

# The Space Coast PC Journal



## Google's New Spam-Fighting Tools

By Bob Rankin

Ask Bob Rankin July 23, 2015 Column

[http://askbobrankin.com/googles\\_new\\_spamfighting\\_tools.html](http://askbobrankin.com/googles_new_spamfighting_tools.html)

bob (at) rankin.org

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Google estimates that nearly 60 percent of all email it processes is spam. But like most Gmail users, I rarely see any spam in my inbox. Google claims that Gmail now blocks 99.9 percent of all spam. Read on to learn how you can get near-perfect spam filtering, even if you don't use Gmail...

Machine learning, an application of artificial intelligence, has been part of Gmail's spam filter program since Gmail's inception. On July 9, Google announced three new improvements to Gmail's spam filter.

Every time a user clicks the "Report Spam" or "Not Spam" button on a message, Gmail learns something that helps it filter spam better. But now, Gmail is attempting to learn on its own, without the user's clicks.

The spam filter now uses the same artificial neural network that Google Now and Google Search use to detect and block the "especially sneaky" spam that sometimes slips past users' radar.

Gmail Spam Filter

What's an "artificial neural network," you ask? The oversimplified answer is, a lot of computers connected to each other in an attempt to simulate the interconnections of human brain cells. It's expensive to build an artificial neural network; most are tiny, with 1 to 10 million connections.

Google has built an ANN with over one billion connections using the processors in its vast and far-flung empire of data centers. That sounds awesome, until you learn that the human brain contains several trillion connections! None the less, Google's ANN is capable of rudimentary human-like selflearning.

That means you don't have to teach it what spam is.

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Continued.....page 4



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*All work on the Journal 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 ringram728@earthlink.net or bring your disk and hardcopy to the Monday meeting or mail to:

Editor, SCPCUG Journal  
 Space Coast PC Users Group, Inc.  
 1360 Mayflower Avenue  
 Melbourne, Fl 32940-672

3Articles must be received by the 28th of the month to appear in the next issue, and all are, of course, subject to editing. □

**From The Editor**

You no doubt have observed that I have included a large number of articles extracted from a few of the multitude of websites available on the Internet. Some of this has become necessary because so few users are writing articles for club publications such as this one. I truly appreciate all of the help I get from Judy Tylour. I'd really be in a bind without the articles she sends me.

Another reason for including the website articles is to familiarize you with the many valuable sources of information that are out there, and to encourage you to check out these sites regularly.

For a very long time I have included Kim Komando Mustn't forget the Scambusters Newsletter.

More recently I have added LeoNotenboom, and Dennis Faas. Leo publishes once a week. Dennis's site is daily with articles by Dennis, and John Lister. All of these, including the archived files are available to you. Check them out.

All of the above was reprinted from the November 2015 issue. I thought you might find it interesting to compare what we published then to what I am able to publish these days. Not much difference. □

**Ron Ingraham, Editor**

***The Space Coast PC Journal***

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**If there is a program not listed that you feel comfortable  
with, let us list you as one of our helplines  
contact ringram28@cfl.rr.com**

**The SCPCUG Home Page is at:  
<http://www.scpcug.com>  
Check it out!!!!**

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### Presentation

October 15, 2020

Meet in the Auditorium  
2 PM  
Get together welcome  
meeting  
Discussion, Q&A

**Bring Some Friends**

## Google's New Spam-Fighting.....from page 1

In one experiment, Google's ANN was fed millions of still images of cats culled from YouTube videos. The images were not labeled as "cats" and programmers did not tell the ANN what a "cat" is. The ANN figured it out for itself, learning to recognize cats in virtually any image. If it can do that, it can recognize spam with greater accuracy than most humans can.

You don't have to do anything to use Gmail's spam filtering - it's automatic. But you can add your own filters to funnel messages into folders, forward to another address, and other actions. See my article [Tame Your Email With Filters](http://askbobrankin.com/tame_your_email_with_filters.html) for help adding filters to Gmail, Yahoo, Outlook.com, iCloud Mail, or AOL webmail. [http://askbobrankin.com/tame\\_your\\_email\\_with\\_filters.html](http://askbobrankin.com/tame_your_email_with_filters.html)

But the ANN is still not perfect. Just as humans see UFOs in pictures of streetlights, Google's ANN sometimes sees spam in legitimate messages and mistakenly consigns them to the spam folder. Google claims that only about 0.01 percent (1 in 10,000) of legitimate emails are falsely labeled as spam these days. As the ANN learns more about email, that figure should fall even further.

Take a look in your Gmail spam folder, and see how it's working. If you do find certain messages are being incorrectly flagged as spam, you can create a Gmail filter for them, with a "Never send to Spam" action, so they'll be delivered to your inbox.

How does Gmail's spam filter compare to other free Webmail services, such as Microsoft's Hotmail/Outlook.com and Yahoo? I haven't been able to find any independent, rigorous studies of this question. I'll just note that Microsoft seems to think it's acceptable if less than 3 percent of the messages that reach your inbox are spam.

Another new spam-fighting technique that Gmail

is introducing doesn't really tackle spam, in my opinion. Gmail now attempts to learn individual users' reading preferences and filter out even legitimate mail that goes unread. The company gives the example of email newsletters. One user reads them assiduously while another just lets them pile up unread, or deletes them without reading. Why people don't just unsubscribe from newsletters is one of life's mysteries. Hopefully, Gmail can distinguish between legit opt-in email newsletters and the ones that just arrive without your consent. <https://www.microsoft.com/en-us/outlook-com/compare/>

Finally, Gmail is providing help for legitimate, large-volume email publishers whose communications are sometimes wrongly condemned as spam. The Gmail Postmaster Tools will help airlines, banks, credit card companies, and other well-known firms analyze the fate of their emails and improve their delivery and reading rates. <https://gmail.com/postmaster/>

Even if you don't use or like Gmail, you can still use it to filter spam. Here's one technique that some people use to "pre-filter" their incoming emails. Instead of providing your actual email address when asked, give out a Gmail address that you've created. Configure that Gmail account to simply forward everything to your actual address. Gmail does spam-filtering BEFORE forwarding, so the messages that do get forwarded are virtually spam-free.

Gmail's spam filter is so reliable and accurate that I hardly ever check my spam filter for false positives anymore. I get hundreds of emails daily, and in 2015, I estimate I've clicked on the "Report Spam" or "Not Spam" button less than a dozen times. The spam filter just works.



## From the Cashier's Cage

+

Financial Report for Month  
Ending August 31,2020

### CHECKING

Beginning Balance	394.87
New Member - Rick Stasik	25.00
Ending balancee - includes \$8.41 snack fund	429.87

### SAVINGS

Beginning Balance	305.20
Transfer to Checking (100.00)	
Interest	.01
Ending Balance	305.21

### TOTAL ACCOUNTS BALANCE

725.08

## Club Meeting Minutes September 17, 2020

The meeting was opened at 2:09 p.m. by President Dan Douglas. Present were 3 board members, 7 members. Board members present were President Dan Douglas, Journal Editor/Library & Learning Center Manager Ron Ingraham, and Secretary Barbara Mead. Absent were Vice President Larry Bennett, Treasurer Irene Nelson, Webmaster Curt Potsic and Membership Chairperson Linda Glassburn.

- Dan welcomed everyone to the meeting.

- Barb read Irene's updated Treasurer's report. The financial report for August 2020 has a beginning balance in checking of 329.87, a deposit for USB sticks of 40.00, a deposit for new member Mamie Kington of 25.00, gives us an ending balance (including 8.41 snack fund) of 394.87. Our savings account had a beginning

balance of 305.17 and added interest of .03 for and ending balance of 305.20. The total accounts balance is 700.07.

- Dan read highlights from Curt's Webmaster report. Curt's report included the APCUG Fall Online Workshops about home automation for seniors and Curt's update of the website to include the last 12 issues of the newsletter available on demand as was voted in during the August meeting.

- Ron noted that the newsletter would go out as soon as e and Dan finished the items they were working on for the newsletter.

- Tom Marr asked about the pros and cons of Malware Bytes and Spybot and the changes in Facebook apps and the Facebook website. He also asked about the Dashline Password manager and other password managers. Dan elaborated on the advantages of each.

- Rick Stasik asked about how to find which browser extensions are installed and how they work together.

Marilyn asked the best way to copy something from an article on her laptop and Dan suggested the app Snip & Sketch; also the use of the print screen key to copy items.

- Ron spoke up about the benefits to the members of APCUG that are available to us on the APCUG2.org website including YouTube videos and lots of tips and tricks that we could find useful.

Pete Vander Houghton talked about video editing apps and his positive experience using the free download Shortcut. Pete also asked about backup techniques not using the cloud. Dan discussed various systems going back to the RAID systems used on mainframes.

Members were encouraged to attend the Saturday meetings, particularly the one this coming Saturday, September 19 from noon to 3:30 as usual.

Meeting adjourned at 3:50 p.m. □



## *From Dan's Desk*

While struggling with what topic to write about this month, our esteemed editor suggested that I do a biography overview. As those of you that I don't get to meet in person at the group functions have no idea who I am and how am I qualified to give advice, whether asked for or not. So here goes... Birthplace: Toronto, Ontario, Canada – Factoid #1 – I have dual citizenship Canada/US – Lived in the US since 1988, citizen since 2008..

Education: St Clair College, Windsor, Ontario – 3yr Business Administration with a major in Data Processing and minor in Marketing. Fun Fact #2 - this where I got my nickname of 'DataDan' from my fellow students – they thought I was really fast at learning how to program – but I never had a job in my life where I got paid to 'program'.

