

Bits of Bytes

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

Volume XXXIX

August 2019

Issue 8



The Prez Sez

by Joe Nuvolini,
President,
P*PCompAS

Last month's video on Windows 10, Ver 1903, was most informative. Unfortunately, John was under the weather and had planned to do the presentation with the video as an assist. Since he was unwell, we got only the video. The presenter's accent made it a bit difficult to follow at times, but there surely was a lot of information there.

Picked up another Echo Dot. This one is a version 3 and the audio is quite a bit more mellow. I set the bass to minimum and the treble to maximum and it still seems a bit too mellow for my liking. I plan to bring one of the version 2s to the meetings so we can query it if we stumped during Around the Room.

At this time, the proposed program for August will be a compilation of Windows Quick Tips. ☺

Meeting Minutes

by Greg Lenihan, Audio Recorder

President Joe Nuvolini called the 6 July 2019 Membership Meeting to order at approximately 9 am. Coffee is free for first-time guests and a dollar for members. The minutes from the previous month were approved.

OFFICER REPORTS

VP Jeff Towne was not present. Secretary Cary Quinn had nothing to report.

Next P*PCompAS meeting: Saturday, 3 August 2019

The presentation will show some Windows Quick Tips.

Treasurer Chuck Harris corrected via e-mail what was stated at the meeting. We have \$3605.13 in savings and \$167.33 in checking.

Membership Chair Ann Titus had nothing to report.

Editor Greg Lenihan said the next newsletter deadline is 20 July.

Librarian Paul Godfrey was not present.

Hospitality Chair Ilene Steinkruger asked for someone to bring doughnuts next month and Cary Quinn volunteered.

BOD Chair Joe Nuvolini had nothing to report.

We are still looking for someone to take over the Nominations Committee.

OLD BUSINESS: None

NEW BUSINESS: None

ANNOUNCEMENTS

The Social Breakfast is on July 20th.

Our next Membership Meeting is on August 3rd.

PRESENTATION



Nuvo shows a video on Windows 10 v1903, that was going to be part of a presentation by John Pearce, who happened to be ill on the day of the meeting. ☺

You Can't Take it With You (Digital Estate Planning)

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

Everyone knows the old cliché about death and taxes. Sooner or later, we'll all kick the bucket, buy the farm, or shed the mortal coil. But when you go, what will happen to your data and online accounts? That's where digital estate planning comes into play. Think of it as having a backup plan to give those left behind access to your data. Here's what you need to know...

What is Digital Estate Planning

A few years back, there was a rumor that actor Bruce Willis was planning to sue Apple for the right to leave his iTunes music collection to his children. There was also a story about Steve Jobs being

Continued on page 2

In This Issue

Articles

Analyze and Diagnose Your PC's Hardware Issues	6
How to Fix a Frozen Windows PC	3
You Can't Take it With You (Digital Estate Planning)	1
What Are Hardware Drivers and Why Do They Cause So Many Problems?	8

P*PCompAS

Meeting Minutes	1
The Prez Sez	1



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Can't Take it With You (Cont. from page 1)

reincarnated in a parallel world. The Willis rumor was debunked, and I'm pretty sure that Steve won't be checking his e-mail any time soon.

You may not be content to just let your Gmail or Facebook account go dormant after you pass on. You may have photos or documents in cloud storage. What if you have money in your Paypal account? And will your surviving relatives have the keys to your online banking or investment portfolio?

The simplest solution is to write down all of your accounts and their login credentials, then give that list to someone you trust. Of course, you'll have to remember to constantly update that document when you change passwords or create new accounts. But what if you don't trust anyone with all of your digital keys, at least while you're still alive?

Back in 2012, I found less than a handful of websites offering digital estate planning services. Now, there are dozens of new players; at least, they're new to the Web - many are offered by established estate planning and legal firms. Much like TurboTax and other tax preparation software, digital estate planning sites walk you step-by-step through the complex process, holding your hand along the way.

Essentially, all of these services help you make decisions and document them; give you secure cloud storage in which to keep your documents; and provide a mechanism for empowering the people you designate to access the documents and other information they need to carry out your wishes.

[Everplans](#) was co-founded by Abby Schneiderman, who experienced firsthand the

frustrations of wrestling with her deceased brother's digital legacy when he died in a car accident in 2012. Everplans helps people document their wishes about everything from advanced medical care directives to who gets the pets and grandma's apple pie recipe. Everplans can hold your family photos and your obituary. You can provide information that you want family and friends to learn after you die, and specify who gets what information. Everplans charges \$75 per year that your account and repository are active.

