



PATACS Posts

Newsletter of the Potomac Area Technology and Computer Society



November 2019

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**PATACS / OPCUG– 11/16/2019
Osher Lifelong Learning Institute
4210 Roberts Road, Fairfax, VA 22032-1028**

**Social Time – “Lunch”
Catering by Leti
12:30 – 1:45**

Meeting – 2 PM

**The Murrow Boys –
News Broadcasting During WWII
Presented by Brian Belanger**

Radio news prior to WWII had not been featured prominently. Few newscasts were offered, and the ones heard tended to be leisurely commentary on current events rather than “hard” news. That changed dramatically during the War. CBS hired Edward R. Murrow to arrange broadcasts from Europe. He hired young journalists such as Eric Sevareid, Charles Collingwood, and Larry LeSueur. The CBS evening news roundup would take listeners via shortwave radio from city to city to hear the latest developments. (“And, now we take you to London.”) This brought the war

viscerally right into American living rooms. Listening to Ed Murrow’s live report standing on the roof of a building in London as bombs are falling around him is difficult to forget, likewise, his description of going along on a British Lancaster bomber on a night bombing run on Berlin. Murrow and three other journalists went with the planes that night and two of them did not return. This talk will describe Murrow and his colleagues and the way they reported the news. Audio clips such as the examples above will be played.

Our speaker, a Ph.D from the University of Southern California had a long career in industry and government before retiring in 2000. Brian has been an active volunteer at the National Capital Radio & Television Museum. One of the museum’s founders, he served as its director for about a decade, and is currently the museum’s curator, a regular docent, and a co-editor of the Museum’s journal *Dials and Channels*. He is an extra class amateur radio operator, and currently serves on the board of directors of the Mid-Atlantic Antique Radio Club, and is a co-editor of their monthly journal, *Radio Age*.

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Help, I'm Stuck! What do I do Now?

Dorothy Fitch, Editor, GVR Computer Club, AZ
Green Bytes, www.ccgvaz.org newsletter (at) ccgvaz.org

Have you ever forgotten how to do something you have done before in a software program or operating system? Or perhaps you know you should be able to do something you need to accomplish, but don't have a clue how to do it? Wandering through menus and settings can be laborious and often, not very productive. So, how can you get "unstuck" in your task?

There are lots of resources you can try. If you aren't in a hurry, you can check out your local library.

If you need immediate help, your first instinct might be to use the program's Help system. However, I sometimes think that people who write Help information aren't really using the program in a "real-world" setting and don't cover everything you might encounter. They tell you what they expect you want to know, not what you really do need to know.

The best way I have found to get "unstuck" is to search the Internet instead. In your favorite search engine, type name of the program and exactly what you are trying to do. I am relearning InDesign, an Adobe product for graphic design, and it is very complex. The version I have is older and pressing F1 for Help doesn't work, as the product is no longer supported. All I wanted to do was to put a box around some text, and so I googled this: `indesign put box around text`.

I immediately got lots of answers, some with video tutorials (which you aren't going to find in the application's Help system). Not only did I find many ways to put a box around text, but I also learned how to remove a box, which might come in handy someday. And how was I to know to look for the Glyphs menu to insert a special character? The Web to the rescue yet again. Sometimes, a Help system doesn't mention what you are looking for because the product

can't do it. I had to search the Web to learn that Paint.net, my favorite (free) graphics editing software, supports RGB color format, but not CMYK, which was what I needed. Their Help information didn't even mention CMYK.

And what do you do if you get an error message you don't understand? Just google the text of the message! I encountered this cryptic error message in InDesign when creating a PDF and couldn't figure out how to resolve it.

"The document's transparency blend space doesn't match the destination color space specified in the Export Adobe PDF settings. To avoid color appearance changes in the PDF, click cancel and change either the document's transparency blend space, or the destination color space."

When I searched for indesign the document's transparency blend space doesn't match, I got several suggestions of what to do, and eventually figured out how to fix the problem.

The bottom line is that people who answer questions in a User Forum or blog, those who take the time to create tutorials and videos, and authors of Tips and Tricks columns are more likely to get you "unstuck" than any product's Help system. All you must do is ask the Web for help.

Educating My Phone - Graduating to a Smartphone by Greg Skalka, President, Under the Computer Hood User Group, CA
www.uchug.org president (at) uchug.org

Though I have built many computers over the years, and used and experimented with lots of technology, for the longest time I have resisted getting the one tech item that now seems to be pervasive in our society - a smartphone. I've had mobile phones, but only "dumb" cell phones. I've had flip phones that could only place voice calls, and a slide phone that allowed talking and texting, but until recently I'd resisted getting a phone that

provided access to the internet. Now at last I am “graduating” to a true smartphone.

Now I’m not opposed to technology. I am an electrical engineer by profession, and currently work for a company designing digital radio systems that may be used to connect cell phone towers to the phone network. I have used computers since before the original IBM PC-XT. I have owned and used all manner of computers, laptops, tablets, Chromebooks, music players, GPS receivers and digital cameras and video recorders. I pay for a mobile phone plan that covers three smartphones (my wife and daughter have iPhones, my son has a Google Nexus), but I’ve never graduated from my dumb phone. Until now.



