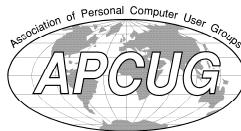




THE WYSIWYG

June 2017

THE WYSIWYG



June 2017

Volume 29, Issue 6

STERLING HEIGHTS COMPUTER CLUB

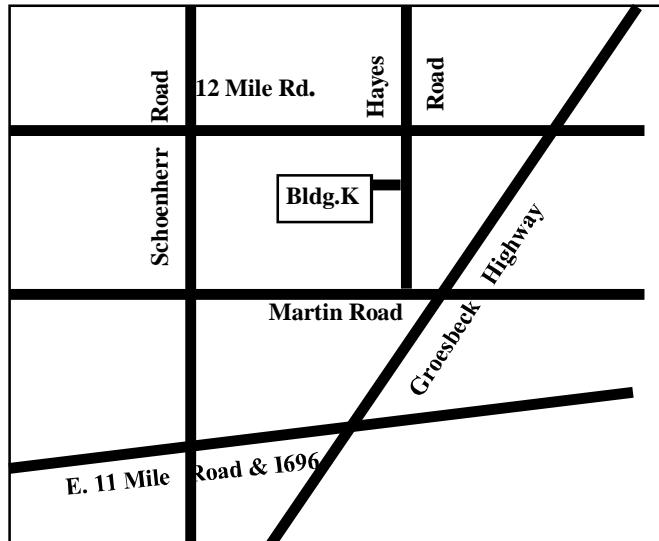
PO Box 385

Sterling Heights, MI 48311-0385

\$3.00

MAIN MEETING: TUESDAY JUNE 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
Recent SIG Notices	3
Font For Future WYSIWYGS (FEEDBACK)	4
Is It Time To Start Using An Adblocker?	4
Picture Management - Something We All Need	6
How Do I Protect Myself From My ISP?	7
A Good Computer House Cleaning	9
Drones	11
Is Amazon Prime Worth It?	11
Windows 10 Tips And Tricks: Improve Battery Life	12
SHCC Emergency Cancellation Procedure	12
WYSIWYG Web Watch	13



This Month's Main Meeting Topic:

"HDTV : Current Technologies And Features," presented by Stanley Luke, Assistant Store Manager of the Madison Heights Best Buy.

SIG news - on page 3

The club does not meet in July and August, and no newsletters are published for those months

After this June meeting, our next club meeting will be on Tuesday, September 5.

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**Resource People:**

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

SHCC Coordinators:

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

Contact Information:

Paul Baecker	586-286-2314	webwatch@sterlingheightscomputerclub.org
Mike Bader	586-447-6683	mdbader@flash.net
Bernie DeFazio	586-864-6558	berniede1@wowway.com
Rick Kucejko	248-879-6180	rick@kucejko.com
Patrick Little	586-264-1497	pblittle@wideopenwest.com
Rick Schummer	586-254-2530	rick@rickschummer.com
Don VanSyckel	586-731-9232	don@vansyckel.net
Jack Vander-Schrier	586-739-5952	jvanders@comcast.net

(Call Jack after noon)

CLUB ADDRESS: PO Box 385, Sterling Heights, MI 48311-0385

CLUB E-MAIL ADDRESS: Info@SterlingHeightsComputerClub.org

CLUB WEB PAGE: http://www.SterlingHeightsComputerClub.org

2017 SHCC Officers

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

Four Month Meeting Schedule:**JUNE 2017**

- 6 - SHCC - "HDTV : Current Technologies And Features," presented by Stanley Luke, Assistant Store Manager of the Madison Heights Best Buy.
 7 - COMP meeting
 11- SEMCO meeting

SEPTEMBER 2017

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

THE CLUB DOES NOT MEET IN JULY AND AUGUST**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)

Time: 2nd Sunday at 1:30PM
 Place: Altair, 1820 E Big Beaver Road, Troy, MI 48083
 (248) 840-2400
 Web page: http://www.semco.org
 Reciprocating: Yes

Royal Oak Computer Club

Time: Every Wednesday at 12:30
 Place: Mahany/Meineger Senior Community Center 3500 Marais Ave. Royal Oak, MI 48073
 248-246-3900
 Reciprocating: No

Newsletter submissions are due 10 days before the club meeting, but the earlier the better. They should be sent to :

WYSIWYG Publisher
 5069 Fedora, Troy, MI 48098
 OR at the e-mail addresses: newsletter@SterlingHeightsComputerClub.org

© Unless stated otherwise, all materials contained in this newsletter are copyrighted by the Sterling Heights Computer Club. License is hereby granted to other clubs (non-profit) to reprint with credit.

The President's Pen

by Don VanSyckel

While not computers and not exactly monitors, TVs have gone a little crazy. Flat screens, LED and plasma, High Definition (HD), curved screens, Ultra High Definition (UHD), and now High Dynamic Range (HDR). Then add to this quickly changing technical specifications. Every manufacturer lists there products specifications slightly differently, making comparison tedious.

TVs are doing what I've seen computers do and certain other electronics as well. You see a product you decide you want to get but it's ridiculously expensive so you bide your time waiting for the price to fall to a reasonable amount. But when the price finally gets to your price range, the new round of the product has been released and now you want that, so you start the wait for the price to drop all over again.

The prices of HD TVs have fallen to a reasonably range, but why get HD when UHD is just that much better. I had almost made up my mind to get UHD and HDR became available. What is HDR and why is it better?