Will Your Data Outlive You?

[FinalRoadmap](#) gives special emphasis to end-of-life care instructions. Its planning protocol gets into details that are often omitted from paper-based advanced care directives and wills, right down to what specific medical interventions you want or don't want, and even who will be permitted in your presence while you're dying. Yes, the questions are uncomfortable, but it's better for you to answer them now than to leave family agonizing over what you would want them to do. FinalRoadMap charges a one-time fee of \$249.

Similar services include [The Digital Beyond](#), [PlannedDeparture.com](#), and [AfterSteps.com](#). Shop around for one that offers the services most important to you, and whose approach makes the most sense.

For do-it-yourselfers, Google offers a free digital estate planning service dubbed [Inactive Account Manager](#). It's intended to deal with

Continued on page 5

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How To Fix a Frozen Windows PC

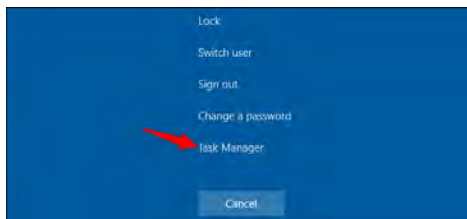
By Chris Hoffman, reprinted with permission from [HowToGeek.com](https://www.howtogeek.com)

Original article at: <https://www.howtogeek.com/427550/how-to-fix-a-frozen-windows-pc/>

There are several ways you can recover your frozen PC, depending on what caused the problem. Sometimes, all you have to do is wait a few seconds—the PC might get hung up while doing some work and unfreeze itself a few seconds later.

If a full-screen application, like a game, freezes and prevents you from leaving it, press Alt+F4. This closes the application if the game is just experiencing graphical problems, but it won't work if the application has frozen completely.

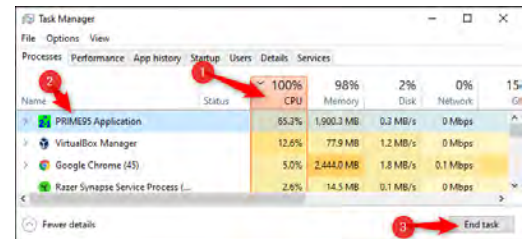
To see if the computer is still responding, press Ctrl+Alt+Delete. From this screen, you can open the Task Manager (and close any running applications), or log out of or restart your PC. If this screen doesn't appear, you might not be able to recover your PC without rebooting it.



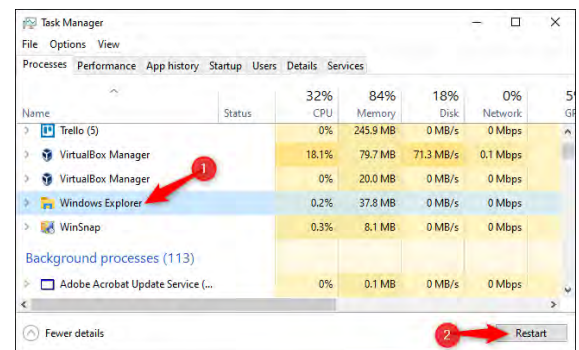
If you can open the [Task Manager](#), you might be able to recover from the freeze. (You can also press Ctrl+Shift+Esc to [open the Task Manager](#).)

Select the "Processes" tab—if you don't see it, click "More Details." Locate any processes using a lot of CPU—you can click the "CPU" column header to sort by CPU usage and see the most demanding processes at the top of the list.

Click a process to select it, and then click "End Task" to forcibly end the program. You'll lose any unsaved work in the program, but if it's crashed and is using a lot of CPU, there might be no way to recover your unsaved data, anyway.



Sometimes, your Windows desktop—including the taskbar and Start menu—might freeze. You can sometimes restart Windows Explorer to fix these problems. To do so, locate "Windows Explorer" in the list of Processes, click to select it, and then click the "Restart" button.



Continued on page 4



If you want to be cool, hang out with the digerati for the monthly breakfast. It was hot during the week of the breakfast, but the air conditioner works very well inside the Country Buffet.



Frozen PC (Cont. from page 3)

If you don't have any unsaved work, click the power button at the bottom-right corner of the Ctrl+Alt+Delete screen and select "Restart." Hopefully, your computer will work normally after it reboots, as [this fixes many system problems](#).

