

The Space Coast PC Journal



Computing...Yesterday and Today

By Phil Sorrentino, Member of The Computer Club, Florida

<http://sccccomputerclub.org>
Philsorr.wordpress.com
philsorr (at) yahoo.com

Yesterday, circa 1965, computing was mostly programming to solve simple problems, to do simple accounting like running a payroll, to match items from a list, and maybe even to print results on multi-colored, fan-fold, wide computer paper. (I bet some of you even remember that kind of computer output.) In fact in those days, you never even saw the computer because it was enshrined in a temperature and humidity controlled room or rooms with a flooring system that allowed many, many heavy cables to be run beneath the computers, so they could go the shortest distance between the massive computer cabinets.

Computing in the 70s, 80s, (and maybe part way into the 90s), was still running special software on computers and printing the results. During this time, thanks to integrated circuits, computers got a lot smaller, and some even moved from the cavernous computer room to the smaller computer lab, where it only took up the space of one desk or so. Anyone remember the Digital Equipment PDP-8? And, during this time, we did start to use the computer for many office tasks like word processing (Word and Word Perfect) and data analysis (Excel and 1-2-3). If you are relatively new to computing,

you probably are not aware of this, but the first personal computer that showed up in 1975, the MITS Altair 8080, was available as a kit for \$395, (soldering iron and tools not included). No keyboard or monitor, input was done by setting a bank of switches and output was just a bank of lights. This was the humble beginning of a major change in computing.

Soon after this, Apple released the Apple 2, which was a major improvement in the way data got into and out of the computer. It had a keyboard for input and the output was displayed on a TV monitor. During this period, the early 80s, there were many start-up computer companies. If you leafed through a computer magazine (like PC Magazine) in 1980 you may have seen almost 100 different manufacturers of incompatible computers advertised. Radio Shack was even a player with its TRS-80 computer system. (Does anyone have or remember the Atari or Osborne or Commodore computers?) Finally, in 1981, the IBM-PC arrived and from then on it has been the platform of choice for computing, (at least from these computers-in-use statistics).

The original IBM-PC was an 8-bit computer, although it did have a 16-bit bus. (Anyone remember the Intel 8088 microprocessor chip?). During this period, Apple also released

Continued.....page 4



The Monthly Publication of the Space Coast PC Users Group, Inc.

Visit Our web Site at www.spcug.com



From The Editor

Editors Emeritus: Lois Hoover, Peter Gaul, Dan & Peg Currie, Steve Gaul

JOURNAL STAFF Editor Ron Ingraham.....777-2578

Database	Ron Ingraham
Circulation.....	Ron Ingraham
Electronic Journal	Ron Ingraham
Proof-Reader.....	Lori Ingraham

All work on the Journal, except printing, is performed by unpaid volunteers.

Submitting Articles to the Journal

We encourage all of our members to submit original computer-related articles for publication in *The Space Coast PC Journal*.

Writing a Product Review

It is really not that difficult to write a good review for *The Space Coast PC Journal*. These guidelines will help you get started:

Product information

- List the product name, release level, and manufacturer.

Use

- What does this product do?
- How easy is it to learn and use? Is it for beginners or does it have advanced features?
- List and describe some of the features. If this is an upgrade, what is new to this version?
- What did you like or dislike about it?
- Did you have to call Customer Support? What for? Were they helpful?

Installation

- How much disk space did the product take?
- How long did it take to install?
- Was it difficult to install?
- Specify requirements such as: DOS level, Windows level, Windows type, etc.

Recommendations

- Would you recommend this product?

Remember these are guidelines. They are not meant to be all-inclusive, nor should they limit your creativity. But all of them should be included as part of your article. Then the review will practically write itself!

Preparing Your Articles

To assist us in incorporating articles into the *Journal*, it would be helpful if certain minimum standards were followed. Use this quick-step guide:

Format: The preferred format is ASCII text files. We can also work with other formats, but check with the editor before using them.

Text: Single-space the text—even between paragraphs. Don't indent paragraphs. Use hard returns only at the ends of paragraphs.

Use only one space after periods, colons, and question marks. Follow standard capitalization rules.

Use left justification only. Do not right justify or block your text. (Word processors add extra spaces between words to justify the text and each of those extra spaces must then be removed.)

Graphics: The preferred format for graphics accompanying your text is TIFF—in separate files from the text. Embedded graphics are not useable. Most image editing programs have a "resize" option to alter the size of graphics. Please try to keep your graphic file sizes to around 1 meg in size. Call the editor if you have questions.

Be sure to include your name and phone number so we may contact you if we have any questions. Anonymous articles will not be published.

Submit your article by uploading the file to ringram28@cfl.rr.com bring your disk and hardcopy to the Monday meeting or mail to:
Editor, SCPCUG Journal
Space Coast PC Users Group, Inc.
8700 Ridgewood Avenue, #B-301
Cape Canaveral, FL 32920-2040

Articles must be received by the 28th of the month to appear in the next issue, and all are, of course, subject to editing. □

Most of you are probably aware that Microsoft will be releasing Windows 10 on July 29th. At one point this was interpreted to mean "Release To Manufacturers, RTM". More recent information indicates that it will be made available to eligible computer owners

There was an update which placed an icon on the information area, or perhaps the lower right corner of the screen on eligible Windows 7 and 8.1 computers. Clicking on the icon prompted one to "Reserve" a copy of Windows 10. Also very informative.

Many of our members, including myself, never saw this icon. Nor did it appear on my wife's Windows 7 laptop. It's the White Window flag,



second from left as seen above.

I decided to check for the updates and wound up downloading KB3035583. Among other things, that put the Windows flag icon on the system tray.

There are lots of comments about this circulating. Many question the advisability of clicking on it, or installing Windows 10 when offered. Check this one: <http://www.infoworld.com/article/2932192/microsoft-windows/how-to-remove-or-acquire-the-windows-10-free-copy-icon.html>

It's coming - be prepared.

Ron Ingraham, Editor

The Space Coast PC Journal

Published monthly by the
Space Coast PC Users Group, Inc.
8700 Ridgewood Avenue # B-301
Cape Canaveral, FL, 32920-2040

Computers -Yesterday and Today....from page 1

some very successful computers such as the Apple 2e, and finally the Apple Mac. (The Apple Lisa didn't fare too well, even with its forward looking Graphical User Interface, which, as it turns out, is a forerunner of our modern Windows User Interface). How is that for digital computer nostalgia?

Today, things are a little different in what we wish to accomplish with, and in what we expect from, our computers. Today, we still expect to accomplish problem solving, but we also expect to communicate the results to, and collaborate with, others nearby, and halfway around the globe. Over the last few decades, our computers have gone in several directions and morphed into several "computing devices" such as desktops, laptops, tablets, and smartphones. Today our computing devices have become the focal point of our virtual digital existence and provide, for us, both computing and communications capabilities. These communications capabilities are now an integral part of our computing devices. Where would we be without smartphones, Wi-Fi, cell towers, and Starbucks?

So what is computing, today? Well, computing today is multi-faceted and quite ingrained in our daily lives. Much of it revolves around the home as well as the office. In the office we still use the computer to solve simple and complex problems like organizing a small business's finances, or tracking the latest hurricanes across the globe. The results, however, are typically provided as softcopy output on a flat panel, touch sensitive display, and only sometimes as hardcopy printouts. But, we also expect to communicate with other workers, and sometimes the public, using our computer. Office networks, Wi-Fi, the Internet and Social Networking Apps allow us to communicate with others across the hall and across the globe. At home we communicate with others, mostly by email, but very often by texting, (especially if we are trying to keep in contact with grandchildren), or video conferencing, aka Skype or Face Time.

Our home computer is the repository and focal point for all our digital information: documents, pictures, and videos. Documents that we create or collect are stored on the home computer for easy access, and long term storage. Pictures that we take with our digital cameras, smartphones, tablets, and scanners are all centrally housed on the home computer. At least, that is one way of keeping track of the large number of pictures we take using multiple devices. (When was the last time you moved your pictures from

your smartphone to the computer? No excuses now.) Videos that we create or acquire are also housed on the home computer. Where else would you be able to store a bunch of 2 to 3 Gigabyte files? We communicate, entertain, and keep track of our home activities, all with the home computer. Not so long ago, the computer in the home was considered the "personal computer". But, today, the desktop or laptop, in our home is really a "home computer" while our smartphone (or tablet) has taken on the role of "personal computer." □

Minutes – Board Of Directors Meeting – May 21 , 2015

The purpose of the meeting was to interface with Officers of the Brevard Users Group Computer Club, to finalize the BUG members joining the Space Coast PC Users Group, and the transfer of the necessary funds.

Attendance:

SCPCUG

President – Dan Douglas

Treasurer—Jim Brown

Secretary—Harry Pearson

Journal/Learning Center—Ron Ingraham

Webmaster—Curt Postic

Vice President Larry Bennett was absent

BUG

President - Larry French

Secretary—Bill Middleton

Newsletter – Jim Townsend

Dan opened the meeting @ 5:30 p.m.

Larry French submitted a list of their paid up active members, which is currently 51. For those to join SCPCUG @ \$25 each comes to \$1275 and he presented a check in this amount to Jim Brown.

Jim Townsend showed a copy of the Minutes of their recent meeting to Ron Ingraham and they discussed the format to send these to Ron for inclusion in our Newsletter.

Ron said he would forward a copy of each of our Newsletters to Larry French who in turn would forward them to the BUG members. .

General discussion followed.

As the starting time, 6:00 p.m. for the regular SCPCUG Meeting was approaching, the meeting was adjourned. □



From the C a s h i e r ' s C a g e

By Jim Brown, Treasurer Space Coast PC Users
Financial Report for Period Ending
May 31, 2015

Beginning Balance May 1,	\$2669
Received During the Period	
New Members - 51 BUG Members (Btrevard Users Group)	\$1275
-	
Total Received During the Period	\$1275
5	50
Total Spent During the Period	
0	
Total Spent During the Period	181
Balance at May 31, 2015	\$3944
May 30, 2015	
September 29, 2014	
Space Coast PC Users Group, Inc.	

SIGs (Special Interest Groups)

Saturday SIGs

The following SIGs meet on the First Saturday of the month at the Merritt Island Library Conference Room:

SIG	Time	Leader
Windows	12:00-1:00	Ron Ingraham
Internet/Web	1:00-2:00	Ron Ingraham

These sessions are designed to provide assistance and advice on the related subject for members at all levels of experience. Don't feel that your questions or problems are too basic. We know much more collectively than we do as individuals.

Club Meeting Minutes May 21, 2015

President Dan Douglas opened the meeting at 6:00 p.m.

Other Board Members present were Treasurer Jim Brown, Secretary Harry Pearson, Webmaster Curt Potic and Journal/Learning Center Ron Ingraham.. Vice President Larry Bennett was absent. Attendance was 14. There were 3 new members – Larry French, Bill Middleton and Jim Townsend. These three were part of the Brevard User Group (BUG) and had met with our Board at a meeting just prior to this one to complete the finances of their group joining ours as members only.

Treasurer: Jim said the balance had been \$2669, but with the addition of \$1275 from the BUG it is now \$3994.

Secretary: Harry said the Minutes for the April 16, 2015 Club Meeting are on Page 5 and the Minutes of the BOD Meeting on April 16, 2015 are on page 28 of the June 2015 Journal. He said he had additions to the Minutes in that Curt Postic had won a computer in the Drawing donated by Don Myer.

Webmaster: Curt said the Home, Special Events, Journal and Speaker Pages have all been updated. There is one New Link – State of Florida Unclaimed Property – Florida Treasure Hunt. Misc. Comments included Patch Notifies Win 7 and 8.1 Users to Upgrade to Windows 10, Verizon's Acquisition of AOL. What Devices Do You Need To Watch Video, Six Editions of Windows 10, Windows 10 Home Users Will Not Be Able To Turn Off Automatic Updates and Candy Crush Saga To Be Preinstalled On Windows 10. Note: considerable Q & A took place as the Windows 10 items were mentioned

Journal/Learning Center: Ron said the Learning Center will be on Saturday, May 23, at the Merritt Island Library. He said the June Journal has been emailed.

Without a break, the Program began which was a Roundtable led by Dan Douglas. Almost the entire discussion was about Windows 10.

The Drawing followed =, One CDRW and 3 CD holders one issue of CPU Magazine, DVDs of Herbie Fully Loaded and a VHS of Star Trek.

7:45 p.m. – Adjournment



From Dan's Desk

I must admit that one of the things that keeps me interested in the latest computer and electronics trends is the chance to play with cool gadgets, or as some people call them, toys. I recently got my latest gadget - an Amazon Echo that I had ordered back in January. The Echo has turned out to be one of the coolest devices that I've seen in a while. It's ideal for anyone who has an Amazon Prime membership and loves listening to music.

Echo is about 9" high, cylindrical shaped and about 3" in diameter with a typical power transformer (many people call them warts) adapter. The top 1/2 inch or so has a led colored ring on the top that can rotate to adjust the volume. Within the cylinder are two speakers - a midrange/tweeter and a woofer. The Echo can be controlled 4 ways - voice commands spoken to it within the rather large listening range, through a remote control that also uses your voice, through a smartphone app or via a web browser. For now it only responds to one name, either Amazon or the default of Alexa.

