

Bits of Bytes

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

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Issue 3



The Prez Sez

by Cary Quinn,
President,
P*PCompAS

Good day All!

Spring is coming, and with the thaw comes my yearly resolution to find new ways to improve my life thru technology. This month I will talk about my concerns with losing what used to be a fairly good memory; and some suggestions on how to improve it. ☺



Meeting Minutes

by Toni Logan,
Secretary,
P*PCompAS

The 6 February 2016 meeting was called to order after a cheer to "Go Broncos." Coffee and donuts are free for 1st time guests and a donation for all others. The minutes were approved as printed in the newsletter.

The presentation today will be on CES by Joe Nuvolini.

OFFICER REPORTS

Vice-President Harvey McMinn reported that he is checking with Samsung for a presentation in March. Gene Barlow will give a Skype presentation in April.

Treasurer Bill Gardner reported that we have \$6137.96 as of the end of December and \$6186.32 as of the end of January. The reports are filed for audit.

Next P*PCompAS meeting: Saturday, 5 March 2016

Prez Cary Quinn plans to talk about improving memory.

Membership Chair Ann Titus reported that there are eight unpaid old memberships outstanding.

Librarian Paul Godfrey has received the library.

Hospitality Chair Warren Hill will be moving in the spring and we will need a new member of the hospitality committee and a new member of the Board of Directors.

APCUG Rep Joe Nuvolini reported that he has filed the 2016 club tax return and sent in the names of the new officers and the name of Norm Miller as senior on the Board of Directors. We did not win in the APCUG competition. There is a virtual conference on February 20 at 1 pm on upgrading your laptop. Check out the APCUG site on how to participate. (It will be too late for this conference, but there may be others to join.)

Newsletter Editor Greg Lenihan reported that the deadline for the March newsletter is Saturday, February 20, 2016.

NEW BUSINESS

The volunteer lunch was held at Old Chicago and everyone had a good time.

Someone at the church will be contacted as to the gift for the church in the coming year.

There will be an audit of the financial records.

AROUND THE ROOM

The audio of the business meeting and Around the Room is on the club website.

PROGRAM

Joe Nuvolini could not attend CES this year, but he showed some online videos of what was new this year.



Joe Nuvolini shows some videos of CES highlights at the February membership meeting.

DRAWING

Book on Window XP Professional—Bob Blackledge

Computer bag—Cary Quinn
System Mechanic (software)—Paul Godfrey

Tape measure—David George
Computer camera—Peter Rallis ☺

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P*PCompAS

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Programs: Paul Godfrey, Toni Logan, and Peter Rallis

Publicity: Harvey McMinn

Nominating: Vacant

Board of Directors

Norm Miller

Bob Blackledge

Warren Hill

John Pearce

Joe Nuvolini

Many Devices Utilize New Charging and Data Transfer USB-C Cables

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

WEBSITES:

<http://www.cnet.com/news/usb-type-c-connections-better-soon-confusion-first/>

https://en.wikipedia.org/wiki/USB_Type-C

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<http://fortune.com/2015/11/05/usbc-google-amazon-reviews/>

<http://www.cnet.com/news/usb-type-c-one-cable-to-connect-them-all/>

<http://www.cnet.com/news/meet-the-new-reversible-usb/>

<http://www.pcmag.com/article2/0,2817,2478121,00.asp>

<https://plus.google.com/u/0/+BensonLeung/posts>

<https://forums.oneplus.net/threads/in-response-to-the-type-c-cable-discussions.412344/>

<http://au.pcmag.com/oneplus-2/40241/news/oneplus-offers-usb-c-cable-adapter-refunds>

<http://www.pcworld.com/article/3009658/hardware/oneplus-offers-a-refund-for-its-potentially-damaging-usb-c-cable-and-adapter.html>

<http://www.usatoday.com/story/tech/2015/12/01/iphone-7-headphone-jack-rumor-report/76591864/>

<http://www.androidheadlines.com/2015/11/checkr-app-tests-usb-type-c-for-nexus-5x-6p-compatibility.html>

<https://play.google.com/store/apps/details?id=net.mderezynski.checkr>

<http://www.amazon.com/gp/pdp/profile/A25GROL6KJV3QG> (Benson Leung reviews)

