

The Rochester Computer Society, Inc.
a computer club open to everyone

MONITOR

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Next Meeting - Tuesday, July 12
Mobile Payments - Leave Your Cash, Credit Cards and
Checkbook at Home presented by Jerry Seward

Upcoming Presentation for Aug: Tuesday, Aug 9
Our Annual Picnic, at Brighton Town Park

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ROCHESTER COMPUTER SOCIETY'S
ANNUAL PICNIC
TUESDAY AUGUST 9TH.
BRIGHTON TOWN PARK
777 WESTFALL ROAD

CARMEN CLARK LODGE (by the pond)

The club will order the red/white hots, cheese burgers, spicy Italian sausage, coffee, tea, and sodas. We are asking for a \$5 donation to cover the cost. If you can, please **bring a dish to pass**. For example: last name begins with A-I munchies, J-R salads and S-Z deserts.

Deadline for placing a food order is August 1st.

Start to arrive at 5:30 and we will eat about 6:30. We will have a silent auction. Please bring auction items early so

everyone can have a chance to make a bid. **Please bring a check or cash so you can take the item with you.** For more information or placing a meat order contact Steve at either srstaub1@rochester.rr.com or call 429-9877. I need your name and what you want for meats.



"Your Computer User Group of the Air", Saturdays from 12:00 pm to 2:00 pm with Nick Francesco, Dave Enright, and Steve Rae. Broadcasting on JAZZ 90.1 FM from Rochester, NY. Call 966-JAZZ (585-966-5299) or 1-800-790-0415

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Some Past Presentations:

- Flash Drives-Not Just for Storage
- Features, Mac OS X & Windows
- Tablets, the Programs and Uses
- Tune Up Windows
- Preview of Windows 10
- Personal Finance Software
- Amazing Browser Tips
- How Domain Name Sys Works
- Linux is Like Cars
- Close up Photography
- Virtual Computer OS Demo
- Cloud Computing

Ad/Popup Blockers and the Internet Advertising War

By Mike Morris

Front Range PC Users Group, Fort Collins, CO

According to InfoWorld:

"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."

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

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:

"... 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."

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

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, can 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:

"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."

Source: https://en.wikipedia.org/wiki/Ad_blocking

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 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:

"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."

Source: <http://www.wired.com/2016/03/heres-how-that-adblocker-youre-using-makes-money/>

There **are** effective ad blockers:

". . . 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."

Source: <http://www.wired.com/2016/03/heres-how-that-adblocker-youre-using-makes-money/>

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)

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Special Interest Group

Linux Sig

The workshop is the **third Saturday of each month**, at Interlock Rochester, 1115 East Main St. www.interlockroc.org



Enter through door #7 on the end of building, near *Comics Etc* and Goodman St. Find 'Interlock' on the intercom directory to get buzzed in and go upstairs to suite #200. We have experts on hand to fix problems and answer questions about Linux and FOSS (free and open source software). **Bring your system** in so we can help you get the most out of it. Hope to see you there.

The RCSI 'Monitor' newsletter can be found in most public libraries in Monroe County, and many college libraries. Free copies can also be found in the following computer stores; Microworx, TSC Electronics, Just Solutions, and Pod Computers.

Chrome:

Disconnect
HTTPS-Everywhere
Privacy Badger
uBlock Origin

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-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.

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

Additional contact information, <http://www.frpcug.org>, twriterext@gmail.com

USB is changing as technology advances

By Bart Koslow

Review Chair, Channel Islands PCUG, CA

USB-C? USB 3.1 generation 1 and 2? The USB interface is changing. It is becoming more versatile, faster, smaller and easier to use. Always interested in new computer developments, I decided to check out these latest developments.

USB long ago replaced the old serial, parallel, and other computer ports. Now it is set to replace many more types of connectors and ports and add functionality.

USB 2.0 (maximum speed 480Mbps) and USB 3.0 (now called USB 3.1 gen 1) are being replaced by USB 3.1 gen 2.

USB 3.1 gen 2 doubles the data transfer speed from USB 3.1 gen 1 from 5Gbps to 10Gbps. This will cut data transfer times in half. USB 3.1 gen 2 will provide up to 100 watts of power for compatible devices. USB 2.0 provides up to 2.5 watts, which can power only small devices like cellphones and tablets. You will get faster charging speeds for all your mobile devices and laptops, and you will be able to deliver power in either direction using a USB-C cable, which means you can use a fully powered device to recharge another device.

