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# THE WYSIWYG

March 2018

Volume 30, Issue 3



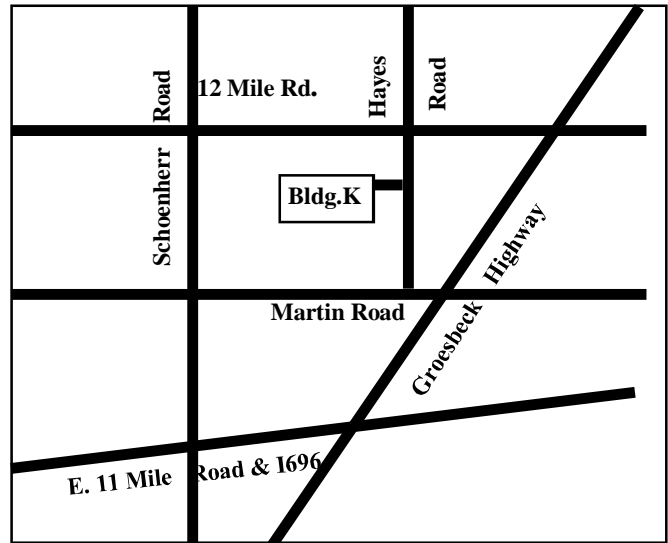
Member of  
An International  
Association of Technology  
& Computer User Groups

## STERLING HEIGHTS COMPUTER CLUB

PO Box 385  
Sterling Heights, MI 48311-0385

**MAIN MEETING: TUESDAY MARCH 6**  
**6:30 PM**

**Macomb Community College  
South Campus  
14500 E 12 Mile Road, Warren  
John Lewis Community Center (Building K)  
[Second floor - left from steps or elevator]**



### IN THIS ISSUE:

About SHCC	2
The President's Pen	3
Door Prizes	3
What is POP? or POP3? And What About IMAP and SMTP?	4
Potpouri Of Tips	5
Why Can't I Talk To A Real Person?	6
The Tile	7
High Tech Remembering	8
Online Survey - A Meeting Recap	9
Wi-Fi - 2.4 or 5 GHz?	11
Whoosh!	12
SHCC Emergency Cancellation Procedure	12
WYSIWYG Web Watch	13

**This Month's Main Meeting Topic:**  
**"Why's And How's Of A Full System Backup"** presented by member Paul Baecker

Guests and visitors are welcome. People can attend any SHCC meetings during two consecutive months before deciding to become a member or not. Meetings include the main meeting and SIG. July and August don't count since there is no main meeting. Membership includes admission to all SHCC functions and the newsletter. Membership is open to anyone. It is not limited to the residents of Sterling Heights.

**DUES: \$25/YEAR**

**CLUB ADDRESS:** PO Box 385, Sterling Heights, MI 48311-0385  
**CLUB E-MAIL ADDRESS:** Info@SterlingHeightsComputerClub.org  
**CLUB WEB PAGE:** <http://www.SterlingHeightsComputerClub.org>

**Resource People:**

Family Tree	Rick Schummer
Firefox	Don VanSyckel
FoxPro	Rick Schummer
General Computer Questions	Jack Vander-Schrier
Hardware	open
MS Publisher	Rick Kucejko
MS Word	Rick Schummer
Spreadsheets	Rick Schummer

**SHCC Coordinators:**

Associate Editor	Rick Schummer
Associate Editor	Paul Baecker
Door prizes	Don VanSyckel
Greeter for visitors	Jim Waldrop
Newsletter publisher	Rick Kucejko
Program Coordinator	Mike Bader
Publicity	Patrick Little
Publicity	Phil Reynaud
Resource People	open
Welcome & check-in desk	Jim Waldrop
Web Site Admin	Don VanSyckel
Web Watch column	Paul Baecker

**2018 SHCC Officers**

President: Don VanSyckel  
 Secretary: Rick Kucejko  
 V. President: Mike Bader  
 Treasurer: Bernie DeFazio

**Four Month Meeting Schedule:**

**MARCH 2018**

- 6 - SHCC Main Meeting
- 7 - COMP meeting
- 11- SEMCO meeting

**MAY 2018**

- 1 - SHCC Main Meeting
- 3 - COMP meeting
- 8 - SEMCO meeting

**JUNE 2018**

- 5 - SHCC Main Meeting
- 6 - COMP meeting
- 10- SEMCO meeting

**APRIL 2018**

- 3 - SHCC Main Meeting
- 4 - COMP meeting
- 9 - SEMCO meeting

**Other Computer Clubs:**

As a member of SHCC, you can attend meetings of other clubs where we have reciprocating membership agreements, at no charge.

**Computer Club of Marysville and Port Huron (COMP)**

Time: 1st Wednesday, 7:00PM  
 Place: Mackenzie Bldg, Room 201, St Clair Community College, Clara E McKenzie Library-Science Building, 323 Erie St. Port Huron, MI (810) 982-1187  
 Web Page: <http://www.bwcomp.org>  
 Reciprocating: Yes

**South Eastern Michigan Computer Organization (SEMCO) (new location)**

Time: 2nd Sunday at 1:15PM  
 Place: Bloomfield Township Library, 1099 Lone Pine Rd., Bloomfield Hills, MI 48302  
 Web page: <http://www.semco.org>  
 Reciprocating: Yes

**Royal Oak Computer Club**

Time: Every Wednesday at 12:30  
 Place: Mahany/Meiniger Senior Community Center  
 500 Marais Ave. Royal Oak, MI 48073  
 248-246-3900  
 Reciprocating: No

**Contact Information:**

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Phil Reynaud	586-268-6586	<a href="mailto:philrey@gmail.com">philrey@gmail.com</a>
Rick Schummer	586-254-2530	<a href="mailto:rick@rickschummer.com">rick@rickschummer.com</a>
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Jack Vander-Schrier (Call Jack after noon)	586-739-5952	<a href="mailto:jvanders@comcast.net">jvanders@comcast.net</a>

Newsletter submissions are due 10 days before the club meeting, but the earlier the better. They should be sent to : [newsletter@SterlingHeightsComputerClub.org](mailto:newsletter@SterlingHeightsComputerClub.org)

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## The President's Pen

by Don VanSyckel



**M**arch already! Please do NOT put the snow shovel away. Murphy lives in Michigan and you don't want to be the cause of the next winter storm, so leave the snow shovel right out there where it can be seen.

