

Bits of Bytes

Newsletter of the Pikes Peak Computer Application Society, Colorado Springs, CO

Volume XL

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Issue 12



The Prez Sez

by John Pearce, President, P*PCompAS

The election of officers for 2021 will be held at the December meeting. The slate of officers for 2021 is in this newsletter. Nominations will be accepted prior to voting.

I am proposing two changes to the Standing Rules. The first change eliminates dues in 2021. The second change is simply housekeeping to eliminate the reference to WebBoard which went away maybe 10 years ago.

A minimum of 10 people is needed to attend the December meeting to have a quorum for conducting the election and Standing Rules changes. I am hopeful there will be at least ten people because attendance in each of the last five months has been enough for a quorum.

Please remember to do the things you already know to do with social distancing (6 ft apart), wearing a mask, washing your hands, using hand sanitizer when you can't wash with soap and water, and keeping your hands away from your face. ☺

Officer Elections for 2021

This is the Slate of P*PCompAS Officers for 2021. Nominations of eligible and willing candidates will be accepted from the membership prior to voting at the December membership meeting.

Next P*PCompAS meeting: Saturday, 5 December 2020

No presentation has been announced.

**President: John Pearce
Vice President: Cary Quinn
Treasurer: Charles Harris
Secretary: Greg Lenihan
Board of Directors: AJ Whelan**

Proposed Changes to Standing Rules

by John Pearce, President, P*PCompAS

I am proposing to change the Standing Rules to waive dues for the 2021 year. The group has sufficient funds in the money market account to pay the APCUG dues for 2021 and the annual Volunteers' Luncheon if it is held later in the year. In addition, I am proposing a change to eliminate the reference to WebBoard. P*PCompAS operated the WebBoard on behalf of APCUG and they ceased to support it many years ago. The revised rules are below.

Please be prepared to vote on these proposed changes at the December meeting.

1. Annual Dues. Effective 1 September 2018, annual dues shall be \$1.00 for an individual membership **except that dues for the year 2021 shall be waived.**

6. The Society shall maintain an active Web Site, on the APCUG server, and a Web Board for the benefit of members and endeavors to perform public services, such as supplying expertise to small businesses and home users. ☺

Meeting Minutes

by Greg Lenihan, for the P*PCompAS Secretary

After AJ was able to stop the music mysteriously coming from his PC, President John Pearce was able to start the 7 November 2020 meeting a few minutes after 9:00 am. There was a motion to approve the October minutes and the minutes were approved.

OFFICER REPORTS

Vice-President Cary Quinn said we would have an APCUG video for today's presentation, and was in the process of downloading a tips and tricks video.

Treasurer Chuck Harris had a statement from the day before that showed we had \$3229.68 in savings and \$71.29 in checking.

Membership Chair Ann Titus had nothing to report.

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Officers

President: John Pearce
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Vice President: Cary Quinn
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Secretary: Phyllis Butler
phylbutler@aol.com

Treasurer: Chuck Harris
charris7525@gmail.com

Staff

APCUG Rep/Webmaster: Joe Nuvolini

Barista: David George

Drawings: Cary Quinn

Editor: Greg Lenihan

Librarian: Paul Godfrey

Membership: Ann Titus

Committees

Audio: A.J. Whelen

Hospitality: Ilene Steinkruger

Programs: Cary Quinn

Publicity: Cary Quinn

Nominating: Vacant

Board of Directors

Peter Rallis

Paul Godfrey

Ann Titus

Harvey McMinn

Jeff Towne



Zoom screenshot of the 7 November 2020 membership meeting



Zoom screenshot of the 21 November breakfast meeting.

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P*PCompAS welcomes any comments, letters, or articles from members and non-members alike. Please send any articles to the editor (see last page for address). The editor reserves the right to reject, postpone, or edit for space, style, grammar, and clarity of any material submitted.

What Are the Sys Rq, Scroll Lock, and Pause Break Keys on My Keyboard?