USB-C, more properly known as USB 3.1 Type-C, is a new, smaller industry standard cable and connector type that will be used for multiple purposes. All of your devices will use this cable type. A USB-C cable will be used for power, video, data, and audio. Your computer, laptop, mobile phone, and USB hard drive will all use one type of cable.

The USB-C connector supports and will replace DisplayPort, HDMI, power, USB, and VGA cables. This includes all the multiple USB cable types now being used. Instead you will be using USB-C cables. You will no longer have to carry AC adapters. All your devices will be charged and powered using USB-C.

USB-C connectors are not only smaller. They are the same at each end and are symmetrical in cross section so you will not be required to turn them around or rotate them to connect to a USB-C slot.

You will have to buy new cables, but think of the many types of cables you will no longer need and the huge improvement in facility and speed these new standards will provide.

From the April 2016 issue, The TOE, www.cipcug.org, bartkoslow@verizon.n

Are Password Managers Safe?

Password management utilities are great tools to not only manage your passwords, but be more secure about how you use them.

// Recently I tried to use [RoboForm](#) for an account at a large financial institution, but I couldn't get it to work. In response to my inquiry, this institution said they do not permit log in using credentials that are stored on software because the security of the password could become jeopardized if my computer were hacked, invaded, etc. Is this true? Am I safer not to use tools like RoboForm?

There are people who believe that using password managers represents a single point of failure. *Very technically*, they are mostly correct: if someone gains access to your password manager, they have access to everything within it. But not-so-technically, I strongly believe they are seriously misguided. Using a password manager is, in my opinion, *significantly* safer than the alternatives.

Security best practices

Without using a password manager, the idea is that you:

- Have good, strong passwords (long and complex).
- Keep them nowhere but in your head (memorable).
- Use a different password on every site or service that requires one (unique).

Yes, that would be ideal.

It's also impractical for most people.

As far as I'm concerned, those requirements cannot all be met at the same time. At least one of them will be compromised.

Without a password manager

Without a password manager, most people will compromise their security in one way or another.

- They'll choose a less secure password that's easy to remember (short and/or not complex).
- They'll use the same password at multiple sites (not unique).
- They'll save the password using unsecure technology, or write the password on a note kept nearby (not memorable).

Any one of those decreases your security significantly.

I believe avoiding technology *specifically designed to keep passwords secure* doesn't make you safer. When you factor in human nature, it *decreases* overall security significantly.



With a password manager

Password managers make best practices easy – even trivial. Using a password manager allows you to:

- Generate and use secure, complex, and appropriately long passwords.
- Never need to type or remember passwords – the password manager remembers them for you.
- Use different passwords on different sites.

These are things that people *don't* do unless they have a tool in place to

help them.

On top of that, most password managers add several features that make improved security even more convenient. They can:

- Synchronize your information across multiple computers.
- Be used on mobile devices.
- Automatically fill in not just passwords, but common web forms.
- Store arbitrary notes.

All with more security than almost all alternatives.

If you're compromised, you're compromised

It is true that if your computer is compromised, all bets are off. Malware *could* gain access to whatever it is you have stored on the computer.

For example, while I'm logged into LastPass, all the information is technically available to software running on my machine – good software or bad.

That's a serious concern, and not to be taken lightly.

But it's a concern that exists *regardless of whether you use a password manager or not*. If you somehow manage to meet the three criteria (complex, memorable, and unique) with your passwords, then all bets are *still* off if a keylogger captures what you enter when you log in to your bank account.

Avoiding a password manager doesn't increase your security one whit. In fact, I'd wager there's more malicious software out there waiting to see what you type in than there is targeted at stealing the contents of your password manager.

There's just no substitute for keeping your machine secure to begin with.

But are password managers safe?

Used properly, yes. In fact, I'll go so far as to say that they are *safer than any practical alternative* that you might think of.

Of course, there are no absolutes – that, too, is a practical reality. [There is no such thing as absolute security](#). As I said earlier, if you fall victim to malware, all bets are off, *no matter what technique you use* to keep your password information.