To reinforce the presentation last month about backups, I'd like to touch on that subject again for those of you who were there, and to stress backups to those of you who were not there. I've talked to many people over the years about backups and I've gotten many different reasons (er, excuses) why they don't do backups. Many people have stated they have nothing important on their hard drive. Consider this: Would you allow me to come over and do a format of your hard drive? This would effectively erase everything on the hard drive. At that point the person always says, "well that wouldn't be good" and start detailing photos and other items on the hard drive they wouldn't want to lose.

It's my opinion that you should be able to lose any disk you have, including the C: drive in your desktop or laptop, an external USB drive, or an USB thumb drive. All data should be in at least two places, or maybe three.

I suggest that the computer you use should have either a) a folder on the C: drive with all your data, b) a second hard drive in the PC for all your data, or c) an external hard drive for all your data. Then, regardless of which of the three options you do, get two external hard drives for backups. Do your work and storage using one of the options above. Then periodically, daily, weekly, or somewhere in between, do a backup to the external backup drive. When not doing a backup, leave the backup drive off or unplugged.

You can do backups with various programs, both paid and free, or you can do your own. For example

if your data is all in the folder C:\data and the external USB drive. F: the one line:

```
robocopy /mir c:\data f:\data
```

is all you need to backup your data.

Another thing you can do is organize your data into "current" and "archive". This means that "current" will have only some of your total data in it, so you can do:

```
robocopy /mir c:\data\current f:\data\current
```

often because it will backup quickly.

Then occasionally when you move files into "archive", you can do:

```
robocopy /mir c:\data\archive f:\data\archive
```

Since you are working in the "current" directory, you can backup "archive" as you work.

At this point, you should only buy USB 3.0 or better external hard drives even if your current PC doesn't support it. USB 3.0, USB 3.1, or better are all backwards compatible. So get the fast drive, and you'll eventually grow into it.

There's other things you can do, such as put the backup commands in batch (.bat) files and make shortcuts to them so a backup is as simple as a double-click, but I'm out of space in this column. So if interested, contact me.

Just four more meetings before Summer! See you Tuesday!

**VISIT THE SHCC WEB SITE:**  
<http://www.SterlingHeightsComputerClub.org>

## Door Prizes

**D**oor prize drawings are held at regular club meetings. The winner's circle for February included:

**Jane Minnick** won an APC surge protector.

**Rick Kucejko** won a package of DVD-R's

**Don Combs** won a 7 in 1 screw-driver

**Irene Kramer** won a power strip

**Paul Baecker** won a DVD spindle

**Walter Jendhoff** won a DVD spindle

**Martee Held** won a 5 pack of DVD-r's

**Bill Kramer** won wire ties

**Evelyn Cherson** won a tablet holder



## Member Classified Ads

**N**one this month. Please send any classifieds to the WYSIWYG Publisher at his e-mail address posted on page 2 of the newsletter.



## Last Month's Meeting

**S**HCC member Don VanSyckel presented at last month's meeting. The topic "Backups the Easy (and Cheap) Way" was informative and a call to action, if you will. Backups are a necessity of computer life, if you want to be safe.



## What Is POP? Or POP3? And What About IMAP And SMTP?

From the Ask Leo Newsletter

**POP, POP3, and SMTP are all acronyms used in configuring email. We'll look at what they mean and how they relate.**

The computer world is full of confusing acronyms, and email is one source of many.

It's useful to understand a few common acronyms, at least at a high level, to make using and configuring email programs a little less confusing.

POP3 and IMAP are half of the email puzzle; SMTP is the other. POP3 and IMAP are protocols (or "languages") used to get your email, while SMTP is the protocol used to send it.

But why POP? Or POP3? And what are you supposed to enter if you're asked to configure your email account in your email client?

### POP: Post Office Protocol

A communications "protocol" is just the language computers use to talk between themselves. POP — the post office protocol — is the language used between a computer fetching email (usually your computer, running an email program) and the computer holding your email (usually that of your email service provider or ISP).

A "POP client" is a program fetching email. Thunderbird and Microsoft Office's Outlook desktop program are two examples. A "POP server" is the server holding your email.

The "3" in POP3 turns out to be pretty boring. It indicates that we're all using version three of the POP protocol. It underwent a few revisions before it became what it is today.

### IMAP: Internet Message Access Protocol

IMAP is another protocol used by email programs to access your email.

IMAP is an alternative to POP3, and works in a fundamentally different way. Those differences make it a frequently-preferred alternative in today's always-connected world.

### IMAP versus POP3

POP3 is designed around the assumption that when you access your email, you want to download it to the computer you're using. So after your email program fetches email via POP3, that email resides only on your computer and nowhere else.<sup>1</sup> It's perfect when you only read your email from a single location: your PC.

IMAP assumes you want to leave the master copy of your email on the email server. IMAP is simply a way of looking at that master copy from a connected device. A computer connected via IMAP may (or may not) actually download your email to your computer.<sup>2</sup> It's ideal if you want to access the same email account from several devices.

To configure a POP3 or IMAP account, you generally need three pieces of information:

- The name of your email provider's server which holds your email. Typically, it's something like "mail.randomisp.com".
- The account ID you were assigned by your ISP. Most commonly it's your email address, but it doesn't have to be.
- Your password.

That's it.

Once properly configured, you can access the email your ISP collects on your behalf.

### SMTP: Simple Mail Transfer Protocol

SMTP is the protocol used to send mail from one computer to another.

When you're using a desktop email program like Thunderbird, it's the protocol used when you hit "Send" to transfer your email message from your computer to that of your email provider. What most people don't realize is that it's also the protocol used behind the scenes to transfer your message from server to server as it makes its way to the server on which your recipient receives email.