There are a lot of reasons I’ve held back until now. I’m pretty value-conscious (some would say cheap) and for a long time I felt having a smartphone was not worth the cost - mainly in the cost of the phone plan. When data plans were around \$40 a month, and my home broadband internet service was about the same, it made me wonder why I had to pay twice; once to have internet access at home, and again to have it away from home. The phones themselves are what I would consider pricey as well. While none of the computers that I use today (desktop or laptop)

cost me more than \$500, this appears to be about the median price for smartphones.

While the capabilities of smartphones are impressive, the cultural phenomenon of the smartphone is not (at least to me). I really would like to be able to access the internet from practically anywhere and look with a bit of envy at those searching the web and getting real-time traffic information while out and about. To scan a product bar code in a store and then search the web for additional information, alternatives and better pricing is very powerful. I don’t feel a great need to have my emails with me wherever I go, however; I think being able to communicate via text messaging is plenty good.

For all the good that smartphones represent, I believe there definitely is a dark side. It seems almost everyone has a smartphone, and many can’t seem to put them down. Opioid drugs are very useful in pain treatment, but when abused, they can be very addictive, and ultimately destructive. I see the same things in smartphones - a great and useful tool that has the potential for great abuse. Now maybe great abuse on an individual scale is uncommon, but I worry what these devices are doing to our society. I all too often see families seated at a table in a restaurant, with each family member devoting their full attention to their own smartphones rather than each other. My wife suffers from motion sensitivity and so does the driving whenever we travel together; this gives me the opportunity to observe the drivers in the cars around us. I’ve found it is not unusual to see half of those drivers holding their phones while driving, presumably talking, texting or worse. Unlike laptop computers, smartphones have had traffic deaths attributed to their use, and laws enacted to hopefully prevent their use in situations like driving, where the distraction could be dangerous.

While I was concerned about the added cost, part of my reluctance to getting a smartphone was my desire to not risk becoming “one of them.” those zombie-like people that can’t put their phones

down. I never want to ignore those I am with in deference to these little electronic gizmos, or risk stepping out in front of an oncoming car because I've tuned out everything but that little device in my hand. Stephen Hawking and Elon Musk are smart guys, and they have both expressed concerns about the potential threat to the human race that artificial intelligence could pose if its development continues. In the same way, I fear we are well on our way to trading away our humanity for these addictive little handheld screens.

So, what made me change my mind and submit to the dark side of smartphones? Is it similar to the argument that "it's not guns that kill people, but people that kill people"? I do hope (and believe) I can ignore their siren song and not use a smartphone in an overtly antisocial manner.



In the end, several factors conspired to put a smartphone in my hand (unlike my slide phone, it is too big for my pocket). Though my slide phone served me well for many years, it has started to become unreliable. Though its built-in camera is poor by current digital camera standards, I found it very handy simply because it was almost always with me. I became dependent on its ability to photograph store product tags for items I wanted to research and send photos of what I'm doing to my kids. Recently, however, it had started to fail me, more often than not taking

photos that look like they were taken in Andy Warhol mode (colorful and cartoonish). Finally, attempts to use the phone camera were greeted with the screen message "Camera not available." It was not the lack of the internet; it was the lack of a camera that pushed me over the edge.



At the same time, I found that phone plans have changed, with data included in our current T-Mobile family plan for each of us, whether we were using it or not. With extra charges for data overages replaced with data throttling when your monthly limit was reached, my concerns over an increasing bill were eliminated. I had been reluctant to change to a smartphone as I thought it would result in a bigger bill due to adding a data plan for it. As it turned out, I had been entitled to use over 2 GB of mobile data all along (and had only been using a few MB of data sending photos with my slide phone). I had the power to have a smartphone all along; all I had to do was click my heels together in the T-Mobile store (so to speak).

With my slide phone broken and data available in my phone plan, the only remaining issue to graduating to a smartphone this June was the device. Since my needs were modest, I expected the price to be modest as well. I consulted with my son, also an electrical engineer, on his choice for a smartphone, but found he had just copied a more knowledgeable friend when he bought his Google Nexus off the web. I looked on Amazon for unlocked smartphones and found promising

candidates in the \$120 to \$170 price range but concerns about being able to use these on our plan had me look at the T-Mobile web site. The best candidate seemed to be a Samsung Galaxy J3 Prime, which could be bought outright for \$150.

Heading with my wife to the T-Mobile store (the phone account is in her name), I felt kind of like a vegan heading to in 'N' Out for a Double-Double, or a diabetic heading to the candy store. Like the recipient of a mail-order bride, I was filled with both excited anticipation and apprehension. Having a smartphone would allow me to do many things I had only dreamed of, like get answers to questions myself when out, rather than have to ask my wife to look things up on her phone. I could get apps and do fun things like check on traffic and control lights at home. Having a smartphone might change me, however. I might become antisocial. I'd have to find a way to carry this larger object and avoid breaking it or losing it. Would I be satisfied with what I had or want more?

At the T-Mobile store, I was able to have my contacts and my few feeble photos transferred from my slide phone to my new smartphone. They took out the 16GB micro SD card from my old phone and put it in my new phone, but I immediately began plotting to get a much larger SD card for the smartphone. I looked at cases for my new phone at the T-Mobile store, but they all seemed expensive. I was able to get a nice case with belt clip (my initial experiment with carrying the phone) for a lot less. I didn't take the phone out much until I'd gotten the case, as I was concerned about damaging it. This caution proved to be justified, as I've already dropped the smartphone in the Fry's parking lot once (but the case protected it).