You can also try pressing Windows+L to [lock your screen](#) and go back to the sign-in screen. You can restart your PC from there, too. However, if Ctrl+Alt+Delete didn't work, this method probably won't either.

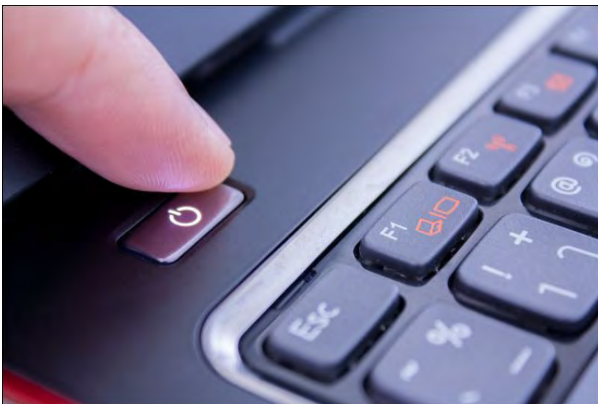


If none of the previous steps work, press Windows+Ctrl+Shift+B on your keyboard. This is a [hidden hotkey combination that restarts your PC's graphics drivers](#). If they are the source of the problem, this might unfreeze your system.

If none of these methods work and your computer won't respond to anything, there's only one way to recover from this—a hard shut down.

Locate your computer's [power button](#), and then press and hold it down for 10 seconds. Your computer will forcibly shut down. Wait a few seconds, and then boot it back up by pressing the power button normally.

This isn't the cleanest, safest way to shut down your PC. You should use onscreen shutdown methods, but, if it's not responding, there's no other way to fix it.



If your computer has [blue-screened](#), this is the only way to fix it. By default, Windows PCs automatically reboot when they blue screen, but if you see a blue screen of death (BSOD), and your PC isn't rebooting, you've probably [turned off automatic reboots](#). Jot down the error message, and then perform a hard shutdown or reboot by long-pressing the power button.

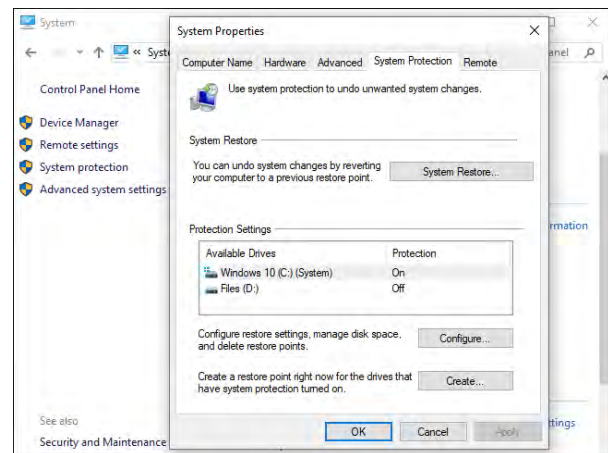
RELATED: [How to Find Out Why Your Windows PC Crashed or Froze](#)

How to Stop Your PC From Freezing in the Future

The tips above can help your PC recover from a freeze and get things functioning normally again. If it's just a one-time freeze, don't worry about it too much. Computers sometimes have fluke problems like these. There might be a bug in your computer's hardware drivers or other software.

If freezes are a regular occurrence, though, something is wrong with your PC. It could be either a software or hardware problem. [The Reliability Monitor and BlueScreenView](#) might point you in the right direction.

If the freezes started recently, and you've also recently updated your PC or installed new software, try [running System Restore](#). This resets your PC's software to a known-good state. To find this option on Windows 10, go to Control Panel > System and Security > System > System Protection > System Restore.



To ensure that malware isn't causing problems with your system, we recommend [running an anti-malware scan](#). On Windows 10, you can [scan with the built-in Defender antivirus](#) and try a free [Malwarebytes](#) scan. You can also try other anti-malware tools to get a second (or third) opinion.

