

Bits of Bytes

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

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October 2015

Issue 10



The Prez Sez

by Cary Quinn,
President,
P*PCompAS

Many of us look forward to the antics of Halloween night at the end of October. For the beginning of the month we can also look forward to learning how to better fight the monsters of ID theft and cyber-crime; and how using the latest technology helps protect us in the real world with a presentation from the El Paso County Sheriff's Office.

See you then on Oct 3rd 2015, the same day that in 1985 the Space Shuttle Atlantis made its first launch. (Mission STS-51-J). ☺



Meeting Minutes

by Toni Logan,
Secretary,
P*PCompAS

President Cary Quinn called the 5 September 2015 meeting to order at 9 am. He thanked the members for attending on a holiday weekend. He reminded us that coffee is free for 1st time guests and a donation for the rest of us.

OFFICER REPORTS

The President had nothing.

The Vice-President was not in attendance. The program for today is a follow-up mini presentation. A representative of the Sheriff's office will be here next month.

Membership Chairwoman Ann Titus asked if there were any updates to our information to let her

Next P*PCompAS meeting: Saturday, 3 October 2015

The El Paso Sheriff's Office will discuss computer security.

know.

Editor Greg Lenihan said that the deadline for the next newsletter is Saturday, September 19, 2015.

WebMaster Joe Nuvolini said that the website was up.

Ilene Steinkruger reported that she had e-mailed the newsletter from Focal Press. The contact had changed.

OLD BUSINESS

There is an exhibit about the Waldo Fire at the Pioneer Museum.

NEW BUSINESS

The next meeting is on Saturday, October 3, 2015. The meeting was adjourned.

AROUND THE ROOM

The audio for the Around the Room is on the website.

PROGRAM

There was a very informative presentation by Cary Quinn on keeping your wireless network working well and how to check it out.



Cary Quinn giving the presentation at the September meeting.

DRAWING

Digital Images book—Cary Quinn
Wallet—Phyllis Butler
Adobe Photoshop 7 book—Bob Blackledge
Microsoft Office 10 book—Ray Weikart ☺

In Memorium



Norris Steven Jordan
March 12, 1945 - September 2, 2015

Our group regrets the loss of former member Steve Jordan in September. Steve and his wife Deborah would come to our meetings and ask our group many thoughtful questions. A few years back, they hosted a picnic for our group at their home. Our condolences go out to the Jordan family.

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P*PCompAS

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Nybbles and Bits

by John Pearce, P*PCompAS



The Wi-Fi network at my house works well although there are places where the signal strength is poor. Recently, my computer and I have been banned from the counter in the kitchen where the wireless signal is good. Most of my computer equipment is relocating to a spare room (originally intended as a bedroom) where there is no Ethernet port and the wireless signal is poor. I still have several pieces of equipment that are not wireless but that could be resolved with a 802.11 Wi-Fi interface if the wireless signal in the spare room was good.

I mentioned my spare room problem to the chief technical wizard where I work. He mentioned power line Ethernet and handed me a pair of Netgear Powerline AV200 adapters along with a CDROM. These were leftovers that had been taking up shelf space in the storage closet for who knows how long and he was glad to give them to me. If you are not familiar with it, power line Ethernet uses the electrical wiring in your home or office to transmit Ethernet data.

The AV200 units are based on the first HomePlug AV standard. They have two power prongs so they are single-input, single-output. According to the documentation, these particular units have a maximum speed of 200 Mbps per second although the HomePlug AV standard supports up to 600 Mbps. I have just two units, however you can create a network with multiple units, as long as all units have the same encryption key.

Installation was really simple. Plug in one Powerline unit near the router; connect from the unit's Ethernet port to a vacant port on the router. Plug in the second unit in the spare room; connect to the computer's Ethernet port; installation complete. It was really cool to have an Internet connection in the spare room with so little work.

With the easy part done, it was time to read the manual. I skipped over the installation section and started reading about security issues. It seems it is possible for the data on the power line to travel outside your home or office, especially in apartment or office buildings. Netgear recommends turning on security to encrypt the data on the power line. To enable security, I chose to load the Netgear Powerline Utility program from the CDROM, write down the password from the back of each unit, assign a name to each unit and configure the Powerline Utility with these details. With that completed, enabling security took all of ten seconds.