Now I've moved into the 21st century, joining the over 3 billion humans that use smartphones. The phones may be smart - let's hope all the users remain so.

'Windows 10 for Dummies'

Book Review by Choy Lai & Clemens Pratt,
Members, Melbourne PCUG, Australia
PC Update www.melbpc.org.au
George (at) melbpc.org.au

'Windows 10 for Dummies' from publishers John Wiley & Sons is not just for dummies! The "for Dummies" tag merely indicates that its treatment of the subject is a simple step-by-step guide for navigating through both the old and new features of Windows 10; for non-beginners it is a comprehensive reference. It would be particularly valuable for anyone new to computing for whom Windows 10 is their first operating system.

Microsoft has designed Windows 10 to look and feel the same when implemented on PCs, tablet computers and smartphones, and author Andy Rathbone provides material for all three. He is an experienced writer whose use of headings, figures, lists, informative panels and marginal indicators makes it inviting to browse and easy to find useful information. Even experts in MelbPC will discover valuable features that they have previously been unaware of.

This book shows how to manage Windows tasks, troubleshoot problems and make quick fixes. It comprises 7 parts:

1. Windows 10 Stuff Everybody Thinks You Already Know
2. Working with Programs, Apps and Files
3. Getting Things Done on the Internet
4. Customising and Upgrading Windows 10
5. Music, Photos and Movies
6. Help!
7. The Part of Tens

Various icons in the margins highlight what's new in Windows 10:

- tips
- technical stuff
- warnings
- remember and
- touchscreen

It is worthwhile taking note of the icons, as they help the reader looking for an aspect.

The 'Start' button is back, with access to apps as well as settings, shutdown and restart options.

Some features new to Windows 10 are:

- Action Centre serves as a hub for system notifications, such as when Windows wants to let you know updates have been installed, and quick access to some key settings. Action Centre is a sensible, useful addition to the interface.
- Windows Explorer in Win 7 is now renamed as File Explorer and enhanced with the addition of a Quick Access section. For folders that are regularly accessed, right click them and add them to Quick Access. They are then there in Explorer and just one click away.
- A new taskbar icon called Task View is very handy. Click it and all your apps are tiled on the desktop. AltTab is great at flipping between application windows. The Task View icon offers a two-click method of switching. The ability to swap between multiple desktops will prove to be indispensable. For instance, one desktop may have Word, PDF document, and Excel to view. Alt-Tab switches between these windows. A second desktop may have reports to write. Seriously, this is a beneficial new feature.
- Another built-in application is Virtual Desktops. It runs several desktops on a single monitor. It does not take up precious system resources or space with the additional desktops because you are not creating a virtual machine. It provides more desktop space for separate tasks and allows quick access to what you need.
- Internet Explorer has been replaced by a new browser, Internet Edge
- Universal Apps which make it simple for developers of Android and Apple iOS to convert their wares to Windows. These apps will run on Windows 10 phone, tablet, PC, laptop and X-box.

The last two parts of this book are great for problem solving. As with other books in the "for Dummies" series, it finishes with its so-called Part of Tens, in this case:

- Ten Things You'll Hate About Windows 10 (and How to Fix Them)
- Ten or So Tips for Tablet and Laptop Owners

These are worth perusing for making some DIY adjustments.

For both the novice with no prior knowledge of Windows and the expert, the book explains each step in its execution. It is simple and easy to follow. Being one of the early books on Windows 10, it provides a speedy way to become skilled in this latest Windows version.

Associations – We need them!

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

Although "guilt by association" may lead you to an incorrect logical conclusion (refer to Association Fallacy in Wikipedia), your computer, without associations, would not be able to make any sense out of any of the files that you use. "What?" you say, why my computer always makes perfectly good sense out of all my files. I can read all my documents, even the most complicated spreadsheets, all my pictures are just picture perfect, my music always sounds beautiful, and my videos are entertaining and enjoyable to watch. Well, that is because you probably have your Associations set properly.

The Association we are talking about here is the Association between a Software Application (App), and a file type on your specific computer. (Remember the file type is shown by the

characters after the “.” in the file name. For example, the file type of the file name “aletter.doc” is “.doc”). Yes, Associations are specific to a computer and are probably different on other computers, though many of the basic Associations that we typically have set up are probably the same on most other computers. For instance, most of us probably have Word associated with .doc and .docx files, and Excel associated with .xls and .xlsx files. (In Windows 10, if you are not seeing the file type as part of the file name, start File Explorer and in the View tab, check the “File name extensions” box.)

The file type is really a description of how to interpret all the data that is held within the file. (It defines in great detail just what every bit and byte in the file means.) And this is where Files and Applications come together, or where they become “associated”. File Association links a file type with an Application. An Application knows how to handle a particular file type because of the file type definition. Fortunately, we, the users, don’t have to know anything about the details of the file type, only that a particular file type can be used with a particular Application. So, if a correct association is made, the Application will handle the file in the expected fashion. If an incorrect association is made, the results will be undetermined and possibly problematic.