The Echo connects to your Wi-Fi network and through that connection, the Echo can be controlled through the devices on the same network and it allows the Echo to access News, Sports, general information and most importantly, the Amazon Prime Music service which has over a 1,000,000 songs plus any music that you have uploaded to your own Amazon account. A typical interaction may be asking "*Alexa* - (the LED light glows blue with a green section pointing at the direction of your voice), *what's the weather forecast?* - Echo will respond with a pleasant female voice with the details.

Virtually anything you can think of to ask, Alexa will try to locate. This is the initial software release so many future

enhancements will be delivered through firmware updates. Recently the ability to ask for traffic, select Pandora radio stations and control SmartHome devices such as lights, thermostats and doors, was sent out via an update.

What I really love is the music! Within 2 seconds of asking for a song, it is typically playing. I say *Alexa*, wait for the light, and then say *play Margaritaville* and Alexa says *Playing Margaritaville by Jimmy Buffett* and the song plays. The sound can be loud and clear depending upon your volume preferences. I thought I'd try it outside since it worked so well inside the house. I plugged it in outside by the pool and jumped in the water. While floating along, I said in a normal voice *Alexa - Play Closing Time* - and Alexa says *Playing Closing Time by Leonard Cohen* and the song plays. To raise the volume you use a scale from 1 to 10 and do a command like *Alexa - volume 6* which is loud enough to be used while in the pool but not so loud as to annoy the neighbors. The Echo can be paired with a Bluetooth device such as a smartphone to be used as a music source to be played through the Echo

When the Echo is playing, the song art and info is displayed on your tablet/smartphone through the free Echo app. You can also stop, pause, resume, play, fast forward, etc. through the interface. A history of all of your requests can be displayed through the history function on the app.

When your wife says it's a cool device, you know it's a winner! She tells me it's the best thing since TiVo successfully implemented the concept of a multi-channel DVR. I'm planning on bringing the Echo to the next SCPCUG meeting (June 18) if you'd like to see a live demo. □



June 2015

Create Foreign Language Characters

Q. My keyboard has several diacritic marks, including the tilde and circumflex accent. How does one place such a mark over a letter?

A. Diacritic marks? Circumflex accents? Pulleezeel! Around here we refer to those as doohickies and squiggly things, so kindly refrain from using such high-falootin' technical jargon in the future. I do have a reputation to protect, you know. Turning to the squiggly thing that is also known as a tilde, on the keyboard it's a single character. But since you cannot press two keys at the same time -- and Lord knows I've tried -- you cannot force the keyboard tilde to appear above another letter by brute strength. ALT Codes are required to create special characters such as ÿ © « ¢, which may not display on all systems. ALT Codes are deployed by using the ALT key in concert with the numeric keypad located on the right side of most keyboards -- not the numbers at the top of your keyboard. Make sure the NUM LOCK is toggled on in order to use ALT Codes. To view a list of most ALT Codes and the special characters they create, take a look at Washington State University's list of Doohickies and Squiggly Things at <http://tinyurl.com/9ylga>.

Q. How can I convert a bookmark into a Desktop icon for faster access? Thanks, Mr. M.

A. The easiest thing to do is go to the Web site that you want to create a shortcut to, then drag it to the Windows Desktop. To do that, place your cursor on the little icon to the left of its address as it appears in your browser and drag that to the Desktop. It will instantly create a shortcut to the site. Press F2 to rename the shortcut, if you wish. Depending on the browser you're using, you might be able to drag it from the list of bookmarks itself. Then again, you might not.

As an alternative, if you don't mind a little hard work, you can roll up your sleeves and create it manually:

First, note the address of the Web page so you have that at hand or in mind, whichever is the most reliable. Let's use Google as an example. Its address is <http://www.google.com>.

Right-click anywhere on the Desktop and select New > Shortcut. In the Location field type Google's address, then click Next and give the shortcut a name -- something clever like "Google" will work -- then click Finish. That's all there is to it.

Q. The sound system in my new car will allow me to plug in a USB drive and play songs. I have quite a few, so how large of a drive should I buy to copy my songs to?

A. Assuming your songs are in MP3 format and each song is approximately three minutes in length, every 2GB can accommodate approximately 500 songs. So a 4GB drive can hold 1000 songs, a 32GB drive 8000 songs and a 64GB drive a whopping 16,000 songs.

Converting all those tunes into listening time breaks down as follows: 500 songs, without allowing for time between songs, will play for 25 hours; 1000 songs will play for 50 hours (more than two days of 24/7 tunes); 8000 songs. 5.5 days; 16,000 songs, more than 11 24-hours days. Yikes!

Mr. Modem's DME (Don't Miss 'Em) Sites of the Month

Episode Guides

Here you will find lists and links containing episode titles and air dates for more than 6,900 TV shows. Type in the name of a show, old or new, use the "Current Shows" link or the alphabetical listing. Also included are links to TV-related retailers, schedules and UK-based radio shows. www.epguides.com

The Body Explained

Hosted by Baylor College of Medicine in Houston, this portion of the "Bio Ed" site uses original video clips to answer common questions about the functioning of the human body. Browse the site's list of delightfully light-hearted yet informative video explanations. Make your selections, then sit back, watch and discover the answers to such life-altering questions as, "What causes

Continued.....page 8

Mr. Modem.....from page 7

an ice cream headache?” and “Why do our ears pop?”
<http://tinyurl.com/o57gltg>

Where’s George?

This entertaining and quasi-informative site tracks where your U.S. dollars go -- not in a budgeting sense, but geographically. Enter the serial number(s) of your bills and leave a comment explaining where you obtained them, what condition each bill is in, or if you made any special markings on any bills (which you’re not supposed to do). As other individuals check their serial numbers, if someone receives one of your bills, they will presumably note the same information so you can track the meanderings of your dollars. Registration (first name and email address) is required to check the whereabouts of any bills you enter. The same service, called Where’s Willy (whereswilly.com) is available for tracking Canadian currency. □
www.wheresgeorge.com

To subscribe to Mr. Modem’s award-winning weekly computer-help newsletter and receive personal responses to your questions, visit www.MrModem.com

For more than a decade now, many tech writers and gurus have been saying the desktop computer is doomed. More recently, they’ve been saying that PCs and Macs as a whole are doomed.

To quote Inigo Montoya from “The Princess Bride,” “You keep using that word. I do not think it means what you think it means.”

From what I’ve seen, the desktop and laptop aren’t going anywhere anytime soon. Lots of people love their desktops and laptops, and computers are still essential for certain tasks and industries.

That being said, computer sales have taken a serious hit in the last few years because a lot of people are buying something else instead.

Yep, I’m talking about tablets. I know several people who have made the switch and they’re perfectly happy. That’s because tablets are more portable, easier to use, generally more secure and often less expensive than a computer.

If you want to surf the Web, read books, Skype, update Facebook, compose email, watch videos and play casual games, a tablet is enough. It can even handle some more advanced tasks like photo organizing and basic editing.

Of course, if you’re used to a computer, switching to a tablet-only lifestyle can be a bit bumpy at first. Here are some things you need to know before you think about making the switch.

Hardware

A tablet is definitely more portable than a desktop or even a laptop computer. You can use it in bed, curled up on the couch, in the kitchen or take it on the go.

That portability does come at a price, though. If you’re used to whipping up detailed emails, long Facebook posts or new pages for your novel, you might find the lack of a keyboard on your tablet to be a problem.

Typing on a tablet’s touch screen is fine for short bursts, but over the long haul you can’t beat a computer keyboard. Plus, hunching over a tablet for long periods of time isn’t the best for your posture.

I suggest getting a third-party stand and keyboard for your tablet. You can find folio cases that combine both



Why you don’t need a computer

*from Kim Komando’s Column,
June 7, 2014*



[Photo courtesy of Shutterstock](#)

stand and keyboard, such as these ones I sell in my store for [Android](#) and [iPad](#).

Keep in mind: If you go for a Microsoft Surface tablet, it has a built-in stand and an optional cover with a built-in keyboard.

If you're just interested in just a stand - say to improve your reading posture, [video chat more naturally](#) or use your tablet as a digital picture frame - I sell a few of those as well. Check out the [Vario-SC](#) or this [brilliantly simple angled stand](#).

Exclusive Offer: As a thank you for being one of my loyal readers, if you buy any of the stands or keyboards listed above from my store, you can enter promo code **NEWS14** and save 10 percent!

The nice thing about add-on stands and keyboards is that when you're done writing, you can pop the tablet out and it's back to [playing popular games](#) while curled up on the couch. Try doing that with your desktop.

If you're tired of staring at the small tablet screen, many tablets can plug into a TV with HDMI.

You can also grab a USB On-The-Go adapter for many Android tablets that lets you plug in a flash drive or other USB-based add-ons. iPads have an adapter for USB camera cords and SD cards.

Apps

It isn't just the hardware that takes some tweaking. You probably have some programs on your computer you can't live without. It might be your word processor, photo editor or financial program. How do you get those on your tablet?

Well, unless you buy a Surface Pro 3 tablet that runs a full version of Windows, you probably can't. What you can do is find app versions and replacements.

Email, Facebook, a media player, a browser - every tablet comes with these, and you can get third-party replacements if you want.

For documents, there are app versions of [Microsoft Office](#), [Apple's iWork](#) and [Google Docs](#). If you buy a Microsoft Surface RT tablet, Office apps are already built in.

For photo editing, you can get Adobe's [Photoshop Touch](#) app. To organize your photos, you can use the

tablet's built-in photo library app or grab an app like [Tidy](#).

To help with your finances, you can grab the [Mint app](#). If you're already familiar with [GnuCash](#) on your computer, you might want to grab the [GnuCash app](#).

If you have certain programs that you use a lot - [scanner](#), [weather checker](#), [personal organizer](#), [medical reference](#) - you can [poke around](#) and probably find an app that does the same thing. There are even apps to [help you print](#).

Now, you might have a special program you use that doesn't have an app equivalent. In that case, you'll want to stick with a regular computer, or snag a Surface Pro tablet that runs a full version of Windows. ☐

Reprinted with Permission. Copyright © 2014. Kim Komando.

www.komando.com

Kim can be heard locally in Melbourne: WMMB 1240AM, Saturdays starting at 10am-1pm; in Cocoa: WMMV 1350AM Sim WMMB, Saturdays starting at 10:00AM-1:00PM.



Webmaster Wanderings

by Curt Potsic, Webmaster, Space Coast PC Users Group. Inc.

State of Florida Unclaimed Property, Florida Treasure Hunt - Search for Unclaimed Property from Dormant Accounts in Financial Institutions, Insurance & Utility Companies, Securities & Trust Holdings plus Tangible Property from Abandoned Safe Deposit Boxes. <https://www.fltreasurehunt.org/>

Currently, the Florida Chief Financial Officer holds unclaimed property accounts valued at more than

Continued.....page 10

Webmaster Wanderings.....from page 9

\$1 billion, mostly from dormant accounts in financial institutions, insurance & utility companies, securities & trust holdings. In addition to money & securities, unclaimed property includes tangible property such as watches, jewelry, coins, currency, stamps, historical items & other miscellaneous articles from abandoned safe deposit boxes. Unclaimed money is deposited into the state school fund, where it is used for public education. There is, however, no statute of limitations, and citizens have the right to claim their property any time at no cost.

My Personal Experience:

Travelzoo's initial gimmick to get users was to give away free shares in the company for signing up for their website. It appears most people assumed, like so many bubble-era gimmicks, that the company simply faded away. But Travelzoo survived! Only problem was that those who owned shares were supposed to make a claim by April 2004. However, after that news came out, some people got upset that they missed the deadline & amazingly Travelzoo decided to honor

those requests, saying they would pay out in cash what the shares were worth.

Last week I received a check for \$107.04 for 6 shares of Travelzoo stock after a 2 for 1 split. I was originally given 3 shares at Travelzoo's startup in 1998. To claim it I had to fill out a claim form with my SSN and submit a copy of my drivers license & a copy of a current utility bill to the State of Florida.

Misc Comments**Patch Notifies Win 7 & 8.1 Users To Upgrade To Win 10**

Last month under Misc Comments I mentioned Microsoft had pushed a 'Recommended' patch via Windows Update that enables some new options for notifications in Win 7 SP1 & Win 8.1 to upgrade to Win 10. Update in question is **KB3035583**. Also said I had found this patch on my Win 8.1 HP desktop, Win 8.1 Nextbook 2-in-1 laptop/tablet, & Win 7 Acer laptop showing it was installed in early April. Since then I have been getting Periodic Notifications but only on my Win 8.1 Nextbook 2-in-1 laptop/tablet saying "Windows 10 is Ready! Get Started." Have also now found an icon in the apps list titled "Windows 10

Technical Preview." Have not clicked it as I don't want to install the Windows 10 Technical Preview. Waiting for the official Win 10 release.