The TV industry uses a unit of measure called a "nit" when evaluating TV displays. A nit is approximately the amount of light from one candle. Contrast is the ratio of nits at peak brightness to the nits of black level. HDR TVs are not as bright as standard HD and UHD TVs, but the nits for the black level are so much lower, the contrast ratio is better, bigger, giving you a better more true-to-life picture. HDR TVs can also produce more colors, enabling the picture to have better color accuracy.

Then there's the matter of content, whether it's HD, UHD, or HDR. Obviously because of length of time available, HD has the most available and HDR has the least available. This means that if you spring for an HDR TV and watch HD content you're getting roughly what you would see on an HD TV viewing the same content. Over time more content will be available for HDR and less for HD and UHD.

The above is a general overview. Many manufacturers use their own "words" to label the technology of their TVs and their specifications. It seems the only standard is that everyone uses different terms. If shopping for a new TV, consider viewing every candidate with the same content to make it a closer comparison.

The last thought is where does it end? The human eye can only "see" so much. At what point does a better picture not really appear any better to the eye? Sort of like DVDs versus Blu-Ray. Many people thought Blu-Ray would kill DVDs. It didn't happen. The "better" Blu-Ray technology didn't wipe out the "good enough" DVD technology. In fact, there appears to be more DVDs for sale than Blu-Ray disks at the stores I frequent. So bring your questions to the June meeting, Mr. Stanley Luke of Best Buy Madison Heights will be presenting "HDTV, Current Technologies And Features". Best Buy has TVs in all categories and Mr. Luke's incite should be very interesting.



Last Month's Meeting

Last month SHCC member Jack Vander-Schrier presented "Genealogy: findagrave.com and Family Tree Maker". If you have any interest in genealogy, this was one presentation you needed.



Member Classified Ads

None this month. Please send any classifieds to the WYSIWYG Publisher at his e-mail address posted on page 2 of the newsletter.



If your e-mail or mail address changes, please e-mail:
secretary@SterlingHeightsComputerClub.org

Door Prizes

Door prize drawings are held at regular club meetings. The winner's circle for May included:

Louise Manning won a screwdriver set

James Waldrop won a flashlight

Tom Miller won a flashlight

Evelyn Chereson won a brush set

Bill Appleberry won a 32 GB flash drive

Mike Bader won a power strip

Ed Zaremba won a cat 6 10-foot cable

Martee Held won a tape measure



SIG NOTICES

Only one club member responded to the request for feedback from those club members interested in having a Novice SIG. Thus, there doesn't appear to be enough interest to start that SIG at this time.

For now, nobody has come forward to take over the PC SIG that was hosted by Jack Vander-Schrier in recent years. Thus, there are no current plans to restart that SIG in the fall. If someone comes forward to run the SIG, this can change.

Font For Future WYSIWYGs (*FEEDBACK*)

Some members responded about the font that they thought was easier to read for the WYSIWYG, from the 2 shown below. One member said that it depended if the WYSIWYG was being read on a computer screen or a printed copy. It is correct that this should, and does make a difference.

From the votes received, FONT 2 got the most votes, apparently because most of the members now get the newsletter in digital format and read it on their computer screen. So, starting in September, future versions of the WYSIWYG will be done using FONT 2 below.

To see if this will have any affect on you, the 2 fonts in question are shown again below. Look at each of these as you would normally view the WYSIWYG, either on the computer screen, or printed. - WYSIWYG EDITOR

Presenters Wanted

FONT 1

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.



Presenters Wanted

FONT 2

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.



Is It Time To Start Using An Adblocker?

*From the Ask Leo Newsletter
<https://askleo.com>*

Advertising on the Internet is broken. The result is that it might be time to think about adblockers, and supporting your favorite websites in other ways.

One of the positions I've held for as long as *Ask Leo!* has been around is that adblockers are fundamentally wrong.

They prevent sites that depend on advertising from making the revenue they need to survive.

Let's be clear about one thing up front: this isn't about greed. This is about survival. Many useful websites exist solely because of the advertising revenue they're able to generate. If

that goes away, the sites go away. Rarely does advertising on small- and medium-sized sites cover more than the basic costs.

If you consider viewing advertisements the "cost" of consuming the content you want for free, then blocking those ads can rightfully be considered theft. You're using the content without paying the price.

That's been my position for years.

But, at the risk of being hypocritical, I'm starting to change my mind. And the advertisers have no one to blame but themselves.

Success is their downfall

My position to date has been that if you don't like the advertisements on a site, then don't visit that site. "Vote with your feet." Go to another site that has less annoying ads, or pay for a site that has as an option to remove ads.

There are sites with useful information that I don't visit, reference, or point people to, simply because the advertising on those sites is so bad.

However, voting with your feet doesn't solve the underlying problem. Because ads are so ubiquitous, so many web sites use the same ad networks, and so many ad networks use the same techniques, it's become nearly impossible to find alternative sites that actually meet the criteria of less-annoying ads.

You can run, but you can't hide.



Manipulation is their downfall

For many years, one of the techniques used by advertisers in the tech space was to make their ads look like download buttons. Visit a site to get the latest download of your favorite image-burning software, and you'll see half a dozen nearly indistinguishable DOWNLOAD buttons, only one of which is the "real" download button you want. The rest? Ads.

My sense is that this has improved somewhat, but the problem remains: ads don't always look like ads. They try to manipulate visitors into thinking the ad is part of the content. This is why it's important to learn to recognize ads.

Manipulation also appears in another guise called "sponsored content". This is content someone *pays* to place on a web site. Sometimes it's obvious, but often it's indistinguishable from the site's own content. What you think is a legitimate recommendation or evaluation of a product may really be an article written by that product's creator. In other words, it might be an ad.