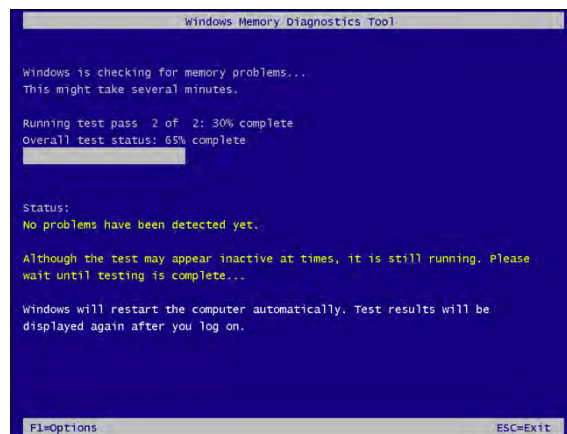
Continued on page 5

Frozen PC (Cont. from page 4)

Hardware problems are much more difficult to pin down. Many things could be failing. [Your computer could be overheating](#), for example, or it could have faulty RAM. If your computer regularly freezes while you're playing PC games, this could suggest a problem with your PC's graphics processing unit (GPU) (or, again, overheating.) Many other components in your PC could be at fault, however.

[Ensure your PC is dusted out](#), properly cooled, and then [test its RAM](#). [Diagnosing hardware problems](#) is tricky. Often, to accurately test, you have to swap out one component for another and see if that fixes the issue. If your

PC is still under warranty, consider letting the manufacturer deal with the problem. After all, that's part of what you paid (or *are* paying) them for.



To eliminate the risk of software bugs, it's a good idea to reinstall Windows. On Windows 10, you can [use the "Reset" feature](#) to get your PC back to a like-new state. Keep in mind, however, that this will remove all installed programs. You can also try a ["fresh start"](#), which gives you a fresh Windows 10 system without the utilities the PC manufacturer preinstalled.

If you just installed a major Windows update within the last ten days, you can also try [rolling your system back](#).

Continued on page 6

Can't Take it With You (Cont. from page 2)

your Google assets (e-mail, Drive, Photos, Google+ page, etc.) but you can also leave instructions about anything else in an e-mail that will be sent to your trusted contact(s) if you don't log into your Google account for a specified period of time.

There's also [Deadmans Switch](#) which lets you send e-mails after you die. An e-mail to your executor, for instance, might contain a list of accounts and passwords or a full-blown digital will and testament. The service sends a check-in e-mail to you every so often; you confirm that you're still alive by clicking on a reply link. If you don't reply within 60 days, you are presumed to be dead and your stored e-mails are sent. The free version supports up to two

recipients. For a one-time fee of \$20, you get up to 100 recipients and the ability to customize the check-in intervals and reply deadline.

Final Wishes for Your Data

Generally, survivors are left to deal with the corporate policies of multiple online services when someone dies. There is no federal law empowering executors or designated representatives to access a decedent's digital assets. Many states have [enacted such laws](#), and their provisions vary widely.

The Uniform Law Commission, which drafts model legislation that States generally adopt as-is for the sake of uniformity (e. g., the Uniform Commercial Code), approved the Uniform Fiduciary Act in 2014. One of its main provisions

is that a fiduciary who has access to a tangible asset will have access to digital assets of a similar type. So if your executor is given control of your business, the online portions of that business and online records associated with the business would be available to the executor, too.

What do you want done with your e-mail after you die? Many people want a relative to login and send a message to all contacts with their news of their passing. Should your Facebook page be closed or converted into a "memorial page"? How about your digital photos stored on Flickr? Do you have a blog or website that may need to be closed down? Any paid online services you need to cancel? These and many other questions are worth answering before you go. Have you made a digital estate plan? ☺

Analyze and Diagnose Your PC's Hardware Issues

by Christa Geraghty at Komando.com (tip from 6/6/19)

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With a world of intertwined parts housed in ever-smaller housing, it's easy to be oblivious about what's going on 'under the hood' of a PC. Unfortunately, with daily wear and tear, it is anticipated a desktop will become sluggish, overheat or require a replacement part during its lifespan. While performance and other issues occur with any form of technology, determining the root of the problem can be quite a challenge.

Of course, if you are a computer expert, disassembling \$1,000 plus worth of equipment is a cakewalk. However, for the average computer user, this notion can make the strongest queasy. There is the option of hiring a technician to diagnose and fix the problem, which will be costly. Or, you can take a preemptive approach and [perform some of the detective work yourself](#).

Taking initiative and preparing for the inevitable is key. Personally, I have made the upkeep of my new all-in-one-HP a priority. In my pursuit of maintaining my PC, I came across **HWInfo**, considered one of the best free hardware diagnostic tools.

