Mike Morris

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According to InfoWorld (<http://www.infoworld.com/article/3013565/web-browsers/advertisers-versus-ad-blockers-race-to-internet-armageddon.html>):

The Web's basic business model -- free content supported by advertising -- is badly broken.

The Internet is at war with itself. An online arms race is pitting users against advertisers, publishers against the developers of ad and cookie blockers, and Apple against Google.

Certainly Google derives most of its revenue from selling advertising. In 2015, that revenue was \$67.39 Billion (yes that's Billion with a B), according to statista.com (<http://www.statista.com/statistics/266249/advertising-revenue-of-google/>). That's about 90% of total revenue (<http://www.investopedia.com/articles/investing/020515/business-google.asp>). See also <http://www.statista.com/statistics/266471/distribution-of-googles-revenues-by-source/>.

Not every company is doing as well as Google (<http://www.infoworld.com/article/3013565/web-browsers/advertisers-versus-ad-blockers-race-to-internet-armageddon.html>):

... Yahoo, despite claiming more than 800 million active users, hasn't been able to increase its ad revenue and may even be forced to sell off most of its assets.

... it's no accident that even the most successful news operations, including the New York Times, charge for access to their content. They were forced to.

So you should not be surprised when you see ads, popup or otherwise, on any website to which you connect. Nor should you be surprised at the rapidly increasing "countermeasures" for those ads.

Internet ads are NOT just an annoyance. Those ads can contain some seriously malicious software, as the NY Times, BBC, NFL, etc. recently discovered:

- Major sites including New York Times and BBC hit by 'ransomware' malvertising (<https://www.theguardian.com/technology/2016/mar/16/major-sites-new-york-times-bbc-ransomware-malvertising> - March 16th, 2016)

The malware was delivered through multiple ad networks, and used a number of vulnerabilities, including a recently-patched flaw in Microsoft's former Flash competitor Silverlight, which was discontinued in 2013.

- Big-name sites hit by rash of malicious ads spreading crypto ransomware (<http://arstechnica.com/security/2016/03/big-name-sites-hit-by-rash-of-malicious-ads-spreading-crypto-ransomware/> - March 16th, 2016)

Blocking internet ads has become a major industry. And note that this is a task that is separate from privacy issues and from making sure that you have up-to-date security software on your computer.

Mobile users, who have a data limit, can, according to https://en.wikipedia.org/wiki/Ad_blocking, derive a financial benefit from ad blockers, since those ads consume data – especially when streaming audio and/or video.

You can see why the use of these applications is growing rapidly. And the growth is, indeed, rapid (https://en.wikipedia.org/wiki/Ad_blocking):

As of Q2 2015, 45 million Americans were using ad blockers. In a survey research study released Q2 2016, MetaFacts reported 72 million Americans, 12.8 million adults in the UK, and 13.2 million adults in France were using ad blockers on their PCs, Smartphones, or Tablets.

Most browsers today offer some sort of ad blocking/popup blocking, although their effectiveness varies. See https://en.wikipedia.org/wiki/List_of_pop-up_blocking_software for

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a list of browsers and browser add-ons that provide ad blocking/popup blocking.

However, beware. Not all ad blockers block all ads. For example (<http://www.wired.com/2016/03/heres-how-that-adblocker-youre-using-makes-money/>):

Adblock Plus—possibly the most popular ad blocker on the Internet—is a business. . . . Adblock Plus doesn't block all ads, but rather operates what it calls an "acceptable ads" program, where ads that meet its criteria for things like placement, size, and distinction, are "whitelisted"—that is, if the company displaying the ads is willing to split the revenue gained by whitelisting with Adblock Plus. Companies can apply to have their sites whitelisted, but Adblock Plus has also reached out to some to solicit their business.