Tracking is their downfall

As long-time readers know, I'm not terribly concerned about the tracking that results in ads "following me" around the iInternet. But I know they concern some. To many, it feels like an invasion of privacy, and to others, it just feels creepy.

The problem, of course, is that the technique works. Ads that follow people are effective. And because they're effective, more and more advertisers and advertising networks use the technique to sell more of whatever it is they're selling. As more and more advertisers use it, more and more ads start "following" you. Even though it really is benign, the result is that the internet feels creepier and creepier.

As an advertising-supported site, it also means I have even less control over what ads appear here. The ads that "follow" you might have nothing to do with technology, or anything I've ever even heard of. You may see ads here for all manner of things, for good or bad.

Malware is their downfall

Honestly, the final straw breaking my adblocking back is malware. It doesn't happen often, but we've definitely heard of situations where an ad isn't an ad at all, but rather a conduit for installing malware on your machine.

This can happen for either of two reasons:

- An advertising network, or the software it uses to display ads on your machine, gets hacked into displaying malicious ads.
- An advertising network has insufficient safeguards in place, and advertisers are unintentionally allowed to display ads that are malicious.

The reason this concerns me is not because it's common — it's not — but that it's almost completely out of your control.

I've long taught that you can't get into trouble if you only visit reputable sites. But now, if that site happens to use an ad network that's somehow compromised, that's simply not true. And there's no way to know beforehand.

My Ask Leo! compromise

As a website owner, I know adblockers are inevitable, and in the face of malware, they're more and more difficult to argue against.

If you visit *Ask Leo!* with an adblocker turned on, in place of the ads I normally use to pay for the site from Google's Adsense program, you'll see a static image asking you to consider becoming a patron to help support the site.

I know other sites — particularly news sites — get more aggressive, often showing a pop-up to visitors using an adblocker. I've seen a handful go so far as to actually block access completely if you're using an adblocker.

How do I know this?

Because for the last few months I've been test-driving an adblocker.

What adblocker to use?

I really, really, wanted to be able to use Privacy Badger from the Electronic Frontier Foundation. As its name implies, it's focused not on ad blocking, but on maintaining your privacy. Its approach is heuristic, meaning it looks for website behavior that looks like tracking and blocks it. As it turns out, there's a high degree of overlap between advertising and tracking techniques, so it functions as a relatively effective ad blocker as well.

Sadly, it's pretty close to an everything-blocker or everything-breaker. The problem is that Privacy Badger is quite aggressive, and many techniques used to detect tracking are valid for other purposes as well. For example, a technique I use here on *Ask Leo!* — to speed up the site by using a content delivery network — is detected as tracking by Privacy Badger. As a result, visiting *Ask Leo!* would result in a jumbled mess on your screen.

Yes, you can whitelist things, but so many sites break, and it's such a frustrating exercise to try and figure out what to whitelist (would you know to whitelist med.askleomedia.com and img.askleomedia.com to get *Ask Leo!* to work?), Privacy Badger is simply a non-starter for the average computer user.

Give it a try if you like, but expect lots of things to break.

What I've settled on is uBlock Origin (not to be confused with uBlock). Technically, it's not "just" an adblocker; in their words, it's "... a wide-spectrum blocker ... default behavior of uBlock Origin when newly installed is to block ads, trackers and malware sites". It's a browser add-on that runs quietly in the background as web pages are displayed. It's lightweight, has a good reputation, and doesn't break too much.

Unfortunately, it does break some things. But the mechanism to whitelist, or temporarily whitelist, a site in order to make it work is simple and effective.

(Click the uBlock Origin icon in the browser, and then click an “off” icon.) And it’s quite configurable.

More to the point, after running it for a couple of months (in Google Chrome, but there are versions for FireFox as well) my browsing experience was not seriously impacted, except for the occasional “we see you’re using an adblocker” message. Rarely did I need to whitelist a site I was visiting, and that was easy and quick.

Where do we go from here?

Internet advertising is broken.

Between sites plastered with ads, the perception of privacy issues, misleading and manipulative advertisements, and the risk — however small — of malware, it’s hard to say anything else.

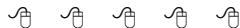
Advertising has also enabled the varied and rich experience that is the Internet today. Without ads, a significant number of the sites you rely on daily — perhaps even most of them — simply wouldn’t exist.

As a website owner, I have to be pragmatic to keep my site and service afloat. Ads allowed *Ask Leo!* to come into being, and ads in some form will certainly be here as long as I can envision. At the same time, I’m not taking any draconian actions against those who choose to use adblockers — I get it, I really do. In my case, I simply explore other ways to pay the bills, be it books, services, or direct patronage.

As an Internet user, I’ve become much less averse to financially supporting the sites and services I use that give me value. Be it subscriptions, purchases, or patronage, I believe it’s important to put my money where my mouth is. If advertising is broken — and it is — then these same sites and services are almost certainly dealing with the same kinds of issues I am.

I know how the sausage is made, and it takes money to turn the crank.

This article is republished, with permission, from the [Ask Leo! Newsletter](#).



Picture Management - Something We All Need

by Phil Sorrentino, The Computer Club, Florida

<http://scccomputerclub.org/> / PhilSorr.wordpress.com philssorr@yahoo.com

With the advent of the smartphone, a camera is always only an arm’s length away, because your smartphone is probably in your pocket or your handbag. And having the camera so available means we take, and hence have, many more pictures (and maybe even videos). With this increased number of pictures comes the problem of organizing or managing them so we can access them when they are needed. The picture may not seem so valuable if you can’t find it when you want to show it to someone.

I think it was very innovative and forward thinking of Steve Jobs at Apple to include a camera in the original iPhone. Today, the camera is probably the second most important reason why you have a smartphone (the first being the fact that the smartphone can make phone calls).