So, where do we find these Associations? I thought you’d never ask. To see them, just go to the Control Panel (Right-click the Start button, and select Control Panel, or type “Control Panel” on the taskbar.) Make sure “View by” is set to small or large Icons, rather than “Category”. Next select Default Programs, and then select “Associate a file type or protocol with a program”. (Yes, here they refer to an Application as a Program. Application, App, and Program are synonymous.) This selection will cause the Control Panel App to search the computer and create an alphanumeric list of all the file types that it finds on your computer. (Have patience, it may take a few minutes if you have an older computer or if you have an extremely large

number of file types.) Once it is finished you will see the list of file types in three columns; Name, Description, and Current Default. Keep in mind that a specific program may handle more than one file type, as indicated by the multiple instances of a program name in the “Current Default” column. (Note that this screen uses the term “Extensions” for what we are calling the “file type”. This is just another name for the part of the file name after the “.”)

You can select a file type with a left click and all three columns will be highlighted for that file type. Try it for one in the list that has a program you recognize in the Current Default column, like “Movies & TV”, or “Groove Music”. Notice that once you have selected a file type, the “Change program...” button on the right side above the outline box of the file types can be used. This button will allow you to change the program that is associated with the file type that you selected. If you click the “Change program...” button you will see a screen that will show you the currently associated program (under “keep using this App”, and a list of other possible programs (under “Other Apps”) that can be associated with this file type. This is a list of other programs that are known, to the Operating System, to be able to handle the file type in question. (Other Apps could be selected by selecting “More Apps”, at the bottom of the list, and then choosing one in the extended list, but these programs are less likely to be able to handle the selected file type in an expected fashion. Selecting any of these programs could produce undesirable results, so be careful if you make any of these associations.)

To change the association, just select one of the programs in the smaller “Other Options” list and select “Ok”. After a few seconds, the newly selected program will be shown in the “Current Default” column for the selected file type, and the name of the newly associated program along with its icon will be shown above the outline box of the file types, on the left side. Now the newly associated program will be used to handle the file type that was selected. That’s all there is to

changing the association. Keep in mind there may be many programs that can handle a given file type but be aware that although the new program may work, it may not work the way you would expect. In this situation, it is true that “the devil is in the details”. Programs may work in general the same, but may be very different in some specific details, and may not produce a desirable outcome. Don’t be afraid to try any of the programs in the shorter “Other Options” list because you will always be able to easily change back to the original program if need be. Now that you are armed with this knowledge you can inspect the associations of the file types of interest, possibly change them, and also see if any new program has hi-jacked the file types you regularly use. Knowledge is Power.

Thoughts from a Clicker – File Menu

Tiny Ruisch, Member, Cajun Clickers Computer Club, LA. Sept 2019, CCCC Computer News www.clickers.org tsa70785 (at) gmail.com

This month I’d like to tell you about one of my favorite utility programs. I have it installed on all my computers and have been using it for more than ten years. I first reviewed this program in July 2009. The program has gotten even better since then. Like many other free programs, the programmer has a donate button on his website. I like the program so much that I hit the PayPal button a long time ago. Maybe it is about time I gave him a few more dollars.

FileMenu Tools lets you customize the right click menu of Windows Explorer. It also works with all the alternate explorer programs that I’ve tried. The program adds utilities to perform operations on files and folders and adds customized commands that let you run external applications, copy or move to a specific folder or delete specific file types.

With the built-in commands you can:

- Run with Parameters – Runs a program with parameters you input in a dialog box.

- Command Line from Here – Opens a command line window.
- Copy/Move – No need to cut and paste. You can also use filters in file selection.
- Duplicate Files – Makes a copy in the same folder.
- Pack to Folder - Moves all the selected elements to new sub-folder in the current folder.
- Copy Path/Name/Content - Copies the selected item(s) to the clipboard.
- Attributes – You can view and change them without having to open a properties dialog box.
- Find and Replace – Lets you find or replace a text for all the files in a selected folder.
- Advanced Rename – With lots of options.
- Change Icon – Changes the icon for the selected folder.
- Change Attributes – Quickly and easily change folder options.
- Advanced Delete – Lets you delete specific file types in a folder.
- Synchronize Two Folders – Lets you synchronize two folders quickly and easily.
- Shred Files – Overwrites several times so it is impossible to recover the file in the future.
- Send to Mail Recipient – Lets you send an e-mail with selected elements as attachments.

These are less than half of the FileMenu commands you can select from. In the configuration menu, a simple check will turn off the commands you don’t want. If you can’t find the FileMenu function you need, then just add a customized command to run external applications, copy/move to a specific folder or delete specific file types.

FileMenu Tools lets you configure the "Send to" sub-menu. You can add new items, change the properties of the existing items or delete them.

You also can disable existing “Send to” items in order to hide them from the menu.

FileMenu Tools will also let you enable/disable the commands which are added to the context menu of the Windows Explorer by other programs. This is the only function that is not one hundred percent reliable.

When it works, it works well, but it doesn't catch all the programs that add a right click.

FileMenu Tools is a 12.90 MB download and runs on all Windows platforms. Open Candy is used during the installation process but can be refused with a check mark. Did I mention the price? This program is freeware and costs nothing.