Chris Hoffman, reprinted with permission from [HowToGeek.com](https://www.howtogeek.com)

Original article at: <https://www.howtogeek.com/125315/htg-explains-what-are-the-sys-rq-scroll-lock-and-pausebreak-keys-on-my-keyboard/>

Glance at your keyboard and chances are you'll see a few keys you never use near the top-right corner: Sys Rq, Scroll Lock, and Pause / Break. Have you ever wondered what those keys are for?

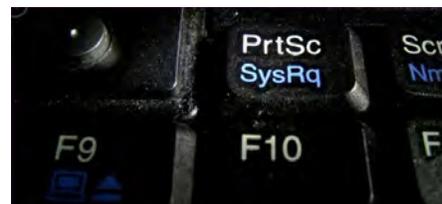
While these keys have been removed from some computer keyboards today, they're still a common sight — even on new keyboards.

Sys Rq

The SysRq key (sometimes Sys Req) is an abbreviation for System Request. These days, keyboards generally combine the SysRq key with the Print Screen (or Prt Scr) key. To actually invoke the System Request key, you'd need to press Alt+SysRq.

This key was meant for invoking low-level operating system functions. It behaves differently from other keys on your keyboard — when you press this key, your computer's BIOS generates a special interrupt that tells the operating system the key was pressed. The operating system can listen for the event and do something special.

These days, most operating systems and programs will simply ignore this key-press event. One notable exception is Linux, where the ["Magic SysRq key"](#) can send commands directly to the Linux kernel to help recover from crashes and debug the operating system.

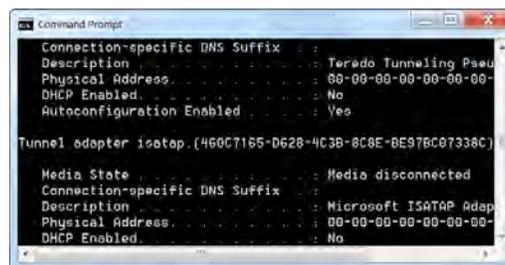


Scroll Lock

Scroll Lock is a toggle, just like Caps Lock and Num Lock — on some keyboards, Scroll Lock may also have a dedicated light.

Scroll Lock was designed for older, text-mode environments, which had a small amount of available screen space. Pressing the arrow keys normally moved the text-entry cursor around, but people wanted a way to scroll up and down through the contents of a text screen.

When Scroll Lock was enabled, the arrow keys would scroll the contents of the screen instead of moving the cursor.



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Meeting Minutes (Cont. from page 1)

Newsletter Editor Greg Lenihan announced the next deadline as 21 November.

Librarian Paul Godfrey had nothing to report.

Hospitality Chair Ilene Steinkruger was not present.

APCUG Rep Joe Nuvolini was not present.

Board of Directors Chair Peter Rallis not present. Paul Godfrey was the next ranking board member present and he had nothing to report.

OLD BUSINESS:

John Pearce is still looking for someone to assume the duties for

the Nominating Committee to solicit for officers next year.

NEW BUSINESS:

As self-appointed Nominating Committee Chair, John Pearce announced a slate of officers to be voted on at the December meeting. They are: President: John Pearce, Vice-President: Cary Quinn, Secretary: Greg Lenihan, and Treasurer: Chuck Harris. New BOD member will be AJ Whelan. There were no additional nominations from members.

The Volunteer's Luncheon will most likely be postponed from January until sometime later in the year.

ANNOUNCEMENTS

The next social breakfast Zoom meeting will be 21 November at 9 am.

Our next membership meeting is on 5 December.

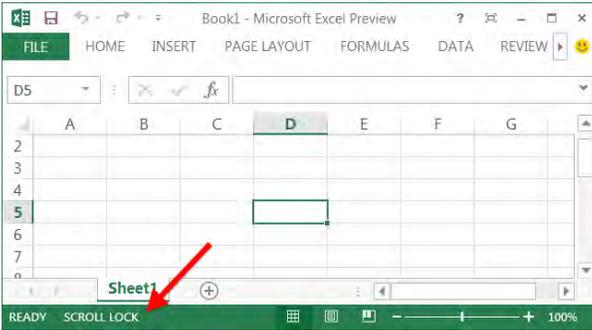
PRESENTATION

Cary Quinn showed two videos. The first was called "I Just Scammed a Scammer," by Graham Stephan, where scammers appear in comment sections of web pages, many posted by bots, with get rich fast schemes. The second video was from APCUG called "Keep Your Personal Computer Running Like New," by Avram Grossman. ☺

Keyboard Keys (Cont. from page 3)

With modern graphical environments that include scroll bars and mouse wheels, this behavior is no longer necessary – in fact, most programs will ignore the Scroll Lock key entirely.