Assured it would provide me an up-close view of my system, I tested the program. By no means is my skill that of an expert. I am one of those typical computer users with a hint of practical know-how. Here's my take on HWInfo.

An introduction to HWInfo

Available in three versions: DOS and 32 or 64 bit for Windows, this software will provide

you copious amounts of detailed information. HWInfo is so thorough in collecting system data that it will display specifics on virtually every component of your computer.

Although the highly accurate reports are best-suited for technical experts, computer manufacturers and the like, they can prove to be useful for those less experienced with computer jargon.

If you are seeking component part numbers, driver updates, or general information including your operating system (OS) version, what model motherboard or hard drive is installed, storage capacity and RAM, HWInfo is for you.

In addition, this program will indicate health information of the system such as the battery-wear level, drive temps, unsafe shutdowns, and how many hours the computer has been powered on. It is essential you pay attention to these figures as they can be indicative of impending issues.

To install the program, visit [HWInfo Diagnostic Software](#), and choose the appropriate download for your desktop. (**Note:** If you do not want a full installation go with the Portable option as it will provide you with a zip file, that once unzipped will automatically launch the software.)

Dissecting the HWInfo interface

Upon starting HWInfo, you have a few options: default mode will run both a sensor report and system summary, or you can choose

Continued on page 7

Frozen PC (Cont. from page 5)



If your PC freezes during the Reset process, try [making Windows 10 installation media](#) on another computer. Insert that into the frozen PC, [boot from the installation media](#), and then [reinstall Windows](#). If your computer freezes while installing Windows (or afterward), you'll know you almost certainly have a hardware problem.

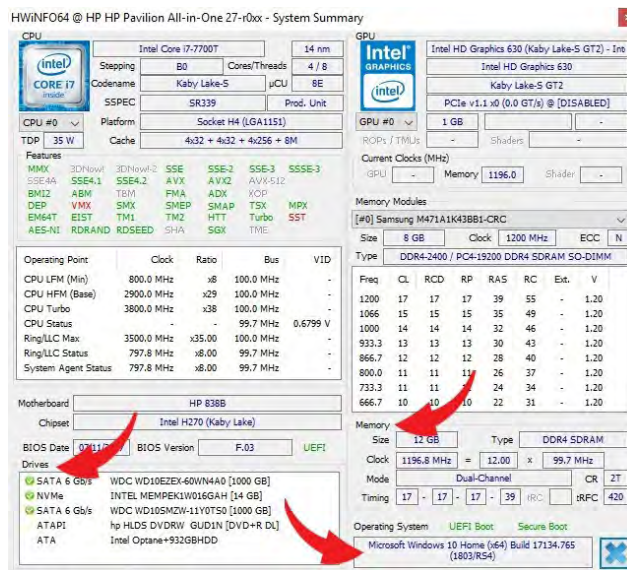
RELATED: [How to Find Out Why Your Windows PC Crashed or Froze](#) 😊

Analyze and Diagnose (Continued from page 6)

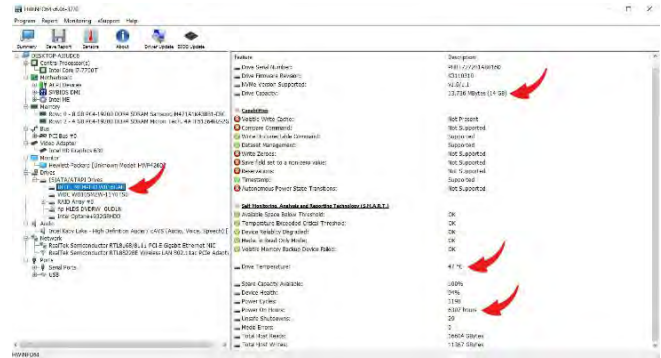


to run each separately. If you proceed in default mode, you will observe two main windows, the larger sensor report and a smaller system summary.

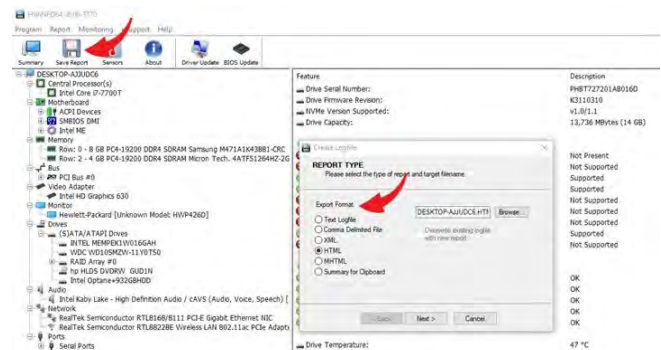
Starting with the summary window, you can find CPU and GPU data along with drives, memory, and [operating system](#) specs. One detail missing was the standard Windows minimize option, which forced me to move the window out of the way to view the sensor report data.