Recent purchasers of smart devices, including many new phones, laptops, Apple devices, and other new high tech electronics probably noticed that the USB cable used to charge the device and transfer data between devices is the same on the “big” end, but slightly different on the “small” end. The traditional “Micro-B” (the “small”) end of the USB cable that has been widely used for several years to connect chargers and data devices to billions of smart devices is a somewhat asymmetric shape resembling a flattened trapezoid. Because of its shape, the common micro USB cable can only be

inserted in one direction, which countless users have found as an inconvenience, but engineers intentionally designed so as to assure that the tiny conductors in the plug could only mate with appropriate matching connectors within the device. Likewise, millions of Apple device users have been using the popular, but somewhat fragile “Lightning” connector connected to an otherwise somewhat identical USB cable to charge their devices and to connect to external devices.

For the past several months a newly standardized connector of

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USB-C Cables (Cont. from page 2)

about the same dimensions as the older Micro-B plug, and with the moniker "USB-C" has started to appear on recently assembled smart devices produced by several of the major manufacturers, including LG, Samsung, Apple, Microsoft, HP, Nexus (the Google brand made by LG, Huawei, and others), OnePlus, and other cutting edge brands. This new USB-C connector is more symmetric, in a flattened rectangular shape with rounded corners, is reversible, and can be inserted with either wide side up, easing the ability to perform the simple task of connecting the charging cable or transferring data. In terms of data transfer speed, the new USB-C cables, with its 24 connecting pins, can easily transfer data with speeds somewhat similar to the USB 3.0 standard, which is a potential of 4 GB per second throughput, and possibly even transfer at the screaming USB 3.1 speed of 10 GB per second, but many of the currently available devices with the USB-C connector can only receive data at something resembling effective USB 2.0 transfer speeds of a respectable 280 MB per second. In addition to being a reversible plug and offering generally faster data connection speeds, the USB-C standard also allows the USB cable to transfer more charging capacity than most earlier USB 2.0 cables, with the USB-C cable and connector easily able to handle from 1.5 amps to 3 amps at 5 volts, allowing for the faster charging of connected devices as well as providing more power to other compatible USB powered devices, such as external hard drives. For those USB powered devices that demand even greater power, the new USB-C cable can handle up to 20 amps at 5 volts, for 100 watts of power. Computer notebook designers are considering replacing the

existing power point on newly manufactured laptops with a USB-C port, as newly made laptops now only require about 60 watts of power, and some USB-C cables can handle up to 100 watts. While in technical competition with the unusually shaped USB 3.0 and USB 3.1 cable and plugs, USB-C has recently had greater industry acceptance than its competing standards apparently because of its greater capabilities than the more traditional USB cables and connectors.

In addition to the traditional functions of charging devices, and transferring data, the new USB-C cables can do much more. Through a single port and a compatible cable, rather than multiple ports requiring different cables, USB-C can also handle video and audio. This makes it more convenient (and more cost effective) to provide connectivity to video devices such as a TV or monitor as well as audio devices, such as an amplifier or speakers, all from a single port on the device, using a single cable for all of the functions. It has recently been reported in the media that the upcoming iPhone 7, due later in 2016, will be doing away with the traditional 3.5 mm headphone jack, and instead connecting the headphone to a traditional (and reversible) Lightning power port, but some leaked images of the iPhone 7 show what appears to be a USB-C style port, which by design can handle headphones as well. Some of the new MacBooks are using the USB-C cable instead of a Lightning cable. (usatoday.com/story/tech/2015/12/01/iphone-7-headphone-jack-rumor-report/76591864)

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Members and guest hang out at the February post-Valentine breakfast at the Country Buffet. Much love and adoration was shown to the wide variety of items on the menu.