There are effective ad blockers (<http://www.wired.com/2016/03/heres-how-that-adblocker-youre-using-makes-money/>):

. . . there are the ad blockers that block, well, nearly every ad and tracker. Privacy Badger, for example, is a nonprofit blocker operated by the Electronic Frontier Foundation that detects and blocks what it calls "non-consensual tracking," or ads and trackers that follow you around from site to site, serving you up, say, an ad about sneakers in a banner after you browse the Nike site. In effect, if you use Privacy Badger, it prevents your browser from loading anything from third-parties that you haven't agreed to see. The EFF accepts donations (and coding help), but the site itself operates as a nonprofit.

I use ad blockers because I find the ads a significant annoyance and also because of the potential security problems associated with the ads. I generally use the Firefox and Chrome browsers. I have the following add-ons installed¹:

Firefox

- Disconnect (prevents tracking browsing/search history – see <https://disconnect.me/> for more information)

- HTTPS-Everywhere (from Wikipedia (https://en.wikipedia.org/wiki/HTTPS_Everywhere): “. . . automatically makes websites use the more secure HTTPS connection instead of HTTP, if they support it.”)
- No Script (“. . . allows JavaScript, Java, Flash and other plugins to be executed only by trusted web sites of your choice (e.g. your online bank - see <https://noscript.net/> for more information.”)
- Privacy Badger (“. . . blocks advertisements and tracking cookies that do not respect the Do Not Track setting in a user's web browser.” See https://en.wikipedia.org/wiki/Privacy_Badger for more information)
- uBlock Origin (provides content-filtering and ad-blocking. See <https://en.wikipedia.org/wiki/uBlock-Origin> for more information)

Chrome

- Disconnect
- HTTPS-Everywhere
- Privacy Badger
- uBlock Origin

[Ed. While NoScript is not available for Google Chrome due to architectural differences, ScriptSafe (<https://github.com/andryou/scriptsafe/wiki>) is a similar add-on for Chrome.]

When using these add-ons, it is important to remember TANSTAAFL:

There Ain't No Such Thing As A Free Lunch

With browser add-ons installed, you may find that you cannot connect to a website of interest. Or, at least, nothing from the website will be displayed when you connect. If it is a website that you do, in fact, want to access, check the add-on settings/features for a temporary disable feature. Or, you may have to temporarily disable the add-on to view the website.

With an up-to-date operating system, up-to-date security software and browser ad blocker add-

(Continued on page 12)

¹Thanks to FRPCUG member Bert Broekstra for the research that led to the selection of these add-ons.

(Continued from page 11)

ons, there is a reasonable chance you will be able to keep your computer secure and free from malicious software.

However, you must still remember to backup at least your important data: financial info, photos, music and any other documents.

Review: Polaroid Cube

by George Harding

Treasurer, Tucson Computer Society, AZ

January 2016 issue, TCS eJournal

www.aztcs.org

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The name pretty much describes what you see for this product. It's a photo cube with things on four of the six sides.

On top is the multifunction button. It controls On/Off and, when On, whether you are taking a still or a movie. The front has the camera and a small aperture for the microphone. The company says the lens captures 124° of field, although my tests show somewhat less. Still, that's a pretty wide angle. The bottom has an embedded magnet for stable attachment to any metal object. This is an easy, but not very useful, way to step away from the camera for motion pictures or stills.

On the back inside a compartment sealed with a slotted disk are: a slot for a microSD card of up to 32 GB; a switch to shift from 720MP to 1080MP; a micro USB slot for the included cable used to attach your laptop or computer.

The laptop or computer connection allows charging the Cube while displaying the stills and movies contained on the microSD card. You can access the data through your laptop, but there is also an app available that allows a few other controls.

Light Frequency: switches from 60 Hz to 50 Hz to eliminate flickering that may be present when taking movies in artificial light.

Timestamp: whether or not to be included in stills and movies and to be displayed when viewing same.

Cycle Recording: records over existing movie files to save storage.

Date & Time: to set the date and time to whatever you want.

Sync with Computer: so the time and date are whatever your laptop or computer has at the time the still or movie is taken.

Camera Buzzer Volume: Multifunction button presses generate one or more beeps; this control makes them more or less audible.

The User Guide includes basic information, but is rather short on details.