The cameras, built into smartphones, have really improved in the short time that smartphones have been in use. Originally the cameras might have only been a mega pixel or so in picture size (the original iPhone had a 2-mega pixel camera); now the cameras have as many pixels as some professional cameras (the iPhone 7 has a 12-mega pixel camera). And, though the quality of the pictures from the earlier smartphones may have been only acceptable, the quality of the pictures from many of today’s cameras is only surpassed by pictures from very expensive professional cameras.

So, with all these pictures, we naturally look for help to organize them, and fortunately help comes in the form of digital picture management software. Photoshop Elements is a

possible solution with a price tag of around \$80.

Picasa has been a very popular, free, picture editor and management software application. Unfortunately, Picasa, which was available from Google since July 2004, was discontinued February 2016. Google is recommending its cloud-based “Google Photos” be used in place of Picasa.

“Google Photos” is not the same as “Photos” that you will find on a Windows 10 computer in the “All Apps” list. The Windows 10 Photos App is a photo viewer that provides minimal picture management. Google Photos is a cloud-based App that encourages you to upload your pictures from all of your devices to the cloud, where the photos are stored and managed. Then, using the Google Photos App, you can view all of your photos from any device with an Internet connection.

Google gives you 15GB of storage space (you can purchase more if needed), and then (with a setting) gives you a choice of “High Quality (free unlimited storage)”, or “Original quality (full resolution that counts against your 15GB quota)”. The “High Quality” selection produces “Great visual quality at reduced file size”, as stated on the website. (This 15GB of storage appears to be separate from your “Google Drive”, if you have one, because there is a setting to “Show Google Drive photos and videos in your Photos library.”)

The photos.google.com website states “the photos are automatically organized and searchable”, and “the photos can be organized by people, places, or things”. The website tutorial also indicates that you can “Easily edit and share” your photos. So, it seems like once your photos are uploaded to the cloud, they can be organized by your needs, and any photo can easily be accessed.

Another free photo management application is Photo Gallery, which was available from Microsoft but unfortunately had its support ended January 10, 2017. If you have a copy of Photo Gallery you will see that it can organize your pictures, but it also has a few neat features.

One of these features is “Panorama”. Photo Gallery allows you to create panoramas from (overlapping) pictures that were sequentially taken of a wide scene. The picture interfaces are stitched together, resulting in a wide panorama of the original scene. If the lighting was consistent and the overlap was easy for the software to find the edges, with a little cropping the results were quite good. Panorama stitching is not that unusual a feature, but Photo Gallery also has a feature called “Photo Fuse”. This feature allows you to correct many unwanted things in a picture. To use this, you have to take multiple pictures of a scene that has some unwanted movements, like people moving in the background, or children turning their heads at inconvenient times.

Once you have a number of images (maybe 5 or 6) of basically the same scene, you’re ready to use Photo Fuse. Photo Fuse lets you choose which picture will be used for a given selectable rectangular area. If there is a person in the background in picture 1 but not in picture 4, then you can use picture 4 for the rectangle that shows the unwanted person. Similarly, you can customize many rectangles with sections from other pictures. When you are finished, all the unwanted people or unwanted movements may be eliminated. This type of feature is typically only found in some very expensive software packages. It reminds me of “Layers” in Photoshop Elements, but “Photo Fuse” is not nearly as powerful. Photo Gallery may still be available from the Microsoft Download site, but without support from Microsoft it may not be something you want to be dependent on. But if you have a copy, Photo Gallery certainly has a lot of really great features, and is fairly easy to use.

There still are a few free Photo Editing and Management applications available. A quick check finds Zoner Photo Studio Free, StudioLine Photo Basic Free 3, Jet Photo Studio 5, XNView MP, Faststone Image Viewer, and DigiKam, but I haven’t tried any of them yet. A quick look at the features makes me wonder if there will be a replacement for Photo Gal-

lery. If you are willing to spend a few dollars, there are a few possibilities that may be a good replacement. Photoshop Elements, Magix Photo Manager, and Acdsee come to mind.

Keep in mind that Picture Management software typically does not rearrange or move your picture files or folders. Picture Management software just acts as a lens viewing all the pictures in the picture folders that you let it use, usually with an “Include folders” setting. So, in my opinion, the only way to really manage your photos is to create a hierarchical arrangement of folders using File Explorer and then manage that set of folders

yourself, again using File Explorer. And then let your Photo Management software use all of those folders. Depending on the size of your picture collection, this may take a big effort and a firm commitment to create, organize and maintain the folders. But whatever method or software you decide on, do it quickly, because your picture collection is probably increasing, even as we speak.

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



How Do I Protect Myself From My ISP?

*From the Ask Leo Newsletter
<https://askleo.com>*

There's a lot of misinformation, and even paranoia, relating to keystroke logging and privacy. Much of it, however, is based on small kernels of truth.

This is a multi-part question and pertains to computer forensics. Specifically, locating those mysterious, deeply hidden files that (supposedly) contain your computer's entire history – every keystroke ever made. Accessing those files. Viewing the contents. Deleting the contents. Understanding how a utility like DBAN can “find” and nuke them, but I as the computer owner can't. And finally, if every keystroke really has been recorded to some hidden file, how come it doesn't wipe out available space on my hard drive?

This is a relatively persistent family of questions that comes around from time to time, particularly in times of concern about individual privacy.

There are several misconceptions in the question.

Further, those misconceptions are based on kernels of truth, which means I can't just say “that's wrong”; instead, it's more a case of “it's not

like that — it's like this”.