In fact, I'll put it this way: password managers are the safest way to keep a record of your online account information, but they are no safer than:

- The master password you use to access the password manager.
- Your own ability to use your computer safely.

The last one scares most people, but my claim is that using password managers is, in fact, one way to use your computer more safely.

What I do

I keep my machine(s) secure [by doing the traditional things that you hear over and over](#): keeping software up-to-date, running up-to-date scans, avoiding malicious websites and downloads, not falling for phishing, and so on and so on.

I use [LastPass](#) as my password manager to manage my passwords and additional security information.

I use [Google Authenticator](#), a form of two-factor authentication, to access my LastPass vault. (There are several forms of two-factor authentication available in LastPass.) What two-factor authentication boils down to is that if I'm not logged into my LastPass account, then you can't get in *even if you know my master password*. To get access to my LastPass vault, you need both my master password *and* my cellphone.

I have LastPass automatically log out after some amount of time on any device which I'm not 100% certain won't get stolen or accessed without my permission.

Even with two-factor authentication, I keep my master password [secure and complex](#).

I'm not going to claim it's impossible for anything to happen – that'd be a foolish claim. I am, however, *very* satisfied with the risks and trade-offs.

Let's face it, even doing business off-line has risks and trade-offs.

The Portable Document File (.pdf) file type has been around since 1993 when Adobe Systems made the specification available to all, free of charge. However, PDF was initially a proprietary format, controlled by Adobe, until it was officially released as an Open Standard in 2008. Since then it has been controlled by a committee of volunteer experts who are part of the International Organization for Standardization. The .pdf file type was developed as a way to share documents that would include text, formatting, and inline images, among computer

users of different types of computers from different companies. (PCs, Apple, IBM, Sun, anyone remember DEC?). The PDF standard endeavors to present documents in a consistent manner that is independent of application software, hardware and operating system. The .pdf file type, by its very nature, and name - Portable, was intended to be a file that could be a complex of text, graphics and so on, and be easily shared by people that didn't have the same hardware or software. So, the real benefit was that the file would look exactly the same when displayed on all different types of computer systems.

Each .pdf file encapsulates a complete description of a document, including text, fonts, graphics, forms, annotations, outlines, and other information needed to display the file. .pdf files can also contain links, buttons, audio, video, and business logic; and where security is important, they can be password protected. So a .pdf file can end up as a pretty big file. (When I was almost finished with this article I saved it as a .doc and a .pdf. The .doc was 36KB, and the .pdf was 106KB. I also looked at a PowerPoint presentation, 127 slides with lots of graphics; it was 11.5MB saved as .ppt, and 32.4MB saved as .pdf. Finally, I saved a fairly large Excel spreadsheet (125 rows, with columns that went out to column AT, with quite a few calculations within the spreadsheet), which was 157K saved as .xls and 475 KB as .pdf. So from that limited testing it looks like the .pdf will be about 3 times the native applications size.)

.pdf files can easily be viewed on your computer using a free PDF Reader from Adobe called "Acrobat Reader DC". A mobile "Acrobat Reader DC" App is also available, free, for your Smartphone or Tablet. And for Windows 10 users, who are also Microsoft Office owners, PDFs can now be created from the Office Apps, Word, Excel, and PowerPoint. (By the way, you may have seen a reference to an .xps file type along with .pdf. The .xps file type is Microsoft's alternative to .pdf. It was introduced with Windows Vista but never attracted much of a following. Of the two, the .pdf format is the preferred choice.)

At this point in computer evolution, .pdf files can be opened by just about every major operating system (Windows 7, 10, OS X, iOS, Android) and can be used by many different applications. In addition, the majority of modern web browsers (Chrome, Edge, and Firefox) allow .pdf files to be read without the use of an external application, making them easy to use in web applications. (Though the literature doesn't give these internal PDF readers much of a good review; and advice on how to replace the internal PDF reader is easily found.) Also, Mobile Operating Systems (Android, iOS) are including PDF readers, making the PDF format almost universally usable. (This can't be said of any other file type; even though we all may be familiar with Microsoft's Word format (.doc), this format can only be used by a limited number of applications.)