The sensor report is a two-pane window similar to others used throughout the Windows platform. Clicking on any component in the left column will bring up the details on the right-side. In the following image, you can see current data, including the number of hours my computer has been powered on, the ever-important drive temp (no overheating here!), and hard drive capacity.



Across the top of the window are buttons you may find useful, including the Save Report feature. If you are ever in need of replacement parts or troubleshooting assistance, you can save a system report in several formats which you can print out as a reference or share the analysis with your local computer guru.



There's no doubt HWiNfo has some serious advantages over its competitors. The interface is simple, uncluttered, and easy to navigate, it's a free program (yay), a help forum is available for registered users, and the depth of information it gathers is unmatched.

On the other hand, while I was able to move the summary window around without issue, I missed the ability to minimize the window. I further noted that after installing HWiNfo, the program did not create a desktop shortcut.

In addition to the absence of these small details, the program crashed at one point during my run-through and would not relaunch until I restarted my computer. That was frustrating.

Although HWiNfo has a few shortcomings, as is typical with most software, I suggest you test it out. If anything, the assessment will provide you a new appreciation for technology. ☺

What Are Hardware Drivers and Why Do They Cause So Many Problems?

By Josh Hendrickson, reprinted with permission from HowToGeek.com

Original article at: <https://www.howtogeek.com/415211/what-are-hardware-drivers-and-why-do-they-cause-so-many-problems/>

If you've experienced a computer crash, a hardware driver may have been the cause. These are pieces of software that your computer's operating system uses to talk to its hardware. Every operating system—from Windows to Android—uses hardware drivers.

Drivers Are Like Translators For Your Computer

At a fundamental level, two main components comprise a computer—software and hardware. The software is your operating system (OS) and any programs and apps you have installed on it. Your motherboard, RAM, mouse, keyboard, printer, and anything else physical connected to your computer make up the hardware.

Without any help, the software doesn't know how to talk to your hardware and vice versa. Hardware drivers are bits of software that teach your OS, programs, and apps how to work with your devices. Imagine your OS speaks English, and your hardware speaks German. Hardware drivers, then, are the language interpreter converting English to German and back again.



Manufacturers Make Drivers; Software Developers Use Them

Since drivers handle hardware translation, you might think that means the manufacturers that make hardware make the drivers. That's true some of the time; chances are the manufacturer made your graphics driver, for instance. But that isn't always true.

Microsoft (and some manufacturers) provides universal drivers that anyone can use. These drivers offer cost savings and consistency in performance across devices. Skipping the driver creation process empowers the manufacturer to tune its hardware to a well known thoroughly tested driver with specifications that fit the company's needs. Your mouse, keyboard, and USB drives are likely using generic Microsoft-made drivers, for instance.

Some devices can use generic drivers but may perform better with device-specific drivers. For example, your [computer's graphics card \(GPU\)](#) can output your desktop to a display with generic drivers, but it needs drivers from its manufacturer—NVIDIA, AMD, or Intel—for optimal 3D gaming performance.

Regardless of who makes the driver, software developers take advantage of and use them. Your text editor or word processor calls the print driver to work with the printer and the graphics driver to display text. Without those drivers, your program doesn't know how to talk to the printer or monitor to accomplish essential functions like printing and changing the font size. Hardware drivers give software developers a leg up though; they don't have to learn the ins and outs of hardware language to use the hardware.

The software developer doesn't have to spend a ton of time reinventing the wheel. If an app needs to print, its developer can implement a basic print function and trust the system's printer drivers to handle the details. Otherwise, the software developer might need to design a print operation for HP printers, then Brother Printers, and so on.

Software sometimes uses multiple drivers to work with a device, passing the data through each. To return to our language barrier example, imagine your software speaks English, and your hardware speaks German. Unfortunately, the first device interpreter on hand only speaks English and Italian. That's enough to facilitate communication. Now, imagine a second interpreter arrived who spoke Italian and German. By sending down the line through the two interpreters, eventually, communication would work. The same basic concept occurs when multiple drivers are in use between software and hardware.