Let's see if I can clear up the confusion. To do so, we'll need to talk about keystrokes, loggers, hidden files, erasing files, and *really* erasing files.

Recording keystrokes

There is no hidden file containing every keystroke you've ever typed on your computer.

Pragmatically, if every keystroke were being recorded somehow, there's no way, after all this time, it would still be some kind of secret. We'd be hearing about a lot more successful prosecution of cyber criminals, along with a plethora of lawsuits regarding various privacy concerns.

So, no, there is no hidden permanent record of *every keystroke* recorded by the operating system, drivers, or other official software.

However, there are kernels of truth.

As I write this, every keystroke is being recorded to create this article. That's what we would expect. The documents you create, the emails you send, are all a type of record of your keystrokes.

- Every keystroke is temporarily recorded in keyboard buffers. These allow you to “type ahead” while your computer is doing something else. Once the computer’s ready again, everything you typed suddenly appears. Those buffers range anywhere from a few bytes to several thousand, and as they fill up, older keystrokes are removed to make room. Normally they’re in memory only; turn your computer off, and they’re gone. There may also be one in your actual keyboard, but again, turn the power off, and it’s gone too.
- Keyboard buffers may be written to disk-swap files as the operating system manages memory between all the running programs. If you turn off your computer, the swap file remains, and could be recovered and examined for “interesting” contents. It’s easy to get the swap file, but *extremely* difficult to make sense of its contents. There’s also no predicting what the swap file will contain, or for how long.

It’s also worth remembering that all bets are off if you have malware installed.

Keystroke loggers

Keystroke loggers, or “keyloggers”, are a form of malware that hackers use to gain access to your various usernames and passwords. A keystroke logger is malicious software that, as its name implies, records every keystroke and sends it off to the hacker over the Internet. Once it’s been sent, of course, there’s nothing you can do.

I often hear from people who wonder if one technique or another will somehow “bypass” keyloggers, allowing them to log in safely without the keylogger logging anything. The answer is no. There are two important points to realize about keyloggers:

- A keylogger is “just” malware that happens to log keystrokes.
- As malware, a keylogger can also

do anything else it wants — including logging whatever fancy trick you use to try to bypass it.

From my perspective, malware, including keystroke loggers, is the only practical reason for concern when it comes to keeping any record of your keystrokes.

The good news is that since keyloggers are “just” malware, then the techniques you already have in place to avoid malware will keep you safe.

Hidden files

The amount of data that would be collected by recording every keystroke is no longer a reason it couldn’t be done.



Let’s say you’re a prolific typist, and you type 100,000 keystrokes a day (that’s over three keystrokes every second for a solid eight-hour work day). In a year, that adds up to 36 megabytes of data. Keep your computer for 10 years, and that’s 360 megabytes. On today’s hard disks, that’s next to nothing. You’d probably never notice it.

So are all your keystrokes being written to some hidden file? No.

But there is a kernel of truth here: there are hidden files on your machine.

- There are files marked with the “hidden” file attribute. The oper-

ating system itself often uses this attribute to hide some of its own files from casual observers. The system swap file, typically in the root of the C: drive, is a common example. These are easy to find, since both Windows File Explorer and the Command Prompt “DIR” command can be instructed to display files that have this “hidden” attribute.

- There are often “hidden” partitions on the hard drive. Many computer manufacturers, as well as recent versions of Windows, now use them to store their recovery data. These are easy to see with Window’s built-in disk management tool or any partition

management software.

There’s an obscure form of hidden data possible in files stored on a disk that’s formatted using the NTFS file system. NTFS supports something called “alternate data streams”. Not many people know about this feature, and it’s difficult to detect if it’s been used.

Lastly, there are techniques, such as VeraCrypt’s “Hidden Volume”, which use various approaches to hiding data within other data.

As you can see, there’s a potential for a lot of hidden information on your PC.

But none of them contain every keystroke you’ve ever typed.

Deleting files

We also need to understand how files are deleted, because that can result in a different type of “hidden” file: remnants of previously deleted files.

When a file is deleted, its contents are not actually removed. Instead, the space the file formerly occupied is marked as “available” for another file to be written to later. Until that overwrite actually happens, the original deleted information is still there.

This is the basis for many undelete and data-recovery utilities. It's also why most of those utilities recommend you stop using your disk if you accidentally delete something, so as to avoid overwriting the deleted area with something new. So just deleting something doesn't necessarily mean it's immediately or completely gone.

The article “How Does Secure Delete Work?” goes into this in more detail, including the steps to take to make sure that your deleted files' data is really gone.

Which brings us to DBAN.

Drive wiping utilities

The utility you mention, DBAN, doesn't locate files at all.

But, once again, there's a kernel of truth: it erases your files — all of them.

How? It securely erases *everything*. Without paying any attention to what's stored on it, DBAN overwrites the entire contents of a hard disk — every sector, whether in use or not.

Should You be Worried?

In my opinion, as long as you follow the fundamentals of keeping your computer safe on the Internet, the answer is clearly no. As I've said before, unless you're doing something illegal or secretive, you're just not that interesting.

When the time comes to dispose of hardware such as your disk drive, tools

like DBAN are a fine way to make sure your private information is sufficiently erased.

This article is republished, with permission, from the [Ask Leo! Newsletter](#).



A Good Computer House Cleaning

by Len Nasman, Bristol Village Computer Club, OH

www.bvres.org bvclub@bvres.org

As you use your computer, some things get a little messy. For example, each time you uninstall or update an application, an area of memory called the registry is changed.

When you install some programs, they might add a feature that keeps part of them running in the background. An example might be when you install software for a printer, a background program might be installed that keeps checking printer use and pops up a reminder to order supplies. If you get too many unnecessary things like this running in the background, it will slow down your computer.