Download FileMenu Tools and give the program a test. I'm pretty sure that you'll like it. While you're on the Lopesoft website, you can also download and test LopeEdit Lite, an excellent alternative to Windows Notepad.

Keep on clicking, and thanks for reading

Open Source Lab - Linux Mint 19.2

Cal Esneault, Former President and leader of many Open Source Workshops & SIGs,
Cajun Clickers Computer Club
September Cajun Clickers Computer News
www.clickers.org tsa70785 (at) gmail.com

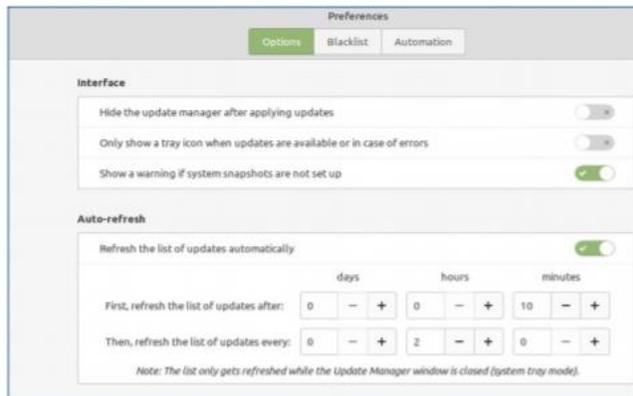
Linux Mint is a Linux distribution based on Ubuntu. A long-term support version, Linux Mint 19, was released in June of 2018. An updated version, Mint 19.2, was released in August 2019. This version is known as a “point” release, and only software developed by Linux Mint has new features different than Mint 19 (the majority of programs remain tied to the latest Ubuntu LTS repository). A few of the applications maintained by the Linux Mint team are listed below.

Menu Name	Program name	Funciton
Update Manager	mintupdate	Safely install software
Files	Nemo	File manager
Text editor	Xed	Edit text files
Image Viewer	Xviewer	View photos
Document Reader	Xreader	View PDF files

Users of Mint 19.1 can do a guided “in-place” upgrade to Mint 19.2 using the Mint Update Manager tools. Just be sure to first back-up the operational parts of your system using “Timeshift” and run the entire upgrade without interruption. None of your personal files will be affected. After reboot, you will be running the newest version.

Linux Mint developers have always tried to minimize user problems after updates. First, they classified updates into categories with respect to breadth of system impact. With increased frequency of Linux kernels, they made recovery from system-wide problems easier. As more installed but inactive kernels began to accumulate and increase system backup overhead, they allowed removal of older kernels one at a time using the Update Manager. With mint 19.2, they added a feature to remove multiple kernels simultaneously.

The Update Manager dialog screens changed significantly in the 19.2 version. The main menu reduced the number tabbed controls from five to three (see screen next column).



Besides simplification, the “levels” tab was eliminated. This seems to de-emphasize the previous strategy of impact categorization in favor of installing all updates with ability to roll-back the OS in case of failures.

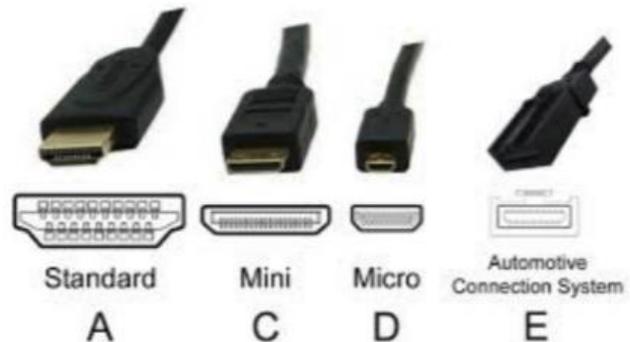
If you are currently running Mint 19.1, this is an easy upgrade with very minimal risk. In that case, it is recommended to upgrade. If you are running Mint 18.x or another distro, however, this install would require a full rebuild and necessitate a lot of effort to maintain your existing information. In that case, don’t install it unless you have studied the situation and have decided this is best for your long-term needs.

HDMI Device Connections

By Jim Cerney, Instructor,
Sarasota Technology Users Club, FL
STUG Monitor www.thestug.org
jimcerny123 (at) gmail.com

HDMI means High-Definition Multimedia Interface and it is the current popular way to connect devices with a cable. In the old days of computers, not too many years ago, you would connect a monitor to your computer with a VGA cable connection (a 15-pin connector) which only transmitted the video signal. My first video projector was connected to my DVD player using THREE video cables (in a one-inch-thick cable) – one connector for each color: blue, red, and green. That was very inconvenient. The big advantage of HDMI is that it transmits not only high-definition video but also audio as well, in one comparatively thin cable connection.

HDMI comes in a “standard” size connector but there are also “mini” and “micro” sized connectors available (see illustration photo). I suppose as time goes on, they will come out with smaller and smaller connectors for our devices.