### Job History:

Canada Packers (Toronto, Ont) 2.5 yrs, Computer Operator/Programmer/Shift Supervisor – Fun Fact #3 – ask me how practical it is to have a computer building attached to a slaughterhouse and I can tell you stories for hours.

Bank Of Montreal (Toronto, Ont) 13 yrs, Computer Operator/Shift Supervisor/Trainer/Problem-Change-Configuration Manager/Process Automation Designer/Implementer – IBM Software Product 'Information Management' (InfoMan) expert – I had one of the first IBM PCs when introduced in 1983 – All of my work on computers up to this point was based primarily on large scale IBM mainframes; remember back in the 70's/80's that's about all there was! - Fun Fact #4 – my staff at BOM referred to me as an 'InfoManiac'

Diedrich & Associates (S. Pasadena, CA) 4.5 yrs – Small consulting firm specializing in improving large data center operational efficiency through the use of software tools such as InfoMan – Senior Consultant Trainer – Fun Fact #5 – The first Stanley Cup Finals hockey game I went to was when Wayne Gretzky was playing for the LA Kings during my time living in the LA area.

Information Retrieval Companies (IRC)/ InfraWise (Cary, NC) 17 yrs– Senior Consultant/Trainer/ Development Manager/IBM Liaison/Marketing VP – Fun Fact #6 – The office was based in Cary because I got to choose where wanted to live and I liked NC the two times that I had visited earlier; Florida was a close second choice

IBM (Raleigh, NC) 2.5yrs – Technical Product Evangelist for InfoMan/Trainer/Product Manager for InfoMan/ Worldwide Product Manager for Service Desk products – Fun Fact #7 – after IBM sold off the product line and I got laid off, I figured out that in my 2.5 yrs working there I was on the road for 70% of my time. I saw a lot of the world from this job and I loved that part of it.

VideoTrend/Markville Video (Toronto, Ont) 4yrs – Owned and managed one of the first video stores in Toronto where you could rent/buy movies/vcrs/tvs – Fun Fact #8 – when we started there was only 20 movies that were legal to rent, but we saw the rental boom was to come - To think I could have been the BlockBuster Video of Canada!

Datadan Computer Services (Cocoa, FL) 5yrs – My computer repair and used PCs for sale shop. All of that tinkering with my mothers' music boxes finally pays off with a semiretirement job.

Share/Guide/NEISUG/SMUG/HDI/SCPCUG/etc.

– 31yrs – These are all Computer user groups that I've been involved with going back to when the IBM Mainframe ones (Share/Guide) used to be held 3 times a year across the country in large cities and would draw from 2,500 to 5,000 attendees every time. They evolved to include PCs when they became proper business tools until the internet doomed us all to get all of our education/information through the net and face to face meetings became a relic of the past. - Fun Fact #9 – I won contests for coming up with the best user group name ever when we called the local InfoMan user group that I started in Toronto the 'Systems Management User Group' (SMUG).

So that's my story on one page without all of the details on what really happened along the way. But the details are why you should come out in person and get involved with your fellow users, each of whom has a background that is probably more entertaining and interesting than mine, and has a wealth of stories to tell concerning our use of computers and technology. Fun Fact #10 – last year I met the gentleman who wrote the operations manual for Apollo 11!





Webmaster Wanderings

Face Masks Are Now A Mandatory Requirement to attend our meetings.

### Jere's Tech Tips

Windows, Android, Linux tips from Jere Minich, APCUG Advisor, Region 5 (AL, FL, GA, SC).

#### New items include:

- Google Maps Just Got a Lot More Colorful
- The Best Video Streaming Services for 2020
- What to do When Your Computer Won't Start
- 5 Ways to Check Who is Tracking You Online
- 10 Things You Didn't Know Google Assistant Could Do
- 5 Weird Noises Inside Your Computer Explained
- How to Turn an Old Laptop Into a Chromebook. <https://apcug2.org/jerestips/>

### APCUG 2020 Fall Online Workshops

These four workshops are on "Home Automation for Seniors" and take place the second Wednesday of the month starting in September. The Workshop will explain why home automation is important to Seniors.

Sep 9 – Why do I need it? What products are on the market, costs, security, and some real-world testimonials.

Oct 14 – Where do I start? How to go about planning your home automation project and best practices.

Nov 11 – Lights, doorbells, locks, and cameras. Applications using lights, doorbells, locks, and cameras.

Dec 9 – Doing it myself vs. Having it done. The benefits of a DIY project or having a professional install.

### Special Events page updated:

#### APCUG 2020 Password Manager Workshop - 7PM

With this workshop, you will learn how to solve password management problems using an open-source solution called Bitwarden.

Sep 29 – Password theft is a serious problem. Everyone should be using a password management program and Bitwarden is one of the easiest and safest ways to store all of your logins and passwords while syncing them between all of your devices.

Oct 1 – Bitwarden Installfest where you will have the opportunity to work along with Kenneth as he shows attendees how to set up Bitwarden, create passwords, troubleshoot any problems you might have, etc.

### Special Events page updated:

#### APCUG 2020 Linux Wednesday Workshop -

12 PM ET Oct 28

This Workshop will introduce you to many Linux distros (short for distribution), a term used to describe a specific distribution of Linux that is built from the common Linux operating system and includes additional applications. Unlike Windows or Mac, you can choose a distro that meets your needs.

Speakers page updated: The August Monthly Meeting summary is posted. Face Masks Are A Mandatory Requirement to attend our meetings. Sep 17 meeting is another Computer Round Table Q & A session. Guest Speakers do not wish to come during Covid-19 pandemic.

#### 1 New Link

TechRadar - The Source for Tech Buying Advice. Has Sections on How To, Reviews, Phones, TVs, Laptops, Cameras, and more. <https://www.techradar.com/>

#### Miscellaneous Links

We love tech! We'll tell you what we think in a fair, unbiased way. TechRadar is the largest UK-based consumer technology news & reviews site (now rapidly growing in the US and Australia).

TechRadar will tell you about the coolest new stuff. We'll work hard to bring you original quotes and exclusive access. We'll review it thoroughly and

## **Webmaster Wanderings.....from page 7**

carefully. We'll explain how it works and why you should buy it (or not).

### **Misc Items**

#### **AT&T Customers with Alexa Echo Devices Can Make & Receive Phone Calls**

If you are an AT&T mobile phone customer you can now link your mobile phone number (but not your landline home phone) to your Alexa Echo device to allow the making and receiving of phone calls on your Alexa device. Since 2017 Alexa Echo devices have allowed free calling of landlines and mobile numbers. However, you could only receive a call on your Alexa Echo device from another Alexa Echo device. This new integration with AT&T goes further. It turns your Alexa Echo device into an extension of your mobile phone. To enable this new feature, "AT&T calling with Alexa," it has to be set up in your Alexa account. Go to the "Communication" section in the Alexa app's Settings. Select "AT&T" and then follow the on-screen instructions to link your mobile number. Once this feature is enabled, users can speak to Alexa to start a phone call or answer an incoming call. This works even if the users mobile phone is out of reach, turned off, or the battery is discharged. Amazon has already rolled this feature out in the UK and Germany.

#### **Amazon Launches Alexa Print**

This new Alexa-enabled printing feature lets Echo device owners use voice commands to print out common items, like To-Do lists, recipes, weekly calendars, educational content for kids and even some games, like Sudoku or crossword puzzles, mazes and more. You need a second generation Echo device or newer & a Internet Printing Protocol (IPP)-enabled compatible printer from brands like HP, Brother, Canon and Epson for this feature to work. Check if your printer works with this feature by saying "Alexa, discover my printer." If Alexa finds your printer you can then start voice printing by saying things like "Alexa, print a crossword puzzle" or "Alexa, print a chicken recipe." Another way of enabling this feature is by going to the Alexa app, choosing "Add Devices" and selecting "Printer." The downside is once connected Alexa receives the information about your ink or toner supply levels and will remind you when supplies are low through email or voice. Some people have complained about the notifications to buy ink

from Amazon. However, these notifications are on by default, but can be turned off in the Alexa app on the device's Settings page under "Status."

### **New Features Coming to Windows 10**

Windows 10 has a number of features currently in beta testing that should soon becoming to all of us.

Among them is an integrated GIF search and improvements to voice typing. The goal is to improve the system's ability to help a user communicate via voice and text on his devices. To better enable a user to react with the perfect laughing, crying or eye roll GIF, Windows 10 will allow the user to quickly input animated GIFs by typing WIN + [.] and WIN + [;]. Voice typing will be a "new and improved" version of Windows dictation. It will be optimized for use with touch keyboards, have auto-punctuation and back end updates that should make voice typing faster and more responsive. You can also use voice commands to stop or pause voice typing and to delete or select certain words. □

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## **Ask Mr Modem**

### **Resize Photos in a Jiffy**

**Q.** Is there any way I can reduce the size of a photo that was given to me in .JPG format?

**A.** There sure is: Irfanview ([www.tucows.com/preview/194967](http://www.tucows.com/preview/194967)) is a free graphics viewer/editor. Once installed, click File > Open to display your photo. With the picture displayed, click Image > Resize/Resample. You will be able to choose from several options in the next window, including setting a new size by typing in the pixel dimensions, making the new picture a percentage of the original, or selecting from several standard sizes. If you click the Half button, you can reduce the size of the photo as much as you wish. When you reach the desired size, click the OK button and you will see the picture in its new size. If the size is acceptable, click File > Save As, and give the file a new name so it doesn't overwrite your original photo.