Those of you who have been to our File Explorer class know that there are hundreds of file types on a typical computer, and that you can inspect and change the association between a file type and the program that uses that file type, using the Control Panel. (Remember, "Default Programs", followed by "associate a file type or protocol with a program"?) So, you have to have a program on your computer that knows how to use the .pdf file type. If you are having trouble opening a .pdf document, you probably don't have a program that knows how to use the .pdf file type, on your machine. If this is your situation, consider getting the free Adobe Reader, from the Adobe website, <http://www.adobe.com>.

Normally, .pdf files cannot be modified by the user, making these files perfect for use by an "end user", i.e., someone who needs the content of the file without being able to modify the file contents. In other words the file was not intended to be changed, once it was created or "published". So, originally there was no way to change a .pdf file without using the very expensive PDF Creator software from Adobe (or lesser expensive PDF creation software from Foxit). However, there are situations where it makes sense to change the contents of a received .pdf file, like "if you need to fill in some information on a PDF form".

"PDF to Word" conversion websites like "PDF Converter", "PDF to Word" or "PDF Online" are websites that advertise that will do the conversion for free. (Google "free pdf to word" and you'll see many possibilities.) Also, you

could try “free document converter” found at www.hellopdf.com. I haven’t any experience with these, but the literature claims they work as indicated. And, for those of you who need to do a lot of these conversions, Adobe offers “Adobe Acrobat DC” for about \$15/month or you could buy it for around \$200. There must be a large enough number of people who need to convert .pdf files to .doc files because when I Googled “pdf to word”, I was pointed to many websites that could supposedly help me in my quest. There even was a YouTube video that indicated that you could upload a .pdf file to Google drive, (yes, you’ll probably need a Google Drive account), and then download it as a word (.doc) document. When I tried it on a pretty simple PDF, the conversion didn’t seem to preserve a lot of the formatting, so it didn’t look like it would be acceptable, at all, on a more complex document. I haven’t had the occasion to need to convert a document, but if the situation ever arises I’m sure I’ll be able to get it done, though I

just might have to go to the lab and get some help from one of the very able and helpful Monitors. **So, when all is said and done, the PDF standard is deeply ingrained in modern computing because it allows a single file to provide a display that looks the same on all different types of computers.**

Additional contact information, <http://scccomputerclub.org/Philsorr.wordpress.com>, philsorr@yahoo.com

*** SOFTWARE & COMPUTER TIPS ***
**

Nuggets from Nuvo

By Joe Nuvolini

APCUG Rep/Webmaster, Pikes Peak

Computer Application Association

(P*PCompAS), CO

IrfanView

One of my favorite programs, IrfanView, is 20 years old this year. I can’t remember when I discovered this exceptional program but it couldn’t have been too long after its release. I use it for all my imaging needs. I have used it to manage all the photos on my Web page and have so for years. I have found the batch resize/rename feature extremely useful in this area. I registered it early on when the fee was \$10. Now that is up to \$12, which is about an increase of one euro.

I have always urged those who use it to register, as at that price it is an exceptional value. When you register it you get your name and a code you can paste into the registration area and your name will be displayed as the owner (see image). Payment options can be found on Irfan’s Web site under Support IrfanView (www.irfanview.com). Both versions can also be downloaded at this site. The latest 4.41 version comes in both a 32-bit and 64-bit version. The program has some 58 plug-ins that are contained in a separate download. Information on what these do can also be found at his Web page under Plugins. There is a wealth of other information on the program there including an FAQ and forum section.

Irfan has received over 65,000 messages of congratulations and well wishes on the program. I have e-mailed him on several occasions when I have run into an issue. He has almost always responded within 24 hours. I’m not sure whether support is available to non-registered users, but if not, all the more reason to register your copy. If this sounds like a commercial for the program, perhaps it is. When I find a program which has served me so well all these many years, I like to promote it. I have written about the features in the past but the best way to check them out is to download the product and try it. You will find it can do many of the things that more expensive imaging programs can do and I’m pretty sure it will do some things they can’t. Give it a try, and if you like it, cough up the registration fee. It is one of the best bargains on the market!

From the February 2016 issue, Bits of Bytes, <http://ppcompas.apcug.org>, glenihan@comcast.net

POD Computers

1925 South Ave.
Corner of South Ave. and East Henrietta Rd.
244-2240

What we do

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(must have membership card to redeem!)

www.podcomputers.com

Kernel Source – v4.4.1. <http://www.kernel.org/>. Free GNU General Public License source code for all platforms by the Linux community.