Configuring an SMTP server generally requires the same three things you needed for POP3 or IMAP:

- The name of your email provider's server which will accept your outgoing email. It could be the same as your POP3 or IMAP server, or something different.
- The account ID you were assigned by your ISP. Most commonly it's your email address, but it doesn't have to be.
- Your password.

### Webmail works differently, mostly

All of this only applies to email programs you run on your own computer, like Microsoft Office Outlook, Thunderbird, and others.



Web-based email, such as Outlook.com, Yahoo, and the like, displays the email directly from their servers to your web browser. There's no configuration needed other than logging in. They may use SMTP (and perhaps even IMAP or POP3) behind the scenes to get and send email, but that's nothing you'd ever need to see, know, or worry about.

The one exception is that many services can be instructed to act like a desktop email program and fetch your email from an email service. For example, say you normally get

your mail from randomisp.com, and use Thunderbird to download that email to your PC, using the POP3 protocol. You can, if you like, open a Gmail account and configure this web-based system to fetch your email from randomisp.com, using POP3. That way, instead of reading your email in your desktop email program, you would read it by visiting the Gmail website in your browser.

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## Potpouri Of Tips

### Meeting Review - Golden Gate Computer Society Computer Society

#### Password Manager

LastPass offers a free version and, for \$24/year/person, a premium version. The two versions are identical when used on computers. The difference is that only the premium version can also be used on mobile devices. In both cases, LastPass offers unlimited password storage and syncing across multiple devices that have LastPass installed, and two-factor authentication. It operates as a browser extension, with support for all major browsers and operating systems.

LastPass Premium adds enhanced password sharing options, storage of desktop-app passwords and support for physical authentication devices. LastPass automatically captures all passwords as you enter them into a website. All passwords are encrypted with your master password before they are stored in the Cloud and are encrypted on your hard drive.

You must create a strong Master Password, which ensures that nobody, even at LastPass, has access to your data.

This password must comprise at least 12 characters, including at least one digit, and a mix of capital and lowercase letters.

Multi-factor authentication requires that, when you log in, you will need a onetime code generated by the app, as well as your Master Password.

Dashland and Roboform are prominent among many other password managers.

#### Snipping tool

The useful Snipping Tool is a free screenshot utility and demonstrated that it permits screen shots of full screen, rectangular areas, or free-form areas using a mouse or a tablet. The image can be saved as JPEG, GIF, or PNG, it can be copied and pasted, and it can be emailed.

Colored pens, eraser, and highlighter allow annotating the image (You cannot make direct changes to the snipped image. An image editing program would have to be used for any edits). It also has a Delay function that allows for timed capture of screenshots.

#### Link shorteners

A link shortener can be seen at [www.bit.ly](http://www.bit.ly). Paste a long web link URL into its webpage and the page generates a shortened version in the format [www.bit.ly/xxxxx](http://www.bit.ly/xxxxx). When the shortened link is

clicked, the user is redirected to the full web link.

For example, you could shorten a 500-character, three-line link to say 12 characters. Bit.ly will shorten any link given to it even if you don't have an account.

However, with an account (free), you can have some degree of customization of the shortened result. (It also offers an enterprise version with more customization.) The shortened link is then owned by you and cannot be changed by others.

#### System tray

The system tray at the bottom right side of the computer screen and the icons in the tray are for programs that run all or part of the time and show current status of systems. Some icons may be hidden, but can be selected by left clicking the up-facing arrow and dragged onto the bar, if required.

The system tray shows the date and time as well as the status of the various icons in the tray. At the extreme right side is the Notification icon which, when clicked, shows an Action center, and with a left-click, the status of all your Windows settings, and network and Internet settings.

Right-clicking an icon, such as the Speaker icon, gives choices as to how to make changes. It would be a good idea to have Windows Defender on the system tray. The snipping tool can be added to the Taskbar. Note that the Taskbar is the set of icons to the right of the Start button and to the left of the System tray.

#### Alexa

Alexa Dot and its big sibling, Echo, are well-known personal assistants. They now have a multitude of voice-activated capabilities, including playing music, playing radio, giving reminders, setting timers, setting lamps, telling jokes, giving weather reports, etc.; additional control of lamps and other electrical systems are available by using modules like the Insteon Hub. Both the Echo and

Dot can interface with home automation systems enabling voice activated commands. It acts as a hub for other Dot or Echo units in the house.

The (free) Alexa app can be used on an iPhone and can be used to ask Alexa for the current time and for news briefings from, say, the BBC, WSJ, NPR, The Economist, etc.

Alexa can be added to a calendar, and to advise of calendar activities and their date/time. Alexa can also read from a Kindle book.

Amazon Echo/Alexa can be set up to control lights and appliances around your home using an Insteon Hub controller and corresponding control switches.

Additional information can be found at:  
<https://www.smarthome.com/insteon.html>.

Microsoft's Cortana, and Google's Home offer similar services.

**Google Forms**

Google Forms can be used to create a survey. Once the form has been created, the link is sent to others. Google Forms has a simple user interface and powerful editor, and works together with Google Sheets spreadsheets. Results can be listed or presented automatically as a graph. It is an easy-to-use form builder with a spreadsheet backend, with only nine question types and basic color plus photo themes, and it can be customized. Google Forms is free with a Google account, but you don't need a Google account to respond to Google Forms.