One notable program that continues to obey Scroll Lock is Microsoft Excel. When Scroll Lock is enabled in Excel, pressing the arrow keys will scroll the viewing area without moving the cursor.



Pause/Break

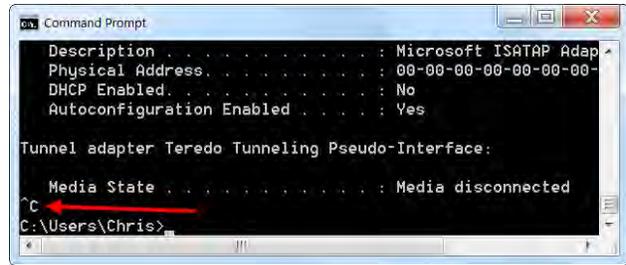
The Pause and Break keys were used in DOS and still function in the Command Prompt today.

The Pause key is designed to pause a text-mode program's output – it still works in the Command Prompt window on Windows. When you press Pause, the output scrolling down your screen will stop. Depending on how the program is written, this may also pause the program's execution. Press another key after pausing and the program will continue.

The Pause key can also pause many computers during the BIOS boot-up process. This can allow you to read BIOS POST (power-on self-test) messages that flash on your screen for a short time.



The Break key can be used to end DOS applications – pressing Ctrl+Break terminates a DOS application. This shortcut functions similarly to Ctrl+C, which is also used to terminate applications in command-line environments.



These keys are old and not commonly used – if you wondered who was using them, the answer is very few people. With the exception of the Scroll Lock key in Microsoft Excel, there's very little the average person can do with these keys. In fact, it's surprising that they're still so common on keyboards today. ☺

Google To Delete Photos and Documents

Google has announced it will end free unlimited high-quality photo uploads, and the company says it will delete content if anyone isn't active, or over their storage limit for two years.

This new policy won't go into effect until June 1, 2021, so your two-year countdown does not begin right now.

Google has a 15 GB limit with their free tier, but that can change in the future. On top of including all uploaded photos towards your limit, starting on June 1, Google will also count any new Docs, Sheets, Slides, Drawings, Forms, or Jamboard files towards your limits. Files that are e-mailed to you could easily contribute to going over your limit.

However, if you need more storage, you can pay for it. There are several tiers of paid plans, with the biggest offering being 2 TB of storage for \$99 a year or \$10 a month. ☺

Free Online Photography Courses Over the Holidays from Nikon

From 23 November until 31 December, Nikon will offer all 10 of its photography lessons for free at <https://www.nikonevents.com/us/live/nikon-school-online/>. These lessons normally cost \$15 to \$50 each.

You can stream the courses from the Nikon website, although you need to sign up for a free account first. If you or a friend is getting a camera for Christmas, take advantage of these free lessons. ☺

The Windows RESET Button: A Good Idea?

By Bob Rankin, <http://askbobrankin.com>, published through the APCUG

A despairing AskBob reader says, "I've managed to mess up my Windows PC to the point of no return. I give up, and now I just want to reset it to its factory-fresh condition and start all over. How do I do that?" Read on and I'll tell you how, and why you might NOT want to do this...

How To Reset Your PC To Factory Defaults

Most Windows PCs can be restored to their fresh-out-of-the-box condition. The very rare exceptions are systems cobbled together in the basement of someone who takes shortcuts without regard for the long-term welfare of his customers. If you didn't buy your system out of a car trunk in a Walmart parking lot, it's safe to say you can restore it to factory defaults.

A properly configured Windows system contains a hidden, protected hard drive partition that holds an image of the factory-fresh system settings and software. Restoring that image to the main drive partition resets your system to its factory-fresh condition. Windows includes a special software routine that does system resets automatically, eliminating human error. It's that simple, in theory.