Verizon's Acquisition of AOL

May 12, 2015 -- Verizon announced plans to acquire AOL for \$50 per share, an estimated total value of approximately \$4.4 billion. The addition of AOL's ad insertion platform should allow Verizon to advance its revenue model for mobile video. Some of AOL's key assets today include TechCrunch, Engadget, and AOL.com. Remember back to Jan 10, 2000 when America Online Inc. announced plans to acquire Time Warner Inc. for roughly \$182 billion. It was a \$350 billion merger. The transaction was to create a 21st-century media powerhouse involved in everything from providing Internet access to making movies to running cable TV channels to publishing magazines to owning Yogi Bear. The whole thing turned out to be such a disaster that AOL Time Warner dropped the "AOL" from its name in 2003, as if to pretend that it had never happened. In 2009, it spun off AOL into a public company. Today aside from 2.1 million remaining dial-up customers, AOL has little in common with the behemoth it was at the turn of the century. How times have changed!

What Devices Do You Use to Watch Video?

Nielsen recently surveyed 30,000 people in 60 countries. Once there was only one option for watching video at home, the TV set. Now there is TV, computer, phone, & tablet.

For 65+ age group (Silent Generation): TV=91%, Computer=15%, Phone=2%, Tablet=4%.

For 21-34 age group (Millennials): TV=62%, Computer=42%, Phone=22%, Tablet=16%.

Six Editions of Windows 10

Windows 10 Home: Consumer-focused desktop edition. Offers a familiar & personal experience for PCs, tablets & 2-in-1s. Windows 10 Home will help people do great things, both big & small. With it, they will be more productive & have more fun thanks to a long list of new innovations: Cortana, the world's most personal digital assistant; the new Microsoft Edge web browser; Continuum tablet mode for touch-capable devices; Windows Hello face-recognition, iris & fingerprint login; and right out of the box, a broad range of universal Windows apps like Photos, Maps, Mail, Calendar, Music & Video.

Windows 10 Mobile: Designed to deliver the best user experience on smaller, mobile, touch-centric devices like smartphones & small tablets (under 8 inches).

Windows 10 Pro: Desktop edition for PCs, tablets & 2-in-1s. Building upon both the familiar & innovative features of Windows 10 Home, it has many extra features to meet the diverse needs of *small businesses* (less than 250 employees per US definition).

Windows 10 Enterprise: Builds on Windows 10 Pro, adding advanced features designed to meet the demands of *medium & large sized organizations*. It provides advanced capabilities to help protect against the ever-growing range of modern security threats targeted at devices, identities, applications and sensitive company information.

Windows 10 Mobile Enterprise: Designed to deliver the best customer experience to *business customers* on smartphones & small tablets.

Windows 10 Education: Builds on Windows 10 Enterprise, and is designed to meet the *needs of schools* – staff, administrators, teachers and students

Windows 10 Home Users Will Not Be Able To Turn Off Automatic Updates

A new report claims that turning off automatic updates will not be an option for Windows 10 Home users. Users will receive updates as soon as they are ready. There will be no option to delay deployment or refuse the various updates & patches that are released. On the flipside Windows 10 Home user computers & machines will always be running the latest version of the operating system.

Candy Crush Saga To Be Preinstalled On Windows 10

Microsoft have confirmed the hit game Candy Crush Saga is coming to Windows 10. Candy Crush Saga will be automatically installed for customers that upgrade to or download Windows 10 during the launch! No word as to if it will be removable for users that don't want it. Microsoft will also be bundling the Solitaire Collection, Minesweeper & Hearts into Windows 10. □

One is left with the horrible feeling now that war settles nothing; that to win a war is as disastrous as to lose one.

Agatha Christie

Computer Experiments

By Dick Maybach, Member, Brookdale Computer Users' Group, NJ

March 2015 issue, BUG Bytes

www.bug.com

n2nd (at) att.net

In the early days of PCs, we had no choice but to experiment with them. Back then, what today are simple changes required changing hardware and software configurations. Since a PC was more of a toy than an essential appliance and stored no important information, if a problem arose it affected nothing except the PC itself. Contrast this with today, where we rely on our PCs for essential communication, for filing our taxes, and for storing important information. All this makes us reluctant to experiment lest we lose an important asset. The result is that as we come to depend more and more on our PCs, we tend to know less and less about them.

The solution is to use a safe “sandbox” where we can experiment without risk, and we can implement one with either hardware or software. This isn't always necessary; for example writing computer gaming software usually doesn't endanger the PC on which it runs. In fact, all modern operating systems restrict what applications can do, in particular, they are usually prevented from making changes in the operating system or other applications. However, applications are allowed to modify user files. If this concerns you, create a separate account for your experiments. There are several approaches you could use: boot from a live CD-ROM, dual boot two operating systems on one PC, or use a virtual machine, an old PC, a Raspberry Pi, or an Arduino. One or more of these probably suits your purposes.

In the live CD-ROM approach, you use a special operating system that runs from a read-only medium rather than a hard disk. Such media also include live DVDs and live memory sticks. You can use these on any PC that will boot from a CD-ROM or a USB device. (Booting a live media on a Mac can be problematic, with many people reporting problems. There is a utility that creates a live USB memory stick that boots on a Mac, <http://www.makeuseof.com/tag/>

Continued.....page 12

Computer Experiments.....from page 11

[how-to-boot-a-linux-live-usb-stick-on-your-mac/](#), but I haven't tried it.) The advantages of this approach are that it doesn't require any changes to the host hardware or software and that when you power down and remove the live medium the host system is unchanged. However, there is a substantial performance penalty because of the low data-transfer rate of the live medium, especially if it's a CD-ROM or DVD. Also it is generally not possible to update the live OS or to add applications to it. Almost all live CD-ROMs are Linux, and the main uses are to see if your hardware is Linux compatible and to run diagnostic or high-security software.

In the dual-boot approach, you either partition your hard disk or add a second disk, install a second operating system, and modify the disk boot record to allow you to choose which system to run at boot time. Because this requires making substantial changes to your software configuration, you must proceed carefully. The best time to do it is on a new PC that isn't storing any vital data. Thus, when you acquire a new PC, if you think you might be interested in trying dual boot at some later time, you might set it up for

immediately. This is also possible on a Mac, see <http://www.notebookreview.com/howto/in-progress-how-to-dual-boot-from-a-mac-into-windows/>, but again I have no experience with this. There is no performance penalty here, except for the disk space that the second operating system occupies, since whichever one is running has the full use of the PC. Only one operating system can be running at any time, and switching between them requires a reboot. Files can usually be transferred between the operating systems by reading from and/or writing to the idle operating system disk area, but in some situations you may have to transfer using a USB memory stick or external disk.

If you have a fairly powerful computer, using a virtual machine is the most convenient way of experimenting. A virtual machine manager is an application program that runs on your main operating system (called a "host") and provides an environment for a second operating system (called a "guest"). As far as the guest knows it has its own hardware. This does not require modifying the host hardware or software, as the virtual machine manager is just another application. A popular VM program is the free VirtualBox, <http://www.virtualbox.org/>, with versions available for Linux, OS

X, and Windows. The performance penalty is small provided the host CPU has virtual machine support features. The host computer also must have enough resources to run the host and guest OS simultaneously, in particular enough RAM (at least four and preferably eight Gbytes) and disk space (allow at least eight Gbytes for each guest). It's very easy to add and remove guests, and the guests can be updated and can accept the installation of new applications. Since both guest and host operate at the same time, you can simultaneously run tasks on both. If the host PC is networked, the guest appears as a separate PC on the network.

If you have an old PC, you can use this for your experiments. It probably isn't fast and may have limited RAM and disk capacity, and you probably can't run the latest operating system, but this may not affect your experimenting at all. If it is very slow, try to figure out why. Often, the problem is not enough RAM, and this is cheap to fix. Since you are probably reluctant to put much money into a relic, you should consider switching it to Linux, which reduces all your future software expenses to zero, and at the same time makes available hundreds of applications. Some Linux distributions are designed to run well on old, slow hardware.

Rather than reuse an old PC, you could purchase a Raspberry Pi, <http://www.raspberrypi.org/>, a complete PC available for less than \$100 if you can use an existing display. Although it's tiny, about the size of a credit card, it has similar performance to an old PC, and since it uses Linux, the software is free. Because it has an Ethernet port, it's suitable for building network servers (multi-media, file sharing, Web, etc.). And because it's completely separate from your home PC it's safe for hardware experiments where it's connected to external devices. If you completely destroy the

Raspberry Pi card, it can be replaced for about \$40. There is an active community interested in the Pi with the result that many books, magazine articles, and support Website are available.

Another hardware solution is the Arduino, <http://www.arduino.cc/>, which like the Pi is credit-card sized, but this is a programmable controller rather than a computer. It runs as a USB peripheral to a Linux, OS X, or Windows machine, and is programmed in a X, and Windows. The performance penalty is small

X, and Windows. The performance penalty is small provided the host CPU has virtual machine support features. The host computer also must have enough resources to run the host and guest OS simultaneously, in particular enough RAM (at least four and preferably eight Gbytes) and disk space (allow at least eight Gbytes for each guest). It's very easy to add and remove guests, and the guests can be updated and can accept the installation of new applications. Since both guest and host operate at the same time, you can simultaneously run tasks on both. If the host PC is networked, the guest appears as a separate PC on the network.

If you have an old PC, you can use this for your experiments. It probably isn't fast and may have limited RAM and disk capacity, and you probably can't run the latest operating system, but this may not affect your experimenting at all. If it is very slow, try to figure out why. Often, the problem is not enough RAM, and this is cheap to fix. Since you are probably reluctant to put much money into a relic, you should consider switching it to Linux, which reduces all your future software expenses to zero, and at the same time makes available hundreds of applications. Some Linux distributions are designed to run well on old, slow hardware. □

The Best Virus Protection...ever

*By Phil Sorrentino, Member of The Computer Club,
Florida*

<http://sccccomputerclub.org>
Philsorr.wordpress.com
 philsorr (at) yahoo.com

Virus Protection isn't really a very popular topic, until you've concluded that your computer has just been infected by one of those nasty viruses. You know the symptoms: strange pop ups, abnormal operations, and/or very slow responses. It seems like computer viruses have been around for a very long time. As it turns out, computer viruses have been around longer than personal computers. Here is just a little computer virus history. The first experimental self-replicating program, called "Creaper", was written in 1971, and was intended to infect Digital Equipment Corp. (DEC) PDP-10 computers running the TENET Operating System. How's that for a bit of history trivia? Fast forward to the personal computer era, when in 1981 a virus called "Elk Cloner" was written for the then very

popular Apple II personal computer. Followed, in 1983, by a very early Trojan Horse designed for the IBM PC. This virus deleted all of the files on the computer's diskette (remember 5 1/4" floppy diskettes?), cleared the screen and typed ARF – ARF. (ARF was a reference to the common "Abort, Retry, Fail" message you would get when a PC could not boot properly.) Also, in 1983, the term "virus" was coined, to describe self-replicating computer programs. And in 1984 the operation of these viruses, that of including a copy of itself, was termed "infection". And so computer viruses have been with us, infecting our computers ever since.

The term "Malware, which is short for malicious software, is currently used as an umbrella to describe any software that is used to disrupt computer operation, gather sensitive information, or gain access to private computer systems. (Malware usually does not include software that causes unintentional harm due to some design deficiency; that's just bad design.) Malware does not usually include all those programs that come along for the ride when you are downloading something of interest. These are typically termed Potentially Unwanted Programs, or PUPs. And, just for completeness, the term "spyware" refers to malware that aids in gathering information about a person or organization without their knowledge and that may send such information to another entity without the owner's consent.

So, even though we all use virus and spyware protection, most of us, maybe all of us, have been the victim of some type of infection. So, what's a person to do when all of a sudden the computer seems to be operating strangely or unusually slow? Well, as most of you know there are a few very useful tools that you can try. Tools like MalwareBytes, SuperAntiSpyware, and Panda. Sometimes they may do the job, by eliminating or quarantining the virus, and sometimes they just may not help at all. What happens when they don't help? I know there are some very capable computer experts out there who have toolboxes full of very capable software tools that could probably fix any type of virus infection, but those experts may not always be available when you need them. And, virus removal by an expert may be a very costly undertaking.

So, we need to have a fall back plan for this eventuality if, or rather when, our computer becomes infected

Continued.....page 14

The Best Virus Protection.....from page 13

and there seems to be either no easy out, or the cost is too dear. This kind of plan would truly be the best virus protection. One plan of approach is to have a recent Image of the computer System, so that it can be restored to the computer. Yes, I know this will take time, and you will have to reload anything that isn't included in the recent Image, but this will always work, no matter what type of virus is present (as long as the virus hasn't been included in the previously saved Image). Note too, this is also a good solution for a crashed disk drive, a hardware problem. This is a good solution only if you have backed up all of your valuable data, but I'm sure you regularly do this.

There are a few ways to get a System Image. The first possibility is that you may have an original Image of your system. It may be a D: partition that may be called a Rescue or Restore partition or something similar, or it may only be labeled with the manufacturer's name. Restoring this Image will bring your computer operation back to the way it was when you bought it. Unless you've had an unusual early disk drive failure or just bad luck to have become infected with a nasty virus, this Image is probably not very "recent". If the computer has been around for a while, the update process that needs to follow the restored image will probably take a good amount of time. I've restored some computers that needed 12 to 14 hours of updates to get back to current operation. So, though this operation will always work, it may be very time consuming, and take a lot of patience.