Also popular and easy to use is ShrinkPictures.com, which is a Web-based service that enables



you to reduce the size of digital photos. No software is required, the service is free and no salesmen will call. Resize2Mail.com is a similar service, also free. PIX Resizer (<http://bluefive.pair.com/pixresizer.htm>) is another freebie that will resize one or multiple photos in one swell foop. All you have to do is create a new folder within which you can send the resized pictures.

**Q. A friend gave me a CD of a computer program to make cards and posters. It was a brand new CD, still wrapped in plastic. When I put it in my computer, it asked for a product key and displayed a text field to type it into. What is a product key and how do I find it?**

A. A product key is a combination of letters and numbers that is used to unlock or open software. Each individual copy has its own unique product key. The product key may be located inside the programs box or case or printed or applied as a sticker to the front or back of the envelope the disc came in (also known as a sleeve). For downloaded software, a product key will usually be emailed to you. Do not throw out any of the packaging that comes with a program until you find your product key or try your program out to make sure it doesn't require one. You might also contact your friend if you cannot locate the product key on the packaging the CD arrived in. It is certainly possible that the CD was purchased within a box or jewel case that contained the product key.

**Q. In the upper right-hand corner of my keyboard is a key marked "PrtSc/SysRq." Someone told me if I want to print a map, for example, to get it on the screen, press the F11 key, then hold down this key and the SHIFT key to get a full-sized map printed out. Can you elaborate on this a bit more? I don't understand it at all.**

A. F11 switches into full-screen mode for most browsers, allowing more of a page to appear on screen. Press F11 again to reverse the action. Pressing the PrintScreen (PrtSc) key captures (takes a picture of) the current screen and places it on the Windows Clipboard. You can then go to any graphics editor (Paint is fine, located within

Windows, under Accessories) and paste (by pressing CTRL + V) the saved image onto the screen and print it from there.

Historical Footnote: The SysRq or SysReq key, which shares the PrtSc key is a relic from another era -- not unlike Mr. Modem. Short for System Request, the SysRq key was the 84th key added when the 83-key PC/XT keyboard became the 84-key AT keyboard eons ago. Unless programmed by a particular application, the SysRq key does nothing in most operating systems today. The key doesn't appear on many new keyboards.

### **Mr. Modems DME (Dont Miss Em) Sites of the Month Answers.com**

This self-described "New Standard in Reference" is a free, online reference guide with information about millions of topics. Answers.com differs from search engines in that it provides quick answers to specific questions, as opposed to results that link you to a list of related topics. The site's editors draw their data from hundreds of reference sources, including dictionaries, encyclopedias, atlases and thesauruseseseses. □



## **Is it cheaper to upgrade or replace an older computer?**

*By Justin Ferris  
September 30, 2015*

I have a mid-range Windows 7 desktop computer that I bought five years ago. I'm about ready to make the upgrade to Windows 10 and I feel like it needs better hardware to run well. Should I upgrade my current system or just buy a brand new one? If I'm upgrading, what do I need? - Gary from Houston, Texas, listen to Kim's national radio show on 950 AM KPRC

**Continued.....page 10**

## **Kim Komando.....from page 9**

A. The recommended lifespan of a computer is about four years, Gary. If you keep it in good shape, of course, it can last longer and still do the job, especially if you regularly follow these three steps to speed it up. But you do have an increased risk of hardware failure, especially with the hard drive. That being said, after years of increasing bloat, Microsoft made the bold decision to have its new operating systems be MORE efficient. That's mainly because it was aiming Windows more heavily at the mobile market and weaker mobile hardware, but it works in your favor for desktops and laptops as well. Any computer that runs Windows 7, 8, or even later Vista machines, should be able to run Windows 10 just as well. This author is running Windows 10 on a system with a high-end Core 2 processor from 2008 and it runs just fine. Of course, other parts of that computer have been upgraded over the years. Let's take a look at what upgrades you'll want to make and how it will compare cost-wise and trouble-wise to just buying a new computer.

### **Computer upgrades**

To find out what upgrades you need, grab a free program called Speccy. This will give you important information about your computer like what processor you have, how much RAM is installed, whether your motherboard supports SATA and much more. First, look at your processor, specifically if it supports 64-bit operating systems. If it is 32-bit only, then you really need to upgrade it. Windows 10 has a 32-bit version, but it's really meant to be run as 64-bit. Also, if you want to have more than 3 gigabytes of RAM - and you do - you need a 64-bit operating system. If a processor upgrade is in your future, it's better to just buy a new computer, especially if you have a laptop. Even with a desktop, you'll need to hunt down a part that works with your motherboard, or upgrade your motherboard, too. Then you'll have to install it all. It's going to cost upward of \$175, and take up a good few hours of your time, or more if you've never done it before. If your processor is OK, then focus on the RAM. You'll want 4GB to get the most of your operating system.

RAM makes your computer snappier when you're re-opening or switching between several programs. It isn't that expensive (\$50 or less for 4GB), and it's fairly easy to install. Learn the steps to upgrade the RAM in your desktop or laptop. If you're doing any upgrading on a computer over three years old, you really should replace the hard drive just to be on the safe side. Even if your files are protected with a secure backup service like our sponsor Carbonite, you don't want the hassle of dealing with a dead hard drive if you can help it. Plus, you can probably double or triple your storage space. Just \$60 will get you a 1 terabyte hard drive, which is more than most people can fill in a lifetime.

You just want to make sure that your motherboard supports Serial ATA, or SATA. Speccy should tell you under the motherboard section if you have it. SATA is the current standard, and you want your hard drive to work with a newer computer when you do get one. Plus, having SATA lets you consider getting a solid-state hard drive. Click here for a refresher on the advantages and disadvantages of an SSD vs. a conventional hard drive. An SSD is one of the best upgrades to make an old computer feel new, and Windows 7, 8, and especially 10, are built to take advantage of what an SSD can do. Even with an older processor, this author's computer starts up in 15 seconds with Windows 10 running on an SSD. Even better, after starting, programs open in a few seconds the first time rather than taking 30 seconds to a minute. SSDs have fallen in price considerably over the last year. A 120GB SSD like the Samsung 850 EVO will set you back just \$75, and a 250GB is under \$100. Granted that doesn't sound like a lot of space, but it's probably close to what you have now and the speed is worth it. Plus, you can always pair it with a 1TB conventional drive if you need a place to store large files. Don't forget that if you're installing new drives, you'll need to set aside time to reinstall Windows, reinstall your programs, get your settings back the way you want them, transfer your files and so forth. Figure a day or two, on and off. From what we've covered above, if you're starting with a decent processor, you can

have a nicely upgraded system for \$100 to \$200, and a day or two of time and effort. Of course, just like an old car, you might find yourself having to make an increasing number of repairs and upgrades over the next few years as more and more hardware fails. So, let's look at how a new computer compares.

### **New computer**

When we say "new computer," you might think of a rig costing \$500 or more. However, that's not necessarily the case anymore. We're seeing a crop of new, cheap computers that cost less than \$300. In fact, the \$130 Intel Compute Stick, which runs Windows 10 and plugs right into your HDMI-compatible TV or monitor, will match a budget computer from four or five years ago. It's fine for basic computing tasks, like email, Web browsing and even streaming online video. Learn more about the Compute Stick and other small, cheap PCs.

Of course, for that little money you're not getting stellar performance. Good budget desktops and laptops start around \$350 to \$400. That's a bit more money, but they're more than a match for an older computer, offering faster speeds, better built-in graphics, 4GB of RAM or more, 1TB hard drives and other goodies. It's also a good jumping-off point if you want to still do some upgrades like adding an SSD. The other benefit of buying new is that it comes with Windows 10 pre-installed, a warranty and should last for the next four years without any major problems. Learn more about buying a new computer with our New Computer Buying Guide.

As a final bonus, if your old computer is still working, you don't need to get rid of it. Throw a free lightweight operating system like Linux Mint on it to turn it into a hassle-free second system. If you are getting rid of your old computer, don't forget to wipe your information to keep it from falling into the wrong hands.

Now, you have a clean machine that you can donate, or recycle it using this site. You could hand it off to a friend or relative if they need a basic computer to use, too. ☐.

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*Kim Komando.*

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## **Ask Leo!**

*by Leo Notenboom*

### **Thunderbird – A Free, Open Source, and Powerful Email Client**

**Thunderbird is a robust and powerful email program that can meet the needs of both light and power users.**

**I use it all day every day.**

Mozilla's Thunderbird is my choice for email. I use it all day every day, and I can heartily recommend it as an often more powerful and capable replacement for mail programs like Outlook Express, Windows Live Mail and many other desktop email applications.

The feature list is long, but I want to call out some of my favorite features and some of the things that personally draw me to Thunderbird and cause me to make it my recommendation for almost anyone using a desktop email program.

- **Free:** You already know that Thunderbird's free. That part's easy, and makes it something that is risk free to try and experiment with before deciding.
- **Comfort:** Most users of Outlook Express will actually feel very comfortable in Thunderbird. Basic operation is very similar.
- **File Format:** Thunderbird uses a standard, common plain text file format for its data store (mbox format, for the geeks among us). Many email programs use proprietary database formats that, quite frankly, seem prone to breaking and make it difficult to move from machine to ma-

## Ask Leo! Thunderbird.....from page 11

chine. Thunderbird uses a simple on-disk folder structure that mirrors your email folder structure, and actual email is kept as plain text files.

Moving your Thunderbird email from machine to machine is as simple as copying the folder tree.

- Cross-platform support: I've successfully moved my email not only between Windows PCs, but also to my Mac and to my Linux machines.

As I said, transferring was a simple copy of all the folders and support information. The result was that not only did my email get transferred, but all the account settings, filters and even supported extensions were moved as well.