Also, whenever you visit websites, they make copies of things and store them in so-called temporary files. The files are called temporary, but they remain there until you remove them.

For example; Internet Explorer saves things in a number of categories. BTW, if you have more than one user that can login to your computer, these

files are saved separately for each different user. Each web browser program (Internet Explorer, Chrome, Firefox) maintains a similar list of files.

In any case, it is a good idea from time to time to clean up the registry, stop unnecessary background programs, and remove temporary files. A useful free program to keep your computer tidy is CCleaner. This program has options for taking care of the issues mentioned earlier.

If you have already installed CCleaner, jump to the update section.

Installing CCleaner

When you go to the CCleaner download web page you will see three different versions offered.

<https://www.piriform.com/CCleaner/download>

After you select the Download option, a dialog box will pop up that lets you save the install file.

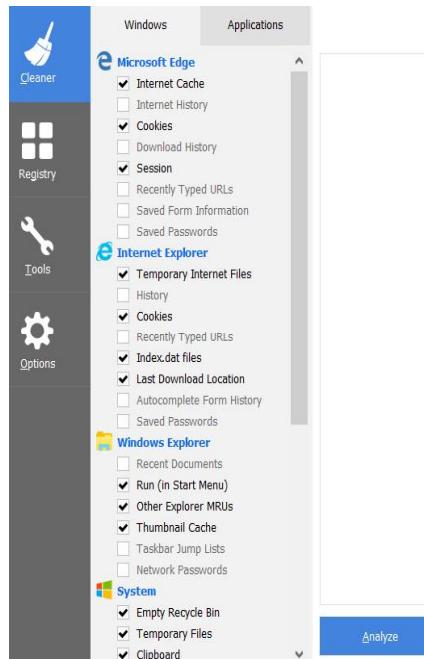


The install program will open an install window that might have a check box that, if not unchecked, will install other software. Watch out for this. Select the Custom install option and select how you would like CCleaner to be installed.



Using CCleaner

There is a vertical list of options on the left side of the CCleaner window. The Cleaner option allows you to toggle different things to be removed. For example, if you do not want to remove Cookies, or browsing History, select the check marks to toggle the options off. Near the top of the window is a button that has a similar list of options for other applications.



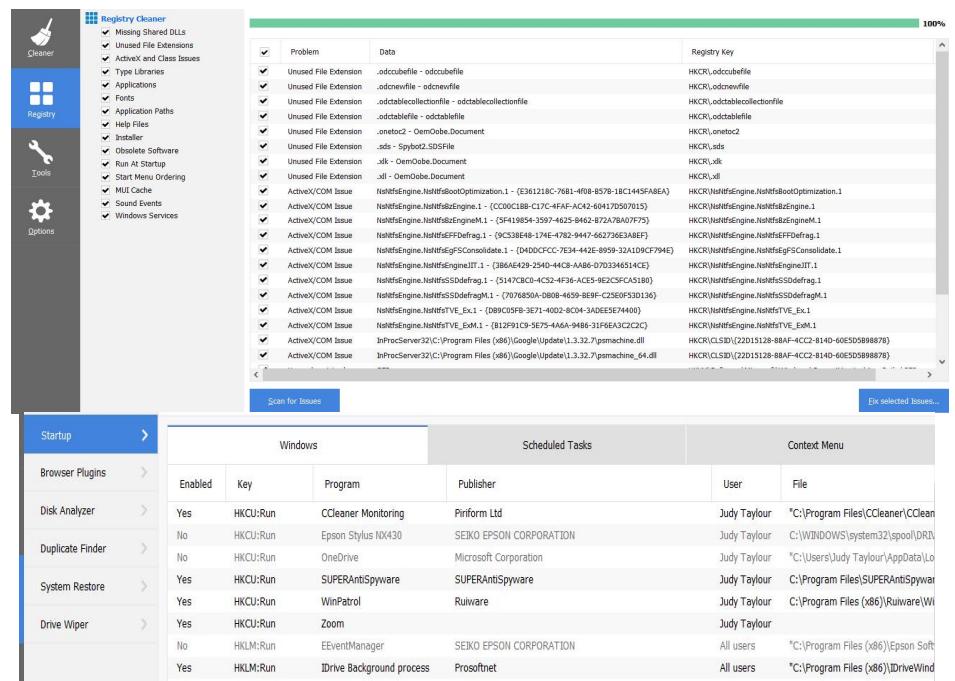
If you select the Analyze button near the bottom of the CCleaner window, the program will go through the motions without deleting any files. It will, however, give you a report of what will be removed if you select the Run Cleaner but-

Cleaning Registry

When you select the Registry button in CCleaner, you will see two buttons near the bottom of the Window; Scan for Issues and Fix selected issues.

After you have scanned for issues, you will see a list of things the system detected.

If you then select the Fix selected issues button, you will have the option to backup registry changes. Select yes, and then select Fix All Selected Issues option. It is a good idea to repeat the Scan for Issues option until no issues are found.



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

Drones

by George Harding, Tucson Computer Society
www.aztcs.org georgehardingsbd@earthlink.net

I am amazed at the rapid development of the drone industry and the uses to which drones are being put.

Here are a few of the uses so far:

Package delivery: UPS has stated that their plan is substantially complete and will be introduced soon. It has limits for weight, distance delivery address.

Weddings and other similar events: Drones make it easy to record events that are important to family and friends. Viewpoints can include those that an individual cannot do.

News gathering: Many TV channels now use drones to access accident sites and other events of interest to a broadcast.