The second way of getting a System Image is to use a commercial System Imaging application to create a system image whenever your software system changes (or at least every 6 months). Most of these have a one-time cost, usually between \$40 and \$50, but it will probably be less than an hour or two of an expert's time needed to try to remove a virus. Some of these applications are Acronis True Image, Paragon Hard Disk Manager, O&O Disk Image, Active@ Disk Image, and Macrium Reflect. If you create an Image every 6 months, your latest Image will always be less than 6 months old and the time to update the restored software system should be reasonable. Always keep the last 2, 3 or 4 images, just in case something unexpected happens to one of them.

The third way of getting a System Image is to use

Microsoft's "Backup and Restore" software included in Windows 7 and 8.

–In Windows 7 you can find "Create a system image" on the Backup and Restore Applet, in Control Panel. Click this and you can select a hard drive or set of DVDs as the destination for the Image. An external hard drive is the best destination, but sometimes it feels good to have a copy on DVDs also. Once the destination is selected, select the C: drive as the Image, and finally click "Start backup". Make sure you get back to the Backup and Restore screen to "Create a system repair disk", which is what you will use to boot up the system in order to restore the Image.

–In Windows 8, you will find "Create a recovery drive" on the Recovery Applet, in Control Panel. Click this and click "Yes" at the "User Account Control" window, then uncheck "Copy the recovery partition from the PC to the recovery drive", click Next, and then choose the destination drive, and finally click "create".

Creating the Image in either OS is relatively straightforward. Restoring the Image is a little more complicated, but with perseverance and maybe some advice and direction from someone who has previously done it, it will be easy enough to do, and it will become routine. Now, with an Image on an external drive, bring on the viruses. □

How to deal with Tech Support

*By Melanie Birnbom, Webmaster, Century Village
Computer Club, Florida*

March, 2015 - Mid-Month Newsletter

<http://cvccpp.tripod.com/>
mbirnbom (at) hotmail.com

Outsourcing customer service and tech support to other countries is a fact of life these days. While most of these reps speak pretty good English, (for some it's their first language) it's not necessarily the version of English you are used to speaking. Even within your own country, understanding accents from region-to-region can be a challenge. When you're chatting with a fellow in an Indian call center, it can sound to both of you like you are not even speaking the same language. Here are some tips to make the best of the situation.

Number one - and this applies to all situations in life - please be polite. The person on the other end of the line is probably doing their best. I realize that by the time you call for support, you are probably pretty darned frustrated. That's not the fault of the person on the other end of the line.

Try not to use slang. Often times slang just doesn't translate between countries. Years ago, my husband was trying to connect a router and he told the tech support guy that it was "jacked up." The rep thought there was something wrong with a jack and kept saying that the router didn't have a jack.

Do your best to speak slowly and clearly. To the person on the other end of the line, you're the person with the accent. It's not a bad idea to write out a description of the problem to get your thoughts together before you call. Sometimes we tend to get into giving long narratives about the circumstances leading up to the problem instead of getting to the issue at hand.

Actually, all of these tips would work well for dealing with customer support anywhere. You may have read a FB post or seen an e-mail that claims, "Come to find out that every American company using overseas operators must transfer you to an American rep. by saying "I want to speak to a representative in America." (Don't take no for an answer on this.) This was confirmed by the American rep. that they must transfer you after that request. I've tried it on a half a dozen major companies including cable, bank, phone and mortgage companies. It works every time and I actually get my issues taken care of.

If accents are proving to be a barrier, you might consider switching to e-mail or chat communication to resolve the problem.

You might be tempted to offer an opinion on the outsourcing of jobs to other countries to the person on the other end of the line. But that's not anything a tech support rep in a cubicle has control over and you'll do better if you concentrate on the tech issue at hand. Also, once a tech support rep realizes you're acting like a jerk, they probably aren't going to want to help you. That's just human nature.

Stay calm. Stay polite. Stay on topic.

You may find more of your calls being answered here in

the U.S. While the trend has been to send tech support and call center jobs overseas for many years, more and more of those jobs are actually coming back to the United States. However, the catch is that companies are using their tech support reps in the States for what they consider their high-value customers, while still routing what they consider unprofitable customers overseas. Interestingly enough, many of these U.S. call centers are managed by Indian companies. □



Get Help from Others

Sandy Berger, CompuKiss

www.compukiss.com
sandy (at) compukiss.com

Need help with your computer, tablet, or phone? There are actually several places that you can go to get help.

A great place to go is to online communities. These online groups can be very helpful in getting questions answered and learning from others. If you don't know where to look for them, just Google your questions and you will get links to several places that might give you an answer and that you might want to revisit later.

Friends and family are also great resources. If you have the same type of phone or tablet as others you know, start sharing the little tips and how-tos that you discover and they are sure to reciprocate by showing you what they know.

When you are looking for apps for your smartphone, tablet, or computer, you can also take advantage of the opinions of others. The Apple iTunes store, the Google Play store, and the Kindle app store all allow users to rate apps. This is extremely useful for finding new apps. And if you haven't yet played with apps, please start now. They provide a whole new world for you to experience. □

***For more interesting and informative articles, check out Sandy's website,
www.compukiss.com.***

You'll find new stuff every time you go there.



Newly Detected Security Bug Threatens Secure Web Connections

by Ira Wilsker

WEBSITES:

<https://weakdh.org>

<https://www.ssllabs.com/ssltest/viewMyClient.html> (**TEST BROWSER FOR MULTIPLE VULNERABILITIES**)

<http://www.techsupportalert.com/content/security-attack-called-logjam-makes-browsers-vulnerable.htm>

<http://www.engadget.com/2015/05/20/logjam-browser-vulnerability-fix/>

<http://www.eweek.com/security/logjam-ssltls-vulnerability-exposes-cryptographic-weakness.html>

<http://www.businessinsider.com/edward-snowden-talks-about-logjam-on-reddit-2015-5>

<http://www.tripwire.com/state-of-security/vulnerability-management/logjam-researchers-identify-another-web-encryption-vulnerability/>

<https://nakedsecurity.sophos.com/2015/05/21/anatomy-of-a-logjam-another-tls-vulnerability-and-what-to-do-about-it/>

<http://www.thewhir.com/web-hosting-news/logjam-vulnerability-could-impact-more-than-500-cloud-providers-report>

<http://blog.lumension.com/10143/logjam-vulnerability-faq/>

<http://thehackernews.com/2015/05/logjam-ssl-vulnerability.html>

http://en.wikipedia.org/wiki/Logjam_%28computer_security%29

For several years, cyber security and safety pundits, myself included, have advised web users to be sure that sensitive information is only transmitted over secured web connections. Virtually all modern browsers, and most websites support the “HTTPS” communications method where the common “HTTP” (Hypertext Transfer Protocol) which is universally listed at the beginning of a web address is “layered” with some form of bi-directional encryption intended to make the web connection secure between the sending and receiving parties. The most common layered encryption protocols used with the HTTPS secured connections are “SSL” (Secure Sockets Layer) and “TLS” (Transport Layer Security), and while having been previously considered reasonably secure against third party listening, have now been shown to be vulnerable to “man in the middle” interception.

While this “geek speak” may be almost indecipherable to the general public, these potential and very possible interceptions of our personal and sensitive data sent over the internet may be a very real threat to our privacy, as well as our financial and physical security. For years, I have been telling readers of this column as well as listeners to my former radio show to be certain that they only connect to ecommerce websites, as well as online banking, and other financial service websites that have the prefix “HTTPS://” appears before the web address in the browser address bar. Likewise, many browsers displayed a small “padlock” icon, often in the lower right corner of the browser window; if “open” then the internet connection was insecure; if the padlock was “closed” (locked), then the connection was considered reasonable safe and secure. For several years, it had been considered reasonable safe for web users to take advantage of these safe browsing features, assured that their sensitive data was being safely and securely sent and received. Now, a new breed of web and browser vulnerabilities nicknamed “Logjam” has appeared which threaten the online security that we have come to expect while conducting online transactions.

If a web user wants to quickly and easily determine if their browsers of choice are vulnerable to this new type of security vulnerability, simply open the webpage at weakdh.org; a red banner across the top of the page will clearly display the browser vulnerability, if present. At present, I am using the most up-to-date version of Firefox, version 38.0.5, but the red banner says, “Warning! Your web browser is vulnerable to Logjam and can be tricked into using weak encryption. You should update your browser.” My preferred alternative browser, Google’s Chrome, “Version 43.0.2357.65 m Google Chrome is up to date” also displays the same vulnerability warning, indicating that both of my preferred browsers have the Logjam vulnerability, even though they are the latest versions available .

In simple terms, the commonly used HTTPS used at the beginning of a web address, either entered manually or by browser default, is no longer considered as secure as it had been in the past. For the common web user who does online purchasing on many of the popular ecommerce websites, online banking, online investing, and other forms of personally sensitive transactions online may not be as well protected against interception as previously thought. Recent published articles have also indicated that users of many of the large and popular “Cloud Service Providers” which have been providing secured backup and data services, may also have had their “secured” web connections compromised. It has also recently been determined that many of the widely used email servers, which typically incorporate SSL or TLS encryption to secure email communications, have also been struck by this vulnerability, theoretically allowing unauthorized third party interception of emails.

While it is being debated in the media whether this vulnerability is simply a bug in the security protocols and the popular web browsers, or it is actually a spyware type of malware, it has very recently (late May) been given the moniker “Logjam”. Since this Logjam threat is bidirectional, considering that a user’s web browser is creating a secured (HTTPS) connection with a server, one of the primary weaknesses is in the user’s web browser itself, with almost all of the current browsers being vulnerable to Logjam. At present, the major security suites utilized by most PC and MAC users, offer little or no protection from this Logjam vulnerability.

With possibly millions of ecommerce, financial service, email servers, and other sensitive web based services in widespread use, the number of vulnerable websites and servers is staggering. According to a website dedicated to exposing the threats of Logjam, weakdh.org, a team of computer scientists from the University of Michigan, CNRS, Microsoft Research, Johns Hopkins University, University of Pennsylvania, and others, performed a study of internet servers vulnerable to the Logjam vulnerability. The study found that servers using the very widely used 512-bit “DHE_EXPORT” encryption methods were often vulnerable to Logjam, based on their purpose and function. The researchers found that of the “Top 1 Million Domains” using the HTTPS protocols to encrypt the data being sent and received, 8.4%, or about 84,000 were vulnerable to Logjam. HTTPS enabled servers which were previously designated as “Browser Trusted Sites” had a Logjam vulnerability rate of 3.4%. Email servers were especially vulnerable to Logjam, with 14.8% of the mail servers using the common “SMTP+StartTLS” being vulnerable, along with 8.9% of the “POP3S” mail servers, and 8.4% of the IMAPS email servers.

Websites that are using some of the more sophisticated, and considered more secure 1024-bit encryption methods may be even more vulnerable to “passive eavesdropping from an attacker with nation-state resources” according to the computer scientists researching Logjam. The term “nation-state resources” implies that this Logjam vulnerability is not likely being perpetrated by the typical hackers and crackers, but instead may possibly be utilized by nations and states that have access to the extensive resources necessary to crack the dynamic encryption keys generated by the 1024-bit encryption protocols. If a “nation-state” with extensive resources could theoretically crack the 1024-bit encryption protocol key, the rate of data interception may be significantly increased. According to an article published on May 21, by Business Insider (businessinsider.com/edward-snowden-talks-about-logjam-on-reddit-2015-5), “Edward Snowden weighs in on the huge internet vulnerability that could have helped the US spy on citizens”; the suspected spy, Edward Snowden, implied that the United States government may have used the Logjam vulnerability to intercept sensitive, encrypted, online transmissions. This statement

Continued.....page 18

Newly Detected Security Bug.....from page 17

about the United States using Logjam to gather intelligence was independently corroborated by the computer scientists researching the Logjam vulnerability.

The research posted at weakdh.org indicates that the number of supposedly secured web servers, VPN (Virtual Private Networks), and secured file and data transfer services using the supposedly more secure 1024-bit encryption may be more vulnerable than previously considered. Of the “Top 1 Million Domains” that implemented the 1024-bit encrypted HTTPS protocols had a vulnerability rate of 17.9%, or 179,000 domains were vulnerable to Logjam. Of those websites and servers described as “Browser Trusted Sites” using the 1024-bit encryption, 6.6% were vulnerable. The very widely used “Secure Shell Protocol”, commonly referred to as “SSH”, which is commonly used to transfer data and files between computers, servers, and the “cloud” had a Logjam vulnerability rate of 25.7%. With many corporations, government agencies, military organizations, and others needing a secure “Virtual Private Network”, commonly called a VPN, the Logjam vulnerability of those VPNs using the IKEv1 (IPsec VPNs) security had a Logjam vulnerability rate of a staggering 66.1%! It is these Logjam vulnerabilities that the alleged spy, Edward Snowden, said that the U.S. has taken advantage of to gather intelligence and other data both domestically and internationally. If the U.S. can (allegedly) be the “man in the middle” intercepting this vulnerable but encrypted data, there is absolutely no reason to believe that others, such as Russia, China, Iran, Israel, India, Pakistan, France, Germany, the U.K., and other nation-states are not doing much the same. With the financial backing and technical capabilities of terrorist organizations, such as ISIS and Al Qaeda, it would not surprise me if they too were not involved with intercepting some encrypted internet communications.