USB-C (Cont. from page 3)

While the USB-C standard was finally approved and adopted during the summer of 2015, what has happened with the early adoption of other technical standards, has happened to USB-C; that is, some of the hardware with USB-C ports and many of the newly manufactured USB-C cables fail to meet the new standards, which can create sometimes serious incompatibility problems. Following complaints from users of new model Google Chromebooks (such as the Pixel 2 model) and newer model Google Nexus phones (Nexus 5X and 6P) that require USB-C cables, a well respected engineer working



for Google, Benson Leung, intentionally purchased a variety of cables advertised as USB-C compatible on Amazon,

and found that many of them were very problematic. Posted on his Google+ blog, Benson Leung found that, “You may not just get weird behavior from your devices with these bad cables... What some of these vendors are doing is downright dangerous.” As quoted in Fortune Magazine (fortune.com/2015/11/05/usbc-google-amazon-reviews), Benson Leung was reported to have said, “Some cables with a type C connector on one end and a legacy connector on the other end do not connect the correct resistor to pin A5 of the type C connector, causing a device connected to the cable to incorrectly determine the amount of power it is permitted to draw from the cable. Cables with this issue may not work properly with certain products, including Apple and Google products, and may even damage power sources such as chargers, hubs, or PC USB ports.” Fortune goes on to say, “Leung has taken to calling out bad cable vendors in Amazon reviews under the username LaughingMan. So far, he’s reviewed 10 different cords and adapters and has found seven of them severely lacking. The biggest issue he’s found is that the cords won’t charge the Chromebook Pixel properly. Although some of the deficient cables will transfer data and power, they do it incorrectly, which could end up damaging your device in the long run.” Some of these deficient USB-C cables sold for as little as \$8.99 on Amazon. The Fortune

article mentioned that Benson Leung did find a few of the third party made USB-C cables that he purchased on Amazon did work as well as the more expensive name brand cables made by Apple, Google for their own devices. Leung tested a \$19 cable made by iOrange-E (currently priced at \$12.99 on Amazon), and found that it did indeed work well on Google devices, for which he gave it a 5-Star rating on Amazon. Leung also found that the \$20 USB-C cable made by Belkin was “good as the ones that Apple and Google provide with and sell on their stores as accessories” and also awarded it five stars.

Some smart phone makers have also fallen into the trap of providing incompatible and potentially damaging USB-C cables and chargers for use with their newly produced phones. One such example is the recently released OnePlus branded charger and USB-C cable sold on the OnePlus factory website; the chargers and USB-C cables were manufactured by third party suppliers. Because these chargers and cables allegedly do not meet the USB-C standard, and are similar to the problematic USB-C cables discovered on Amazon by Benson Leung, OnePlus has offered anyone who purchased these questionable chargers and USB-C cables from their website a full refund. According to OnePlus, only the “standalone” chargers and USB-C cables purchased on their website will be refunded, but the USB-C cables and chargers bundled with new phones, such as the OnePlus 2, are not eligible for that refund.



Type-C

Many of the media pundits are referring to USB-C as the primary “go to” cable and connector of the future. It is fast, can carry more electrical power, and can drive a variety of other devices. One cable manufacturer, Monoprice, is already offering connectors and converters for USB-C that can take a signal directly from the smart device, and output the data to HDMI (HD TV video input), gigabit Ethernet (high speed networked data), and other devices. I did a search on Amazon and other websites for USB-C cables, carefully reading the published reviews and ratings (which I know are not always accurate and truthful), finding that many of the listings have changed their wording since Leung and Fortune did their expose’ on substandard USB-C cables. Some of those which were problematic now only state that they are capable of USB 2.0 data speeds, but nothing

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What is 802.11ac and Do I Need It?

By Chris Stobing, reprinted with permission from HowToGeek.com

Original article at: <http://www.howtogeek.com/234751/what-is-802.11ac-and-do-i-need-it/>

If you've been down to your local Best Buy lately, you might have noticed that a whole new class of wireless routers are on the market on the premium end of the product scale, emblazoned with an "802.11ac" label in bright letters on the front of the box.

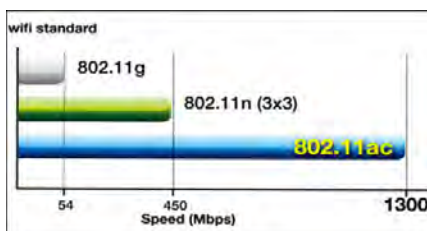
But what does 802.11ac mean, and is it really necessary for you to get the most out of your daily WiFi browsing experience? Read on as we clear up the confusion around this confounding wireless networking standard and tell you everything you need to know about the newest devices that can support it in 2016.