LibreOffice – v5.1. <http://www.libreoffice.org/>. Free Mozilla Public License source code and executables for

Microsoft® Windows®, Apple® OS X® and GNU/Linux® by The Document Foundation. LibreOffice is a powerful office suite; its clean interface and powerful tools let you unleash your creativity and grow your productivity. LibreOffice embeds several applications that make it the most powerful Free & Open Source Office suite on the market: Writer, the word processor; Calc, the spreadsheet application; Impress, the presentation engine; Draw, the drawing and flowcharting application; Base, the database and database frontend; and Math for editing mathematic equations. LibreOffice native document standard is OpenDocument, but includes filters to import and export a wide variety of document file formats, including Microsoft Office, Adobe PageMaker, Corel WordPerfect, PDF, and many legacy formats. LibreOffice has localization (menu support) for 110 languages with writing aids for over 140 languages, and supports macros, document templates and over 1,000 program extensions.

This is the first release of the 5.1.x branch of LibreOffice. LibreOffice 5.1 comes with many improvements in speed and offers a completely reorganized user interface, and several improved features targeted at enterprise deployments: better support for ODF 1.2, interoperability with proprietary document formats and file management on remote servers (e.g., Google Drive, Alfresco, SharePoint).

[Screenshots at <https://www.libreoffice.org/discover/screenshots/>]

Pingus – v0.7.6. <http://pingus.seul.org/welcome.html>. Free GNU General Public License source code and executables for Microsoft® Windows®, Apple® OS X® and GNU/Linux® by Ingo Ruhnke. Pingus started at the end of 1998 with the simple goal to create a Free clone of the DMA Design puzzle game Lemmings™.

The player takes command of a bunch of penguins and guides them through 77 levels. Since the penguins walk on their own, the player can only influence them by giving them commands, like build a bridge, dig a hole or redirect all animals in the other direction. The goal of each level is to reach the exit, requiring multiple command combinations. The game is presented in a 2D side view.

Pingus doesn't try to be an exact clone; it includes a few ideas of its own like the world map and secret levels. It has also a few new actions, like the jumper that wasn't present in the original game.

[Screenshots at <http://pingus.seul.org/screenshots.html>]

Rust – v1.6.0. <http://blog.rust-lang.org/>. Free Apache License or MIT License source code and executables for Microsoft® Windows®, Apple® OS X® and GNU/Linux® by Graydon Hoare and the Rust Project Developers. Rust is a systems programming language that runs blazingly fast, prevents segfaults, and guarantees thread safety.

Features include:

- zero-cost abstractions
- move semantics
- guaranteed memory safety
- threads without data races
- trait-based generics
- pattern matching
- type inference
- minimal runtime
- efficient C bindings

[Code samples at <http://rustbyexample.com/index.html>]

Bridge Designer – v2016. <https://bridgecontest.org/>. Free GNU General Public License source code and executables for Microsoft® Windows® and Apple® OS X® by Gene Ressler and Engineering Encounters. Bridge Designer is the

official software for a national virtual bridge engineering contest with prizes for middle and high school kids, grades 6 to 12, but anyone can enter for fun.

Features include:

1. Design a virtual bridge and compete nationally for scholarships or a computer!
2. Learn about engineering and design.
3. Have fun testing and improving your designs with your friends.
4. Teachers, school districts, states! Run your own local contest with our support.
5. Cool game quality animation of bridge test with OpenGL.
6. BD (since 2013) is code-signed for your computer's safety and Windows 8 and Mac 10.7+ security compliance!

[Screenshots at <http://sourceforge.net/projects/bdcontest/?source=directory>]

From the March 2016 Issue, PATACS Posts, www.patacs.org, linux@patacs.org

Musings of an Apple Tyro

By Lorrin R. Garson

Potomac Area Technology and Computer Society

OS X El Capitan

Let me tell you about my experience with El Capitan, which was released to users on September 30, 2015. I waited until the end of December to install it (version 10.11.2, see <http://apple.co/1J5gYqz>) on our three Apple computers to allow time for the kinks to be sorted out. Unless there is some compelling reason I don't like to install just-released software and be on the bleeding edge, especially for my wife. El Capitan is not a major, compelling release but rather a collection of minor changes and improvements. So far (as of January) I haven't found any substantial "gotchas". El Capitan is worth the effort to install and it's free.