*This article has been obtained from APCUG with the author's permission for publication by APCUG member groups.*

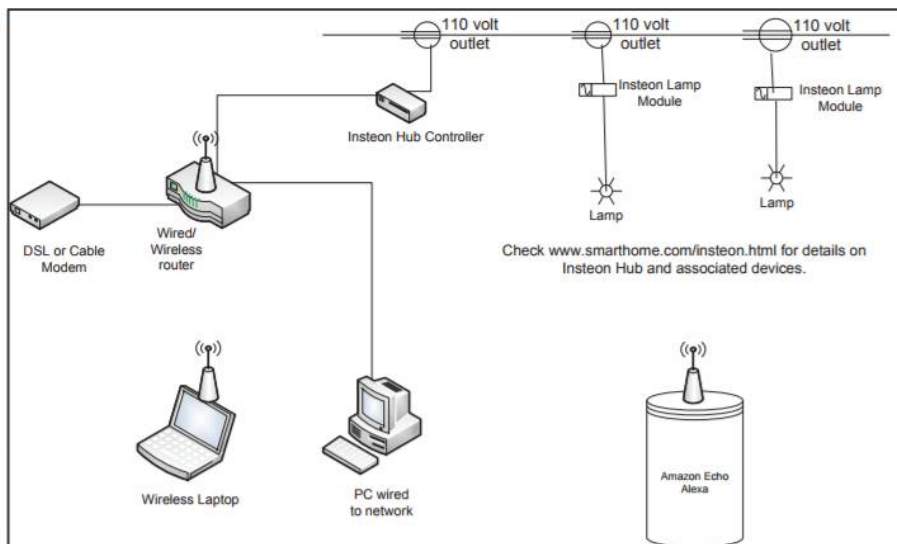


Fig. 1. How Alexa works.

**Why Can't I Talk To A Real Person?**

*From the Ask Leo Newsletter*

***I would think that no PC would be immune from malicious threats if they landed on some corrupt site that then installed malware or key-capture software. Is there any reasonable way to continue to safely do online banking?***

**S**ure. Avoid getting infected.

I know, that sounds trite and flip-pant, and I don't mean to be

so. Ultimately, though, all the advice boils down to exactly that: do what it takes to stay safe on the Internet.

I regularly bank online. In fact, I've done so for years without incident. I much prefer it over the alternatives.

**Follow the basics**

It really boils down to remembering and religiously following the basics.

**Use a strong password** – Much of the account theft I see is due to poor passwords. You must have a strong password on your banking accounts. It's your best, first line of defense.

**Don't share passwords** – Giving your password to someone you "trust" is another way banking accounts often get compromised. The problem arises when the individual turns out to be not so trustworthy or not as security-conscious as you need them to be.

**Use two-factor when available** – Two-factor (also "multi-factor") authentication prevents unauthorized entry into your accounts even when the password is known. Using SMS, a dedicated app, or some other approach is the best way to truly lock down your most important accounts.

**Open only email attachments you trust** – If you're the least bit uncertain, don't open 'em. Email attachments are, by far, the most common way malware lands on machines these days.

**Learn to recognize and avoid phishing** – In order to fool you, hackers constantly send email that looks like it came from your bank. Don't click on links in email messages from your bank. Instead, visit your bank as you would without the email: type the address of your bank's website into the browser address bar (or use a bookmark you saved previously).

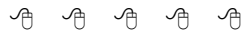
**Secure your network** – Make sure to secure your router. Understand what it means to use an open Wi-Fi hotspot or other shared network connection safely. Yes, you can bank online safely when traveling (again, it's something I do), but it does require that you pay attention to network security.

**Avoid shared or public computers, period** – While library computers or the machine you can borrow while visiting your friend might be convenient, you have no idea what's on them. They could be full of malware or include undetectable malicious hardware. Avoid them for anything sensitive.

### All banking is dangerous

All banking, online or off, is dangerous. In my opinion, you're actually more likely to be affected by bad behavior you have no control over — such as that in the bank's back room or at some hacked third party — than you are to have your information compromised due to your own failings... as long as you follow the basic security you should already be doing.

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## The Tile

By Matt Batt, The Computer Club, Inc., Florida  
www.scccomputerclub.org mbatt453@gmail.com

**D**o you spend as much time looking for your keys or your phone as I do? I've been able to solve this problem using a Bluetooth tracker known as a Tile and an app on my smartphone. The Tile is a small device about 1-inch square and ¼ inch thick. Here's how it works. I attached a Tile to my key ring. The app in my phone can see the keys and keeps track of their location. When I can't find my keys, I can make the Tile ring from my phone if it is within 100 feet. If I have my keys and have misplaced my phone, I can make my phone ring from the tile on my keys even when it is on silent. I use the ringing feature a lot.

If my phone gets out of range of the tracker, the app records the physical location that the keys were last seen. Later, when I'm looking for my keys, the app can give me the address and mark on a map where I left them.

I have a Tile tracker attached to my USB drive that I am constantly leaving in someone's house or the lab after I repair a computer. When I discover that I've misplaced my

USB drive, the app can tell me where I left it.

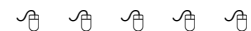
I was traveling in Western Scotland last year. We were on one of those tours where we made several stops that day. I left my pack, which had a tracking Tile, at the restaurant where we ate lunch, but I didn't realize that until later that afternoon when we were many miles away. The app told me the exact address where I had left it. I was able to call the restaurant and they were nice enough to mail the pack to a place where I could pick it up a few days later.

I keep a tracking Tile in my luggage when I travel. Using the app, I can tell when my luggage is approaching baggage claim.

Another incredible feature of these Tiles is that if the item has been stolen or isn't where you last saw it, you can select "Notify When Found" in the app. When any other Tile user passes close to your missing item, you'll automatically be notified of its location. This feature works 100% anonymously and automatically to protect your privacy. I was traveling from Montreal to Milwaukee and my luggage didn't make it. I reported it lost to the airline and selected "Notify When Found" in the app. After a few frustrating days, when the airline finally shipped my luggage to Milwaukee, someone passed by it that had the app and I was notified the luggage was in Milwaukee before the airline could even notify me. There are 10 million Tiles in use, so it is no wonder that someone passed by my luggage.

Can you tell I'm sold on these things? The cost is 4 Tiles for \$70. The website is [www.thetileapp.com](http://www.thetileapp.com). Also, they are an excellent gift.

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## Member Ads

**A**ds are available free to SHCC members, and are limited to computer related items for non-commercial purposes. Any ad shall be a maximum of twelve newsletter lines of text.





## High-Tech Remembering

by Greg Skalka, Under The Hood User Group  
www.uchug.org president@uchug.org

**A**s we get older, our human memory seems to fail us. For some of us, this seems to start at a relatively early age, while others have good recall into our twilight years. Sometimes we have a greater problem retaining short-term memories, like what we had for dinner the night before or where we left our car keys, but can recall in detail events of many decades ago. Most of us just slowly start forgetting things. Of course, a blow to the head or a stroke can degrade even the best of memories.