- Extensions: like its cousin FireFox, Thunderbird has a number of powerful Add-ons available. Examples include Lightning, the calendar add-on and the Google Calendar Provider, the Enigmail encryption add-on, QuickText which allows you to enter common responses with a single keystroke, and one of my favorites, Nostalgia which allows you to copy or move messages between folders extremely easily using the keyboard.

- Filters: Thunderbird supports a set of very powerful filters that allow you to have it take action automatically on mail as it arrives. For example, I have 37 separate filters that automatically sort incoming email and place it into various folders based on various criteria.

Your needs may not be that complex, but simply being able to say things like "if this is from someone in my address book, move it into this folder" is a powerful way to prioritize your approach to email.

***"... Thunderbird remains my recommended alternative to almost every other desktop email program.***

Naturally, there are many more features that may appeal to you. I encourage you to have a look.

Thunderbird remains my recommended alternative to almost every other desktop email program. (The sole exception would be Microsoft Outlook for the corporate and power user, but even then, I'm a power user, and have come to prefer Thunderbird anyway.)

If you don't already have a favorite (I acknowledge that email programs are often a personal, even passionate, decision), or you're struggling with the drawbacks of whatever program you're currently using, Thunderbird is worth a look.

I recommend it. ☐

**Go to [www.askleo.com](http://www.askleo.com) to see the wealth of information provided on a wide variety of technology subjects.**



## Ways to Repair or 'Factory Reset' Windows 10

Infopackets Reader Gail N. writes:

"Dear Dennis, I have two HP laptops: one that came with Windows 7 and the other with Windows 8. I have already upgraded both laptops to Windows 10 using the 'get Windows 10 app' via the desktop. My question is: what happens if Windows 10 fails and I need to factory restore my laptop? Will I get back Windows 10 or will it reload the original operating system (Windows 7 or 8)? I ask because both my HP laptops have a 'factory restore' partition which I can access by pressing F11 on my keyboard during bootup. Also, is there any way to fix my laptop without issuing a full restore?"

### My response:

This is a good question. If you were to issue a restore by pressing F11 during the boot process, your computer would be reverted back to Windows 7 or 8 and you would lose all your user data and installed programs. That said, there are a number of ways you can repair Windows 10 if there are problems, with the worst case scenario being a complete reinstall of Windows 10 using Windows 10 install media which can be downloaded for free from Microsoft. I'll explain more in detail below.

### **Option #1: Issue a Restore from a Disk Image Backup**

By far the easiest way to make Windows 10 work again is to issue a restore from a disk image backup. For this task I recommend Acronis True Image, as it can backup the entire operating system, including installed programs and user files. If you make a backup now while the system is in perfectly working order, then restoring the backup will keep everything in tact. Since Acronis True Image uses its own environment to issue a restore, you can restore your backups even if your computer running Windows 10 can't boot. If you don't know how to use Acronis True Image or need help setting it up, contact me and I'll do it for you using remote desktop support.

### **Option #2: In-Place Upgrade / Repair Install**

If you don't have a backup, another option is to download Windows 10 install media and perform an in-place upgrade (also known as a "repair install"). To perform a repair install, you must insert the Windows 10 install media from within the Windows 10 desktop environment, and then run the setup.exe file on the Windows 10 install DVD or USB. This will essentially install Windows 10 over top of itself, allowing you to keep all your installed programs, settings, and files.

Note that you cannot issue a repair install by booting Windows 10 media - it must be done from within the Windows 10 desktop environment. If that doesn't work, proceed to the next step.

### **Option #3: Repair Windows 10 using Install Media**

Another option is to repair Windows using Windows 10 install media; usually this option would be taken if your PC cannot boot into Windows 10. In this scenario you would reboot the computer with the Windows 10 DVD or USB inserted, then press a key during the boot process to initiate the Windows 10 install media. Proceed through the screens until you get to the part where it says "Install Now"; on that same screen there will be an option to "Repair your computer"; click that link. This will take you the Windows 10 System Recovery Options where you can attempt various fixes.

If you don't have Windows 10 install media handy, you can download it free using another computer. If that doesn't work, proceed to the next step.

### **Option #4: Refresh Windows 10 from within Windows 10**

If you can still boot into Windows 10, you can also issue a Windows 10 Refresh. This is similar to a repair install using install media (Option #2), except the Windows Refresh uses Windows image files that are already present on your hard drive. If that doesn't work, proceed to the next step.

### **Option #5: Reset Windows 10 from within Windows 10**

If you can still boot into Windows 10, you can also issue a Windows 10 Reset. In this scenario, Windows 10 performs a 'factory reset' where the hard drive is formatted and Windows 10 is installed fresh. Note however that you will lose all user data, settings, and installed programs if you choose this option. If that doesn't work, proceed to the next step.

### **Option #6: Use a Recovery Drive to Repair, Reset, or Refresh**

Another option is to create a Recovery Drive using a USB memory stick. This will allow you to restore from system restore point, reset your PC, or use advanced troubleshooting options (including safe mode). This option is effectively the same as Option #5 (with a few extras); the main difference is that you would be booting from USB instead of performing the task within a Windows 10 environment. Also note that it is possible to create a Recovery Drive using another Windows 10 PC if your PC won't boot; that said, the recovery drive will only work if you are using the same operating system architecture on both machines (ex: 64-bit and 64-bit, or 32-bit and 32-bit).

If that doesn't work, proceed to the next step.

### **Option #7: Reboot and Install Windows 10 Fresh**

If all else fails, you can always boot from Windows 10 install media and wipe out the entire hard drive and perform a new installation. This is similar to a Reset except you are manually performing the Windows 10 install using install media. If you

**Continued.....page 14**

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## Ways to Repair.....from page 13

don't have Windows 10 install media handy, you can download it free.

### Re-activating Windows 10

It's worth mentioning that once Windows 10 has been activated on a device, you can reinstall it as many times as you want without ever having to re-enter the license key. That's because the device is digitally fingerprinted and registered with Microsoft's servers once it is registered for the first time. All you need is an Internet connection after Windows 10 is reinstalled and it will automatically register itself. This may take a day or two depending on your Internet connection and Microsoft's servers.

Hope that helps..□

About the author: Dennis Faas is the owner and operator of Infopackets.com. With over 30 years of computing experience, Dennis' areas of expertise are a broad range and include PC hardware, Microsoft Windows, Linux, network administration, and virtualization.

Dennis holds a Bachelors degree in Computer Science (1999) and has authored 6 books on the topics of MS Windows and PC Security. If you like the advice you received on this page, please up-vote / Like this page and share it with friends. For technical support inquiries, Dennis can be reached via Live chat online this site using the Zopim Chat service (currently located at the bottom left of the screen); optionally, you can contact Dennis through the website contact form.

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## Can You Pass the Phishing Test?

*By Scambuster Keith,*

*Scambusters Newsletter, October 7, 2015*

How good would you be at spotting a phishing attempt to steal your confidential information?

Most of us would probably feel fairly confident that we wouldn't be tricked into giving away our passwords to scammers. But apparently that's not the way it is.

Phishing, as all Scambusters readers hopefully know, is a trick, normally initiated by email or text, in which

victims are usually directed to a fake replica of a wellknown website.

There, they may be asked for sign-on details, credit card numbers, Social Security numbers, or other confidential information.

It turns out that the vast majority of people, even those who know all about phishing and identity theft, can be fooled.

Proof? According to Internet security firm McAfee, only 3% of the public got everything right in an online test of phishing vulnerability.

This wasn't a small test either -- 19,000 people took part.

The quiz presented 10 emails that participants were asked to review and say whether they were genuine or phishing attempts.

Four out of five participants mistook one phishing email as genuine.

Put another way, that suggests that if scammers send out enough phony emails to the same person, they'll eventually trick them into giving away their info.

The test was originally devised for McAfee's parent company, Intel Security, which subsequently presented it to 100 participants at a security conference.

Remarkably, even the experts could only identify about two-thirds of the fakes and only 6% of them got everything right.

Gary Davis, vice president of global consumer marketing for McAfee, was quoted as saying: "Even if you're a security professional, it's hard to just look at these emails and say whether they're phishing or not. Every single one looks like a good email."

Even though the study is finished, you can take the test, presented in conjunction with CBS, here:

<http://www.cbsnews.com/news/mcafee-intel-security-phishing-quiz-can-you-spot-a-scam-dont-be-so-sure/>

### Spear Phishing

Usually, phishing emails, disguised as being from

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a particular bank or other company, are sent out at random in hopes that some of them will land in the inbox of genuine customers.

But a particularly nasty form known as spear phishing is more precisely targeted at particular individuals.

As we wrote in an earlier issue, these are often more effective because they contain information about the recipient that seems to confirm they're genuine.

<http://www.scambusters.org/whaling.html>

In another recent report, security research consultancy InfoSec Institute said that spear phishing enabled hackers to gain access to confidential information in two recent high-profile incidents -- involving retailers Target and entertainment company Sony.

Precise details of these specific incidents haven't been disclosed but typically a spear phishing email would be targeted at either a highly-placed executive or an IT professional within a company, tricking them into providing their sign-on details, thereby giving the hackers access to entire corporate systems.

"Spear phishing represents a serious threat for every industry, and the possibility that a group of terrorists will use this technique is concrete," said Infotec.

### Five Key Steps

Given the high-failure rate of even the experts, what can you do to try to reduce your risk of being conned into giving away your confidential information?

Here are five key steps:

- \* The first, and by far most important, tactic is to abandon your over-confidence, your belief that you wouldn't be fooled. You could be. Start from that position with every email you receive.
- \* Second, avoid distractions when reviewing your email. It's easy to thoughtlessly click on a link if you're not concentrating on the message.
- \* Third, be skeptical. Never assume an email message is exactly what it purports to be, even if it seems to come from companies you do business with or from friends.