802.11 Explained

Whenever you buy a new router, the first thing you probably notice is that no matter which model you eventually go with, they all share the denotation of "802.11(something)" somewhere in their name. Without getting too deep with the technical details, what you'll want to pay attention to is the letter that follows after this number, which signifies both the generation of the router and the maximum

speed you can hope to transmit or receive between the base station and other wireless devices.

You can read about what all of these mean [in our handy guide here](#), but to cut to the chase the only two we'll be talking about today are 802.11n, and 802.11ac. To start, it helps to know that on the whole, most routers made within the past five years will support 802.11n, which at its peak can transfer upwards of 450Mbps/s, or around 56 megabytes per second. This, of course, is the theoretical max point for the technology achieved in carefully controlled lab settings, but it's still plenty fast enough for the average household to run multiple Netflix streams or gaming sessions at a time without anyone noticing a slowdown.



802.11ac on the other hand is quite a bit newer, having only been

approved by the IEEE (Institute of Electrical and Electronics Engineers) for consumers in 2014. Theoretically capable of maxing out at a whopping 1.3Gbits per second (162.5 MB/s), the throughput of an ac-enabled router is more than double what you can expect with the more common 802.11n. Also, it's important to note that opposed to 802.11n, 802.11ac can only transmit over the 5 Ghz spectrum. [As we explain in this article](#), while the 2.4 Ghz band is much more crowded than 5 Ghz and can suffer from increased interference, its larger wavelength allows it to penetrate walls over longer distances without much signal loss.

This means that if your router sits a number of rooms or floors away from your wireless devices, it may not be the best pick for your household despite the possible increased throughput.

802.11ac Routers: Do I Need One Yet?

Because 802.11ac was only approved for the consumer market so recently, router manufacturers

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USB-C (Cont. from page 4)

about the alleged electrical deficiencies. Some, such as the \$20 Belkin cable cited positively by Leung, now display a statement that they are certified as compatible by USB-IF, the organization that finalized the USB-C standard and conducts compliance testing.

If considering purchasing a USB-C cable, be sure to read the reviews (acknowledging their sometimes unreliability), and check to see if it is certified by the USB-IF. There is no need to waste money and possibly damage your devices by buying inferior cables. For users of some Nexus devices, specifically the Nexus 5X and

Nexus 6P phones, there is a free app available in the Google Play Store called CheckR that can test USB-C cables for proper functionality; at present this app will not yet work on other devices, but a version for the Chromebook Pixel will be available in the future. Also check to see if the transfer speed of the cable is appropriate for your devices, as most are now labeled as compatible with the USB 2.0 480 MB per second transfer rate, but a few that are much more expensive are listed as USB 3.1 compatible with transfer speeds up to 10 GB per second. If your device is listed as USB 2.0, then there is no need to waste your money on a cable with a greater speed potential than that which can be handled by your device. ☺

What to Do When Your Computer Freezes

by Justin Ferris via Kim Komando (tip from 2/8/16)

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We've all had it happen. You're doing something on your computer, whether it's an important project, some aimless browsing, or trying to beat your high score on Solitaire, and without warning everything freezes.

You wiggle the mouse, click the buttons a few times, tap some keys on your keyboard and nothing. Your 21st century piece of technology is as useless as a pet rock. What do you do next?

RESTART

OK, this step is obvious. However, some people think they have to pull the computer's power plug or flip the switch on the power strip. Instead, simply hold the computer's power button for 5 to 10 seconds and it will restart with less disruption than a

complete power loss.

There are a few things that can happen next when your computer comes back on. We're going to look at a few and what they tell you to do next.

Computer starts fine

If the computer starts up fine, immediately make sure you back up your information in case a serious problem is on the way. Otherwise, you could find yourself scrambling through [more complicated ways to get files off a dead computer](#).

Then go back to using the computer as

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802.11ac (Cont. from page 5)

have just begun the process of flooding the shelves down at your local Best Buy with wireless networking hubs that bear the new brand.

To know that a router is ac-ready, simply look at the name of the model to learn everything you need to know about what kind of power you should expect straight out of the box. For the time being, all routers featuring 802.11ac will have an "ac" stashed somewhere in its name (the Asus RT-AC3200, D-Link AC3200, etc). On average you can expect to pay anywhere from \$150 – \$400 for an 802.11ac router, which is a high price for users who might only have one or two devices in the house that are actually capable of tuning into the channel in the first place.