Check your browser at weakdh.org for the Logjam vulnerability. An alternative website that will test your browser for the Logjam threat as well as other vulnerabilities is ssllabs.com/ssltest/viewMyClient.html . If your browser is vulnerable, as almost all browsers are currently vulnerable to Logjam (with Internet Explorer version 11.0.19 being an exception), check for an update, as all of the major browser publishers are working on patching the vulnerability. Simply opening the browser menu and selecting “About” will display the installed browser version, and most browsers will also indicate if the browser is up-to-date, often with a link to an updated version, if available.

While there is no current anecdotal evidence that our common consumer financial transactions have yet been compromised by the Logjam vulnerability, the possibility of it still exists, and it is only a matter of time until cyber crooks find a way to capitalize on it. By the time that this occurs, hopefully we all would have had an opportunity to upgrade our web browsers to a more secure version - until next time. ☐

Back to Basics

Turning Off Your Computer, i-Pad, and i-Phone

By Jim Cerny, 2nd Vice President, Sarasota TUG, FL

February 2015 issue, Sarasota Technology Monitor

www.spcug.org
[jimcerny123 \(at\) gmail.com](mailto:jimcerny123@gmail.com)

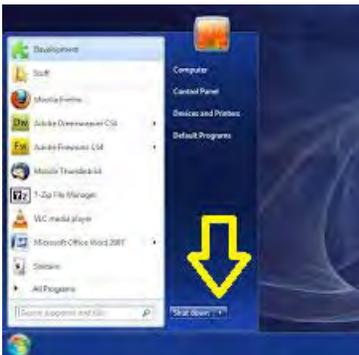
Remember the old days when devices had a simple “off” and “on” switch? One switch – two choices. Not very complicated. But when computers arrived so did multiple options. Some say TOO many options. Even turning your computer or iPad off has choices too. Maybe you will not use all of the choices available, but maybe you are thinking that you turned your device completely off and – surprise – it really isn’t completely off after all, it’s in a



“sleep” mode. Let’s look at three devices today – your Windows computer (laptop), your iPad, and iPhone. This information will apply to other devices as well.

Computer (Windows 7) – You know how to turn on your laptop – you just press the “on” button. But you should not use that button to turn your computer off. Actually, turning off your computer is called “shutting it down” or “shutdown”. Before shutting down your computer you should close ALL your windows (that is, programs you are running) first. Then you bring up the start menu by clicking on the round “start orb” which is the round button in the lower left corner of your desktop screen. On the start menu you will see “shutdown” and it is this word you click on with your mouse to turn the computer off. It may take several seconds as the computer checks itself to make sure it is all right to “shut down”. If not, you will get some windows (or “pop-ups”) to tell you that you may want to save some of your work. But if you click on the little white triangle just to the right of the word “shutdown” you get some choices (see illustration). You can click on “sleep” which will put your computer in a low-power state and when you come back you can pick up right where you left off. Or you can click on “hibernate” which will save your session on your “C” disk drive, shut down your computer, and when you turn on your computer again it will put you right back where you left off. You could think of it as being easier and quicker to “wake up” your computer from sleep, but it takes a bit longer to wake it up from hibernation. I always click on “shut down” on my computer when I am done with it, even for only a half hour. Why all these options? Well, laptop computers, when not connected to a power outlet, run on their battery so the computer companies want to give you options for saving that battery power for when you need it. I leave my laptop computer plugged in to a power outlet when I am at home and this keeps my battery fully charged.

iPad and iPhone – These wonderful tablet computers and phones are easily portable and, therefore, use their battery. They are intended to be “on” in a low power state even when you hit the “wake/sleep” button on the upper right of the frame to put it to sleep. (I think most people call that button the “off” button, but actually it is not called that by Apple.) Normally you can use your iPad or iPhone all day on a single charge and plug it in to recharge at night. Like the iPhone, the iPad likes to keep in touch with the internet (or the cellular phone network if you have that type of iPad) and it does this while it is in the “sleep” mode. Some of your “apps” (applications or programs) may get a notice for an update or other notices from the internet and this can happen even if you have pressed the “wake/sleep” button to turn put your device in a low power state. To COMPLETELY turn your iPad (or iPhone) off, HOLD DOWN the “wake/sleep” button until you see “slide to power off”, then swipe your finger on the slide and it will be completely off. In the “power off” state it is not using any battery power. You will have to hold down the same button for a few seconds to begin the start-up process. I usually “power off” my iPad about once a week. By the way, I have a new case for my iPad and, when I close the case, it puts the iPad in “sleep” mode just as if I hit the button. Note that not all cases do this.



So different devices have different options for turning them off, and the meaning of “off” is not clear anymore. When many people think they have turned their device “off” may really mean that they put it in a “low power” or “sleep” mode. My best advice, as usual, is to ask Google. Ask “How do I turn my (device name AND model) off” or “completely off” and see what Google says. You will probably be surprised with the options available. I don’t think we will ever see a simple “on-off” switch again, unfortunately.

Sharing Data – That’s what networks are all about

By Phil Sorrentino, Member of The Computer Club, Florida

December 2014

<http://sccccomputerclub.org>

Philsorr.wordpress.com

[philsorr \(at\) yahoo.com](mailto:philsorr@yahoo.com)

Networks are ubiquitous, owing to the availability of inexpensive wireless routers. Almost everyone who has a high speed internet connection (Cable, FIOS, or even DSL) has, or can have, a home network. Besides the modem (usually supplied by the Internet Service Provider (ISP), the only other hardware needed is the wireless router, which can be supplied by the ISP or obtained from a computer store (like Best Buy, Office Depot, Staples, Amazon, etc.). Having all your computers networked together makes the Internet readily available to each device, with the added benefits of file sharing and video streaming.

In some installations, the modem and the wireless router are in the same small physical package. Whatever hardware is used, the network is typically used for sharing the Internet connection and sharing data (and possibly printers) among the computers on the network. With shared folders on a network you can move files from computer to computer without having to copy them on to an intermediate device, like a flash drive, and then running the flash drive over to the destination computer (commonly referred to, in the past, as “sneaker net”).

Internet sharing is pretty straight forward and almost automatic. Just connect a computer to the router, wired or wirelessly, and that computer has access to the internet. That’s all there is to sharing the internet connection. Of course, the wireless portion of the network should be setup for security and the security code (key, or password) has to be put into the computer attempting to use the wireless network; but once that is done the computer will have access to the internet.

Sharing data is a little more involved. Windows 7 provides three ways to set up a network: Public folders, Homegroups, and “Share Any Folder”. Public folders are part of Windows

7 and take no effort to set up or employ. Every Windows 7 has public folders that are accessible from any other Windows 7 computer on the network. Using Windows Explorer, you’ll find public folders for My Documents, My Pictures, My Videos, and My Music under the Users name, under Users for that computer. These are found under Network which is at the bottom of the left pane of the Windows Explorer window. These folders start off empty so you’ll have to put a file into them in order to share it. This is not a very secure alternative because once a file is in the public folder it is available to all computers on the network, but if security is not an issue, it is an easy way to share files.

The second way to share files is to set up a Homegroup. Only Windows 7 computers can be part of a Homegroup, so this is a limitation if you want to share with computers using XP. A Homegroup is easy to set up. Just go to Homegroup in the Control Panel on the first computer, or just Click Start and type “Homegroup” into the “Search programs and files” box. In the dialog box presented, Click “Create a homegroup”. The next screen will allow you to select the Libraries and/or printers to be shared, and choose to share your media by “streaming” your video and music to other network computers. After you make these selections, Click Next and a new window will provide a Homegroup password, write it down and then Click Finish. Now it’s time to go to the other computer that is to be a participant in the Homegroup. Click Start and type in Homegroup again. This time the dialog box will indicate a homegroup is available. Click “Join now”, choose the folders to share, and Click Next. The next dialog box will ask for the password, so type in the password, and then Click Finish. If there are other computers to join the Homegroup, repeat this procedure on each of them so they will all be part of the Homegroup. Once the Homegroup is setup each computer will be able to take advantage of the files and/or printers that were setup for sharing, at each of the other computers.

The third and most general (and maybe most difficult) method is “Share Any Folder”. This method lets you determine the folder to be shared and also determine the Users that will be able to share the folder. Additionally, it allows you to set the permissions for each of the Users. (Permissions determine what can be done with the shared folder, or file. More about this in next month’s Monitor.)

Whole disks can also be shared in this general way, but it is not encouraged. Disk sharing presents security concerns, but if security is not a concern, in a small office it can be a real convenience.

Microsoft has included a “Share Any Folder” Wizard for this specific purpose. In order to share a specific folder, start Windows Explorer and find that folder in the left pane. Right-click the folder and select “Share with”, and then choose “specific people”. This will bring up the “Choose people to share with” window. If the Users to be allowed to share this folder are in the list, select each one, followed by “Add”, and then finally click the “Share” button. If a User is not in the list, you will have to create an account on this machine for that User. Notice that for each User, the initial permission is set to “Read”. This can be changed to “Read/Write” by pulling down the down arrow and making that selection. Do this only if you intend for that specific User to be able to add, change or delete files in the folder. When you click “Share” the “Your files are shared” window will be shown. This can be used to let the Users know that the folder or file is now shared and accessible by them. (In a home or a small office environment it is just as easy to just tell the individual that the folder is now available.)

It is possible to share a complete disk (or a folder), without the use of the “Share any Folder” wizard. This gives you greater control over the operation, but seems to be more complicated. To do this, open Windows Explorer and find the folder to be shared in the left pane. Right-click and select Properties. In the Properties window, select the Sharing Tab, and then select “Advanced Sharing”. Click “Share this folder” and then click Permissions. In the “Share Permissions” window, select the Users and in the “Permissions for User”, set the permissions. Then go back and select the “Security” tab in the Properties window, where you have more control over the Permissions, and edit the Permissions, if needed.

By using one of these methods, it is possible to share data with anyone on your network. Sharing data means you only have to keep one copy of your data: your pictures, music, videos and documents. Maintaining only one copy makes backup and general data maintenance easier. The more data you share on your network, the more you realize the value of a network. □

BitTorrent

By Dick Maybach, Member, Brookdale Computer Users’ Group, NJ

January 2015 issue, BUG Bytes

www.bcug.com
n2nd (at) att.net

BitTorrent, <http://www.bittorrent.org/>, is a peer-to-peer file sharing protocol for transferring files over the Internet. The conventional way of transferring data is for one site to act as a file server, which stores the files and transmits them on demand. If many people want the file, this requires a high bandwidth connection to avoid long download times. In the BitTorrent scheme, the central site is called an indexer, and it functions as a file director rather than a file server. (Actually, the situation is somewhat more complex. There are also sites called trackers that work with and assist indexers. Most people blur this distinction and use the term tracker for both indexers and trackers, and I’ll do the same for the rest of this article.) When a user requests a file from a tracker, he or she receives a Torrent Descriptor File that contains a list of sites, called seeders, that currently are making the file available for transfer. On the user’s computer a program called a BitTorrent Client uses information in the descriptor file to request pieces of the desired file from the seeders. Since each of the many seeders supply only a few pieces of the file, their upload volumes and rates are low. The descriptor file also contains a checksum for each piece of the file and the client uses these to ensure that the downloaded file has no errors. BitTorrent allows individuals to share files with many others without requiring the use of expensive facilities. By spreading the distribution task among many servers, BitTorrent reduces traffic congestion on the Internet thus speeds up data rates for everyone, including those that aren’t using peer-to-peer sharing. Peer-to-peer file sharing is so widely used that by some estimates it accounts for half or more of all Internet traffic. As of January 2012, there were 150 million active BitTorrent Users.

Some people use peer-to-peer file sharing to distribute illegal material. Don’t do this. Media corporations have convinced some courts to make examples of individuals who illegally obtain copyrighted work, and

Continued.....page 22

Bit Torrent.....from page 21

the resulting fines have been truly punitive. The same corporations actively monitor Internet peer-to-peer sharing activity. The risks far outweighs the rewards of watching a movie or listening to music that you don't think is worth paying for. In addition, the sites that distribute such material are dishonest and won't hesitate to infect your computer with malware.

I use BitTorrent to download Linux distributions, which often occupy several Gbytes. When a new distribution is first released, the official sites are often overloaded, and this of course is when I'm most interested in obtaining it. Many sites anticipate this, and make it convenient to use BitTorrent as an alternate to a direct download.

Security

The BitTorrent client software resides on your PC, and you should take the same precautions installing it as with any other program. In addition to the usual worries about malware, you depend on this program to upload only the files you designate and only at those times you allow. Windows users should obtain it from a reliable source and check it for malware before using it. Linux and OS X users have fewer concerns since they use the client Transmission, which is in the official repositories. Regardless of your confidence in the package, do not install it on a corporate machine, as most businesses prohibit file sharing. The Windows client µTorrent, available at www.utorrent.com/downloads/win?us is a safe choice. Unfortunately, it changes your default search engine to Ask.com and installs the Ask.com toolbar in your browser. You will want to undo this, as a search using Ask.com produces mostly marketing sites having little or no relation to your search. An alternative Windows client is available at <http://www.bittorrent.com/>, but the free version displays advertising; a deluxe version without advertising is available for \$20. Before using BitTorrent, install and configure a software firewall, such as ZoneAlarm, www.zonealarm.com/, for Windows. This will limit the access to your PC and will help ensure that only what you intend is uploaded.