But think about what's missing from a factory-fresh system: software or digital products you've paid for, free software you've downloaded, irreplaceable documents, photos, videos, and more that you created or stored on that drive; all the registry settings that have been tweaked and tuned over the years to make your system "just right" for you.

In practice, you probably don't want to lose everything that you have added to your hard drive since you acquired that system. So before resetting to factory defaults, be sure to copy documents, photos, and anything else you want to keep to another location. That could be an external hard drive, a USB flash drive, or cloud storage. Popular cloud storage options are Google Drive, Microsoft's OneDrive, Apple iCloud, and Dropbox.

Another consideration, which looms larger the older your system is, is that of Windows Updates. The factory-default image file contains the version of Windows that was the latest as of the date Windows was installed on the hardware. That date may be months or years

before the system was sold to you. You will need to spend many hours downloading and installing perhaps hundreds of Windows updates after resetting to factory defaults.

But Wait, There's More... (a lot more)

All of the third-party application software (paid or free) you now use will vanish when the system is reset. Be sure you have the CD or installation files for any apps that you want to re-install, and the registration keys if necessary. If the installation files you have are old, plan on spending time downloading and installing critical updates specific to that app. Don't forget that your printer and other peripherals will need to be reinstalled as well.

Once that's all done, you can restore your documents, photos and other personal files from the backup you made. Finally, redo all of the system settings to your liking. This includes your Windows theme, mouse settings, display settings, and any customizations or extensions you've applied to Windows Explorer, Internet Explorer, Firefox, Chrome and other software.

Hit The RESET Button?

If all of these caveats don't deter you, here is how to reset your Windows system to its factory defaults:

Windows 10 has a straightforward "reset" button. To find it, press and hold the "Windows" key and "A" button on your keyboard. Click "All Settings" on the resulting screen, followed by "Update & Security" and then "Recovery." Click the "Get Started" button under "Reset this PC." You can also type "Reset this PC" in the Windows search box to get there.

A new window will appear, offering options to "Keep my files" or "Remove everything." The first option keeps your documents, images, etc. The second option removes them. Both options remove all installed software except Windows itself. The "Keep files" option, which gives you a fresh copy of the Windows operating system, minus the software (or malware) that was causing problems may be just the ticket.

Similarly, on Windows 8, you'll find Refresh and Reset options by going to Settings > Update and Recovery > Recovery. See my article [3 Ways to Repair Windows 8](#) for details.

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Thank Ben Franklin—For the Library, That Is

By Phil Sorrentino, The Computer Club, Florida, www.sccccomputerclub.org, [Philsorr \(at\) yahoo.com](mailto:Philsorr@yahoo.com)

Ben Franklin is remembered for many things political and technical. I'll leave the politics to the history buffs, but on the technical side, he invented the lightning rod, bifocal glasses, the Franklin Stove for home heating, and the odometer. And most important to us lately, he laid the groundwork for the public library system.

Libraries have changed a lot since Franklin's time, but the idea of a source of information or entertainment to be loaned out for free, to members, has endured for almost 300 years. Initially, books were probably the only things being loaned out, but nowadays the library loans out eBooks and audible books, as well as movie DVDs, music CDs, and TV shows, and the always popular classically bound books, many of which are mercifully in Large Print. Although initially and up to just a few years ago, a person had to visit the library to borrow an item, today we have computers, tablets, and phones that allow us to borrow an item without ever having to show up at the library. (However, you probably have to go once just to join the library and get a library card, though that, recently, may have even migrated to online activity.)



OverDrive Icon



Libby Icon

Today, most public libraries subscribe to a service called OverDrive to catalog and manage their electronic offerings. When you borrow an electronic item, you download a license file to your computer. The license file is an .acsm file type,

for those of you interested in the details. So, borrowing an electronic item entails downloading the item's license file to your device and then using the appropriate reader/viewer/player to read/view or play the electronic item. And don't worry about returning the item because after the borrowing period ends, the item will automatically be returned to the library (No late fees, pretty neat, don't you think).