\* Fourth, if you can, avoid clicking on any links or attachments in unsolicited messages without confirming their origin with the sender. Instead of clicking links, independently visit websites via your browser.

\* Finally, check for poor grammar, spelling and language usage -- often a giveaway for a scam.

The bottom line is that any email that either directly or via a website asks you to sign on to your account by clicking should be regarded as potentially suspect.

Phishing has been around since the earliest days of the Internet and is always in the Number 1 slot in our Annual Top 10.

That should be sufficient evidence that, from the crooks' point of view, it's a crime that pays. Don't let your guard down.

Alert of the Week: Fancy getting your home carpets cleaned for free? Got a coupon?

Hold on! Why would anyone want to do that job for nothing?

Perhaps they just want to get inside your house -- supposedly to inspect the carpets -- either to steal stuff or scope it out for a burglary.

You could be cleaned out. But not in the way you expected. ☐

***Check out the newsletter at [scambusters.org](http://scambusters.org).  
Subscribe FREE to ScamBusters, a public service and  
the #1 publication on Internet fraud***







## Edge – Microsoft’s New Web Browser

*By Sandy Berger,  
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Yes, Microsoft has finally replaced their old bloated Internet Explorer web browser. The new browser which comes with Windows 10, is called “Edge”. This is aptly named because it is much sharper than Internet Explorer. As a matter of fact, it is better in almost every way.

Edge is more secure, faster, and has new rendering engine. One of the best things about Edge is that it’s newly designed interface is easy-to-use. Similar to the current Chrome browser, Edge has a cleaner look that makes it easier to use. The Edge address bar is front and center under a “Where to Next?” label. Although this is a bit simplistic, it works.

The Edge has a New Tab page that is quite customizable. It also has a well-designed reading mode that strips away all of the extraneous ads and navigation creating an easy-to-read version of an article. You can also easily save an article for reading in the future.

A Hub icon on the upper toolbar gives you easy access to your favorites, a reading list, your browsing history, and your current downloads. This download area is especially useful making it easier for the average user to find them.

And WOW, you can even write on the screen of a web page to add your own comments. Draw or type on any web page using a mouse or drawing with your finger on a touch-screen .You can draw in several different colors with three different sized pens. You can also highlight in several colors and add a text note. You can even draw a square on the screen to highlight and copy part of the web page. Once you have marked up the web page you can save it and/or share it with friends.

When using Edge you can also use Cortana, Microsoft’s voice assistant to issue voice commands. Cortana will answer or will find the correct folder or program for you. It is extremely useful. You can even ask Cortana for more information on any text that you highlight.

In the future, Edge will support browser extensions from Chrome and Firefox and it will keep getting better and better. It is available at no additional cost along with Windows 10.☐

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## Drive for Change - Installing a Laptop Hybrid Drive

*By Greg Skalka, President, Under the Computer  
Hood UG, CA*

**June 2015 issue, Drive Light**

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Like people, computers have a lifecycle. That lifecycle typically takes them from a youth of peak capabilities, through a middle age marked by a slowing down and perhaps reduced desirability to twilight years of diminished capacities, failing parts and obsolescence in the workforce. If your laptop is in the midst of a mid-life crisis, there are things you can do to turn back the clock and return a bit of that youthful capability and desirability.

I have a couple of laptops that are now three years old and don’t seem as quick and capable as when I bought them. I buy on a value budget, so both the Fujitsu Lifebook LH531 for me and Lifebook AH531 for my wife were mid-priced computers bought on sale. Both

**Continued.....page 16**

## Drive for change.....from page 15

had decent processors, Windows 7, adequate but not expansive RAM and hard drives and the typical interfaces of the 2011 computer era. They now seem a bit slower, are running out of storage space and don't have some of the new, faster interfaces to match my new accessories (like USB3). Should I continue to use them as they continue to slowly degrade, buy updated new replacements or upgrade them to add increased life and utility?

Fortunately, improvements in technology have led to falling prices in RAM and mass storage since I bought these laptops. I recently changed their RAM, doubling the amount in them from the original 2 GB, for a lot less than I probably would have paid for more memory three years ago. Now I'm looking at changing the 500 GB hard drives they came with to larger and/or faster mass storage.

It seems to me that these are constants in the computer user experience:

- You can always use more storage space
- The computer can always be faster

As luck would have it, available sizes for hard drives have been steadily increasing over the years as the per unit cost of storage has been falling. In addition to magnetic spinning platter drives, solid-state drives (SSDs) are now available; these have much faster access times and can greatly decrease boot times and improve the performance of storage-intensive computer activities. Like hard drives, SSDs have also increased in size and dropped in price over the years. Unfortunately, the price drops have been proportional, so as SSD costs have come down to make them more attractive, so too have hard drive prices, so the choice for me has not been an easy one. Increasing my storage to a 1 TB hard drive in these laptops would now cost only about \$60 each, but a 1 TB SSD is currently around \$300. I could speed things up with a 240 GB SSD for around \$100, but would then have less than half the storage space I have now. It does not look like SSD prices are going to drop dramatically compared to magnetic hard drives and put them out of business anytime soon.

A new class of mass storage promises to provide the best of both worlds - large storage at a low cost, with much faster access times. It is called the hybrid drive or

solid-state hard drive (SSHD), and it combines a magnetic platter hard drive and solid-state Flash memory in one device. With the addition of 8 GB of NAND Flash to the hard drive's controller card, the most often accessed data is stored in the solid-state memory, reducing access times for a lot of critical disk operations. Now two of the three hard drive manufacturers, Toshiba and Seagate, offer these hybrid drives (so far Western Digital does not). Seagate claims their SSHD can boot in 22 seconds, when compared to an HDD (hard disk drive) boot of 37 seconds and an SSD boot of 21 seconds. A 1 TB hybrid or SSHD is currently available for around \$80, which is not much more than an HDD, but a lot less than an SSD of the same size.

For my wife's laptop, I recently installed a Toshiba MQ01ABD100H 1 TB hybrid drive. It doubled the storage space, while reducing the boot time from 90 seconds to 33 seconds on average. For my LH531 laptop, I'm choosing a Seagate ST1000LM014 1 TB hybrid drive. The process I used to change drives was:

- 1) Clean up the old drive. There is no sense in copying temp files, out of date applications or malware to the new drive. After running my anti-virus and anti-malware software and updating my operating system and important applications, I also defragmented the old hard drive.



*LH531 New Drive in Carrier*



*LH531 Removing Old Drive*

2) Back up the old drive. There are several ways to copy the data from the old drive to the new drive, including connecting the new bare drive to the computer through an adapter and running drive cloning software. I chose to instead make an image backup of my old drive to an external USB hard drive, and then later restore to the new drive after swapping them.

3) Remove the old drive and replace with the new bare drive. This is fairly easy on most laptops, though you do need to take care to avoid damaging the drive and computer from a static discharge.

4) Restore the image backup to the new hard drive. With no operating system on the new drive initially, your backup program must be able to be booted from an external drive (a CD, USB or network drive)

5) Adjust the restored partition(s) on the new drive to take advantage of the additional space, if necessary. The nice thing about this transfer method is that it is low risk - the original hard drive can always be installed back in the laptop should something go wrong in the transfer process.

I use Acronis True Image backup software, and so used it to make my image backup files for the transfers. Though True Image may be installed on the hard drive, it may also be run from the program CD, as the CD is bootable.

I always run True Image from the bootable CD as I want to be familiar with the way I would need to run it if I ever had a hard drive failure. Though I buy the new version of True Image each year (the latest is True Image 2015), I typically continue to use the older versions on my old computers, as I'm more familiar with the user interface. I found I had to move up to True Image 2014 when restoring to the hybrid drive in my wife's laptop, as the 2011 version I used to make the backup image did not recognize the



*LH531 Restoring Image to New Drive*

## **Drive for Change.....from page 17**

hybrid drive.

Note that I tried unsuccessfully to use True Image 2015 for the restore; I found this latest version did not recognize the external USB drive containing my backup file. True Image has had extensive and useful support for external and network drives in their previous versions; it appears Acronis may have traded that for cloud storage capabilities in their latest version.

While True Image can back up and restore individual files and folders, its main advantage over other backup programs is in making image backups of drive partitions (the partition data plus the partition formatting). I had True Image create a single backup file containing all the partitions on the old hard drive to make restoring to the blank drive easier.

Once the backup of the original hard drive was created, I flipped my laptop over and opened the small door over the hard drive. To remove the hard drive, I had to lift one end slightly and gently rock that end of the drive while pulling away from the connector, in order to disengage the drive from the laptop connector. The old drive was mounted in a metal carrier, which had to be removed and installed on the new hybrid drive. The procedure was reversed to install the new drive. The only tool needed was a small Phillips screwdriver.

Booting from the True Image 2014 CD, I restored the full disk image I had made from the original drive to the new drive. True Image proportionally increased the sizes of most of the partitions in my image file, so that all the new hard drive's space was allocated among them. I then used another Acronis program, Disk Director 12, to resize some of the partitions to suit my needs.

Before I'd removed the old hard drive, I'd started the laptop repeatedly to measure the boot time. I repeated this with the new hybrid drive, and found that the boot time went from around 90 seconds to around 35 seconds.