Be careful choosing a tracker, as many specialize in downloading illegal material. You could consider Jamendo (www.jamendo.com/en/welcome), which distributes Creative Commons licensed albums and

Linux Tracker (linuxtracker.org/), which distributes Linux distributions. An Internet search will show many other trackers, but again be careful. The BitTorrent Descriptor File that the tracker sends you contains checksums for each piece you obtain from individual seeders, which guarantees the integrity of the pieces. Thus you aren't dependent on the nature of the seeders.

Limit which files and directories you share by setting the preferences in your BitTorrent client. In my case, I allow sharing only from my Downloads directory and only those files I've obtained using BitTorrent, which are the defaults in the Linux client. Some clients by default allow sharing everything on your PC, and you must change this before beginning a download. After the download is complete, scan it with an anti-virus program as you would with any software, regardless of the means by which you obtain it. Many Linux

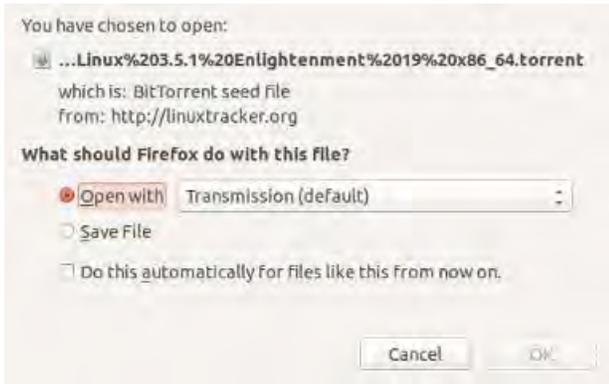
software providers provide MD5 checksums that you can use to be sure every bit in the file is correct. Unfortunately, this is rare in the Windows world.

Process

To obtain a file, go to the tracker's Website and select the desired BitTorrent descriptor file, which will have the extension .torrent, and will have a size of 30 Kbytes or so. How you get this to the BitTorrent client program on your PC depends on how you have set things up. You may accomplish it just by double-clicking on the file name on the Website; in the worst case, you will download the file to your PC and open it with the client. The client should start and within a few seconds you should see both the file you want coming in and some of the files you've decided to share going out. It's considered good manners to send at least as much data as you receive, in fact some trackers insist on it to the extent that they will limit your downloads if your upload volume isn't sufficient. Because the upload rate is much less than that of the download, you will have to let the client run long after the download is complete to satisfy this.

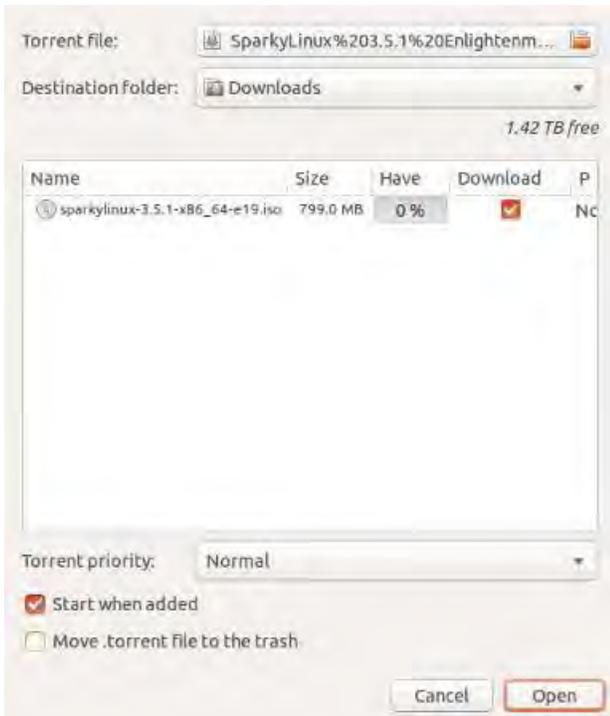
The following example uses Linux to download a file using BitTorrent. The process is the same for OS X and Windows, although the screens will be different. The first step is to go to a tracker Website and click on the

file you want, which will produce the window below, giving you the usual choice of opening the file with Transmission (the BitTorrent client for both Linux and OS X) or downloading it to your PC. Note that this is a small BitTorrent descriptor file, not the large one you want to download. Usually, you'll choose the first option.

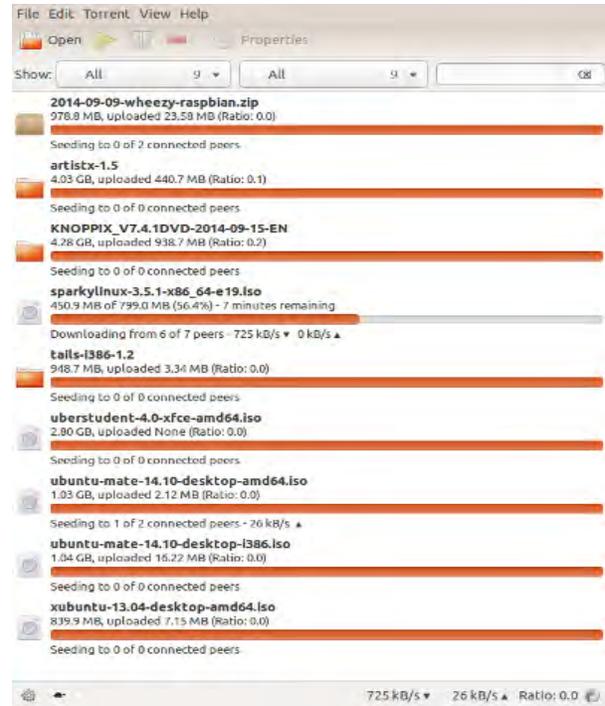


Assuming you choose the Open with option, the next screen will show the file to be downloaded and give you an opportunity to change the destination folder from the default (in this case Downloads). If you had aborted an earlier download of the same file, the Have amount would not be 0 %, and you would have only to download the pieces you didn't already have.

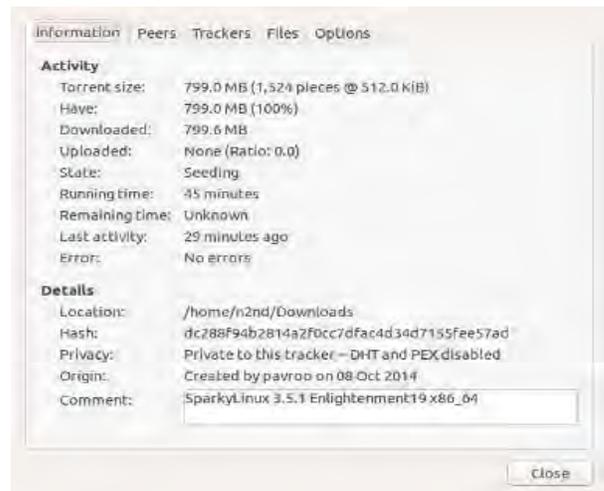
The next screen shows BitTorrent downloading the sparkylinux file. You can see that I've previously



obtained eight other files using BitTorrent, that ubuntu-mate is being uploaded, and that although two peers are interested in wheezy-raspbian the upload rate is zero. At the time of the screen-shot, nobody connected to this tracker wanted the other files.



Right-clicking on the sparky-linux item on the download screen after the download was complete and selecting properties shows the next screen. We can see that the 799 Mbyte file was downloaded as 1524 pieces of 512 Kbytes each and there were no errors.



Continued.....page 24

Bit Torrent.....from page 23

Should you use BitTorrent? I've found that it takes a fraction of the time to download large files as direct transfer, especially if the file server is busy, which seems to be the usual case for the files I want. Also, some files are available only by peer-to-peer transfer. You do have to be careful to obtain a BitTorrent client you can trust, to set up your firewall properly, to use reliable trackers, and to check the download for malware. These precautions are similar to what you would do with any new file regardless of how you obtained it. Ultimately, the choice is yours; if BitTorrent makes you uneasy, don't use it. □

Five Things the Tech Industry Won't Tell You

By Greg Skalka, President, Under the Computer Hood User Group, CA

February 2015 issue, Drive Light

www.uchug.org
president (at) uchug.org

In a nod to the Wall Street Journal Sunday's imaginative, interesting and informative "10 Things . . . (xxx) Won't Tell You" columns, I offer my half-sized version. The tech industry's annual new product celebration, CES (Consumer Electronic Show), occurred in January. I've never attended, but I enjoy reading about the latest tech items presented each year.

Each year brings a new batch of innovative products that get the favorable buzz. Sometimes items at the show succeed in the marketplace, while others never make it to prime time.

1. 'The latest is not necessarily the greatest.'

The main purpose of a lot of new products is often not to help the customer but to make money for the tech companies. Occasionally this results in products that despite a big marketing effort are not well received by consumers. It may be due to a company going in the wrong direction, hastily putting out a shoddy product or attempting to pass off a few changes (some perhaps not really wanted by consumers) as a new product.

Windows 8 is an example of a desire to sell something

that the customer really does not want. Microsoft seems to get it right in terms of operating systems only about every other attempt. They were very successful with Windows 98, but then disappointed with the release of Windows Me (Millennium Edition). They captured almost all the market with the popular Windows XP OS, but then followed it up with poorly-received Vista. After correcting their mistakes in well-received Windows 7, their successor, Windows 8, went in a direction most computer users did not want to go. Since Microsoft has decided that they must skip the number nine, all we can do is hope Windows 10 is an improvement when it is released this year, as our time with Windows 7 is limited (mainstream support ended on Jan. 13; extended support, which includes free security updates, will end in five years).

Unfortunately, Microsoft continues to irritate me with their new versions of Office. It is a very powerful application but most users only scratch the surface of its capabilities. I use it daily for work, but never to its fullest potential. Yet they continue to add additional obscure features and greatly change the familiar user interface to let them somehow justify selling a new version every other year or so. Now they want to sell it by subscription, so users can become just a revenue stream.

And let's not get me started on Microsoft Bob.

2. 'Your old stuff probably still works just fine for what you need.'

Some consumers are enamored with the latest thing and must upgrade whenever possible. It seems to me that these are the customers Apple is often targeting with their new smart phones and tablets. Tech companies would like their customers to think like some car buyers used to (and some maybe still do), and trade up to their latest product every year or two. In most cases, the product the consumer already has meets most if not all of their present real needs. Just as with automobiles, "trading in" for a new smart phone, laptop, camera or office suite too often can cost a lot with little increase in benefits.

A number of PC users hung on to Windows XP a lot longer than Microsoft would have liked. Though the poor reputations of Vista and Windows 8 contributed, a lot of XP users resisted switching because XP met their needs. Businesses were particularly reluctant to switch. I am presently using three XP computers at my work,

a small telecom equipment design firm. I also still have a couple of XP computers at home (I wrote this column on one), though I'm definitely phasing them out because of security concerns.

A lot of technology costs a lot when initially introduced, but drops in price once it is more widely adopted and production volumes increase. Staying off the cutting edge can save money but still provide a good user experience.

3. 'This new stuff may seem great, but it is still a long way from reality.'

Highly innovative new products can capture the imagination, but most successful new products are the result of iterative development. These iterations can require years to finally come up with an implementation that is cost-effective for consumers.

I was excited about Google Glass when I first heard about it a few years ago. I'd hoped by now it would have had greater availability and a lower price, but instead Google has just announced that it is halting production of this model. I am encouraged that Microsoft is working on the HoloLens device, but I expect I'll be waiting a while longer to personally experience this type of device. With luck Google will continue development of Glass as well; I'd hate to see it become the Segway of computing device

It also seems to be taking a long time to get autonomous cars into the hands of consumers. The Google Self-Driving Car project has been in existence for a number of years, having logged nearly 700,000 autonomous miles. A new prototype without human controls will begin testing this year. A number of major auto manufacturers are also at work on autonomous cars. Google believes that it will be able to offer a self-driving car to the public between 2017 and 2019. The legal issues may take as long to work out as the technical ones, however. Meanwhile, we may get there piecemeal as car-makers offer features like self-parking (for parallel parking) and auto braking now

4. 'New technology may provide benefits, but there are usually unintended consequences.'

Almost every new technology introduced has resulted in job losses somewhere in the economy. The automobile put a huge dent in buggy sales. Streaming video wiped out most of the jobs involved in video

disc rental. Computers and robotics greatly reduced factory employment. Digital cameras decimated the photographic film industry and computers and tablets have reduced the need for photo prints.

These technologies have of course created new jobs of different types, but this forces great change on the industries and employees. Email and social media have greatly reduced the number of letters delivered by the Postal Service, so it has had to recast itself as a deliverer of Amazon packages. Unskilled labor is being pushed out as almost all workers, from the burger flipper to the airline pilot, must deal with video displays and electronic controls on the job.

The Internet has revolutionized communications, education, shopping, entertainment and our relationships. Smart phones and social media have greatly changed our culture and our society. We get our news, find our jobs and pick our mates using the Internet. Crime has followed the technology path to our money; it is not in the banks, but in our personal information. Identity theft, phishing, cyber terrorism, sexting and laws against texting while driving are all unintended consequences of our new technology.