Right now, the crux of buying an 802.11ac router is that only the most current wireless devices even know how to decode its signal. For



example, both the iPhone 6 and 6s are equipped to handle an 802.11ac signal...but when was the last time you found yourself struggling with the fact that 802.11n *only* transmits at a 'mere' 56 megabytes per second?

802.11ac will be great as soon as everyone in the house wants their own private 4K movie on laptops or streaming devices that are capable of handling that much bandwidth over the air, but until then, it seems it's simply a luxury for those who have the hottest devices equipped with the latest and greatest in WiFi technology.

Conclusion

So, do you really *need* an 802.11ac router just yet? (Probably not. If you're somehow streaming 4K videos to your iPhone through a central media server or have an ultrabook that was released in the past six months then yes, you can receive an ac signal and obviously have enough reasons to put it to work.

That said, unless you're one of the lucky few customers to

have fiber optic lines in their home that actually receive broadband speeds above the 150 Mbit limit, your standard b/g/n router should be able to handle the job just fine. They're a heck of a lot cheaper than 802.11ac routers, compatible with both the 2.4 Ghz and 5 Ghz spectrum, and run almost all of the current heavy-load applications (gaming, streaming, downloading) without breaking a sweat.

Our recommendation is to wait this one out another year or two once the rest of the wireless networking community catches up to the trend that 802.11ac routers are just starting to dip their toes into. If you have the spare cash on hand and just can't get enough of routers that look like they were designed by Bruce Wayne, then it's a worthy investment that's just about as "future-proof" as they come. If you just need something that delivers solid performance at a discount however, there are still plenty of 802.11n models out there that will get the job done just fine.

☺

Computer Freezes (Cont. from page 6)

normal until it freezes again, although it might not. [Find out why a restart often makes problems disappear](#). If the computer does freeze again, then keep reading for more steps to take.

Computer asks you how to boot

While restarting, the computer might say there was an error with Windows and ask if you want to start normally or in Safe Mode. The first time, choose to start Windows normally. Then follow the directions above to back up your data and see if the computer freezes again.

If this is the second time your computer has frozen, choose to boot in "Safe Mode with Networking." Try using the computer like this and see if it freezes again. If it does, then you're looking at either a software or a hardware problem.

If it doesn't freeze again while in Safe Mode, then it's likely a software problem. Keep reading for tips to investigate both.

BASIC SOFTWARE TROUBLESHOOTING

An occasional or consistent computer freeze could be the result of a program acting up. Use the keyboard shortcut CTRL + SHIFT + ESC to open Windows' Task Manager and then select the "Performance" tab. In Windows 8.1 and 10, you might need to click the "More details" link at the bottom of the Task Manager to see it.

Start using your computer as normal, but keep an eye on the CPU, memory and disk categories. If the computer freezes, and one of these is really high, then that could be your answer. Make a note of which area was really high then restart the computer and open Task Manager again.

This time, however, choose the "Processes" tab. Sort the list by CPU, memory or disk, whichever was really high last time the

computer froze, and see what process pops up to the top of the list as the computer freezes. This should tell you what software is acting up so you can uninstall or update it. [Learn how to unravel what processes tell you about your programs](#).

You might also have hidden software, such as a virus, causing problems. Be sure to run a scan with your security software to uncover something that shouldn't be there.

In cases where your computer freezes during startup in normal mode, but boots OK in Safe Mode, the problem could be a program that's loading during the boot sequence. Use a program like [Autoruns](#) to selectively disable the programs that begin at startup and see which one is causing the problem.

If your computer is freezing during startup no matter what, and it's at the same point, then the problem could be corruption in Windows, or a hardware problem. A quick way to tell is to grab a Live CD for another operating system, such as [Linux Mint](#) or [Tails](#), and boot with that.

If the other operating system boots OK, then you're probably looking at a problem with Windows and might need to [reinstall](#).

Windows 10 (and 8) has a Refresh/Reset feature that's supposed to return Windows to a factory state. It's under Settings>>Update and recovery>>Recovery. If Windows is having trouble starting, it should pop up a Recovery option during boot that includes this, or you might have to use a disc.

If the other operating system has trouble too, then it's time to look at your hardware.