The link speed between my Powerline units varies from 90 to 140 Mbps per second. Below is a screen shot taken while writing this article. It shows 120 Mbps transmit and 125 Mbps receive. Even the 90 Mbps speed is better than the 43 Mbps which is typical for wireless-N in the spare room.

Newer units based on the HomePlug AV2 standard have three

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Amazon Underground Offers Paid Apps for Free

Published with permission from Ira Wilsker, Golden Triangle PC Club, columnist for The Examiner, Beaumont, TX

WEBSITES:

<http://amazon.com/underground>
<https://www.amazon.com/gp/feature.html?ie=UTF8&docId=1003016361>
<http://www.amazon.com/Amazon-com-Amazon-Underground/dp/B004GJDQT8>
<http://www.ecommercetimes.com/story/82440.html>
<http://www.dailymail.co.uk/sciencetech/article-3217042/How-thousands-Android-apps-FREE-Amazon-Underground-offers-paid-games-without-app-purchases.html>
<http://techcrunch.com/2015/08/26/amazon-underground-is-an-android-app-store-with-only-actually-free-apps/>
<http://www.greenbot.com/article/2976413/android-apps/amazon-underground-fights-back-against-freemium-with-app-and-game-giveaways.html>
<http://abcnews.go.com/Technology/amazon-underground-offers-thousands-dollars-free-apps/story?id=33356677>
<http://mobile.pcmag.com/software/59247-amazon-underground-offers-apps-that-are-actually-free>

Amazon, the online marketing powerhouse best known for its general merchandise, groceries, digital books, and streaming media has now entered a somewhat new market. While Amazon has had an online app store since 2008, with hundreds of thousands of paid and free Android apps, Amazon recently announced a new Android app and a feature on its website offering a wide selection of normally paid apps for free; according to Amazon, eventually more than ten thousand normally paid apps will be available for totally free download, including free future updates. Not so strangely missing from the competing ubiquitous Google Play Store, this new app with the moniker “Amazon Underground” is available directly from Amazon by connecting to amazon.com/underground from the Android device. This new Amazon app combines features from the traditional Amazon shopping app as well as the existing

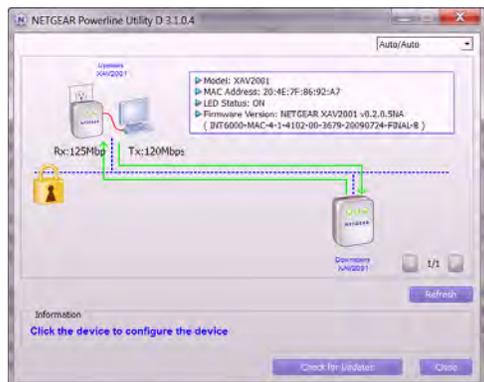
Amazon App Store, but also provides the user with access to the expanding catalog of otherwise “premium” (paid) apps labeled by Amazon as “Actually Free.”

Amazon is able to offer these otherwise paid apps for free because Amazon has come up with a creative way to compensate the developers for the revenue lost by giving away otherwise revenue generating apps. Amazon pays the developers a fee based on the actual use of the apps by the users, and plans on offsetting the cost by attracting more customer to its other more traditional products. Another nice feature of these “Actually Free” apps is the fact that in exchange for direct compensation from Amazon, the developers also waive the typical in-app purchases, as well as the traditional upfront charges to use their products. Since there are generally no costs involved whatsoever to download and use these otherwise paid apps, the Android user now has the ability to download potentially thousands of premium utilities, games, and other apps that otherwise would have borne a significant cost. Amazon claims that each Android user can access over \$10,000 worth of apps “Actually Free” using its new Amazon Underground service. Google is apparently unhappy with this potentially strong competition from Amazon, and does not list the Amazon Underground app on its Google Play Store, thus requiring the download of the Amazon Underground app directly from Amazon.

In order to allow the Android phone or tablet to download the Amazon Underground app directly from Amazon, many users may have to modify a security setting on their device; this is accomplished by opening “Settings,” then “Security,”

Nybbles (Continued from page 2)

power prongs and support Multiple-Input, Multiple-Output, similar to the 802.11n and 802.11ac Wi-Fi standards. These units are capable of speeds up to 1.2 Gbps, however that speed is not typical. ☺



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Amazon Underground (Cont. from page 3)

then “Unknown Sources - Allow installation from non-official apps.” While this is a legitimate security setting intended to prevent the user from installing possibly dangerous apps from illicit unofficial sources, it can also prevent the installation of apps from other legitimate sources such as Amazon. When “on,” this otherwise legitimate security setting only allows apps downloaded from the official Google Play Store to be installed, giving Google a potentially unfair competitive edge vis a vis Amazon. It has been rumored in the blogs that this otherwise legitimate security concern may also restrict competition, which has supposedly attracted the attention of federal regulators, but there has been nothing official published, and there is no confirmation, only unsubstantiated speculation that this may be happening. It is up to the user to decide to allow or prevent apps to be installed from other than the Google Play Store; in order to install the free apps downloaded from Amazon Underground, this setting needs to be on “allow.”