Our technology may have had a hand in changing our planet's climate and it may ultimately provide us with a remedy, but some initial tech solutions have provided mixed results. Nuclear power has the promise of carbon-free energy, but radioactive leaks have resulted in disasters. Wind power seems to be a clean renewable source of energy but the large rotating blades may also cause excessive bird kills. The new Ivanpah Solar Electric Generating System in the Mohave Desert may be scorching thousands of birds each year with its concentrated reflected light.

How will new tech advances change our economy and our society in the future? We can guess that widespread use of autonomous cars might make our highways safer, increase productivity by reclaiming lost commute time and wipe out the taxi industry. What other unanticipated effects will it have on us? Police body cameras and other public video surveillance may reduce misconduct, but how will they affect privacy? Will virtual reality technology

Continued.....page 26

Five Things the Tech Industry.....from page 25

wipe out the travel industry? Will increased use of online communications and telepresence devices leave us virtually connected but physically isolated in our homes? Will biotech advances turn us into a long-lived, genetically engineered species? Will our computers and autonomous vehicles achieve artificial intelligence? We can never fully predict the future.

5. ‘Playing the Luddite is pointless, as technology is transforming our society as we speak.’

The Luddites were 19th century English workers who rebelled against technology by smashing the new machines that were taking their jobs. They were not successful in stopping progress and it is likely modern opposition to technology would be ineffective on the whole. Cell phone networks are being spread through almost every developing country and satellite-based Internet and Wi-Fi installations are increasing, so soon no one will be able to escape technology’s reach. Our culture and our relationships are being changed by our technology. We may not be able to put the genie back in the bottle, even if we wanted to. □

streaming is a great technique. During streaming the content is constantly being processed so you can watch the show while it is being processed with no interruption.

Streaming allows you to watch television shows and movies without having a cable or satellite subscription. You can use streaming to augment a basic cable or satellite TV subscription or to eliminate cable or satellite subscriptions completely making it a valuable tool for TV watching.

Also, Netflix and Amazon are now producing their own programming, much of which, like House of Cards, as become very popular. With streaming you can also watch a wide variety of movies and the past episodes of many different TV shows.

Even if you are not technically inclined, you will find that streaming is quite simple to setup. Here’s what you need.

First -- a HDTV with a HDMI port. While older analog TVs can also be set up to stream, having an HDMI port make it much easier. All HDTVs, which include most newer TVs have these ports. To find them look at the back of the TV, they are usually labeled HDMI.

Second – You need a good broadband Internet connection. This is how the data (movies) will get to your television. The faster the better and you might want to upgrade your Internet, but you may not have to. Try it with the connection you have right now. You might be pleasantly surprised.

Third -- you need a streaming media device. Some newer TVs and most Blu-ray players can access the Internet. If you have one of these you can use it as your media streaming device.

If you don’t have one of these, you will need to purchase a new device. The good news is that these devices are small and inexpensive. These devices include Chromecast, Roku, and Amazon Fire TV and Fire Stick. They range in price from \$30 to \$100. I have tried them all and they all work quite well. If you already belong to Amazon Prime, an Amazon Fire might be the best choice. To get the best selection of content, Roku is the best. In any case, the main difference in price is often whether the device comes with a remote control or not. If it doesn’t come with a remote, like the Chromecast, you will have to use a tablet or mobile phone to control it. If that doesn’t appeal to you, opt for one with a remote.



How to Stream TV

By *Sandy Berger*,
CompuKiss

Sandy (at) compukiss.com
www.compukiss.com

There is no doubt that the world of television content and the way we get that content is changing. Many people are “cutting the cord” by turning their backs on cable and satellite TV. These folks are turning to streaming TV shows and movies. For those of you who are not yet familiar with “streaming”, here’s a quick tutorial on how to stream and what you need.

Streaming is named for a technique for transmitting data over the Internet so that it can be processed as a steady and continuous stream. This differs from downloading content in which the entire chunk of data must be downloaded before it can be processed. Most users do not have enough bandwidth to download an entire movie or TV show, so

Fourth -- you will need a wireless router. Although some devices can hook up directly to your wired Internet router, in most cases your television is not in the same room as the Internet connection making it necessary to have a wireless router to transmit the data wirelessly to your television. If you already have wireless in your home for a tablet or phone, you are all set.

When you get your streaming media device home, you simply plug it into the TV. Set the TV to the proper input like HDMI 1 or HDMI 2, then follow the set up instructions that will appear on the screen. All are easy to follow. The only thing you will need is to know the password for you wireless network if it is password protected.

After the setup you will see your choices of things to watch. Some of these will be free, some will have extra costs. For instance Netflix and Hulu both have a ton of content, but each charges about \$10 a month. Fortunately both have free trials which you can use.

Watching streaming media on your TV is not as simple as watching cable TV. There are little inconveniences. Every time you want to switch to your streaming device, you have to change the input on your television. Also there is no simple guide as the one you get with cable or satellite TV. You often have to search for what you want to watch. The Amazon Fire TV (not the Fire Stick) makes this easier because its remote has a voice search which works quite well. Just speak the name of a movie, actor, or director and it will find the movie you want. This, however, only works for Amazon Prime movies and shows. Also, if you have more than one subscription, you have to remember which movies are on which service....Now was Orange is the New Black on Netflix, Hulu, or Amazon?

Yet, the inconveniences are minor and there are advantages. For instance, after I started streaming I was able to watch the entire series of Downton Abbey on Amazon and House of Cards on Netflix at my convenience. How wonderful to watch a few episodes a week until I got caught up!

If you haven't yet tried streaming, be sure to check it out. You may find a new way of watching television that can save you money and give you new options. □

For more interesting and informative articles, check out Sandy's website, www.compukiss.com.

You'll find new stuff every time you go there.

Just in Time for Vacations: 7 Latest Travel Scam Alerts

*by Scambuster Keith, Scambusters Newsletter,
May 27, 2015*

Just when you should be enjoying yourself on vacation, will you be tested with a travel scam this season?

You may think you know them all -- and if you're a regular Scambusters reader you'll already be aware of dozens of them.

But every year we encounter new con tricks ready to spring a trap on the unsuspecting vacationer and business traveler.

In fact, this year we've uncovered so many new travel scams we'll be splitting this special vacation issue across two weeks to give us enough space to explain how they work and how to avoid them.

So, if you're traveling this vacation season -- especially abroad -- here are some of the scammers you might encounter.

The Undercover Cop

This one is common in South American countries, notably Colombia and in Spain.

Well-dressed crooks approach tourists on city streets or in their cars claiming to be plain-clothes detectives, working undercover to track down forged currencies or stolen items.

They may show phony identity cards before demanding to inspect money and jewelry items.

As soon as they get their hands on your stuff they make a quick exit.

In the UK, victims have also been accused by bogus cops of some minor infringement like dropping litter or not carrying personal IDs.

Continued.....page 28

7 Latest Travel Scams.....from page 27

The crooks demand payment of an on-the-spot fine.

Action: It's tough to resist these characters or to prove their ID is worthless but the truth is that police usually don't operate this way so you're almost certainly on the receiving end of a scam.

What you do -- for instance refusing to hand over or pay, or taking a photo of the scammer -- may be a judgment call depending on the circumstances. You may feel sufficiently threatened to have to do nothing and hand over your stuff.

These crooks are much more likely to strike if you're alone or in a quiet area so try to avoid walking around unaccompanied and stick to busier areas where you're less likely to feel threatened if you resist.

The Drug Mule

In this scam, a tourist in an airport or railway concourse is asked by a friendly "fellow traveler" to keep an eye on his suitcase while he goes to buy a ticket.

He disappears and a few moments later a couple of "heavies" appear, usually claiming to be from the narcotics section of the local police force.

Despite the victim's protests that it's not his/hers, the men open the suitcase and "discover" it's full of drugs.

They may perform some sort of arrest routine or become threatening, while making it clear they're open to a bribe payment to forget the whole thing and just take the suitcase away.

Action: Here's another good reason why, as airport security are always telling us, we shouldn't involve ourselves with someone else's luggage.

If you're asked to do this, make your refusal loud and clear, shaking your head and walking away.

The Entry Fee Collector

There are numerous variations of a scam in which tricksters try to charge an entry fee for visitors to tourist attractions.

Usually, entries to these locations is either free or must be paid at official pay desks or kiosks on entry.

But that doesn't stop the scammers from trying to hijack tourists before they get there and realize the true setup.

Perhaps the most blatant is a long standing scam that died off some years ago and has now returned this season for visitors to Gibraltar.

This small British outpost adjoining Southern Spain is a popular tourist spot.

It's a political hotspot though because of Spain's claim to this disputed territory, which can sometimes result in long delays to cross the border.

This slow trek allows scammers to parade up and down the line of waiting traffic to collect a supposed entry fee of 10 Euros (about \$10).

There is no fee. Entry to Gibraltar may be slow but it's free.

Action: Keep your car window shut and ignore window tappers until you reach the official border crossing when you will have to show documents -- but no money.

The Credit Card Swindler

This is as simple as it is financially devastating.

You're in a foreign country where you don't know the exchange rates and are pressured into buying something at a tourist shop with your credit card.

The merchant produces a receipt for you to sign and you can't quite make out what those zeroes represent.

The confusion is deepened by the fact that many countries use different punctuation -- commas instead of periods to represent a decimal point.

And if the credit card payment slip is one of those older handwritten types, numbers can be indistinct -- for example, figures '1' and '7' can look similar.

If any of these tricks play out for you, you could

find yourself out by thousands of dollars when your statement comes in.

Action: Know the exchange rate and verify the conversion before signing.

If in doubt, don't sign. Return the item and tear up the slip.

Thai Tricksters

We've previously reported on how travelers to Thailand are tricked into buying expensive jewelry that turns out to be worthless.

But there's more to the Thai tricksters' repertoire than that.

Widespread scams reported recently include damaged rental jet ski craft. When renters return their craft, the owner points out some damage and demands compensation.

In fact, the jet ski was almost certainly damaged before the renter got it but, unless he inspected the craft and pointed out the damage before setting off, he won't be able to prove it.

Another scam involves advertising flyers and street hustlers promoting free ping pong shows.

This is really a come-on to get tourists inside dubious restaurants that massively overcharge.

Victims don't realize this because they're initially given a menu with relatively normal prices -- but a huge service charge, often 10 times the food bill, is added for the supposedly free show.

Action: Check rental items and take photos of any damage while you're at the depot. And remember, next time someone accosts you with a "free" offer on the

street, there's always a price to pay.

Alert of the week: Finally, for this week, we'll take this opportunity to highlight two of the most common travel scams and where you're most likely to encounter them.

* **Pickpockets** -- Big cities in European countries, especially Spain (Barcelona) and France (Paris). Crooks usually work in teams and use all manner of distractions including spilling stuff on your clothes or giving you a hug. Stay alert!

* **ATM and card skimming devices** -- Pretty much everywhere. But in Italy and Mexico there's particular concern about growth of "doctoring" of ATMs either to trap cash or steal card details. Get your cash inside a reputable bank if you can.

As we said earlier, we've got another batch of travel scams to tell you about next week.

Look out for our next issue with news of travel scams that include overcharging London rickshaw cyclists, Portuguese rolling bar tricksters, New York street artists who can't draw, and Filipino taxi drivers who ask passengers to get out and push -- and then drive off .

Check out the newsletter at scambusters.org.

*Subscribe **FREE** to ScamBusters, a public service and the #1 publication on Internet fraud.*



"Live each moment. Practice being mindful. Be present in... Hold on, I have to take this."

Ancient Rome declined because it had a Senate; now what's going to happen to us with both a Senate and a House?

Will Rogers

BREVARD USERS GROUP

BUG Officers

President:

Larry French 837-0962
oresident@bugclub.org

Treasurer:

Bob Bloch
treasurer@bugclub.org

Secretary:

Bill Middleton
secretary@bugclub.org

member at Large:

Jim Townsend

Webmaster:

Chris Crisafulli
webmaster@bugclub.org

Special Interest Groups

Webmaster:

Chris Crisafulli
webmaster@bugclub.org

Special Interest Groups

Beginners' SIG:

Larry French 837-0962
beginners@bugclub.org

Hardware (Tinkers) SIG:

Bob Schmidt 952-0199
hardware@bugclub.org

BUG Web Page:

<http://bugclub.org>

Secretary's Report

By Bill Middleton

Monthly General Meeting, June 3, 2015

1. The meeting was called to order by President, Larry French at 6:30 PM.
2. Because we have been unable to find a new newsletter editor to replace our retiring editor, Jim Townsend, our newsletter's essential information (Treasurer's & Secretary's Reports and meeting schedule & Announcements) will now be incorporated into the Space Coast PC Users Group Newsletter. This publication will be E-mailed to our members in lieu of our now-retired newsletter. It is larger than ours and incorporates articles from the same sources Jim used and more. Our members are now members of the SCPCUG ffffffff and are most cordially invited to attend any of their meetings and events they find of interest. SCPCUG meetings are usually held at the Main Brevard County Library in Cocoa. Our three meetings per month will continue as usual and SCPCUG members are invited.