Here's what I've observed and for the most part liked.

7. **Installation:** It takes about an hour to download and install from the App store. This is with somewhat high end computers (two 21.5-inch iMacs with Core i7 3.1 GHz CPUs and a 13-inch MacBook Pro Retina with a Core i5 2.6 GHz CPU; all three machines have SSDs; 50 Mbps up and down FiOS Internet connectivity). Most of the hour is spent waiting for things to happen. Have user, Mail and your Apple passwords handy.
8. **Performance:** There is an improvement in performance, detectable but not profound.
9. **Mail:**
 - j. Messages can now more easily be deleted by left-dragging one finger across the mouse and clicking on the red rectangle marked "Trash". For those using a track pad, left-drag with two fingers. Likewise, messages can be marked as unread by right-dragging and clicking on the blue rectangle labelled "Mark as Unread".
 - k. Prior to El Capitan, when the Mail app checked for new mail, the message "Incoming Mail..." was displayed, which really meant "checking for new mail". That message has been changed to the more accurate "Checking for Mail...".
 - l. In sending a message from, say, ABC@domain.com to ABC@domain.com, the message does not go the ABC@domain.com mailbox but rather to the "Important" mailbox. A bit strange.
 - m. During the initial installation of El Capitan, I encountered a problem with Mail attempting to set up an outlook.com e-mail account. It just didn't work. However, subsequently I was able to set up this account using the normal "Add Account" procedure.
14. **Spotlight:** This function has noticeably improved especially its natural language function. For example, you can search (and retrieve) for such things as "documents I worked on yesterday" or search "weather" and you'll get a weather report right where you are.
15. **Full screen Split View:** You can now see two windows side-by-side in full screen mode. It's a bit clumsy but becomes automatic with experience. Microsoft Windows does it so much better!

16. **Airdrop:** This function which allows file transfer between Apple computers within 30 feet of each other (no WiFi or Internet needed) now seems to be more stable. Heretofore my experience was it was hit-and-miss.
17. **Safari:** Do you get annoyed when sound comes blasting when a commercial video pops up when you're on the Web? You can now turn off the sound by clicking on the blue speaker icon on the active tab. Whew!
18. **Where Is My Mouse:** Locating the cursor can sometimes be a challenge. With El Capitan, just wiggle the mouse and a large cursor will temporarily appear to show you where it is. The trackpad works similarly
19. **Maps:** This application has improved but I still prefer Google Maps.
20. **Security:** By default, El Capitan has "System Integrity Protection" turned on. This security measure prevents even the administrator from tampering with directories and processes deemed to be a security risk. Most users won't notice a difference but improvements in security are welcomed.

For more information see <http://bit.ly/1Otk7x7>, <http://bit.ly/1RPYXOI> and <http://bit.ly/1RPZgZm>.

Replacing USB-2 with USB-3

If you are still using USB-2 devices, you may want to consider replacing them with USB-3 equipment, especially thumb drives. USB-2 devices can reach speeds of 60 MBps whereas USB-3 devices can go up to 625 MBps, although in practice 400 MBps seems to be the norm. Even at 400 MBps, this is a speed improvement of 6.7 times faster. USB stands for **U**niversal **S**erial **B**us. See <http://bit.ly/1RnVPKV> for more information on USB.

Each successive generation of USB is backwards compatible with previous versions. Older devices work in newer sockets and newer devices work in older sockets, although at the slower speed.

Sharing Office 365 Home

Are you aware that you can share your Office 365 Home subscription with up to four people? Or better yet, perhaps you have a friend or family member who is willing to share their Office 365 Home subscription with you! Each individual sharing a subscription must have a Microsoft account, which is free. Each person sharing a subscription gets 1 TB free OneDrive storage and 60 Skype minutes calling time per month to mobile phones in eight countries and to landlines in 60+ countries.

Our son recently invited us to share his Office 365 Home subscription and we upgraded from Office 2011 on our Apple computers to Office 365. Office 365 is an improvement over Office 2011 but it isn't dramatically different, at least for light to moderate use. See <http://bit.ly/1WbIDJy> for details. It's worth the upgrade— especially if it's free.