Users may find the selection of apps available from Amazon Underground that are “Actually Free” to be quite attractive. Popular games, including several of the “Angry Birds” series, which normally generate revenue for the developers through the “in app purchases” of coins or other game tokens carry the following statement when downloaded from Amazon Underground: “This app and its in-app purchases are actually free.” Productivity and utility apps, such as the Microsoft Office compatible commercial office suites, including “Docs to Go” and “OfficeSuite Professional 8,” state in the product description that not just is the app totally free to download (many are in the \$10 range on the Google

Play Store), but states in the product details section “In-App Purchasing (Free with Amazon Underground).” For those of you (or your kids) who may have run up large bills while playing many of the popular games, you may find the same games that you have been playing and paying for are shown in the Amazon Underground app store as “Actually Free,” and what were “in-app purchases” are now free!



While the Amazon Underground apps can be automatically sent to the connected device from the browser-based versions of the basic Amazon website, most Android users will probably use the integral Amazon Underground app to directly download and install the listed apps. The new Amazon Underground app, which incorporates all of the other more traditional Amazon products and features plus apps into this single app, has a slightly different appearance than the better known Amazon shopping app, which still remains fully functional as a shopping app, but lacks the Underground connection. While the icon for the more traditional Amazon shopping app is the well known blue and white shopping cart, the new Amazon Underground

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John Pearce arrived early to set up the table arrangement with the absence of Nuvo, and a crowd of digerati soon came in to join in small talk and a big breakfast. The breakfast is on the 3rd Saturday of every month at the Country Buffet.



Amazon Underground (Cont. from page 4)

icon is a black and orange shopping cart design that simply says “Amazon.” When downloaded and installed, the new Amazon Underground app and icon replaces the older Amazon shopping icon.

To quickly find the latest listings of the “actually free” apps, open the Amazon Underground app, tap on the three parallel line menu icon on the top left corner of the display to open the detailed menu, then tap the down arrow on the right of the “Apps & Games” line in the menu, and then tap on “Underground Apps & Games.” The screen will now show a series of featured apps and games, divided into self explanatory categories. Among the categories displayed, each of which can be “slid” to the left to display more apps in that particular category, are “Featured actually Free Apps and Games,” “Actually Free Kids Apps & Games,” “Apps & Games Biggest Savings,” “Actually Free Productivity & Lifestyle,” “Top Amazon Underground Apps,” “Recommended for You,” and “All Underground.” On the top right corner of each category is a link that says “See All” which will open another page displaying a lengthy list of all of the “Actually Free” apps under that category.

The category titles are reasonably self explanatory, and do not require any articulation to disclose their contents. In the “Actually Free Kids Apps & Games” are dozens of popular kids games that have also appealed to many adults, including several of the Angry Birds series; I have one adult acquaintance who has been a regular player of one of these Angry Birds games, almost to the point of an expensive addiction; while still somewhat addictive, the exact same game downloaded and installed from Amazon Underground would not bear any of the substantial cost that she has been paying for the same game elsewhere. In her case, the statement on the game app page “In-App Purchasing (Free with Amazon Underground)” would be a big money saver for her, as well as those concerned about their kids racking up large game app bills. While possibly appealing to a more mature audience, the more adult oriented game apps such as the slot machine apps, “Deal or No Deal,” and other similar game apps from Underground can waste just as much time as the same apps downloaded from the Google Play Store, but will not have the associated fiscal costs of playing them, lessening the burden these games can place on

the individual.