Our technology today is filled with memories of various kinds - volatile and non-volatile, fast and slow, large and small capacity. The SDRAM (synchronous dynamic random access memory) used for the main storage in most computers and smartphones is the ultimate in short-term memory. If power is removed, all the information stored in it quickly fades away. Flash memory (for small capacity applications) and magnetic media like hard drives (for large capacity) are non-volatile, and can retain their stored data for long periods of time without power. All of these memory types can suffer losses of data due to electrical, magnetic and cosmic ray abuse, and do also degrade over time just from normal use.

In these respects, the memories in our tech devices suffer from the same issues as our human, brain-based memories. Just as with our brains, semiconductor and magnetic memories lose their ability to reliably store information over time. Abuse to these memory devices, through actions like static discharge, extremes in temperature or mechanical shock (to a hard drive) can cause permanent damage, as a concussion or stroke does to a brain.

One means of information loss in our tech memories that does not

really have an equivalent in the brain is in deletion. Information in semiconductor memories or hard drives can be deleted or overwritten. We humans don't really have a way to intentionally delete or forget information (this might be convenient for lost loves or humiliating experiences), though trauma may cause memories to be repressed or unconsciously blocked. In theory, therapy may be able to recover repressed memories in humans. In theory, there are also techniques that may be effective in recovering deleted files in semiconductor and magnetic memories.

Deleting a file from your computer (stored on a hard drive, or in semiconductor memory device like a flash drive or memory card) does not initially eliminate the data file, but instead removes the file's location from the computer's file system. In Windows, the deleted file goes into the recycle bin, from which it can be easily recovered. Even if the recycle bin is emptied, the file's data remains in the storage media until it is overwritten. Special software tools (data recovery software) can often recover these deleted files from hard drives, USB flash drives and memory cards. I recently had need of such software, as I accidentally deleted photos and videos from the memory card in my smartphone.

When my wife and I went on vacation to Nebraska to view the total solar eclipse on 8/21/17, I left my Windows laptop at home and instead traveled with my smaller and lighter Chromebook. For its main job, it was well suited - accessing the Internet and viewing web pages while on travel. It was less capable at its secondary task, copying photo and video files from the many cameras we took with us to a mass storage.

With four still and four video digital cameras being packed for this trip, I did not want to bring the multiple memory cards for each camera that would be necessary to hold all the files we would generate over the week we would be traveling. On past trips, I'd simply copied the contents of the memory cards from the cameras to the hard drive in my laptop, and then erased the cards for reuse. Since the Chromebook has no large internal storage, I planned to use it to copy my photos and videos to an external USB hard drive I brought.

I practiced copying these files before we left, and this all worked well for the files on my digital still cameras and digital video cameras. For some cameras, I removed the SD memory card and used the Chromebook's SD card reader. For others, I accessed the camera memory through a cable between the camera and the Chromebook's USB port. I also copied the photos and videos from the memory card in my smartphone, also through a USB cable. Since I had switched the micro SD card in my phone to be a 128 GB card the day before we left, I was in no risk of filling it up and really did not need to copy from it, but I did it anyway to be consistent. This later proved to be a big mistake on my part.

I am very familiar with the Windows file manager, but not so much with the file manager in the Chrome OS. While copying the folders of photos and videos from my Samsung Galaxy J3 Prime, an Android-based smartphone, to the external USB hard drive late one night in our hotel room, I got an error message that some files did not copy. I should have stopped right there and then, but haste and late nights make waste. I decided to delete those incompletely copied folders from the hard drive and try again, but due to my lack of familiarity with the Chrome OS file manager, I accidentally deleted the photo folders on my smartphone instead.



In the panic of the realization of what I had just done, I doubled down on my error and immediately copied those folders back from my external drive to the smartphone memory card. After reviewing the photos now on the smartphone, I found many photos and videos, including all I had taken in the last few days on the trip, were missing.

Fortunately, I finally stopped and calmly took stock of my situation. I had deleted all the photos from my smartphone, but fortunately I had backups of all but for the last few prior days of my trip. The photos taken with my smartphone were mainly just supplementals; most of my photography was done with my digital cameras. There were only a few cases where I had lost unique photos not duplicated by my cameras, amounting to perhaps several dozen files. If those missing smartphone photos were lost forever, it would not be the end of the world for me, but I would still like to get them back. If I stopped further photography with my smartphone, I could try to recover the missing files when I returned home. Unfortunately, I had already copied back to the memory card the files I did have on the external drive, and so may have already overwritten some files, and thus lost them forever.

When I returned home, I started looking for a solution to my deleted file problem. A web search turned up many software options for file recovery from memory cards. There were a few programs that were free, but many were not. I then recalled a program I had seen demonstrated at one of the Southwest User Group Conferences. I believe it was Terry Currier of the WINNERS group (WINdows usERS) that gave the presentation, and one program he recommended and demonstrated was Recuva. I decided to make this attempt with something I had seen, rather than an unknown.

Recuva is produced by Piriform ([www.piriform.com](http://www.piriform.com)), the same company that makes CCleaner. Recuva comes in a free version, as well as a

Pro version for \$19.99 (both as downloads). My recollection was that Terry used the free version, so I downloaded it and installed it on my Windows 7 laptop. To make things as simple as possible for Recuva, I removed the micro SD card from my phone and put it in an SD adapter I could plug into my laptop's memory card reader, rather than connect through a USB cable on the phone.

When Recuva starts, it uses a wizard to simplify the process, though you can easily skip it. Being relatively unfamiliar with the program, I used the wizard, which asks just a few simple questions of the user. The first wizard screen asks you to select the type of files you are trying to recover. Since it would not allow the selection of multiple types (pictures and video), I selected "all files". In the next screen, I specified the location of the SD memory card (drive letter). The final screen had a start button, which initiates the search for deleted files. It also has a check box for "deep scan", which I skipped initially.