Over the more recent years of increasing technology improvement (and increasing confusion for most of us) the HDMI cables have been improving as well. The latest (newest) HDMI cable (version 2.1) can transmit much higher video resolution much more quickly than older versions. So, if you buy an HDMI cable to connect your devices, check to make sure you are buying the latest version. Older versions may work but may not transmit the higher volume of data to get the most of your newer devices. Remember when you bought a high-definition television and found out only a few channels were sending high-definition signals? It could be a similar situation. What about cost? It is my belief

that there is little difference in the quality of cables (all kinds of cables) but they can be sold at very high prices because some people buy them. I would get the cheapest cable that would meet your needs and return it if it does not work when installed. Current prices on Amazon are around \$6 for a six-foot cable and around \$9 for a pack of three. If you need a cable over 10 meters long, you may need a “booster” to strengthen the signal. A 100-foot cable with a booster included was \$67.

When we view a video image on a device, we really don't care how the image gets there; we just want it to work. But be aware that there are several things that can affect the image you see. In addition to the capacity of the HDMI cable, the device you are using, the source transmission of the video signal, internet capacity, modem, and other factors can all affect the quality of the image. The weakest link in the chain limits the quality. Your cable TV provider can come and check your TV and internet signal (hopefully free of charge) to make sure you are getting the best possible. Once my provider checked my service and determined the underground cable on my property was losing (or “leaking”) a good part of my signal, so they replaced it. It made a big difference. Hopefully this short article will help you stay well-connected.

Wi-Fi - 2.4 or 5GHz

By Carol Picard, Editor / Webmaster,
Midland Computer Club, Michigan
Bits and Bytes capmidmi (at) yahoo.com
mcc.apcug.org

I normally have acceptable network speeds throughout my house but one day, while downloading file to desktop computer, which has a PCI wireless network card, was only getting 3 Mbps download speed. This is my primary computer and is also located in a room farthest from where the router is located. My ISP is Charter Spectrum and highest download speed should be around 60Mbps.

Since slow speeds have happened before, I decided to take the time to see if there was anything, I could do to improve the speed on the desktop computer. Running an Ethernet cable is an option, but I was looking for solution that would work for multiple devices, e.g., tablets, laptop computers, etc.

Using my laptop computer, I ran a speed test in several locations within the house. The speed test on the laptop computer in the same room as the Netgear R7000 router showed 60Mbps download speed. About 10 feet from router I was getting 30Mbps. At 20 feet from router it was 15Mbps but at the farthest distance (within the house) from the router it was 5Mbps. Speed tests normally fluctuate so I thought it was a good idea to run tests on different days and at different times of the day to get an average.

The router was dual band, capable of both 2.4GHz and 5GHz but had never used 5GHz.

I was surprised to discover that the PCI network card in seven-year-old desktop computer was dual band. I was concerned about the distance/obstructions between the computer and router. Several factors affect speed, other than distance, e.g., number and composition of walls, appliances, wiring, etc., and I had read that 5GHz had a shorter transmission distance than 2.4GHz.

After enabling the 5GHz band on the router, I ran more speed tests and was getting similar, high speeds on the laptop in the room where the router is located and on the desktop computer at the opposite end of house.

To check whether your computer is connecting at 2.4GHz or 5GHz, in Windows 10

- open Settings
- click Network & Internet Settings
- click Wi-Fi
- click Hardware Properties
- check information for Network band.

The Netgear R7000 router has a Smart Connect setting. The description of that setting indicates if SSID and network key are the same for both the 2.4GHz and 5GHz bands; the router would determine the best band for the connected devices. On the R7000, Smart Connect only applies to the main network. The Guest Network on the router has two bands (2.4GHz and 5GHz) but each band should have a unique SSID.

I configured SSID and network key on the router to enable Smart Connect. On the laptop, it successfully connected to the correct band, but using Smart Connect totally messed up the Internet connection on the desktop computer. I had difficulty connecting to the network and after connecting it either didn't get an internet connection or got it for a short time and then dropped it. Resetting IP and flushing DNS on desktop computer didn't resolve problem. Neither did changing DNS servers. So, I reconfigured router to not use Smart Connect.

On the desktop computer, I ran various speed tests (beta.speedtest.net):

- 5GHz band and results showed Download = 67.67 Mbps; Upload = 5.71 Mbps.
- 2.4GHz band results showed Download = 35.91Mbps; Upload = 5.71 Mbps.

I also tested using Charter Spectrum speed test.

- 5GHz band results showed Download = 66.40 Mbps; Upload = 5.75 Mbps.
- 2.4GHz band results showed Download = 39.42Mbps; Upload = 5.97 Mbps.

Upload speeds are almost always considerably slower than download.

Normally, when working on a specific problem, I find one or two more problems but this time, while working on a solution for the Internet speed problem at home, I discovered a solution to another problem. We recently changed the location for our Club meetings and when attempting to connect to the Internet at the new location, several members did not see the

wireless connection on their devices when viewing available networks and were unable to connect to the internet.

While testing different devices at home, e.g., laptop computers and tablets, I noticed that some of the devices were not showing the 5GHz SSID. I checked specifications for those devices and found the internal network card only had single band, 2.4GHz capability. A device that only has 2.4GHz network card, cannot see a network broadcasting at 5GHz. To further test this, purchased a Netgear AC1200 Wi-Fi USB Dual Band Adapter. Using the AC1200 adapter I could bypass the internal 2.4GHz network card and connect to the router's 5GHz band. I further tested this at last month's computer club meeting and was able to connect to 5GHz at the meeting location.

There are different ways to determine if a network card/adaptor is capable of dual band.