I will admit that as attractive as many of the games are, I am not a gamer. The Underground apps that most appealed to me, which I downloaded and installed from Amazon Underground were in the “Actually Free Productivity & Lifestyle” category. Pleading guilty, I had previously been using one of the office utilities that I downloaded from the Google Play Store, but did not take advantage of its advanced features because of the cost of the “In-App Purchases,” which would enable the enhanced functionality of that app, with each additional function costing from \$2 to \$10. After seeing the identical app on Amazon Underground without all of the extra fees, I uninstalled the app from the Google Play Store, and then downloaded the same app from Amazon Underground; I now have the complete functionality of that utility without any additional expense! In this “Productivity & Lifestyle” group are several complete office suites that are fully compatible with Microsoft Office products, PDF utilities, comprehensive photo and video editing suites, map and road routing apps, financial and budgeting apps, weather apps, calendar and task managers, password managers, music synthesizers, workout helpers, and other useful apps.

This is not a short term promotion being offered by Amazon, as Amazon has stated that this new “Underground” service will not just remain available, but will be greatly expanded to offer many more apps than just those currently listed. With hundreds of “Actually Free” apps now available, and potentially thousands more to be added in the foreseeable future, the Google



Play Store may face some serious competition from Amazon Underground in the lucrative market for paid apps. The users of paid apps downloaded from Google

may find the same Amazon Underground “Actually Free” apps which also waive the infamous “In-App Purchase” fees most attractive. Move over Google; there is a new sheriff in town. ☺

The Tip Corner—May 2015

By Bill Sheff, Lehigh Valley Computer Group, Pennsylvania, www.lvcg.org, [nsheff \(at\) aol.com](mailto:nsheff@at.aol.com)

Scams and Viruses

Last month I inadvertently typed in the wrong password for my AOL account, and could not get in. You would think I would go to “Keyword Password Reset,” but for some reason I googled aol help. A site that appeared to be AOL connected me to a tech with an Indian dialect. Although I explained that all I wanted to do was reset my password, he told me that I had a problem and wanted permission to take over my computer to “clean it up.” Brrr! That was close. It seems that more and more hackers are finding ways to get our information. So beware. I then did go to Password Reset and was back in in a matter of minutes.

If you ever discover that your C: drive appears blank and all your icons are missing, don’t despair. Even though your antivirus program has cleaned a virus from your computer, it appears some viruses can leave behind some unwanted results. One such virus is the Windows 7 Recovery virus, which will hide your files in an attempt to make you pay to remove the virus. Try this tip which seems to work.

Click the Start button in the lower left corner of your task bar. Type cmd in the search box at the bottom of the menu and press Enter. If you’re using Windows XP, click Run and type cmd into the Run box.

Then type `attrib -s -h -r c:/*.* /s /d` and press Enter to execute the command. After a few minutes it will finish executing the program. You can then close the command prompt window and check your desktop. The hidden files have been restored. By changing the c: drive to the name of a flash or other drive the tip should work.

Print part of an email or other text?

At a recent meeting the question came up: “How can I print a portion of an email?” Here are a couple of ways of achieving this.

One way is to highlight the section of the email you’d like to print. Select copy and paste to a word document. This method is good if you want to do some editing of the text.

Another method is to highlight what you want, right-click, select PRINT. When the print dialog box comes up, in the “Print Range” box, place a check mark in the box that says “SELECTION.” Finally, highlight what you want, right-click, and select PRINT PREVIEW. Select the “As laid out” option, click the drop-down button, and click ‘As selected on screen.’ You will see only the selected portion of text, ready to print. That will print out just what was highlighted.

Use Google Now for Quick Calculations

Need to calculate a tip. On your Android phone tap the Google Now Widget and tap the microphone or say Okay Google. You can then ask Google to calculate by asking, “What is 18 percent of Forty two dollars?” Google now will then calculate your tip. You can also ask it many other questions such as what is the circumference of the earth?

Removing Duplicate Files

If you are like me, if something interests you, you copy and save it to your computer. Or you work on a project and have a bunch of duplicate files. There are many duplicate file programs available. There are some specifically made

for music files, other for pictures and the old standby text files.

If you have some time and want to clean up some bloat download Duplicate Cleaner. There are two versions: a free and a commercial free. Try the free version before you decide to buy. You might find the free version is more than adequate.

Microsoft Update

In 2014, Microsoft issues an update for Windows Vista, 7, 8 and 8. 1, and then issued a warning for Windows users to uninstall them. The updates with the problems are KB2982791, KB2970228, KB2975719 and KB2975331.

To see if you have them on your computer go to Programs and Features and choose View installed updates and search for the above numbers by typing them in the search box one at a time. If you find one, choose Uninstall. After you have checked for all the above and uninstalled any that you have found, restart your computer.