The device is pretty simple when you understand how to do it. There are a number of accessories available for use with the Cube. The tripod mount may be one of the most useful. Pointing the camera at the target you want is not easy and the mount would make it much easier.

It would be helpful if there were a way to access the camera's function with an app for your smartphone. Since Cube is not Wi-Fi capable, the app would not work for it. Their successor product the Cube+ is Wi-Fi equipped and available at a higher price.

About: Polaroid Cube

Vendor: Polaroid

www.polaroid.com

Price: \$99



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The Association of Personal Computer User Groups (APCUG) is a worldwide organization that helps groups devoted to the world of technology including computers, tablets, smartphones, digital photography, genealogy, etc. by facilitating communications between member groups and industry vendors.

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<http://apcug2.org/apcug-2016-conference/>

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- Lunch on Sunday
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- Your choice of 20+ presentations
- Door Prizes
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- Up close-and-personal time with sponsors at the Saturday night Expo

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- \$85 Early Bird registration ends October 4
- \$100 registration October 5 – October 20
- \$125 on-site registration
- Palace Hotel Conference rate ends October 4

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SeniorTech is a service of the Jewish Council for the Aging (JCA). Within the limits of its resources, JCA serves people of all faiths and from all walks of life.

For additional information about SeniorTech courses, call 240-395-0916 or 703-652-1512. A course catalog is available for download at <http://www.accessjca.org/programs/technology-training/>.

Washington DC Area Training Locations

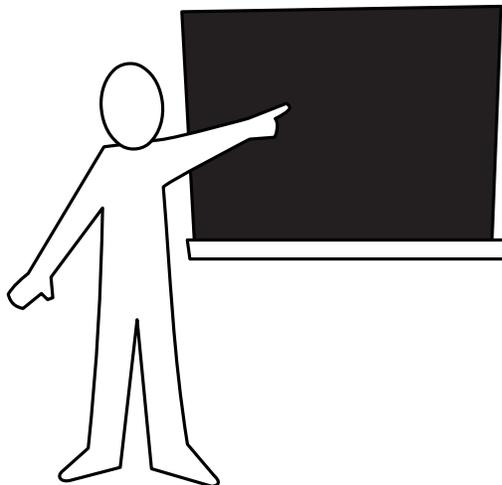
Asbury Methodist Village, 409 Russell Ave,
Gaithersburg, MD, 301-987-6291

JCA Bronfman Center, 12320 Parklawn Drive,
Rockville, MD, 301-255-4200

Microsoft at Westfield Montgomery Mall, 7101
Democracy Blvd, Bethesda, MD, 301-765-3080

Microsoft at Tysons Corner, 1961 Chain Bridge
Rd, McLean, VA 22102, 703-336-8480

Crystal City Shops, 1750 Crystal Drive, Suite
1638B, Arlington, VA, 703-941-1007
<http://va-seniortech.org/>



Micro Center® In Store Clinics

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Micro Center stores host free events called “In Store Clinics.” The clinics cover a wide range of topics. All Micro Center store locations follow the same schedule of topics.

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/site/stores/instore-clinics.aspx>).

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.

July 2016 Schedule

July 02 & 03: Build Your Own

July 09 & 10: TBD

July 16 & 17: TBD

July 23 & 24: TBD



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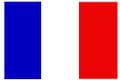
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| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|---|-----|--|---|--|--|
| | | | | | 1 | 2 World UFO Day  |
| 3 | 4 Independence Day  | 5 | 6 7-9pm Arlington General Meeting | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 7-9pm Online Zoom Meeting | 14 Bastille Day  | 15 | 16 12:30-3:30pm Fairfax General Meeting |
| 17 | 18 7-9pm Arlington Board Meeting | 19 | 20 | 21 | 22 | 23 September Newsletter Articles Due |
| 24 | 25 National Hot Fudge Sundae Day | 26 | 27 7-9pm Arlington Technology & PC Help Desk | 28 | 29 System Administrator Appreciation Day | 30 |
| 31 | | | | | | |

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

Fairfax: Osher Lifelong Learning Institute
 4210 Roberts Road
 Fairfax VA 22032