Site inspection: Viewing construction as it is occurring is valuable to identify problems that may not otherwise be seen. Checking electric and other similar supports can be done with drones without the necessity of having a human climb up a tall tower to inspect.

Agriculture: Drones are used to check field sizes, crop progress and limited spraying, without the dangers associated with crop duster planes.

Police and Fire observation of sites: This saves the need for a human to be in danger.

Security: Drones can inspect premises to identify risks that would be difficult for a human to do quickly and economically.

Safety: Australia has started using drones to survey beach areas for sharks.

Photography: Drones can deliver video and photographs in high resolution of just about anything: Nature, colorful situations, traffic, events and more.

Search and rescue: Drones can access locations that are difficult or dangerous during severe storms, earthquakes, and hurricanes to find survivors and help with rescue.

With the FAA promulgation of Rule 107,

individuals and business can operate drones with assurance that they will not run afoul of government oversight. Some of the rules are:

- Line of sight. The operator must keep the drone in sight at all times.
- Night operations not allowed. Maximum ground speed of 100mph and maximum altitude of 400 feet.
- Drone must be lighter than 55 pounds.
- Operations in commercial air space (airports, etc.) only with ATC permission.
- Preflight inspection of drone required.
- Remote pilot airman certificate required. Pilot aeronautical knowledge required, unless the operator of the drone already has a pilot license.
- Registration of drone required. Over 500,000 drones have been registered already.

Intel has made some interesting innovations in drone technology. They have available a ready-to-fly drone that incorporates their Real Sense technology. It allows the drone to see conflicts ahead and move to avoid them. So, instead of flying into a tree, its drone can see the tree and maneuver around it to keep on track for the target. See intel.com/aero for more info.

Intel is also working on the ability to control more than one drone at a time. At **Interdrone 2016**, a video was shown of a demonstration of controlling 100 drones at a time over the opera house in Sydney, Australia. It showed the drones circling around in what appeared to be a random pattern and ended with an oval of drones in the sky with "Intel" in blue drones in the center. Most amazing!

The drone market is exploding as to usage. There are many uses today for drones, but the future will open up many more, things we have not even thought of today.

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



Is Amazon Prime Worth It?

by Jim Cerny, Sarasota Technology User's Group, FL
www.thestug.org jimcerny123@gmail.com

Gradually as technology progresses faster than our minds can catch up to it, on-line shopping is becoming more and more the trend. If you check the contents of Santa's sleigh this year you will find many items are in Amazon shipping boxes! Even Walmart and other stores are allowing ordering on-line and then picking up your completed order at their store – all for free. But Amazon is taking a big piece of the Walmart customer pie, and the big plus with Amazon "Prime" is FREE delivery anywhere!

Amazon has great prices too. And although the cost to become an Amazon "Prime" member is \$100 a year, (ouch, you say!?) even if you purchase a modest number of products it can easily be worth the price.

Shopping for things to buy comes often in our house, not just at the Holidays, and we make note of prospective purchases at the stores. We write down (or make a note in our iPhone) the make, model, and price of the items we are interested in. Sometimes we take a quick photo of the item on the shelf

with the price tag. Then we look up the same item on Amazon.com. Almost always the price is the same or in many cases cheaper. Once we know what we want, we can save selected items in our "shopping cart" on-line and continue to compare multiple items before purchase. For our extended family, which is literally in all parts of the country, the benefit is definitely the "free shipping" – being able to send any Amazon purchase anywhere in the country with NO shipping costs. If it is a gift, they will even gift-wrap it for you and send a message for a small fee. So, if you do any shipping of gifts Amazon Prime could be a big help to you. Just your savings on gas for going to the stores and then to the post office or shipper could make up the \$100 annual fee.

There are other benefits to Amazon Prime which may be of interest to you. Amazon keeps adding enhancements and options to get your business, and many could be fun or helpful for you

as well. Here are just a few of them:

- Movies on-line or downloaded to your device. Many are free with your "prime" membership.
- Music on-line with fun playlists of different styles or by artist or album.
- Free photo storage.

Groceries and pet supplies delivered to your door for a flat \$5 fee.

Please go to Amazon.com or use Google to search for "How to use Amazon.com" and watch a video to learn all the possibilities. Many of these added services may be available only within a limited area or zip code.

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



Windows 10 Tips And Tricks: Improve Battery Life

by Leti Labell, Potomac Area Technology and Computer Society
www.patacs.org

Windows 10 has a battery saver feature that can help you if your laptop's battery is running low. When your battery power drops below a level you set, it will throttle back the background processes to limit your power consumption and save your battery. It works better than power-saving modes in previous versions of Windows.



To enable this feature, open the **Start menu** (click the Windows Key).



Select **Settings** in the lower left corner of the start menu.



Select **System** (Display, notification, apps, and power).

Then select **Battery**.

Check the box next to "Turn battery saver on automatically if my battery falls below:" and move the slider to the percentage you prefer. The default is 20%, but you may want it higher or lower than that.

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



If your e-mail or mail address changes, please e-mail:
secretary@SterlingHeightsComputerClub.org

Did You Know?

Did You Know? The SHCC web site has a "Lingo" page, describing some tekkie terms.



VISIT THE SHCC WEB SITE:

[http://
www.SterlingHeightsComputerClub.org](http://www.SterlingHeightsComputerClub.org)

Member Ads

Ads 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.



If your dues are paid in the month they are due, as shown on the invoice the club sends, you automatically get an extra month of membership. This policy has been in effect for many years but newer members may not be aware of this "free month" policy.

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



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.

Google's Earth Pro is now free to download and use. (Requires Google Chrome web browser.) Travel the globe to specific destinations, or let yourself be taken to random locations.