The new hybrid drive has much more space and seems to provide a big speed improvement. Only one question remains - should this hybrid drive be defragmented? In a magnetic hard drive, the normal file write and erase operations result over time in files that are not stored in contiguous tracks on the disk, but have portions spread over many parts of the disk (the file is fragmented). In a spinning platter drive, this increases the time required to read the file (the read head must move more and often wait for the data to rotate under the head), so the drive should be defragmented periodically for optimum performance. The same fragmentation occurs in an SSD, but since the read speed is the same for every memory location, the access time is not increased, making defragmentation unnecessary. In fact, an SSD drive should never be defragmented, as this reduces the drive's lifetime unnecessarily (each SSD location supports a fixed number of writes). I'll need to consult with Seagate and Toshiba to determine if SSHDs should be defragmented. □



## Free Apps That Can Save or Make You Money

*by Ira Wilsker*

On one of the morning talk shows earlier this week, a guest was “Kurt the Cyber Guy”, also known as Kurt Knutsson. His topic was “5 Apps That Can Help You Earn Extra Money”. All of the apps that he mentioned were free, and available for both Android and iOS devices. A few of the apps that he mentioned, I was already familiar with, and already using some competitive apps that in my opinion were equal to or better than those that he was showing on TV. Basically the apps that he referenced offered digital coupons, automatic digital rebates, and even the opportunity for the user to earn money as an automated “secret shopper” for several local stores.

While many local stores, such as Kohl’s, Macy’s, and Kroger have their own proprietary apps which offer sales information and digital coupons that can be scanned or otherwise digitally applied at checkout, other apps aggregate the coupons and sales of hundreds of stores in a single app. My personal favorite coupon app which I have been using for a while is RetailMeNot, available as a webpage at [retailmenot.com](http://retailmenot.com), or as a free download as an app directly from the Google and Apple app stores. At any given time, RetailMeNot claims to have over a half-million coupons available from over 50,000 stores! Many of these coupons are intended to be used for online purchases, applied at the “enter coupon code here” box at checkout for online purchases, while many other coupons are digital in nature, often in bar-code format, which can be scanned at the register at checkout. On Father’s Day, at one of the local well known restaurants, my extended family used a “20% Off” coupon, saving us a tidy sum off of a sizeable check. A few days earlier, at one of the local “national chain” soft goods stores, again with the RetailMeNot app, we used another 20% coupon at the checkout, which the clerk simply scanned from the screen on my phone. As do most of the competitive coupon apps, RetailMeNot can use the location feature of the device and display an interactive map showing the local businesses that currently have coupons or sales listed on the app.

Many people are aware that many manufacturers and retailers offer rebates on individual item purchases, but those sellers know that only a small percentage of purchasers actually send in the rebate coupons. Likewise, many manufacturers and retailers offer “cents off” or similar coupons for merchandise in their respective stores, and except for a small handful of “ultimate couponers” most of us are blissfully unaware of those coupons, or otherwise do not take the time and effort to clip them, sort them, and hand them to the checker; in terms of courtesy, the customers in line behind us may be irritated with the extra time it takes for the checker to process large numbers of paper coupons. While stores such as Kroger have heavily gone to digital coupons, which they call “E-Coupons”, there are many more coupons available for use in the grocery stores and other retailers that we can possibly be aware of, thus losing the benefit and savings that those unknown coupons could have otherwise provided us. Now, there are several free apps available that automate the coupon task without having the checker scan individual paper or digital coupons, and the coupons can also be leisurely processed after returning home by simply using the phone’s camera to take a picture of the receipt. The app’s host server will use sophisticated OCR (Optical Character Recognition) to read the receipt, searching for a coupon for each of the identified items, and crediting any found coupons to the user. At specified intervals or amounts, the app will automatically transfer the coupon proceeds to the user as a PayPal deposit, prepaid gift



card, or other specified form of payment.

Some of the apps that can scan register receipts and remotely process coupons are “Snap by Groupon”, IBotta, and Receipt Hog; each of these apps are available for Android and iOS. While all of these apps work somewhat similarly, there are some differences between them. As I write this column, “Snap by Groupon” ([snap.groupon.com](http://snap.groupon.com)) is showing 37 current items that are offering significant cash back for the purchase of any of those items; these items, most of which each offer a rebate between \$1 and \$3, include coffee, baby food, fiber supplements, greeting cards, ground beef, hair care products, almonds, magazines, breakfast cereal, soups, and many other grocery products. If any of these items appear in the photo of a grocery receipt, Snap by Groupon will deposit the proceeds into the selected account. Another similar automated rebate service is IBotta ([ibotta.com](http://ibotta.com)) which has an extensive list of individual products which will generate significant rebates, as well as a sizeable list of retailers who offer larger rebates (many \$10 or more) for shopping in those stores, both local and online. IBotta will deposit rebate proceeds into a PayPal account, or as prepaid gift cards good at a wide selection of retailers. A third competitive rebate app is from Receipt Hog ([receipthog.com](http://receipthog.com)), which in addition to processing rebates from photos of receipts, also offers contests and games based on purchases which award additional points; Receipt Hog pays the proceeds into the user’s PayPal account or as prepaid Amazon gift cards.

A heavily advertised rebate or “cash back” service available online or as an app is Ebates ([ebates.com](http://ebates.com)), which primarily offers rebates and coupons for online purchases; these rebates can be for a specific number of dollars, or a percentage of the total order, ranging from 1% to 40%. Periodically, some of the participating retailers offer “double rebates”, which can greatly increase the rewards given to the users. According to the Ebates website, “You get Cash Back at over 1,800 stores every time you start your shopping trip at Ebates. There are no points to redeem, no forms to mail in and no fees. Stores pay Ebates a commission for sending you their way, and Ebates shares the commission with you as Cash Back.” That same website says that the total real time rebates already paid to Ebates users is currently \$338 million. Ebates also offers a variety of incentives to join, typically a \$10 gift card to any one of a variety of popular stores, sent to the member after a minimal amount of purchases.

Many of you readers are likely aware that there are several legitimate (and some not so legitimate) “mystery shopper” services, that pay individuals to visit particular stores, maybe to make a small purchase, and then send an evaluation of the store and the employees. For those who would like to earn some money while shopping by performing mystery shopping services, using the app from Mobee ([getmobee.com/mobeeapp](http://getmobee.com/mobeeapp)) can totally automate the process. The results of the mystery shop can be sent directly from the phone, earning points which can be converted to cash or to gift cards for stores of the user’s choice. A typical successful mystery shop awards points worth \$5 or more. According to Mobee, “Earn huge rewards and tons of cash to go to places you already know and love! Mobee is the easiest way to make money while helping local businesses improve their service!”

We connect you to thousands of businesses near you that want to hear your feedback on their stores, and in return you get rewarded with awesome prizes, gifts, and cash. ... With locations like Starbucks, McDonalds, CVS and more, chances are you’ll find a place to earn cash and enjoy doing it!” The Mobee app can generate a local map displaying those businesses participating in the program; selecting a business will describe the mystery shop duties, and the compensation for the project.

Since most of us carry a smart phone with us while we shop, we might as well use that smart phone to save us money, or even make us money while we shop. Wouldn’t it be great to convert our expensive smartphones from an expense to a profitable revenue source? Something to think about. □

# OneNote serves as a computerized memory

## Review of OneNote meeting presentation

By John Weigle, Editor, Channel Islands PCUG, CA

June 2015 issue, The Outer Edge

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OneNote is the perfect place to keep all that information you want to remember and find easily when you need it, Toby Scott said at the May meeting. “It still is the greatest piece of software ever written,” Scott said, even though at first it doesn’t seem like much.



Because it’s “ideal for storing random data,” and because we all have a lot of that, “the longer you use it, the more valuable they (the OneNote entries) are.”

“It’s a hugely useful program, but it’s only useful if you use it,” Scott added.

OneNote started as a paid part of Microsoft Office, but it is now a free tool available for Windows, Macs, iOS (iPhone and iPad) and Android. It can be downloaded at <https://www.onenote.com>. The link is at the top right corner of the page.

OneNote is designed to resemble school notebooks on your computer and in the cloud. It’s set up in



three organizational trees, documents, sections and pages, and that layout makes it easy to store material by topics. But its search engine is so good that users can put material anywhere in the program, and it will be easy to find, he said.

Scott recommends keeping the notebooks in Microsoft's OneDrive so they'll be available on any device wherever you are. Among other things, he keeps articles and websites that he finds on how to fix unusual computer problems.

But that's just one possibility, he said. When he was planning a trip to Utah, he stored Web pages and other information about the state, including places he might want to visit. When you copy text or pictures from a website and paste it into OneNote, it automatically adds a link back to the source. The link is clickable, so it's easy to return to original information sources.

Users can add material to OneNote with copy and paste, drag and drop and "send to." Tools for Firefox and Chrome browsers let users save full Web pages to OneNote.

Users can insert Excel spreadsheets and PowerPoint presentations or links to them in the program.

OneNote has optical character recognition abilities so its search function can find text in pictures and graphics. Scott demonstrated that by taking a screen shot of a DOS screen, putting it in OneNote and searching for a word that was in the graphic. The word was highlighted each time it appeared.

Skype calls can also be recorded and saved in OneNote, as can emails. Templates for other Office programs work in OneNote. Notebooks, sections and pages can be password-protected and shared with other people.

Asked how OneNote and Evernote compare, Scott said that Evernote was developed as a free alternative to OneNote, which cost about \$150 when it was first released. Scott said it's best to use one or the other, but not both, because they can't open each other's files.

Although Scott knew about OneNote, he didn't start using it until a speaker at an Intel conference used it to find an answer to an attendee's question. The speaker didn't recall the answer but had it stored in OneNote and found it easily. When most of those attending asked about the program he used to find the answer, the speaker quickly wrapped up his Intel presentation and demonstrated OneNote, calling it "the only way to keep track of all this stuff."