The first pass took only a few minutes and found 32 files. I selected them all to be copied to a folder on an external hard drive. I examined the folder and found the files recovered were all JPEG pho-

tos, almost all from before my trip, and none of the ones I really wanted.

I ran through the wizard a second time, this time with the deep scan selected. It took about two hours, but this time Recuva found 351 files. I had it save them all to a second hard drive folder. There were a lot of files that I already had from back-ups, but there were also the JPEG and MP4 files that I was looking for. It appears that Recuva was able to recover all of the missing files that I could remember.

It will take me a while to sort through them and remove the duplicates, but between the back-ups and what Recuva recovered, I believe I did not lose a single file in my accident. Now I can view those photos and videos and relive those moments. I'll be more careful in deleting files with my Chromebook in the future, and I'm sure glad Recuva works so well and is there when I'm not so careful. I sure wish there was a Recuva program for the human memory.

*This article has been obtained from APCUG with the author's permission for publication by APCUG member groups.*



## Online Survey - A Meeting Recap

by John Weigle, Channel Islands PCUG, CA  
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Online safety was the primary topic of a computer club meeting. The presenter discussed the amount of personal information that's on the Internet and many of the dangers that creates.

He used [chayn.co/safety](http://chayn.co/safety), which was designed for women but has tips for everyone in its online security guide as a general guide to dangers and solutions. He also used [familytreenow.com](http://familytreenow.com), which is genealogy site, to demonstrate

the amount of information that's easy to find.

The [chain.co/safety](http://chain.co/safety) site offers a starter pack and an advanced guide about possible scams, dangers and solutions. Both are free and part of the website. Its introduction includes this statement: "Modern technology such as the Internet/mobile phones etc., has made it increasingly easy for abusive partners to stalk, intimidate and threaten their targets both online and offline. The good news is that you can take measures to pro-

tect yourself, assess your risk, and take back control with this guide of best practices.”

The site emphasizes that everyone posts all kinds of information on social media, opens accounts of many kinds, logs into many sites, and has apps on computers or smart phones that have information we seldom think about. This information includes Wi-Fi signals and GPS locations, websites we've visited, and pictures we posted. The site also suggests considering how your children's posts might affect your privacy. Are they posting their addresses, schools, activities, and places they like to visit?

General recommendations from the site:

- Use a strong password with at least 15 characters with upper and lower case letters, numbers, and symbols.
- Don't use the same password on many sites.
- Don't let your browser save your passwords.
- Think of a passphrase instead of password.
- Use a password manager and change your passwords periodically.
- Use two-factor authentication.

#### Browser recommendations

Use the Electronic Frontier Foundation's Panopticlick at <https://panopticlick.eff.org>. (The writer tested the site and it recommended installing Privacy Badger, which it says blocks tracking ads, and invisible trackers, unblocks third parties that promise to honor 'do not track,' and determines if the browser protects from fingerprinting. It lists the information that's shared.

The site has instructions on privacy settings for Chrome, Firefox, Safari,

Explorer, and others, and discusses private browsing techniques within browsers and with add-ons.

Facebook and Twitter settings are explained, as are location apps in smart phones. Message apps *WhatsApp* and *Signal* are also discussed. The Advanced Guide discusses how to identify your security risks and what to do about the ones you find, starting with documenting any abusers who are bothering you. Sections include securing mobile phones, laptops, computers, apps, browsing the web, social engineering, phishing, IP addresses, and Wi-Fi, among others. Other topics include anti-virus and firewall software, encryption and deleting information, and remembering that deleting computer files does not remove files. That just changes the file name, which tells the computer other files can write over the "deleted" one.

#### FamilyTreeNow.com

As noted above, this is a genealogy site, but it could be used by stalkers and others who want to learn more about an individual. "This is a scary, scary thing." The opening page asks for the first and last name of the person you want information about, and one state or all states.

The presenter used himself on the site, and the result was ultimately a long list of associated names, possible relatives, possible associates, current and past addresses and phone numbers. Most of the entries were valid, and then names that came up, he recognized.

The writer visited the site, and the first result was a list of nine people with the name John Weigle. I selected myself and got a much shorter list than the one the presenter found. My name and my deceased father's name were correct. I did not recognize the sole possible associate. Of the eight current and past addresses, four were correct home or mailing addresses, one was a business site

my brother and I co-owned, and three were wrong. Three phone numbers were correct.)

A member of the audience noted that the ease of finding former addresses is a good reason not to use them as part of a password.

Clicking on an address brings up a picture of the location. When you think 'nobody knows anything about me,' it is not necessarily true.

The site has an opt-out page.

#### Questions and answers

Q: Are maiden names on the site? A: Yes.

Q: Is there a fee? A: I'm sure there is somewhere, but so far what I've shown you is free.

Q: Is the site tracking you? A: I'm not sure. I could have used incognito browsing, which is not tracked.

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## SHCC Post Office Box

After 9-11 some of the rules have been changed concerning post office boxes. These changes are intended to make it more difficult for persons using post office boxes to remain anonymous, at least to the post office. If you send anything to the club's PO box, don't put a person's name on it. It's OK to use titles such as President, Treasurer, and such. If you use a person's name, your mail will sit at the post office until that person can get to the post office with ID and claim the mail. This just slows down your mail and inconveniences the addressee.



## Wi-Fi - 2.4 or 5 GHz?

by Carol Picard, Midland Computer Club, Michigan  
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I normally have acceptable network speeds throughout my house, but one day while downloading a file to a desktop computer, which has a PCI wireless network card, I was only getting 3 Mbps download speed. This is my primary computer and is also located in a room farthest from where the router is located. My ISP is Charter Spectrum, and highest download speed should be around 60Mbps.

Since slow speeds have happened before, I decided to take the time to see if there was anything I could do to improve the speed on the desktop computer. Running an Ethernet cable is an option, but I was looking for solution that would work for multiple devices, e.g., tablets, laptop computers, etc.

Using my laptop computer, I ran a speed test in several locations within the house. The speed test on the laptop computer in the same room as the Netgear R7000 router showed 60Mbps download speed. About 10 feet from router I was getting 30Mbps. At 20 feet from router it was 15Mbps but at the farthest distance (within the house) from the router it was 5Mbps. Speed tests normally fluctuate so I thought it was a good idea to run tests on different days and at different times of the day to get an average.