Some users have reported problems restarting or even seeing the BSOD (Blue Screen of Death). The link has been removed and a fix is probably out now.

Windows Recovery

Fortunately, when Windows 10 comes out (which is free to all Win7 and above operating systems) they will be installing a refresh and rest function which will do away with updates and also the need for recovery images. Not needing the recovery points could save between 4 and 12 Gbs of space. Another nice perk is that you will not have to reinstall updates if you do have to recover your system for some reason.

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10 Quick Ways to Speed Up a Slow Windows PC

By Chris Hoffman, reprinted with permission from HowToGeek.com

Original article at: <http://www.howtogeek.com/228570/10-quick-ways-to-speed-up-a-slow-windows-pc/>

Windows PCs don't have to slow down over time. Whether your PC has gradually become slower or it suddenly ground to a halt a few minutes ago, there could be quite a few reasons for that slowness.

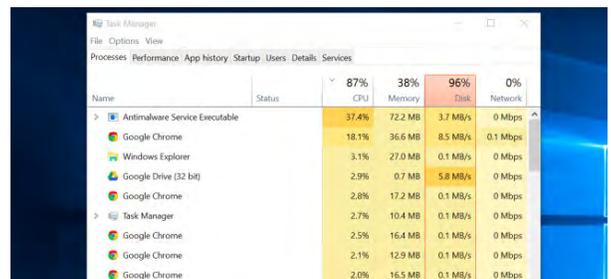
As with all PC issues, don't be afraid to give your computer a reboot if something's not working properly. This can fix quite a few problems and is faster than attempting to manually troubleshoot and fix the problem yourself.

Find Resource-Hungry Programs

Your PC is running slow because something is using up those resources. If it's suddenly running slower, a runaway process might be using 99% of your CPU resources, for example. Or, an application might be experiencing a memory leak and using a large amount of memory, causing your PC to swap to disk. Alternately, an application might be using the disk a lot, causing other applications to slow down when they need to load data from or save it to the disk.

To find out, open the Task Manager. You can right-click your taskbar and select the "Task

Manager" option or press Ctrl+Shift+Escape to open it. On Windows 8, 8.1, and 10, the New Task Manager provides an upgraded interface that color-codes applications using a lot of resources. Click the "CPU," "Memory," and "Disk" headers to sort the list by the applications using the most resources. If any application is using too much resources, you might want to close it normally — if you can't, select it here and click "End Task" to force it to close.



Name	Status	87% CPU	38% Memory	96% Disk	0% Network
Antimalware Service Executable		37.4%	72.2 MB	3.7 MB/s	0 Mbps
Google Chrome		18.1%	36.6 MB	8.5 MB/s	0.1 Mbps
Windows Explorer		3.1%	27.0 MB	0.1 MB/s	0 Mbps
Google Drive (32 bit)		2.9%	0.7 MB	5.8 MB/s	0 Mbps
Google Chrome		2.8%	17.2 MB	0.1 MB/s	0 Mbps
Task Manager		2.7%	10.4 MB	0.1 MB/s	0 Mbps
Google Chrome		2.5%	16.4 MB	0.1 MB/s	0 Mbps
Google Chrome		2.1%	12.9 MB	0.1 MB/s	0 Mbps
Google Chrome		2.0%	16.5 MB	0.1 MB/s	0 Mbps

Close System Tray Programs

Many applications tend to run in the system tray, or notification area. These applications often launch at startup and stay running in

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Tip Corner (Cont. from page 6)

Batch Renaming of Files

For years I used to use Batch renaming when I downloaded my pictures from my camera. But I haven't used it for quite a while until last week when I was reviewing my picture folder and realized I had to get rid of the cryptic file names the camera uses to something a human can understand. It is really very simple. Just highlight all the files, right-click, and choose Rename. You can name it anything and the batch file will number the files for you. Before you start, put the cursor on the first file in the list. This also works with folders.

How to Speed Up Windows

Periodically, it seems like a good idea to discuss speeding up your computer. There are lots of reasons why computers start creeping along, so we will hit on a few of them, and maybe one or two might be of interest to you.