OneNote is a program, while Dropbox is a cloud storage system like Microsoft's OneDrive and Google's Google Drive. Don't confuse the storage media with the program that stores the data, he advised.

Another person asked about calendars in One Note. OneNote has a weak calendar function, Scott said, but you can't store a calendar in it that provides repeating events and similar tools. There are third-party templates that work quite well. Many are for special situations, so you need to figure out what you need. Calendars are persnickety, he added.

For things like calendars, mail and contacts, "you pretty much have to settle on one platform, he said,

## **OneNote.....from page 23**

and he prefers Outlook, also part of Microsoft Office. People can use the cloud to synchronize or back up various devices, but they don't need to store everything in several cloud storage sites. Because of size limits, however, some people might find it easier to store photos in one location, music and video in another and other data in a third. That all depends on how much data is involved, he explained.

If a device that has OneDrive access — such as a laptop — is lost or stolen, Scott said, he can go to OneDrive and block its access to the device. At the OneDrive website login screen, highlight the device, and click on Remove PC. Users should also enable two-factor identification so that any new device that logs into your OneDrive has to be authenticated by entering a code that Microsoft sends to your primary device, he added. In this way, a hacker who discovers your username and password still cannot get to your data.

An audience member asked if it's possible to stop Android devices from backing up photos before she gets a chance to delete ones she doesn't want. The answer is to go to the Photo App in settings and change the auto backup settings.

An audience member noted that a spreadsheet that was cut and pasted into OneNote loses its functionality. Another member of the audience asked if there's a good tutorial for OneNote. Scott said there are many videos on YouTube and written material on other sites, but they're not needed. The best way to learn OneNote is to start using it.

Asked how OneNote compares to Dropbox, Scott said they're entirely different. □

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## **Cloud Computing - An Ephemeral Concept**

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

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Cloud computing has been around for quite some time. It just wasn't called Cloud computing until recently. Although, the term "Cloud Computing" is relatively new, references to "Cloud Computing" can be found as early as the mid-90s. But the term seems to have become popularized sometime in the mid-2000s. In 2008, Steve Jobs of Apple fame, developed his vision of the cloud as a "digital hub for all your digital content". His idea was that a person's digital content (pictures, documents, videos, music) would be stored on a remote server, managed by a trusted company, making that content available for that person to use on any device, anywhere, anytime. The "cloud" is really just a metaphor for the Internet. It goes back to the days when engineers made presentations that referred to the internet, they pictured the large amorphous infrastructure of the Internet as a puffy, white cloud. This cloud would accept requests for data and provide information and answers. If you are wondering if you ever use Cloud Computing, think about this. If you have ever searched for a gift on-line, ordered it from Amazon, and tracked its progress using the supplied tracking information, you were doing Cloud Computing.

You were using applications hosted on someone else's server to accomplish your task.

In the simplest terms, cloud computing just means storing and accessing data and programs over the Internet instead of using only your computer's hard drive or local storage. When you run programs from your local hard drive and store the data on your local hard drive you are doing local computing. Everything you need is physically close by. Local computing is how we have functioned for many years and it has some obvious benefits, like speed, but cloud computing expands your computing reach beyond your local resources.

So, if the cloud is really the internet, let's look a brief history of the internet. The internet had its beginnings in the development the ARPAnet network that was funded, in the late 1960s, by an agency of the Department of Defense, Defense Advanced Research Projects Agency. DARPA is responsible for the development of new technologies for use by the military, but in this case non-military commerce has greatly benefited. Some brief technical considerations shows that the internet has no real structure, there are no plans or schematics that define the internet, only the implementation of packet switching and an agreed-upon set of communications protocols, called TCP/IP. Packet switching is a digital networking communications method that groups all data messages, regardless of content, type, or structure, into uniformly sized packages or packets. TCP/IP provides the protocols that specify how data should be formatted, addressed, transmitted, routed and received at the destination. Packet switching and the use of TCP/ IP is what makes the internet so amorphous and yet extremely resilient. Amorphous in that you do not know what path a packet will take to get to it destination, and resilient in that if part of the network is unusable, the packets will go via alternate routes. A complete message will consist of from one to many packets. A complete message can be reconstructed when all the packets are received because the packets include the address of the intended receiver, the address of the sender, the body of information, and a set of check characters used to prove the correctness of the received data.

So because the cloud is really the internet, we all have been doing cloud computing for quite some time and we didn't even know it. Google searches, email, Netflix movie streaming, Carbonite backup, Pandora music, YouTube videos, Facebook sharing, Twitter tweeting, and Google Earth mapping, are all examples of cloud computing.

Once the internet was established as a communications pathway to anyone who could operate a personal computer, commerce began to take advantage of its reach. Think about the reach of the highway system in the 60s and 70s. The highway system brought people and commerce together. Shopping malls were easy to get to and they became the place to purchase goods. Now with the internet, people can visit (cyber) stores without even having to use the transportation highways (though the products do have to be delivered and that must be done over the highways). Commercial establishments have built large websites to accommodate the large number of people attempting to use the internet for these commercial activities. Some websites were set up just to search out information that was available from other websites. Does Google come to mind? Other websites were developed to provide the communications capability that has become email. What would we do without email? Still others like Facebook and Twitter provide a forum for social interactions. Many websites were developed to provide the news that would normally be sent to people by the newspapers, and so news websites and news readers became available. Financial institutions realized that they could interact with their customers via the internet and so they created financial websites. Financial websites give the user instant access to their financial information and allow them to buy and sell financial instruments from their home computer. I'm sure you could come up with man more types of internet websites. The last time I looked, there were over 800 million websites connected to the internet. That's a pretty big cloud.

The point of all this is that websites are hosted on computers.

## Cloud Computing.....from page 25

Website computers provide the Server portion of the Client –Server operation. (Your browser provides the “Client” side.) Large websites are not hosted by a single computer. Large websites may employ a network of hundreds of computers. So the bigger the website, the more computers are needed to host that website. The need for these networks of computer servers has evolved into website companies building large “Server Farms”. These server farms may have hundreds, if not thousands, of computers networked to act as website servers. Many of the companies with large server farms have set aside a portion, of their cloud, for use by the public. Typically, the first small amount of storage (3 – 7 GB) is free, with larger amounts at a cost. Think, iCloud, OneDrive, Google Drive, and Dropbox. □

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## Fun With Spreadsheets

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

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Most people do not associate the word “fun” with anything like what a spreadsheet program can do, but I hope by reading this you will decide to at least open a spreadsheet program just to see what it can do and if it is really “fun” for you to use. I use a spreadsheet program to keep track of my monthly expenses. It is really simple to use for this purpose and helps you organize anything with numbers. Let me introduce you to the basic use of spreadsheets.

What is a “spreadsheet” program anyway? It is a program that allows you to organize numbers in a matrix array of boxes called “cells”. You can put ANY number or words in a “cell”. The beauty of a spreadsheet program is that it can do calculations and is easy to sort or change the contents of any cell. You have probably heard of Microsoft Excel (part of the Microsoft Office set of programs), but there are many other FREE spreadsheet programs that you can use as well, such as Google Drive (called “Sheets”) and Open Office (Google these to find out more about them).

What can a spreadsheet program do for me? I enjoy using a spreadsheet program to help me keep track of my personal home monthly expenses, my investments, and lists of club members. Although a spreadsheet program is intended for use with numbers, you certainly can use it to organize and sort a list of anything. Let me introduce you to a simple basic use of a spreadsheet by using one to track monthly expenses. I will use Excel 2013 in this example.

The basic elements of a spreadsheet. All spreadsheet programs work the same way. Once you learn how

to use one, it is not difficult to use another. The basic screen of a spreadsheet (see sample) is an array of cells with the cell columns labeled with letters (A, B, C, etc.) and the cell rows labeled with numbers (1, 2, 3, etc.). Thus every cell has a unique “address” such as B5 or D3 for example. Above this array of cells are the many menus, tools, and options that are available for you. Use your mouse to click on a “cell” in the array. You will see the “address” of that cell displayed just above the top row in the far left of the menu area. This is how you know what cell you are working with. The box or area to the right of the address is the “function” bar and it shows the contents of the cell here. You can enter and edit the contents of a cell in this area if you want, I find it most helpful.

For our example, I am going to put words in the first row and column cells. This serves to “label” or give a title to the numbers I am going to put into the other cells.

Click the mouse (the left mouse button) in cell A1 and then type in the word “Expense”. In the following cells in row 1, click in each cell to enter in the name of the month. So in cell B1, type “January”, in cell C1, “February”, in cell D1 “March”, etc. (see example). In column A, in each row from 2 on down, enter the text of the expense (bill, service, or company) that you pay each month. So, for example, in cell A2 I will enter “Electric”, in cell A3 I will enter “Water and Sewer”, in cell A4 I will enter “Gas”, etc. When I entered “Water and Sewer” the column was too narrow to hold all the words, so I had to widen the column. I did this by positioning my mouse on the vertical line between “A” and “B” (the mouse changes to a double arrow) and then I dragged the mouse to the right. I will end up with a list in column A of all my monthly expenses. All you are doing, really, is making a simple table with labels on the first row and column. This table will be filled with a number (your expense) in each cell.