<https://www.google.com/earth/>

File associations and related file types (also known as file 'extensions'). Know the types of files on your PC to reduce the chance of infections.

<https://pc.net/extensions/>

Homeland Security warns of "BrickerBot" malware that destroys unsecured Internet-connected devices.

<http://www.zdnet.com/article/homeland-security-warns-of-brickerbot-malware-that-destroys-unsecured-internet-connected-devices/>

How to create a bootable live USB drive with multiple Linux distros.

<https://beebom.com/how-create-bootable-live-usb-multiple-linux-distros/>

How to clear your Google search history.

www.howtogeek.com/208751/how-to-delete-your-google-search-history-on-a-pc

How to speed up Chrome and fix errors without reinstalling it.

<https://www.howtogeek.com/305521/how-to-speed-up-chrome-and-fix-errors-without-reinstalling-it/>

How to transfer music albums to your personal computer.

<http://www.komando.com/tips/393601/how-to-transfer-albums-to-your-personal-computer>

Skip the login screen! Here's how to boot Into Windows directly without using a password.

<http://www.makeuseof.com/tag/skip-login-screen-heres-boot-windows-directly/>

Robocalls flooding your cellphone? Here's how to stop them.

<https://www.nytimes.com/2017/05/11/smarter-living/stop-robocalls.html>

By default, Mozilla's Firefox browser downloads/install its 32-bit version on 32- and 64-bit Windows systems. Here's how to upgrade Firefox 32-bit to the 64-Bit version without a reinstall.

<http://www.intowindows.com/how-to-upgrade-firefox-32-to-64-bit-without-reinstall/>

How to run Android on your computer.

<https://www.howtogeek.com/howto/22665/run-android-on-your-netbook-or-desktop/>

World War 1 in photos.

<https://www.theatlantic.com/projects/world-war-i-in-photos/>

What is "ethical hacking"?

<http://www.computersciencezone.org/what-is-ethical-hacking/>

Free flight simulator that runs in your web browser -- no downloads or plugins are required. Fly over 20 aircraft anywhere in the world in 'photo-realistic' landscape. Perhaps print out (or memorize) the list of keyboard/mouse instructions first, *before* you crash.

<http://www.geo-fs.com>

Discover castles and manor houses around the world and medieval life within.

<http://www.castlesandmanorhouses.com>

How to stop autoplaying videos in Firefox.

<http://www.laptopmag.com/articles/stop-autoplaying-videos-firefox>

How to prevent WannaCrypt attacking -- some tips to defend against this ransomware. (Also, check with the provider of your security software to determine its level of protection.)

<http://www.iobit.com/en/tips-how-to-prevent-wannacrypt-attacking-80.php>

"WannaCry" ransomware decryption tool released, providing the *possibility* to unlock files without paying the ransom.

<https://thehackernews.com/2017/05/wannacry-ransomware-decryption-tool.html>

"WannaCry" 2.0 ransomware is more aggressive than the first version. Article includes short video demonstration of a WannaCry ransomware infection.

<http://thehackernews.com/2017/05/wannacry-ransomware-cyber-attack.html>

What you need to know about torrents: A beginner's guide.

<https://www.lifewire.com/what-to-know-about-torrents-3483014>

How to spot fake torrent file downloads -- Don't get fooled into downloading viruses & codec scam files!

<https://www.lifewire.com/how-to-tell-if-a-movie-torrent-file-is-fake-2483619>

Torrents 101: How torrent downloading works.

<https://www.lifewire.com/how-torrent-downloading-works-2483513>

MP3 is dead, long live AAC (Advanced Audio Coding), the new standard for audio and video downloads to mobile phones.

<https://www.engadget.com/2017/05/12/mp3-is-dead-long-live-aac/>

Many PC users are not comfortable trusting cloud storage services. Here's what to know about keeping your data safe with home cloud storage.

<https://www.maketecheasier.com/keep-data-safe-home-cloud-storage/>

How to prepare the perfect external hard disk for storing movies.

<https://www.maketecheasier.com/perfect-external-hdd-for-storing-movies>

Use extreme caution using QR code apps on smartphones, and stay safe from "QRishing" scams.

<http://www.thewindowsclub.com/qrshing-scams-qr-code-smartphone>

How to find and remove duplicate files in Linux.

<https://www.howtogeek.com/201140/how-to-find-and-remove-duplicate-files-on-linux/>

Here's what happens when you install the top 10 download.com offerings. ("Caution" is the important word.)

<https://www.howtogeek.com/198622/heres-what-happens-when-you-install-the-top-10-download.com-apps/>

FREE Microsoft eBooks and guides to download, including: Windows 10, Office 365, Office 2016, Power BI, Azure, Windows 8.1, Office 2013, more.

<https://blogs.microsoft.com/mssmallbiz/2016/07/10/free-thats-right-im-giving-away-millions-of-free-microsoft-ebooks-again-including-windows-10-office-365-office-2016-power-bi-azure-windows-8-1-office-2013-sharepoint-2016-sha/>

Linux desktop operating system: A beginner's guide.

<http://www.techrepublic.com/article/getting-up-to-speed-with-the-linux-desktop-operating-system/>

How to recognize and avoid phishing scams.

<http://lifehacksthatwork.com/recognise-avoid-phishing-scams>

Free download of operator and service manuals for many computer, printer, and tablet devices.

<https://www.manualslib.com>

A list of portable apps (some very popular and useful).

<http://www.makeuseof.com/tag/best-portable-apps/>

Definitions of computer and Internet terms.

<https://pc.net/glossary/>

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

C heck 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.