The router was dual band, capable of both 2.4GHz and 5GHz, but it had never used 5GHz.

I was surprised to discover that the PCI network card in my seven-year-old desktop computer was dual band.

I was concerned about the distance/obstructions between the computer and router. Several factors affect speed, other than distance, e.g., number and composition of walls, appliances, wiring,

etc., and I had read that 5GHz had a shorter transmission distance than 2.4GHz.

After enabling the 5GHz band on the router, I ran more speed tests and was getting similar, high speeds on the laptop in the room where the router is located and on the desktop computer at the opposite end of house.

To check whether your computer is connecting at 2.4GHz or 5GHz, in Windows 10:

- open Settings
- click Network & Internet Settings
- click Wi-Fi
- click Hardware Properties
- check information for Network band.

The Netgear R7000 router has a Smart Connect setting. The description of that setting indicates if SSID and network key are the same for both the 2.4GHz and 5GHz bands. The router would determine the best band for the connected devices. On the R7000, Smart Connect only applies to the main network. The Guest Network on the router has two bands (2.4GHz and 5GHz) but each band should have a unique SSID.

I configured SSID and network key on the router to enable Smart Connect. On the laptop, it successfully connected to the correct band, but using Smart Connect totally messed up the Internet connection on the desktop computer. I had difficulty connecting to the network, and after connecting, it either didn't get an Internet connection, or got it for a short time and

then dropped it. Resetting IP and flushing DNS on the desktop computer didn't resolve the problem. Neither did changing DNS servers. So, I reconfigured the router to not use Smart Connect.

On the desktop computer, I ran various speed tests:

(beta.speedtest.net):

5GHz band and results showed  
Download = 67.67 Mbps;  
Upload = 5.71 Mbps.

2.4GHz band results showed  
Download = 35.91Mbps;  
Upload = 5.71 Mbps.

I also tested using Charter Spectrum speed test.

5GHz band results showed  
Download = 66.40 Mbps;  
Upload = 5.75 Mbps.

2.4GHz band results showed  
Download = 39.42Mbps;  
Upload = 5.97 Mbps.

Upload speeds are almost always considerably slower than download speeds.

Normally, when working on a specific problem, I find one or two more problems. This time, while working on a solution for the Internet speed problem at home, I discovered a solution to another problem. We recently changed the location for our Club meetings. When attempting to connect to the Internet at the new location, several members did not see the wireless connection on their devices when viewing available networks, and were unable to connect to the Internet.

While testing different devices at home, e.g., laptop computers and tablets, I noticed that some of the devices were not showing the 5GHz SSID. I checked specifications for those devices and found the internal network card only had single band, 2.4GHz capability. A device that only has 2.4GHz network "card," cannot see a network broadcasting at 5GHz.



To further test this, I purchased a Netgear AC1200 Wi-Fi USB Dual Band Adapter. Using the AC1200 adapter I could bypass the internal 2.4GHz network card and connect to the router's 5GHz band. I further tested this at last month's computer club meeting and was able to connect to 5GHz at the meeting location.

There are different ways to determine if a network card/adaptor is capable of dual band.

Under Device Manager, Network Adapters, description, may indicate whether it is dual band.

In Windows 10:

- open Settings
- click Network & Internet
- click Status
- click View your network properties
- scroll down to Wireless Network Connection

You can also try an Internet search for the model number of your device, and the specifications may show information

Security reminder: If you own your own router, make sure you have changed the password for logging into the router. This is not the same as the SSID password for connecting devices to the network/Internet.

Also check for and install router firmware updates, especially security updates.

***This article has been obtained from APCUG with the author's permission for publication by APCUG member groups.***



## Whoosh!

by George Harding, Tucson Computer Society  
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One of the very useful products I came across at CES was Whoosh!

It is a screen-cleaning product that not only clears out all the grime and fingerprints from your phone's screen, but also protects it from further contamination. It works on other screens, as well. I use it on my tablet and my laptop, too. I could use it on my flat screen TV also, but haven't yet.

The product is a spray bottle of liquid, which is non-toxic. and a polishing cloth. You spray a bit of liquid on the cloth, wipe the surface of your screen, then use a dry part of the cloth to polish the screen to a pristine finish. The cloth has been treated with an antimicrobial product to protect the cloth from contamination.



There are several packages in the product, including packets of screen wipes, as well as the customary spray bottle and cloth packages. The latter come in three sizes. The product is available in most office supply and computer stores.

This is a great product to have at home or office. It gives you clean screens in a flash.

Whoosh!  
[www.whooshcreenshine.com](http://www.whooshcreenshine.com)  
 Price varies from \$10 to \$20

***This article has been obtained from APCUG with the author's permission for publication by APCUG member groups.***



## Presenters Wanted

The officers invite any member to make a presentation at the main meeting.

If there is some software you have been using and think others may be interested as well, or there is a computer topic you would like to present to other members, please call or e-mail Don VanSyckel. Making presentations is not that difficult. The hour goes by before you know it and there is always enough material to cover in a software package so that the hour is easy to fill.

If there is a topic you are interested in or something you would like demonstrated, please see any of the officers. They are always interested in what the members would like to see.



## SHCC Emergency Cancellation

Sterling Heights Computer Club meets at Macomb Community College (MCC). We will meet if MCC is open and will not if MCC is closed. MCC closure is announced with other school closings on many local TV and radio stations and on their web site. All members of SHCC have an email address. One of the SHCC officers will send an email to the addresses SHCC has on file alerting members to the event cancellation. If your email is broken, call an officer; don't leave a message, call another officer if you don't talk to someone live. It is your responsibility to keep the email address you have listed with SHCC current.





## WYSIWYG WEB WATCH (www)

by Paul Baecker [webwatch@sterlingheightscomputerclub.org](mailto:webwatch@sterlingheightscomputerclub.org)



This column attempts to locate sites containing valuable, amusing, and free content, with no overbearing pressure to purchase anything. Club members are encouraged to submit favorite sites (a description is optional) to the e-address noted above, for inclusion in a future WYSIWYG issue. Also check the SHCC web site (“Web Page Reviews”) for previous gems.