2015 a Bad Year for Cyber Attacks

Although depressing, you may want to read an article in *PCWorld* entitled "The most innovative and damaging hacks of 2015". It's enough to make you want to move into a one-room log cabin in Montana with no electricity or plumbing... well, perhaps not that bad. See <http://bit.ly/1mYwPgg>.

From the March 2016 issue, PATACS Posts, www.patacs.org, newslettercolumnist@patacs.org

Should I Buy a Chromebook?

By John Moss

Member, Green Valley Computer Club, AZ

What is a Chromebook?

Chromebooks are lightweight laptops that run an operating system called Chrome OS; Chromebooks are made by computer manufacturers like Dell, HP, Acer, Samsung, Toshiba, and Lenovo. These computers are designed to be used primarily while connected to the Internet, with most applications and documents living in the cloud. As a result, these laptops don't have a lot of onboard memory, but they don't have very large price tags, either.

Chromebooks are optimized for Google's apps, such as Gmail, Google Calendar and Google Drive. Getting set up on a Chromebook will be easy if you already use Google's services for your email, calendar and documents. However,

if you use other popular services--such as Microsoft Outlook, AIM or Yahoo Mail--it might take some time to get adjusted to Google's OS.

If you use your computer primarily for email, Facebook, and general Internet surfing, you will get along just fine with a Chromebook. After all, that is exactly what Chromebooks were designed for.

Key Advantages of a Chromebook

So, are Chromebooks good enough for what you do with your laptop? Here are some of the features that draw people to a Chromebook as opposed to a Windows or Mac computer.

- **Price:** The majority of Chromebooks cost significantly less than your average laptop. Chromebooks can be had for as little as \$140 with mid-range models in the \$200-250 range.
- **Speed:** Chromebooks can power on and be ready to use in around eight seconds.
- **Battery:** Chromebooks last a longer time on battery than most laptops.
- **Security:** The Chrome OS has built-in virus and malware protection.
- **Sync:** Chromebooks sync all your apps and passwords with Chrome browsers on other computers. This also means that you will never lose your work, as all of your data is saved on Google Drive (in the cloud).
- **Cloud Storage:** You get 100GB of Google Drive storage free for two years with all new Chromebooks.
- **Updates:** Chromebooks update themselves silently, automatically, and in the background.
- **Weight:** Most Chromebooks are lightweight.

Disadvantages of a Chromebook

Like anything, Chromebooks, too, have their own shortcomings. It is necessary to be aware of some of the limitations and disadvantages of Chromebooks before making your final decision.

1. If you are married to Microsoft Office products, a Chromebook is not for you. Google encourages you to use its own [free online suite](#) of Office-like services.
2. Chromebooks, while startup is quick, can be slow while performing tasks such as working with spreadsheets or retrieving or saving files. This is due mainly to the fact that most of the processing is being done in the cloud.
3. Chromebooks typically only have 16 to 32GB of on-board storage. Limiting storage helps keep the price down because component costs are cheaper. Google wants you to store your data in the cloud, and that is why it includes 100GB of online storage for free for two years.
4. Chromebooks have no optical drive for CDs and DVDs.

From the Summer 2016 Issue, Green Bytes, www.ccgvas.org, dmfitch@cox.net

***** REVIEWS *****

What's New? - Blu-Toque

By George Harding

Treasurer, Tucson Computer Society

Bluetooth is gaining in popularity and usefulness. More and more applications use Bluetooth, a short distance communication technology. Bluetooth is not new, but the use of it to enable applications is becoming more frequent and innovative.

One such application is **Blu-Toque**, otherwise known as Bluetooth Beanie. Here is an innovative use of Bluetooth to play songs that are on your smartphone.

The woolen cap has a battery which is charged with an included cable. One end is a micro-USB connector, the other a USB plug. The battery compartment is accessed on the inside of the Beanie. Charging takes a while, but should last for 2 ½ days of standby and 6 hours of talk time, according to the company. The battery is lithium-ion.

Once charged, you can pair the device with your smartphone in the usual fashion. Then you can listen to your songs as you skate, hike, ski, walk or whatever, out of doors and keep your ears warm at the same time.