Under Device Manager, Network Adapters, description may indicate whether it is dual band.

In Windows 10

- open Settings
- click Network & Internet
- click Status
- click View your network properties
- scroll down to Wireless Network Connection

You can also try an Internet search for the model number of your device; specifications may show information

Security reminder: If you own your own router make sure you have changed the password for logging into the router (this is not the same as the SSID password for connecting devices to the network/internet). Also check for and install router firmware updates, especially security updates.

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Encrypting a Drive

By Dan Douglas, President Space Coast PCUG
The Space Coast PC Journal
www.scpcug.com datadan (at) msn.com

Last month I described a BIOS password problem that I had to solve. This month, we'll look at other password locks such as those used for protecting hard drive data.

One of the added features of Windows 10 Pro over the Home edition capabilities, is the ability to encrypt a drive to protect all data and files contained on that drive from unauthorized access. An administrator can select a drive from the File Explorer app and turn on the BitLocker option from the right mouse button option list. The user must then select an encryption key using any combination of uppercase and lowercase letters, numbers or symbols up to 64 characters long. It is critical to record this password as it will be impossible to access the files afterwards without this key. Windows will prompt you to save this key on your cloud account, or in a file or by printing it before encrypting the drive.

I recently had a customer who had a broken Surface PC and needed to recover some business files from the drive. The first place they'd taken it to had told them that it was not possible to access the data, not because it was encrypted, but because the drive was a solid-state circuit board, as is usually found in tablets and many Macs, and did not have the usual SATA drive connector. Having used many drives of this type before, I had the correct adapter to convert it to a SATA type connector. That was when we discovered that it had been locked using BitLocker. It prompted us to enter the key and the owner had no idea what that key may be. I told them that without the key I could not access the data for them. They were advised to check all their paperwork to see if it was recorded somewhere. Fortunately, when the PC was purchased, the BitLocker key was written on their bill of sale by BestBuy! When they returned later with the key,

we were able to access the data and transfer the files to a USB stick.

If you need to encrypt just specific files or folders and not a complete drive, there are several alternatives available. For example, Word and Excel provides for the ability to protect a document by applying the 'protect document' option to the file through the Word or Excel options. Adobe Acrobat can also be used to protect PDF type files. In certain versions of Windows, namely Windows 10 Pro, Windows 7 Professional, Windows 7 Ultimate, Windows 7 Enterprise, Windows 8 Pro or Windows 8 Enterprise also come with an Encrypting File System (EFS), which lets you encrypt any kind of file, as well as whole folders and subfolders. Users with a Home edition of Windows will need to use either the Office Suite encryption or a third-party solution, such as TrueCrypt, VeraCrypt or 7-Zip. EFS is applied by selecting the folder or file, select the properties/advanced through a right button click, and then select the 'encrypt contents to secure data' option. This encryption is applied using the logon ID and password so it is not as secure as that used by the BitLocker and I'm not sure what would happen if the password used by that ID was removed using a password removal tool. Possibly the data would stay encrypted and still require the original password to allow the files/directories to be accessed.

Many USB drives also offer their own encryption system for the files on that drive, but I would be hesitant to use these as the proprietary nature of the program may cause problems later.

Brain Dead In San Diego

By Art Gresham, Editor,
Under the Computer Hood User Group, CA
May 2019 Drive Light
www.uchug.org leditor101 (at) uchug.org

Sunday, March 31st, was "World Back Up Day." Even if you don't do a complete system backup, please back up your important documents (i.e.-

photos, videos, office docs, PDF files and any other files you deem important to you) to a USB drive, CD/DVD, external HD or the Cloud. Take the pledge and spread the word.

THE WORLD BACKUP DAY PLEDGE

“I solemnly swear to back up my important documents and precious memories on March 31st.” I will also tell my friends and family about World Backup Day - friends don't let friends go without a backup.

Did you read the World Backup Day information in UCHUG's March newsletter? The editor sure did. He (by which I mean I) put it there. So, for the 64-cent question. Did I do a backup? No. Bad on me, I guess. But no harm done. Right? Not so fast there buck'o.

As I started building the current newsletter (and following the scare raised by the Email issue our President reported this month) I was looking at the screen when it began having very weird patterns of color flashing over the entire screen. Quick as a wink I thought I should get a photo of it in case it turns in to something. Fishing my cell phone out of my pocket, and looking up, suddenly the color patches were gone. Back to normal screen. Strange but oh well. Grab the mouse and go back to work.....work... come on mouse WORK. Nope. No Work. No keyboard, No mouse, no Nuttin.

Power off, by brute force (power strip) and back on. Nothing. Not even the familiar Beep Beep, and CMOS screen. Nothing. Cycle power and try again. Nothing. Deep breathing. Go practice some Yoga. Or VooDoo. Calmly go to bed and hope it heals itself over night. Hey, it's been known to happen.

So now it's the next morning. Power on. YEAAAA, it boots like normal; everything is well again..... for about two minutes then.... Color patches. Frozen mouse and Keyboard. Dead.

So now I need a spare computer to use and try to get back on track. Perhaps the hard drive is still intact. I calmly disconnected the machine - a Gateway brand. Fortunately, I have my older generation computer, a Dell, still sitting beside my working system (which is no longer working). The Dell boots up right where it left off last October when last it was powered up. A starting point. Pull it out and remove the Gateway hard drive and place it in the Dell. They are similar 1 TB drives so no real compatibility issues. I expect it will work, with just slight performance reduction because of a slower CPU.