BASIC HARDWARE TROUBLESHOOTING

A computer that freezes both

in normal mode and Safe Mode, or with another operating system, can often indicate a problem with your computer's hardware. It could be your hard drive, an overheating CPU, bad memory or a failing power supply. In some cases, it might also be your motherboard, although that's usually fairly bulletproof.

Usually with hardware problems, the freezing will start out sporadic, but increase in frequency as time goes on. Or it will trigger when the computer is working hard, but not when you're doing more basic things. Fortunately, you can run some checks and see if that's the case.

Use a program like [CrystalDiskInfo](#) to check your hard drive's S.M.A.R.T. data for signs of impending failure. A program like [SpeedFan](#) can tell you if your computer processor is overheating, or if the voltages are fluctuating, which might be a problematic power supply.

If you want to go more in-depth, you can grab a diagnostic CD like [FalconFour's Ultimate Boot CD](#). It has plenty of other tools for checking out your computer, including MemTest for putting strain on your memory to see if it's working OK.

[Learn about more signs that your computer could be close to dying](#). If your computer is newer, it might still be under warranty, in which case you'll want to contact the manufacturer or seller.

For an older computer, you need to decide if it's less expensive to repair or replace it. [Let us help walk you through the decision-making process](#). ☺



Record Your TV Shows—How-to Options

By Phil Sorrentino, The Computer Club, Florida, <http://sccccomputerclub.org>, [philsorr \(at\) yahoo.com](mailto:philsorr@yahoo.com)

It seems like TV shows are rarely aired at a convenient time, or they have so many commercials, during which you could easily lose the story line. Hence the tremendous market for Digital Video Recorders (DVR). After using a video recorder for the past ten or so years, I don't know what channel a show I watch weekly is on, or when it was originally aired. (Thank goodness for on-line, and newspaper, TV guides.) Today, most homes get their TV service from a cable (or possibly satellite) company. In fact, TV service is very commonly bundled in what is called the "triple play:" TV, Internet, and phone. The TV portion usually provides a long list of TV (and music) channels. Also, there are premium channels, such as HBO, Showtime, Starz, or Cinemax, that can be received for an additional monthly cost.

So, once you make your TV channel selection, be it just basic or basic plus some premium content, you have access to all the shows that are on those channels, at the time they are aired. If you can arrange your schedule to be at the TV at all the times the shows you want to see are aired, then you are "good to go."

But most of us have other commitments and interests that keep us from the TV at specific times. So, the next step is to get – usually rent - a DVR. The cable operators are more than willing to rent you a DVR for something around \$10 to \$15 per month. Now, a DVR is basically a small single purpose computer that is capable of collecting the incoming digital signal, and storing it on a hard drive as a video file, for later playback. The cost

of the DVR is usually driven by the size of the hard drive, and the number of shows that can be simultaneously recorded. (Each show being recorded simultaneously needs a dedicated tuner, so the ability to record two shows, while watching live TV, would require 3 tuners.) So, if you are satisfied with the use and cost of the rented DVR, you also are "good to go."

If at this point you are not "good to go." here are two other alternatives. The first is to go with the TV cable channels selected, but employ a different DVR. Microsoft has generously made Windows Media Center available to Windows 7 and 8.1 users. (It is free for Windows 7 Home Premium and above, and is \$100 for Windows 8.1 users, and \$10 for Windows 8.1 pro users. Unfortunately, Microsoft has not included it in its plans for Windows 10, so the long-term future for Windows Media Center is not clear at this time.) If you are using Windows 7 Home Premium or above, the only additional cost is a TV tuner.

Windows Media Center, in conjunction with up to 4 TV tuners, can provide the ability to record up to 4 channels simultaneously, although usually 2 tuners will be adequate). Some TV tuners are USB devices and are no bigger than a flash memory stick, and can be bought for around \$70. One end plugs into an empty USB slot in the computer and the other

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The annual Volunteer's Luncheon was held at Old Chicago on Saturday, January 30th. It is a time when the club can honor those who give their time and talents to the membership so that the club can survive. The club thanks you for all you do.



Record TV (Cont. from page 8)

end connects to the cable. (You can also get TV tuners designed specifically for desktops.)