The module is on the outside of the beanie and has three pressure points. The middle one pressed 3 seconds turns on the device and pressed once plays or stops the music. The right-hand one skips to the next selection or, if given a long press increases volume. The left-hand one skips to previous selection or, if given a long press decreases volume. The long press actions did not work for me, but the smartphone can be used instead for volume control.

The beanie comes with the charging cable and a User Manual which is printed in very small type, but includes brief instructions in three languages.

There are some warnings in the instruction packet.

5. Do not expose to liquids or moisture
6. Don't tamper with it
7. Pull out the Bluetooth module before washing the beanie
8. Keep it away from fire (I wonder if it is flammable!)
9. Do not store it near acids or alkaline material

I had one problem with the fit of the beanie. I guess my head must be larger than the model in the picture, because I couldn't get the beanie to fit completely over my ears. I could still hear the music, but my ears would get cold, if I were in a cold environment.

Blu-Toque by Caseco

www.caseco.ca

Price \$50

From the www.aztcs.org, georgehardingsbd@earthlink.net

Ripple Coffee Maker

One of the most unusual products at CES was demonstrated by a coffee maker! The result is a cup of coffee with an image floating on the surface of the coffee. It has to be a latte, cappuccino or other foam-based beverage in order to show the image. It's called Ripple and I saw it at a booth at CES, In fact, I was served a latte with an image of the Mona Lisa floating on the surface!

The first step is to make a latte, or whatever. The second step is to download an image of just about any sort to a machine that does the "engraving." The result is your image in the foam of the latte.

It's a unique operation and, while interesting, doesn't seem to have much in the way of actual use, outside of being an unusual offering at parties.

They are currently processing orders for customers in the U.S. and Canada.

The Ripple Effect

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

Editor's note; the international CES (Consumer Electronics Show) is a gathering of vendors and consumers. Many start-ups showcase their products here and the USA 2017 event is scheduled for January 5-8, in Las Vegas.



From Our Membership

Bill
Perkett



You can "Donate your old computer" to this cause by contacting

Bill & Doris by email at dorisbillp@joimail.com

Web: <http://computersforrefugees.mywebcommunity.org>

computersforrefugees.wordpress.com

Rochester Computer Society

Helps Half Hour Notes

by Jan Rothfuss

June 14, 2016

St. John's Meadows

Q: A member is running out of space on his laptop. He noticed that there are three versions of Ubuntu. What can he do to get rid of some?

A: It should not be simply deleted. The earlier versions should be uninstalled.

Q: A member has trouble opening photo images. When he clicks on them it starts up Corell.

A: It was suggested that he right click on the photo file, select "open with" and choose the program. This will then be used for all similar files.

Q: Sometimes when using YouTube he can hear the output but does not see the video.

A: The member must update his Flash software.

NOTE: Recently, a member discovered that the only laser pointer that shows up on a flat screen tv is colored green. It is the strongest light, too, so be careful if you use it at home. It could be dangerous if it hits the eyes.

June's Presentation of 'Flash Drives – Not Just for Storage', was presented by Arpad Kovacs. He demonstrated how to add portable apps onto flash drives and run them. The final segment was devoted to using 'yumi' and how to install linux distros and other software onto a flash drive and make it bootable. Yumi can setup a 'multi-boot' system and has the ability to install from an 'iso', including Windows. He demonstrated this by installing Zorin linux on a bootable flash drive that already had Hiren's boot cd (a commonly used collection of repair software). At the end, 10 flash drives, yes 10 (donated by Jerry Seward), were given away to lucky ticket holders.

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Computer Recycling

Microworx accepts most electronic waste (large monitors/crt's, 50 cents/pound), located at 20 Allens Creek Road. Brighton. 585-271-0050

Monroe County *ecopark* (Cathode Ray Tube TVs and monitors - \$10 each credit/debit card only) 10 Avion Drive Rochester, NY 14624
Phone: (585) 753-7600 (Option #3)

Maven Technologies offers *free* residential drop off, 9:00 am – 4:00 pm (M-F), 1450 Lyell Avenue, Rochester, NY. The processing center is located on the NW corner of Lyell and Mt Read, behind the 'strip mall'. Go to the customer entrance. 458-2460.

Micrecycle, 49 Stone Street, downtown Rochester, 244-4040, refurbishes computers and accepts used hardware and ***working crt monitors***.