At this point many, or most, of you are saying. Wait. You can't just swap a hard drive into a completely different CPU box. The operating system will complain, and you will have to go through a bunch of fixes to get it to recognize all the different hardware. Wrong. You must think I am using some proprietary operating system like Windows 7 or 8 or 9 or 10!!!? Nope. Both systems were running Linux, Mint 17 and 18. More significantly, upon taking my up-to-date system hard drive, putting it into the older CPU box, and giving it power -- it instantly recognizes everything, mouse, keyboard, internet connection. Boots up to exactly where I left it on the broken machine yesterday morning. I have lost nothing much more than time and some worry. Of course, the operations are slightly slower. But much faster than DEAD.

So, at this point you may think I resumed building the Drive Light. You would be wrong. The first thing I did was to start a backup, and there is the moral of the story. Back up, back up, Back up! You never know when the computer will die, and you may not be so lucky as to be able to perform a 'brain-ectomy' to bring your data back to life. Moving on now. Got a newsletter to put together.

PLEASE – Donate to PATACS Today !!

The Society is an IRS recognized 501(c) (3) non-profit, educational organization. Donations are tax-deductible, helping us provide services and enhancements like Zoom conferencing and recordings of meeting to our members.

PATACS, Inc. 201 S. Kensington St. Arlington VA 22204-1141

Club Information call: 703-370-7649

Web Site: www.patacs.org

- President, Registered Agent, Internet Services:** Paul Howard, 703-860-9246, president(at)patacs.org
- 1st Vice President:** Ron Schmidt, 301-577-7899, director11(at)patacs.org
- 2nd Vice President, Membership Chair:** ... Mel Mikosinski, 703-978-9158, director4(at)patacs.org
- Secretary:** Jim Rhodes, 703-931-7854, director7(at)patacs.org
- Treasurer:** Roger Fujii, 703-426-5917 treasurer(at)patacs.org
- Director, Meeting Setup:** Bill Walsh, 703-241-8141, director14(at)patacs.org
- Director, APCUG Liaison:** Gabe Goldberg, director10(at)patacs.org
- Vendor Liaison:** Volunteer Needed
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- Windows Support:** Jim Brueggeman, 703-450-1384, windows(at)patacs.org
- Newsletter Editor:** Kathy Perrin, editor(at)patacs.org
- Columnists:** Volunteers Needed
- Publicity:** Volunteer Needed

Posts is an official publication of the Potomac Area Technology and Computer Society (PATACS), a Virginia membership corporation, a tax-exempt organization under section 501(c)(3) of the Internal Revenue Code. Contributions are gratefully received and tax deductible. We encourage our members to organize small topic-specific meetings at your choice of time/place. For further information or suggestions chat with any officer or director. Tech clubs often have Special Interest Groups (SIGs) on topics such as photography, Windows, Apple products/services, genealogy, financial applications, and much more. SIGs offer members the opportunity to find others with similar interests and increase knowledge in specific areas. We are very fortunate to have members with many skills they generously share.

OPCUG / PATACS Saturday Meetings

12:30 PM – Social time in Coffee Room and Annex
 1:00 – 1:05 PM: TA-1: Meeting Start –
 Introductions, Announcements
Please silence phones.

1:05 – 1:19 PM: Q&A – detailed responses may be deferred to post-meeting communication.
 1:20 – 1:50 PM: 'Learn in 30' Presentation
 1:50 – 2:00 PM: Break in Coffee Room / Annex
 2:00 – 3:20 PM: Featured Presentation
 3:20 PM – Door Prize Drawings (usually 3) for each group. Eligibility - group members only.
 3:30 PM – Adjourn (Expect some flexibility in scheduled times. Order may be varied to accommodate scheduling needs of our valued presenters.)

Meeting Information and Agenda

In June and December, a PC Clinic / Tech Help session is run concurrently with the meeting starting at 1 PM in the Annex.

See: <https://www.patacs.org/clinicpat.html>

With the concurrence of presenters, meeting sessions are webcast using the Zoom.us cloud meeting service.

Dues-paid members may 'attend' from remote locations, using the meeting number information provided on the PATACS website.

Please see:
<https://www.patacs.org/mtgdetpat.html#3rdsat>

Need more information about Zoom?

Contact: webinarhosts@patacs.org

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NOVEMBER 2019 PATACS Event Calendar

Call (703) 370-7649 for meeting announcements

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Sun	Mon	Tues	Wed	Thur	Fri	Sat
					1	2
3	4	5	6 7-9 pm Arlington General Meeting	7	8	9
10	11	12	13 7-9 pm On-Line Zoom Meeting	14	15	16 12:30- 3:30pm Fairfax General Meeting
17	18 7-9 pm Arlington Board Meeting	19	20	21	22	23
24	25	26	27 7-9 pm Arlington Tech & PC Help Desk	28	29	30

Arlington: Carlin Hall Community Center
5711 4th Street South
Arlington VA 22204

Fairfax: Osher Lifelong Learning Institute
4210 Roberts Road
Fairfax VA 22032