3. Those members who paid for hard copy editions of our newsletter will be refunded for the next six issues that will not be published. SCCC's newsletter is much larger than ours was and would cost considerably more to print and mail. If enough members from both clubs desire hard copy, an arrangement may be made in the future.

4. A question-and-answer session with Chuck Boring came next. Among the new subjects discussed were:

A. Windows 10 will be released on July 29. Microsoft is sending out invitations to current Windows 7 and 8 users to get on the list for the free upgrade. A new, little Windows icon may appear on your bottom button bar. That will get you to the invitation. If you do not get the invitation and are a registered user, it is advised that you get on the list ASAP. It is expected that Windows 7 will continue to be supported for the next 5 years or so. After that, ????. Microsoft will have a free, little program to check your own computer for compatibility.

B. if you are going to scrap or donate your old computer, it is advisable to remove the entire contents from your old hard drive. There are free programs available to do this as well as the inexpensive Drivescrubber.

June 2015 BUG Meetings

C. When setting up a new computer, it is advisable to freshly install Programs and Apps rather than attempt to transfer them from your old computer. Remember, NOT everything will work with a newer operating system.

D. Defragmentation of your hard drive is, by default, automatic in both windows 7 & 8.

E. Accessing the bios on new, high-speed (e.g. Gaming) computers can be difficult since they boot so quickly. It is hard to hit the appropriate F key fast enough. One approach that sometimes works, is to hit many random keys as the computer boots. This will often stop the process with a keyboard error which will give you a chance to enter the appropriate F key to enter the bios.

F. if you wish to copy YouTube videos to your computer, you must get a Flash Downloader (freeware) plug-in for your browser(s).

G. when attempting to get the latest version of the free Avast anti-virus software, be careful to update rather than upgrade. If you choose to upgrade, they will bill you for the paid version.

5. Respectfully submitted, Bill Middleton.

Treasurers Report

by Bob Bloch

June 2015

Checking Account:

Beginning balance \$2694.91

Dues SCPCUG \$1275

Expenses

Newsletter

APCUG Membership

FL registration

Ending balance \$1419.91

Savings Account \$1025.79

TOTAL ASSETS: \$2445.70

June 21, 2015

Tinkers SIG : 1:00 - 3:00 PM

Bob Schmidt's Home

Call 952-0199 to verify meeting: Meeting was called to order by President, Larry French at 6:30 PM.

June 25, 2015

Afternoon SIG

3:30 -4:45 PM

Eau Gallie Library

1521 Pineapple Avenue

Melbourne, FL

2. Because we have been unable to find a new newsletter editor to replace our retiring editor, Jim Townsend, our newsletter's essential information (Treasurer's & Secretary's Reports and meeting schedule & Announcements) will now be incorporated into the Space Coast Computer Club's Newsletter.

July 1, 2015

Monthly Meeting

6:30-7:45 PM

Melbourne Library

549 Fee Avenue

Melbourne, FL

July 6, 2015

Windows Beginners: 2:00-3:00 PM

Investing: 3:00-4:00 PM

Tinkers, (Hardware) Cancelled, Father's Day

July 30, 2015

Afternoon SIG

3:30-4:45 PM

Eau Gallie Library

1521 Pineapple Avenue

Melbourne, FL



Change of Address?
Going North for the summer

or coming back ?

Don't miss a single issue of your

Please give us any change to your email address if you wish to receive the eJournal .

Send your changes to
ringram28@cfl.rr.com
or mail a note to him at:

SCPCUG Editor

**Space Coast PC Users Group
8700 Ridgewood Avenue, #B-301
Cape Canaveral, FL 32920-2040**

*****Reminder*****

There will no longer be a print copy of the Space Coast PC Journal mailed to you.

Print copies if available at the Monthly Meetings are \$1.50

If requested, a print copy can be mailed for \$3.00

Calendar of Events

June 6, 2015 - Saturday SIGs

Merritt Island Library 12:00- 2:00 PM

Learning Center 2-3:30 PM

June 18, 2015- SCPCUG Meeting

Central Brevard Library and Reference Center

6:00 PM -SCPCUG Meeting, Room 2

June 30, 2015- Deadline for Journal Input

July 4, 2015 - Saturday SIGs

Merritt Island Library Conference Room

12- 3:30 PM

July 16, 2015 SCPCUG Meeting

Central Brevard Library and Reference Center

6:00 PM -SCPCUG Meeting, Room 2

July 31, 2015, Deadline for Journal Input

Magick Movers

Melbourne's oldest independent Mover



Mark and Nora Kirschner Proprietors

There's a magician on every truck

Presentations Schedule

June 18, 2015

Dan Douglas will fill us in on his latest from

Brighthouse

Echo

Bring your friends or neighbors

Are you having problems with your hardware or software?

Did you find the solution yourself?

How about sharing that information with your fellow club members? Sit down for a few minutes open up that word processor and put your ideas to paper. Aside from the value to the members, you'll get your name in print!

Don't worry about the details, we'll edit it for the best appearance and presentation.

**Beginners or Advanced
Bring Your Questions
Get Technical Help
Share Your Knowledge
at your SCPCUG**

Learning Center

Meets on First and Third

Saturdays in The Merritt Island

Library Conference Room

From 12 - 3:30 PM

**Please restrict your visits to these
times.**

**Bring your hardware or software
problems.**

We'll do all we can to help.

**If you bring a desktop computer,
please bring the keyboard, mouse,
and power cord.**

**Call Ron Ingraham. 321-777-2578
for more information.**

Call Ron Ingraham, 777-2578,
for more information.

The Space Coast PC Users Group Journal

is produced using

Adobe InDesign CS3

&

Adobe PhotoShop 6.0

*All SCPCUG club members are entitled to
receive the electronic version of the Journal
in pdf format. You'll need Adobe's widely
available Acrobat Reader X.I (free) to view the
eJournal.*

Contact Ron Ingraham
ringram28@cfl.rr.com to get on the
eJournal mailing list

**Space Coast PC Users
Group is proud to be a**

Member of



**An International
Association of Technology
& Computer User Groups**

The Space Coast PC Users Group's
Computer Doctors Make House
Calls

Free to
SCPCUG Members!
Dan Douglas, owner of
DataDan Computer Services,
will accept phone requests
for computer assistance.
(321) 301-1075

After a phone call, a house call may be
made within 5 miles of Merritt Island.



**Computers 4 Kids
C4K Volunteers need
Donated
Computers, Keyboards, Mice,
etc
for
Building PC Systems
complete with Software
for
Needy School Children
Call
Gene Nelson @ 453-3986
To arrange pickup**



Computer Tutor
Computer Services for Boomers & Seniors
1510 S. Wickham Rd, West Melbourne
321-431-3866

Reduced attendance at the regular monthly meetings has made it increasingly difficult to find people willing to give a presentation.

It would be helpful if you would offer suggestions regarding subjects of interest to you or the group as a whole.

If you know of anyone with knowledge of computer software or hardware who might be willing to speak to the group, please let our Vice-President, Larry Bennett know.

(321) 259-2400

lbennett@ qualitek.biz

Dan Douglas
datadan@msn.com
(321) 301-1075
DataDan Computer Services
All types of computer repairs & services
3815 Hwy 1
Unit 109
Cocoa FL 32926

Space Coast PC Users Group, Inc.

MEMBERSHIP APPLICATION

Membership
\$25.00 [] Check [] Cash
One-time Initiation Fee
 Check No. _____

NAME _____ [] New [] Renewal
 ADDRESS _____ Date _____
 CITY _____ STATE _____ ZIP _____
 Home Phone _____ Work Phone (Optional) _____
 E-mail _____

Would you like to attend: a class for BEGINNERS? []
 a WINDOWS class? []
 an ADVANCED WINDOWS class? []

What other topics would you like covered in a class? _____

Would you like to join a Special Interest Group (SIG)? [] Yes [] No

Please list groups of interest: _____, _____,
 _____ See page 31 for the names of active groups

Do you have expertise that you would like to share? Please describe.

Would you be willing to be listed in the Helpline of the *Journal*?
 If so, what subject? _____ Calling hours: _____
 Phone _____ E-mail _____

Would you like to help the Club in the following areas?
 Resource Center Staff _____ Journal Staff _____
 Computer Doctor _____ Room Setup _____ Teach Class _____
 Other _____

What topics would you like to see for monthly programs?

What can the SCPCUG do to help you and others?

If you were told about the SCPCUG by a club member, write that member's name here _____

Make check payable to: Space Coast PC Users Group

Mail to: SCPCUG Treasurer, 8700 Ridgewood Avenue, #B-301, Cape Canaveral, FL 32920-2040

Are You CPU

Bewildered?

DRAM Windows Modem
HTML

Join the
Space Coast PC Users Group
 and learn the lingo!

Membership benefits:
 The *SCPCUG Journal*
 Computer Literacy Classes
 (e.g. Windows 95/98)
 Seminars and Workshops
 Special Interest Groups
 Computer Doctors - computer
 help - **FREE!**
 Group Purchases, Raffles, and
 Door Prizes!
 Helplines - get help from the
 experts

Join Now!

ADVERTISING RATES

	1 Month	3 Months	6 Months
1 Year			
SIZE	~10%*	~15%*	~25%*
Full Page.....	\$90.00.....	\$243.00*	\$459.00*.....\$810.00*
Half Page..	...45.00....	...123.00*	...230.00*.....405.00*
1/4 Page.....	...23.00....	...62.00*	...117.00*.....207.00*
Business Card.....	...35.00.....	...59.00*	...105.00*

* = Discount from regular monthly rate. Discount applies to ads running in consecutive issues.

Payment **must** accompany order. Make checks payable to:
 Space Coast PC Users Group

Dimensions (W x H) for ads are as follows:

- Full page: 7" x 9 1/4"
- Half page: 7" x 4 3/8" or 3 3/8" x 9 1/4"
- Quarter page: 3 3/8" x 4 3/8"
- Business card: 3 3/8" x 2"

Camera ready ad copy is due by the 28th of the month to ensure that the ad will appear in the next issue. Mail ad copy to the Editor at: 1360 Mayflower Avenue, Melbourne, FL 32940-6723. Prices will be quoted for design work. Questions? Call (321)777-2578.

All advertisements are subject to the approval of the Editor.

SPACE COAST PC USERS GROUP, INC.
8700 RIDGEWOOD AVENUE, #B-301
CAPE CANAVERAL, FL 32920-2040

AGENDA

June 18, 2015

5:30-6:00 PM

Help Desk
Currently not available

5:30-6:00 PM

NEW MEMBER ORIENTATION
(Outside Meeting Room 2)

- 1. PC Journal**
- 2. Software Associated Classes**
- 3. Special Interest Groups**
- 4. Computer Doctors**
- 5. Helplines**
- 6. Learning Center**

6:00-7:45 PM

GENERAL MEETING

- 1. Introduction**
- 2. Intermission**
- 3. Presentation 6:30 PM**
- 4. Q&A After Presentation**
- 5. Door Prizes 7:30 PM**
- 6. Raffle (Occasionally)**
- 7. Adjournment 7:45 PM**

STATEMENT OF PURPOSE

The Space Coast PC Users Group is an in-dependent, not for profit, computer group open to anyone interested in computers. It is not affiliated with any business. Our purpose is to serve as an educational, scientific, and literary organization designed to enhance computer literacy.

DISCLAIMER: Neither the Space Coast PC Users Group, Inc. (SCPCUG), its officers, board of directors, nor members make any expressed or implied warranties of any kind with regard to any information or offers disseminated in the *Journal* via advertisements or articles, including but not limited to warranties of merchantability and/or fitness for a particular purpose. Opinions provided by *Journal* articles, or by speakers, members, or guests who address the SCPCUG meetings are individual opinions only, and do not represent the opinions of the SCPCUG, its officers, the board of directors,

or members. All opinions, information, and advertisements should be carefully considered by every individual and neither the group, its officers, board of directors, nor members shall in any respect be held responsible for nor be liable for any and all incidental or consequential damages in connection with or arising out of the furnishing or use of any information, advertisements, or opinions provided by or through the Space Coast PC Users Group.

The Space Coast PC Journal is a copyright© 2009 monthly publication of the Space Coast PC Users Group, Inc. Subscriptions are included in the cost of membership. Reproduction of any material herein by any means is expressly prohibited unless written permission is granted, except that noncopyrighted articles may be reprinted by other user groups, provided credit is given to the author and the publication.

INITIAL MEMBERSHIP \$25. ANNUAL DUES HAVE BEEN SUSPENDED. Please send check, made payable to **Space Coast PC Users Group, Inc.**, to the Treasurer at:
 Space Coast PC Users Group, Inc.
 8700 Ridgewood Avenue, #B-301
 Cape Canaveral, FL 32920-2040

BENEFITS: Members get the monthly *Journal*.

In addition, *only* members can:

- participate in meeting drawings
- join special interest groups
- use the Helplines
- talk to one of our computer "doctors"

NEXT MEETING

June 18, 2015

Central Brevard Library and Reference Center
 308 Forrest Avenue, Cocoa

To get to Meeting Room Two: after entering the Library turn left after the Gift Shop and proceed down the hallway, through a set of double doors, through a second set of double doors on the right into

Meeting Room Two.

Guests are always welcome at the Space Coast PC Users Group meetings.

Guests are always welcome at the Space Coast PC Users Group meetings.