You can even return the item early if you finish it before the borrowing period ends; just look for a button to "Return" the book. Fortunately, all of the steps required to borrow and return an item are done for you by an app that you initially download to your device. Once it is downloaded, you then use it to borrow the electronic items. When you first use the app to connect you to your local library system, you will establish an account with an account name (usually your library card number) and a password or PIN. This is now the account you will use to borrow electronic items. Two of these apps are Overdrive and Libby, both of which are used to borrow eBooks and audible books. Overdrive has been around for a while and allows you to borrow eBooks and audible books so you can then read them with a reader like the Kindle reader. Libby is newer. Not surprisingly, Libby is made by the same company that makes OverDrive—the OverDrive Company. Libby not only helps you borrow the item, but it provides a reading environment, so you can borrow and read eBooks or listen to audible books, all within Libby. (So, you don't need the Kindle reader if you use Libby.)

eBooks and Audible books are typically shown in a library-like view, and you will have

Continued on page 7

RESET Button (Cont. from page 5)

Windows 7 does not have a "reset" button. Instead, you must re-install Windows manually. Typically, your Windows installation or recovery files will be on a CD that was supplied with your computer at the time of purchase, or you may have

purchased a Windows installation CD. Insert the CD, restart your computer, and follow the instructions to begin the process.

On the Windows 10 Recovery screen, there are some other options you may wish to explore. Among them are running a troubleshooter, restoring from a backup, going back to an earlier version of Windows 10, or starting

fresh with a clean Windows installation.

As I mentioned earlier in this article, restoring your computer to "factory fresh" condition can involve a lot of work after the fact to get back to good, because all of your software, personal files and settings must be restored. I recommend it only as a last resort. ☺

How to Remove PUPs and Other Unexpected Things From Your Computer

By Leo A. Notenboom, <https://newsletter.askleo.com/>; published under the Creative Commons License

Ending up with random software on your machine you never wanted in the first place is annoying as heck.

So-called **PUPs** (for Potentially Unwanted Programs, although there's rarely any "potentially" about it) are tools, settings, utilities, browser toolbars, extensions, and more software installed on your computer as a result of installing something else. PUPs are rarely even related to what you're installing.

I'll talk a little about prevention, but first, let's

walk through the steps I recommend when you suddenly realize you've been saddled with software you didn't ask for and certainly never wanted.

To remove PUPs (and other unwanted, unexpected software), start with an Uninstall via the settings app, then run Malwarebytes free version, then run AdwCleaner. This sequence catches the most common PUPs. You can also simply restore to a backup taken prior to the PUP's arrival. Remember:

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Thank Franklin (Cont. from page 6)

an opportunity to borrow any available item if the book's license has not been checked out. If you find a book that you are interested in, typically you can borrow the book just by clicking on "borrow." The book (license file) will be downloaded to your device and you will be able to read or play it with an appropriate reader or player, for the amount of time specified by your library. Just like physical books, these electronic books can only be borrowed by one person at a time. If an item is checked out by someone else, the item will show up as not available and you will see an option to place a hold on the item. Once you place a hold on an item, it will be added to the "hold" section of your account. When it becomes available, you will typically get a "book available" notification email. Just as an example, an eBook borrowed from the Hillsborough County library, using Overdrive can be kept for 14 days.

Many of us may remember Hoopla, Fran & Ollie, or was that Kookla, Fran & Ollie. (Well, that probably gives away the fact that I grew up in the 1950s near New York City.) But the important point here is that Hoopla is a new free Streaming service being offered by many library systems, in particular the Hillsborough County Public

Library Cooperative. (HCPLC). Many of us are probably familiar with borrowing eBooks and audible books from the library using Overdrive or Libby on our mobile devices (phones and tablets), but Hoopla goes a step beyond and provides free streaming of much of the library's video inventory. Hoopla is a cloud-based digital media platform that enables users to instantly borrow entertainment and educational material using the Hoopla app on a tablet or smartphone. Think of Hoopla as pay-per-view or video streaming, where your public library is picking up the cost.