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Hardware Drivers (Continued from page 8)

Why Hardware Drivers Can Cause System Crashes

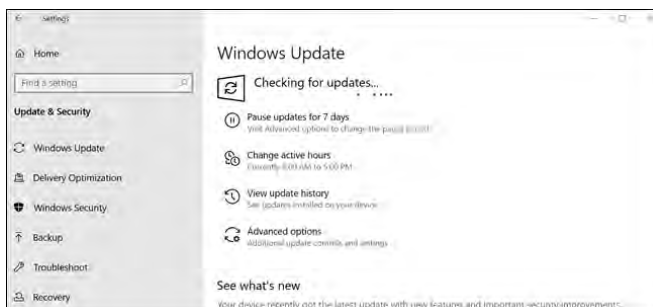
The close interaction between software, driver, and hardware is what makes everything work on your computer. It's also what breaks things. Let's go back to our language interpretation analogy. Language translation is only as good as the worst speaker of a language in the chain. If your interpreter speaks very good English but only passable German, then it's possible they'll misspeak, and the German speaker won't truly understand what's being said.

The same occurs with device drivers, but the problem is compounded. It isn't just that the device driver itself may not be perfect, but the software and the hardware involved may also have problems. And those problems can be magnified as they head down the chain, much like a game of telephone. So if you tell the software you want to print, and it sends the direction to the driver incorrectly, the driver will, in turn, interpret as best as it can and send those directions to the hardware. If all goes well, you'll be none the wiser.

But software, drivers, and your hardware aren't always smart enough to recover from bad data. If your interpreter seems befuddled because they don't know why the German speaker wants "hand shoes" (handschue in German) you can work together to determine they mean gloves. But if your OS tells your graphics driver to turn the graphics card's fan off when it meant on, your graphics card will do as told, leading to a potential system overheat and shutdown.

The problem gets more complicated than that, but at their basic levels, they can be boiled down to the fact that bad data made an impossible request and the system couldn't recover. Your operating system may freeze or crash. Drivers themselves may contain bugs or incompatibilities, but a driver may also appear to be at fault when the underlying hardware device is failing or has another physical problem.

What to Do If You Suspect Bad Hardware Drivers



This is the first place to go for updated hardware drivers.

If you think you have a hardware driver issue, the first thing you should do is take a step back and

examine why you've come to that conclusion. If a piece of software recommends you update 'out of date' software and promises to help you update, you should stop. [We don't recommend driver update utilities](#); they can cause more harm than good; in fact, it's debatable if they cause any good at all. The best thing you can do for your machine is uninstalling the driver updater.

The truth is, [you generally don't need to update hardware drivers](#). If you do not see an issue with your hardware, and it seems to be working fine, then it's better to leave things as they are than risk introducing an issue. One exception is [graphics drivers associated with graphics cards](#); these are regularly updated to solve problems, add new features, and improve performance for new PC games. But most of your hardware drivers likely don't need updating.

However, if you've seen a [BSOD \(Blue Screen of Death\)](#) that lists an error message about a hardware driver, you're probably on the right track. If a hardware driver is causing crashes, then your next step should be to check for new drivers.

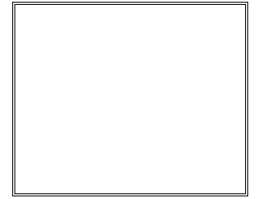
But even in that case, don't use the driver update utility. The best way to update your driver is [through Windows Update](#) or the manufacturer's website. Start by checking for any Windows updates, Microsoft does a decent job of taking care of hardware updates for you at this point, and that may save a lot of effort.

If you don't see anything in Windows Update, then head to the manufacturer's website and check its support area for driver downloads. Compare the latest version the manufacturer offers to the version [shown in Device Manager](#).

For the most part, hardware drivers should work in the background, and you shouldn't notice their presence. Unfortunately, everything that makes hardware drivers work well also makes them a potential source of problems. But usually, you don't need to worry about them at all. They either don't need updating, or Windows will take care of it for you. Understanding those key facts will help you solve a problem if you have it—and avoid causing a problem where none existed in the first place.

RELATED: [Everything You Need To Know About the Blue Screen of Death](#) ☺

P*PCompAS Newsletter
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Coming Events:

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

Next Breakfast Meeting: 17 Aug @ 8 am, Golden Corral, 1970 Waynoka Rd.

Newsletter Deadline: 24 Aug

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