For example Win8. 1. Every once in a while the computer freezes up. I was very upset until I realized what the problem was. Too much stuff going on and not enough memory. I am hoping that Win10 fixes the problem, but until I know for certain let's take a stroll down computer memory lane. So the first thing to do with Win8 is get the start menu back. Too much activity which uses up memory resources of which most computers do not come with enough of. (There are a lot of add

on programs that will do the job such as Classic Shell and 8 Start button, and I believe that Pokki has even been installed on a recent version of 8.)

A computer's memory can only do so much. So the more memory, the more tasks that can be accomplished.

1. Check for viruses, Trojan horses, malware, cookies, root kits, etc. I recommend having CCleaner, Malwarebytes, and Avast on your computer and running them at least every other week.
2. Stop unwanted programs from starting up when you turn on the computer. Click START > RUN, type "MSCONFIG," and click OK or hit Enter. ☺

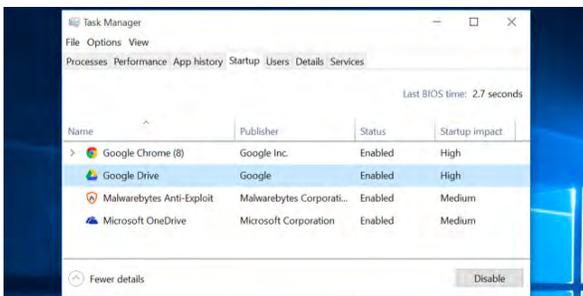
Speed Up PC (Cont. from page 7)

the background but remain hidden behind the up arrow icon at the bottom-right corner of your screen. Click the up arrow icon near the system tray, right-click any applications you don't need running in the background, and close them to free up resources.

**Disable Startup Programs**

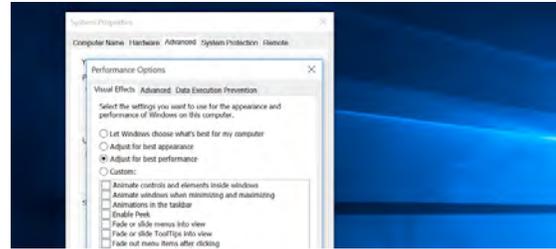
Better yet, prevent those applications from launching at startup to save memory and CPU cycles, as well as speed up the login process.

On Windows 8, 8.1, and 10, there's now a Startup Manager in the Task Manager you can use to manage your startup programs. Right-click the taskbar and select "Task Manager" or press Ctrl+Shift+Escape to launch it. Click over to the Startup tab and disable startup applications you don't need. Windows will helpfully tell you which applications slow down your startup process the most.

**Reduce Animations**

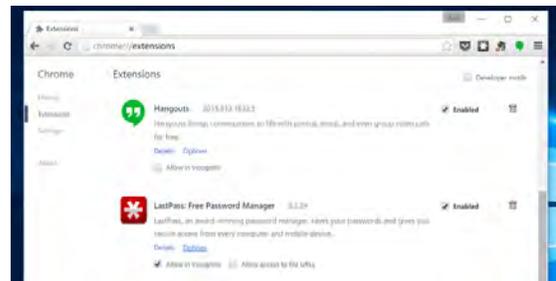
Windows uses quite a few animations, and those animations can make your PC seem a bit slower. For example, Windows can minimize and maximize windows instantly if you disable the associated animations.

To disable animations, press Windows Key + X or right-click the Start button and select "System." Click "Advanced System Settings" on the left and click the "Settings" button under Performance. Choose "Adjust for best performance" under Visual Effects to disable all the animations, or select "Custom" and disable the individual animations you don't want to see. For example, uncheck "Animate windows when minimizing and maximizing" to disable the minimize and maximize animations.

**Lighten Your Web Browser**

There's a good chance you use your web browser a lot, so your web browser may just be a bit slow. It's a good idea to use as few browser extensions, or add-ons, as possible — those slow down your web browser and cause it to use more memory.

Go into your web browser's Extensions or Add-ons manager and remove add-ons you don't need. You should also consider enabling click-to-play plug-ins. Preventing Flash and other content from loading will prevent unimportant Flash content from using CPU time.

**Scan for Malware and Adware**

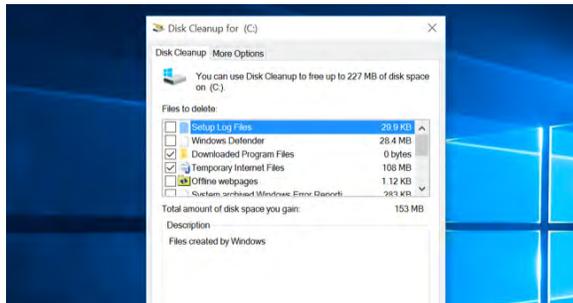
There's also a chance your computer is slow because malicious software is slowing it down and running in the background. This may not be flat-out malware — it may be software that interferes with your web browsing to track it and add additional advertisements, for example.