Hoopla is a website (Server) and app (Client for mobile devices) that allows you to borrow movies, TV (shows & episodes), and Music selections. The website is hoopladigital.com and the App looks like this:



All streaming services are vying for your time and most are also after your money, but Hoopla is free. Hoopla is more like a library

than a "blockbuster" store (for those of you who can remember that far back). All you need is a library card and you can get an account. Once you have an account, you can borrow movies, TV shows, music CDs, eBooks, audible books, and comics (cartoons). When you borrow these items, like borrowing items from any library there are some restrictions. Libraries have different limits, so check with your particular library system. Libraries may limit the number of items borrowed per month, or the amount of time you may have access to the item. HCPLC allows you to borrow 20 movies per month. When you borrow a movie, you can have it for up to 3 days. CDs borrowed via Hoopla are good for 7 days and audiobooks are good for 21 days. A quick look at HCPLC revealed over 12 thousand movie titles, over 2 thousand TV show episodes, over 45 thousand CD titles, over 180 thousand eBooks, over 51 thousand audible book titles, and over 10 thousand comics (cartoons) listed. With that much free streaming from the library, you may not need all those costly streaming subscriptions, though I doubt if Hoopla will replace any of the popular streaming sites like Netflix or Amazon. It is probably just a free adjunct, but if funds are tight it may just be a good free alternative. ☺

Remove PUPs (Cont. from page 7)

always choose custom installation to avoid PUPs in the future.

Start with a backup

The steps we are about to take have a small chance of causing problems.

Whenever that's the case, I strongly recommend you take a full [image backup](#) of your machine before you do anything else. That way, you'll have that backup to restore should anything below go wrong.

Uninstall the somewhat well-behaved

A number of unexpected toolbars and other applications that show up on your machine are "relatively" well behaved. By that I mean they are somewhat easy to uninstall using official mechanisms.

Start in the Windows Settings app, and click on **Apps**.

Look for the item by name. Sometimes this can be tricky, as some applications intentionally use obscure names to make them more difficult to remove. The well-behaved items we're looking for here should be relatively clear. Look for names including the words "toolbar" or "extension," in particular, as those are some of the browser-behavior-altering pests often putting us in this scenario.

Click on the item you want to uninstall and click **Uninstall** when it appears.

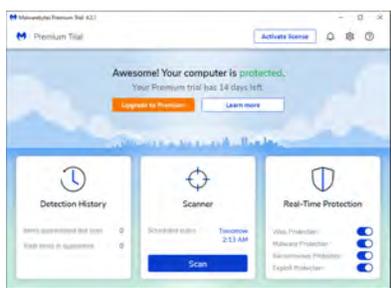
We'll do the next steps even if it appeared to work, because in many cases there will be traces left over. Sometimes those traces can reinstall the [PUP](#).

Run Malwarebytes

If you don't have it already, download and install the [free version of Malwarebytes Anti-Malware](#).

Important: The free version is, at first, a free *trial* of their paid version. It will nag you to register/upgrade/license the product. *You do not need to do so.* Simply use the product as described here. After a period of time (two weeks, at this writing) the trial will revert to the purely free version. It may continue to nag you, but it will keep working.

Run the program, if it hasn't started automatically, and click **Scan** to perform a scan.



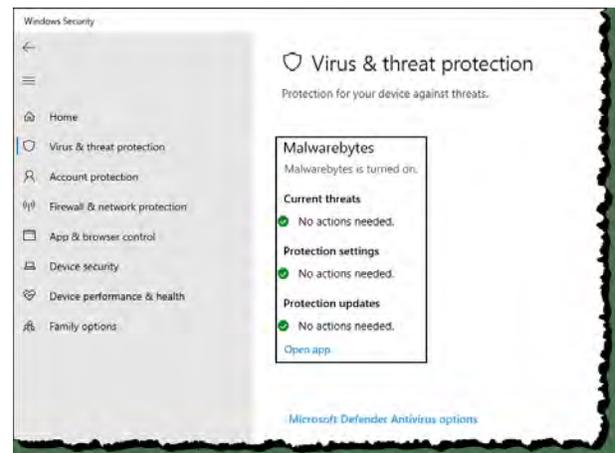
The Malwarebytes scan may take a while.

When it's complete, you'll get a notification if you have [malware](#) or PUPs.