Dangerous and extreme railways around the world. (10-min. video)

<https://www.youtube.com/watch?v=gV79eObat24>

Electron microscope shows a stop motion animation of a phonograph needle in an LP groove. (10-min. video)

<https://www.youtube.com/watch?v=GuCdsyCWmt8>

Easy drawing tutorials for the artist in you.

<http://diyprojectsforteens.com/easy-drawing-tutorials>

In Linux, everything is a file. (A Linux Beginner tutorial.)

<https://www.linux.org/threads/in-linux-everything-is-a-file.4251/>

How to set up and use Kodi, a home theatre application for beginners (for Windows, MacOS, iOS, Linux, Android, Ras Pi). (Includes download link.)

<https://www.makeuseof.com/tag/set-up-use-kodi-beginners/>

What Is HTTPS, and why should I care?

<https://www.howtogeek.com/181767/htg-explains-what-is-https-and-why-should-i-care/>

Hate seeing ads while browsing the web? Block ads on your network with Raspberry Pi and pi-hole.

<https://opensource.com/article/18/2/block-ads-raspberry-pi>

Beginner's course about one of the concepts that newcomers to Linux find different -- the file system in Linux (how data is stored and managed).

<https://www.linux.org/threads/linux-file-systems.4123/>

Ryzen CPUs explained: Everything you need to know about AMD's new disruptive multicore chips.

<https://www.pcworld.com/article/3176907/components-processors/ryzen-cpus-explained-everything-you-need-to-know-about-amds-disruptive-multicore-chips.html>

Online games for kids that help teach about astronomy.

<https://www.certstaff.com/classes/astronomy-computer-games-kids.html>

Google's Location History tracking is creepier than first thought.

<https://www.ghacks.net/2018/01/29/google-location-history-tracking-is-creepier-than-thought/>

6 underground Search Engines you may have never known about.

<https://www.makeuseof.com/tag/top-7-underground-search-engines-knew/>

US Mint Error Coins are valuable. How to check if you have one. (7-min. video)

[https://www.youtube.com/watch?time\\_continue=102&v=W3Qv1OQL3LI](https://www.youtube.com/watch?time_continue=102&v=W3Qv1OQL3LI)

Crazy winter sports you'll actually find in Michigan.

[http://www.mlive.com/entertainment/index.ssf/2018/01/crazy\\_winter\\_sports\\_youll\\_actu.html](http://www.mlive.com/entertainment/index.ssf/2018/01/crazy_winter_sports_youll_actu.html)

Kadaza shows only what it considers as the absolute best and most popular websites, covering hundreds of topics like news, music/movies/TV, computers, finance, games, more. Just click on your choices to link.

<https://www.kadaza.com/>

Robocopy is a robust file copy tool for the Windows command line that allows you to copy files, directories, and even drives from one location to another. Here is a long list of syntax options and a few examples to put it to use.

<https://www.computerhope.com/robocopy.htm>

Some best open-source games you can play on Linux.

<https://www.maketecheasier.com/open-source-linux-games/>

How to block spam texts and messages on your phone.

<https://www.komando.com/columns/394001/how-to-block-spam-texts-and-messages-on-your-phone>

Alexa and Google Home (and other similar services) record what you say. But what happens to that data? What are you risking?

<https://www.wired.com/2016/12/alexa-and-google-record-your-voice/>

How to check your Linux PC for Meltdown or Spectre vulnerability.

<https://www.maketecheasier.com/check-linux-meltdown-spectre-vulnerability/>

7 great (but ugly) Linux software programs.

<https://www.makeuseof.com/tag/great-ugly-linux-software/>

Open source clones of great old games.

<https://www.maketecheasier.com/best-open-source-clones-of-great-old-games/>

How to check if your computer (Windows or Linux) uses UEFI or BIOS -- good to know, particularly if you plan to dual-boot two operating systems.

<https://itsfoss.com/check-uefi-or-bios/>

Analyze and compare the cost of owning mutual funds. Fees add up fast. How much money are you throwing away with high-fee investments?

[https://tools.finra.org/fund\\_analyzer/](https://tools.finra.org/fund_analyzer/)

Over 300 vintage and rare airliner videos spanning the 1940s to the 1970s.

<https://www.youtube.com/mcdonnell220>

A unique approach to learning Linux from scratch, with numerous charts, graphics, links, and videos.

<https://www.guru99.com/unix-linux-tutorial.html>

Prevent files and folders from accidental deletion or modification In Linux.

<https://www.ostechnix.com/prevent-files-folders-accidental-deletion-modification-linux/>

Seven 5-minute exercises for a healthy spine.

<http://www.lifeadvancer.com/five-minute-exercises-healthy-spine>

How to install Steam in Ubuntu, in order to play over 2000 Linux-based games.

<https://www.maketecheasier.com/install-steam-in-ubuntu/>

Free check to see if your router has been hacked by criminals.

[https://www.f-secure.com/en\\_US/web/home\\_us/router-checker](https://www.f-secure.com/en_US/web/home_us/router-checker)

The rise and fall of Penn Station (NYC), the enormous engineering feat of building and razing an iconic piece of architecture. (55-min. video)

<https://www.youtube.com/watch?v=695KwYpwYts>

Check any short or affiliate URL (such as like bit.ly, goo.gl, etc.) to see where it goes.

<http://www.websiteplanet.com/webtools/redirected/>

Everything you should know about your IMEI number.

<https://www.maketecheasier.com/imei-number>

Google News has an option to search over 100 years' worth of archived news from newspapers around the world, back to the mid-1800s.

<https://news.google.com/newspapers?hl=en>

**NOTE: Many of the links in the digital newsletter connect to the Internet if clicked. For those that do not, copy and paste the link into your Internet browser.**

## World Wide Web Column on the Club Web Site

Check out the WebPageReviews section on the club's web site. You can see past web sites reviewed in this column on our club web site. They are arranged into various key word categories to help locate a specific site.