To be extra safe, scan your computer with an antivirus program. You should also scan it with Malwarebytes, which catches a lot of "potentially unwanted programs" (PUPs) that most antivirus programs tend to ignore. These programs try to sneak onto your computer when you install other software, and you almost certainly don't want them.

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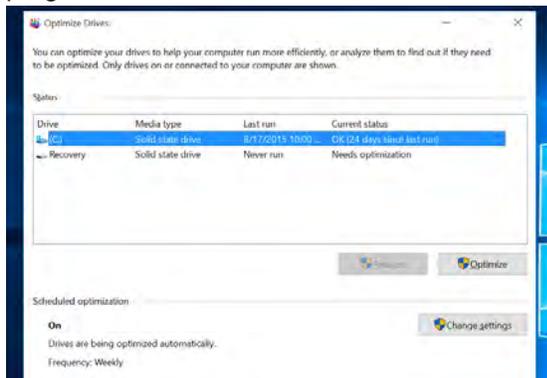
*Speed Up PC (Cont. from page 8)***Free Up Disk Space**

If your hard drive is almost completely full, your computer may run noticeably slower. You want to leave your computer some room to work on your hard drive. Follow [our guide to freeing up space on your Windows PC](#) to free up room. You don't need any third-party software — just running the Disk Cleanup tool included in Windows can help quite a bit.

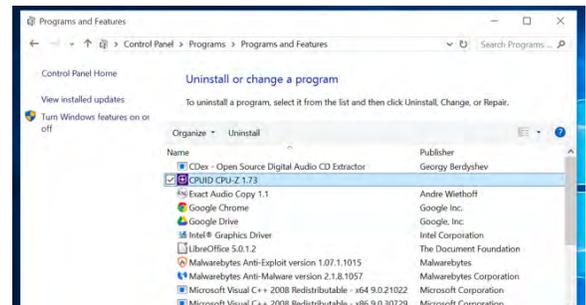
**Defragment Your Hard Disk**

Defragmenting your hard disk actually shouldn't be necessary on modern versions of Windows. It'll automatically defragment mechanical hard drives in the background. Solid-state drives don't really need traditional defragmentation, although modern versions of Windows will "optimize" them — and that's fine.

You shouldn't worry about defragmentation most of the time. However, if you do have a mechanical hard drive and you've just put a lot of files on the drive — for example, copying a huge database or gigabytes of PC game files — those files might be defragmented because Windows hasn't gotten around to defragmenting them yet. In this situation, you might want to open the disk defragmenter tool and perform a scan to see if you need to run a manual defrag program.

**Uninstall Programs You Don't Use**

Open the Control Panel, find the list of installed programs, and uninstall programs you don't use and don't need from your PC. This can help speed your PC up, as those programs might include background processes, autostart entries, system services, context menu entries, and other things that can slow down your PC. It'll also save room on your hard drive and improve system security — for example, you definitely shouldn't have Java installed if you're not using it.

**Reset Your PC / Reinstall Windows**

If the other tips here didn't fix your problem, the one timeless solution to fix Windows problems — aside from rebooting your PC, of course — is getting a fresh Windows installation.

On modern versions of Windows — that is, Windows 8, 8.1, and 10 — it's easier to get a fresh Windows installation than ever. You don't have to get Windows installation media and reinstall Windows. Instead, you can simply use the "Reset Your PC" feature built into Windows to get a new, fresh Windows system. This is similar to reinstalling Windows and will wipe your installed programs and system settings while keeping your files.

If your PC is still using a mechanical hard drive, upgrading to a solid-state drive — or just ensuring your next PC has an SSD — will offer you a dramatic performance improvement, too. In an age where most people won't notice faster CPUs and graphics processors, solid-state storage will offer the single biggest boost in overall system performance for most people. ☺



P*PCompAS Newsletter
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Coming Events:

Next Membership Meeting: 3 Oct, beginning at 9 am (see directions below)

Next Breakfast Meeting: 17 Oct @ 8 am, Country Buffet, 801 N. Academy Blvd.

Newsletter Deadline: 24 Oct.

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