Even if no actual malware is detected, potentially unwanted programs may still be found. Malwarebytes will show you the entire list. You can review the list if you like, but in general, the next step is to simply quarantine everything. You will likely need to [reboot](#).

A clean scan is your goal.

Note that you may want to uninstall Malwarebytes, as its trial version will have disabled Windows Defender in Windows Security. This isn't really a problem; you shouldn't have two fully-featured security solutions running at the same time, and Windows Security knows to step aside when Malwarebytes is installed. That being said, if you don't plan on keeping Malwarebytes, you'll probably want to remember to uninstall it when all is said and done. If you don't, after the trial period it will step aside; Windows Security will resume full real-time protection, and Malwarebytes will remain available for on-demand scans.



It's possible Malwarebytes may be unable to remove some PUPs. If that's the case (or even if it's not), I want you to take one more step.

Run AdwCleaner

AdwCleaner is perhaps best [downloaded from our friends over at BleepingComputer.com](#). (AdwCleaner was purchased by Malwarebytes in 2016, but remains a separate tool.)

Speaking of being careful, remember to avoid advertisements that say "Download" or "Free Download." Those are *not* the programs you want. The button that I used simply read, "Download Now @BleepingComputer."

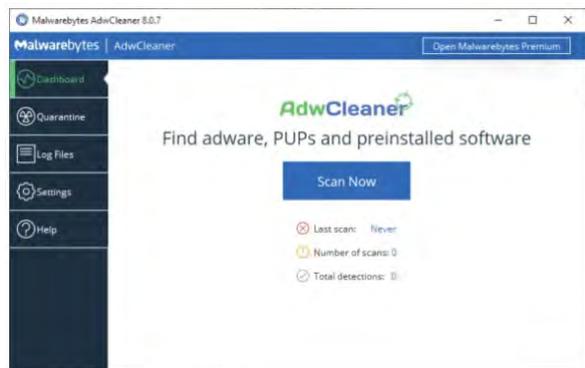
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Remove PUPs (Cont. from page 8)

AdwCleaner has no install. Once downloaded, simply run it, and answer **Yes** to any [UAC](#) prompt.



Also click **I agree** to any licensing terms agreement. Click **Scan Now**.



Once the scan is complete, AdwCleaner will present its scan results.

If you're not certain about what AdwCleaner finds, go ahead and let it clean up anything you don't recognize by clicking **Clean & Repair**. (It first warns you that all programs should be closed.)

The ultimate removal

Even with the tools I've outlined and other tools that may also be used or come along later, there's a real possibility that the unwanted software will *still* not be completely or successfully removed. This often happens when the PUP is new and the security-software makers are catching up to the latest tricks.

It's worthwhile to consider restoring to a [recent backup image](#). Restoring will make these things go away *every single time*.

If you have a backup image of the machine as it was prior to these pests getting installed, you can simply restore your machine to that image, and they're gone. No fancy tools are needed, and you needn't just hope that it works. Restoring to a prior backup works *every time*.

Presuming, of course, you have one.

Prevention

PUPs and related pests arrive in several different ways, but the most common method is by being "offered" to you when you [install](#) or even [update](#) something else.

The offer is often hidden and defaulted to "Yes." The technicality is, by choosing this default (or not unchecking the appropriate box) when you install a program you've downloaded, you're *requesting* this other software be installed.

Don't do that.

Whenever you install or update any software — *even software you've purchased or already have installed* — always choose the "Custom" or "Detailed" option. Choose whatever option is *not* the default option.

Then pay *very close* attention to every option you're presented. If it offers you something that is not clearly related to the software you want, *uncheck it*. If it offers to change your search page, *uncheck it*. If it offers to install some toolbar, *uncheck it*.

You get the idea.

The bottom line is, if you're not careful when you install software — even software from reputable vendors — you may end up with things you never expected or wanted.

There's nothing "potentially unwanted" about it. ☺



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Coming Events:

Next Membership Meeting: 5 December @ 9 am, via Zoom

Next Breakfast Meeting: 19 December via Zoom

Newsletter Deadline: 19 December

Check out our Web page at: <http://ppcompas.apcug.org>