Windows Media Center will use as much hard drive as is available on the computer for your recordings, but will only put them in one folder. Once the tuners have been installed and Windows Media Center is installed on your computer, you can record shows from a guide that usually contains one to two weeks of programming. Playback is as easy as starting Windows Media Center, clicking on “recorded tv”, choosing a recorded show, and clicking play.

One other option is to obtain a DVR from another source. There are a handful of choices, just Google “DVR” to see them. You can also look at the reviews to help you decide on one that fits your needs and budget. (CNET has done a review. Maybe someday Consumers Reports will do one.) If you do find a DVR, make sure it comes with a “TV Guide Service.” A TV Guide Service is needed to be able to schedule recordings of

shows one to two weeks into the future. Most DVRs will come with a TV Guide Service. You can usually purchase the DVR and the service two different ways. In the first option, the DVR will be sold at a fairly low price and the TV Guide Service will be a monthly expense. For the second option there is a one-time, higher cost, for both the DVR and the TV Guide Service. From the few that I’ve looked at, the break-even may be around one 1 & 1/2 to two years. So if you expect to use it for more than two years, the higher one-time cost will be less expensive in the long run. To be more specific, for a particular TiVo, the DVR was \$50 with a \$15 per month charge. The other way was \$300 for both the DVR and the TV Guide Service (until the DVR stopped being used, or it was sold).

For those of you who are looking to “cut the cord,” there is a DVR that is available for only Over-the-Air TV. The DVR can record 4 shows simultaneously. This type of DVR would only be useful if you are in an area close enough to the

transmission antennas for the major TV networks, ABC, NBC, CBS, Fox, and PBS. In order to see how many channels you might get with a TV antenna, just go to www.antennaweb.org, click on “Click Here to Start,” enter your zip code, and click “Submit.” The results are shown as a list of the channels you could expect to receive with the distance and direction to the transmitting antennas. For example, for Sun City Center, all the major networks are within 10 miles, making the channels obtainable with a “small multi directional” antenna. My recent, limited, experience with Over-the-Air TV agrees with this. I am able to receive all the major networks and a few local channels on my TV with a relatively small antenna. (I guess I’m one third of the way towards cutting the cord.) With all these options available, I’m sure you can easily record all of your shows and soon forget the associated channels and air times. ☺

Windows Tips

Quickly launch a new instance of a program

Those taskbar icons can also be used to quickly launch a second (or third, or fourth, or...) instance of a program—a fresh browser window alongside an already populated one, for instance, or another Windows Explorer window.

Doing so is easy: Just hold down the Shift button, then open the program as you normally would, either via a left click of the mouse or the aforementioned quick-launch keyboard trick. Boom! A new, clean version of the software appears alongside the one you already have open.

More secret right-click options

Secret right-click options revealed by the *Shift* key don’t end with file paths, though.

The basic *Send to* tool that appears as an option when you right-click on a file or folder is handy enough indeed, allowing you to move the

item quickly to a handful of locations on your PC, add it to a .zip archive, or send it off in an email or fax.

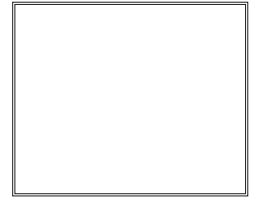
But that’s just the tip of the iceberg! Holding down the Shift key as you right-click a file or folder will add an absolute ton of new folder locations to the basic *Send to* menu.

Erase the past

When you’re shuffling files around willy-nilly, you’re bound to accidentally drop one in the wrong folder—or almost more irritating, errantly make copies of a slew of files rather than simply dragging them to a new location. Arrrrrrrrg.

Rather than trying to track that missing file down or manually delete the legion of copies, whip out the universal Get Out of Jail Free card that, somewhat surprisingly, also works within Windows proper: *Ctrl* + *Z*. The keyboard shortcut undoes your last action, restoring order when chaos suddenly appears. (*Ctrl* + *C* and *Ctrl* + *V* for copying and pasting, respectively, also work properly within Windows.) ☺

P*PCompAS Newsletter
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Coming Events:

Next Membership Meeting: 5 Mar beginning at 9 am (see directions below)

Next Breakfast Meeting: 19 Mar @ 8 am, Country Buffet, 801 N. Academy Blvd.

Newsletter Deadline: 19 Mar.

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