Note that if you click on a cell to select it, the contents of the cell will appear above the array of cells in the “function” bar

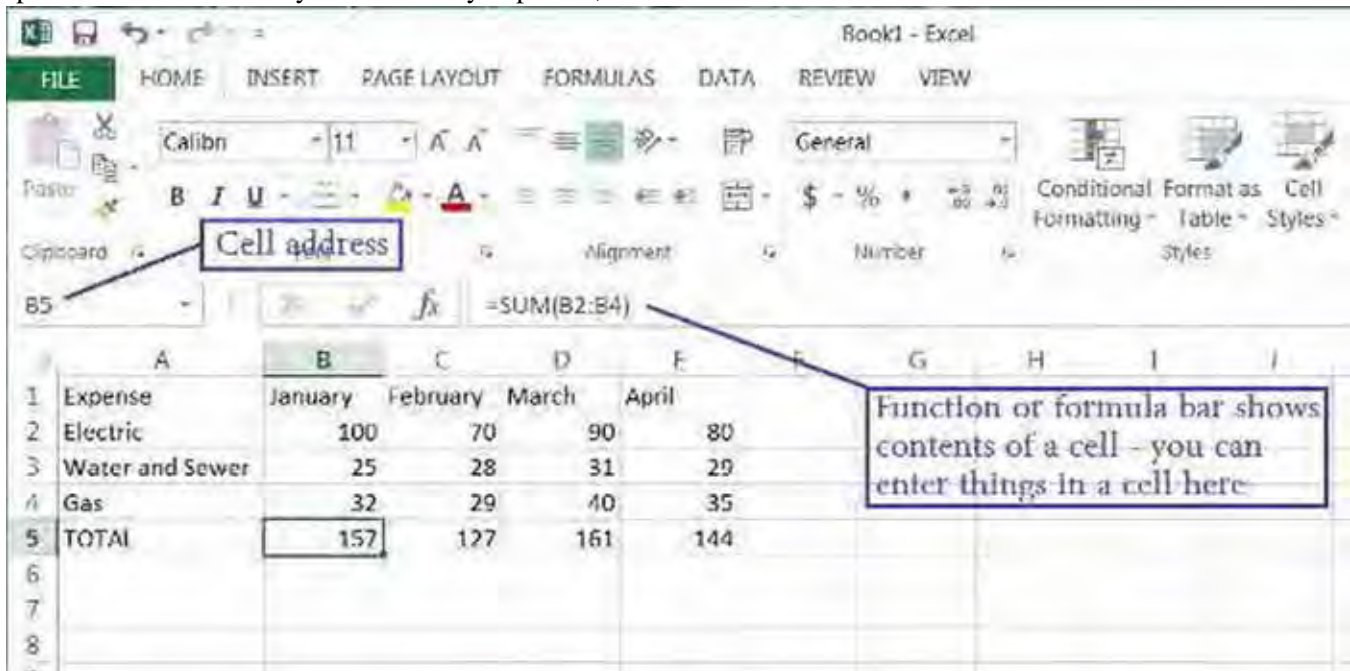
Enter numbers into the cells. Just click your mouse (left mouse button) on any cell to enter something into that cell. You can enter what you want in that cell by using the function bar if you wish. If you make a mistake, you can delete what is in that cell by hitting the “delete” key on your keyboard or use text editing. I did not use the decimal (the period key on your keyboard) in this example, but you can pick the “two decimal point” option if you want, and the “\$” option as well.

Adding up the total. Now we come to the good part. You would like the spreadsheet to add or sum all the numbers in a column (or row). So, let’s enter a new row label in column A as the last row in our spreadsheet and enter the text “TOTAL”. In my example spreadsheet there are only three monthly expenses,

put the total in this cell, B6. In my example, you can see the formula that is in cell B5 in the function bar above. I find it easier to always enter things into a cell by entering it in the formula or function bar.

Try doing this in the remaining total cells in row 5, totaling the numbers in each column above.

What’s the Big Deal Anyway? Well, the big deal is that you can organize and work with ANY array of numbers OR text. Not only can you total numbers, but you can average them or perform any mathematical calculation you want with them. It is easy to insert new rows or columns and the formulas will still do the calculations correctly. You can sort your spreadsheet by text (the “labels”) or by numbers. Your spreadsheet can look (that is, can be “formatted”) any way you want. You can color or highlight text, numbers, or cells; make the text larger, use any font, make the size of the cells any size you want, and much more. There are hun-



so my “TOTAL” row will be row 5. You can have as many rows (and expenses) as you like. Now click on cell B5 which will contain my total of all the “January” expenses and I will enter the following FORMULA or FUNCTION into that cell: =SUM(B2:B4). You should enter this formula in the “function bar” at the top, above the spreadsheet, in the menu area. Note that the equal sign “=” indicates that this is NOT text or a number like we entered in our other cells, but a formula or function. We are telling it to ADD or SUM the numbers in all the cells from B2 to B4, and it will

dreds of formatting options and hundreds of “built-in” formulas and functions. Excel, for example, can even draw graphs and charts. Well, I will let the accountants use all the fancy stuff, I just want to track some of my basic expenses, and a spreadsheet is perfect for doing that. Why not give it a try? You can learn more about the spreadsheet that you are using by using the “help” option or by asking Google. YouTube will have many video lessons as well. Hey, maybe this can be fun after all! ☐

# My Windows 10 Upgrade Experiences

*By Frank Ramsey, Newsletter Editor, Akron Canton PCUG, Ohio*

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I've been previewing Windows 10 since October of 2014 and really like it. The official release couldn't come fast enough for me!

I'm been fortunate enough to have a great laptop to run the preview on...i7 processor, 8 gigs of memory, with a touch-enabled 12" screen. I'm also fortunate enough to have had a spare hard drive to install the preview on. Along the way this disk was replaced by an OCZ SSD disk with Windows 10 migrated using Macrium Reflect, Fast and responsive machine.

As I was running build 10240, July 29th came and went. My preview machine didn't see anything, other than the patches/updates released shortly after. Microsoft gave me a copy of Windows 10 for being part of the preview. Kool!!!! The real fun came with my other machines.

The other machines ran a mix of Windows 8 Pro, Windows 7 Home Premium and Windows 7 Ultimate. Talk about a disaster waiting to happen...

Being a somewhat impatient person, I found that if you went to <https://www.microsoft.com/en-us/software-download/windows10>, you could grab the appropriate (32- or 64-bit based) downloader and updates rather than wait for Microsoft to download them. I grabbed an upgrade to Windows 10 Pro 64-bit and Windows 10 Home 32-bit. Yep, that's the other kicker...versions based on differing hardware architecture. Yes, I had to totally download the update for both. They are 3-4 gigs in size, so be prepared to wait a while. After the first downloaded I copied the appropriate folders (\$Windows.~BT and \$Windows.~WS) from the root of C: to another location...otherwise they would be overwritten by the next download. I also deleted these directory contents after downloading the first files to be sure I had only the proper files for the 2nd download.

I decided to take it easy...the first upgrade was to a

laptop running Windows 8.1 Pro 64 bit. This had plenty of free space on the C drive and this hard drive was setup up to the Microsoft standards of dedicated boot and system drive.

I first uninstalled the software I no longer used...know why? Well it just seemed like the proper thing to do. Most were older versions of utility suites that i got from sharewareonsale.com.

Since I like to try various antivirus products, I removed the antivirus product before running the update. Also because the Google Chrome browser simply did not run properly on the preview of Windows 10, I removed it. I copied the folders listed above to the C:\ drive of the hard drive of interest then ran setupdat.exe from \$Windows.~WS\source\Windows\source and away we go.

After a few hours and a few reboots, the process completed successfully. I logged in with my preview ID and the update activated, ran the update tools to grab the latest updates, installed my anti-virus program and Firefox and it was done. All in all, relatively smooth.

Basking in the glory of a successful update, I turned my attention to my Dell Venue 8 Pro tablet. The tablet was running a 32-bit version of Windows 8.1 with the drive protected by Bitlocker drive encryption. It had about 6 gigs free.

Before running the cleanup as above, including removing antivirus, I cleaned up everything I could; 6 gigs was below the stated minimum of 16 gigs free storage. I did check online and found that various folks reported the update process would ask for other storage to use during the update if the update process found additional free space was required. Let's remember this is a tablet lacking a mouse and keyboard and with marginal free storage. Still I pressed on and ran the update.

The update ran through the various stages for a couple of hours. Just when I thought it was successful, I saw the restoring the previous version message and the tablet proceeded to roll back the install. After another 40 minutes of roll back, the tablet booted into Windows 8.1 and displayed an error message of "0x80070002-0x20007 failed in the SAFE\_OS phase with an error during INSTALL\_DRIVERS operation|.Boot failed".

Researching this error online was of no help. Lots had the solution, but none met my circumstances. SO what the heck, I tried the update again.

The second update try also failed. I was thinking I might have to perform a clean install or forget about running Windows 10 on this device. Performing a clean install was troublesome...without an OS update would I get a valid Windows 10 product key for free? I had the install media for Windows 8, so I had the required media in case a reinstall was required.

However, as I had reinstalled Windows 8 on this tablet once before, I was not looking forward to it. Having to attach a mouse and keyboard to the tablet and manually unlocking the Bitlocker protected drive is doable, but a royal pain in the tush!

Then I got lucky. One of the devices I purchased along the way was a USB to DVI display adapter from mygica.com. I had tried using this with my Windows 10 preview laptop and discovered the included drivers did not work. A quick search of the Internet turned up some updated drivers. These worked fine in the preview Windows 10 version. I stumbled across the fact that I had used this device on my tablet. Perhaps????

Uninstalling the offending drivers from the tablet I was ready to try again. I was more than a little worried because the tablet now had less than 5 gigs. Try as I might, I couldn't find anything else to remove or purge. "On through the valley of ..." ...well you get the idea. I tried the update again, mentally preparing myself for a full Windows 8 reinstall.

Low and behold, it worked! The update finished successfully, the tablet booted and I logged in using the touch interface with my preview ID to a fully activated Windows 10! Beautiful!!!!

As before, I installed antivirus (a different one than before...remember I like to try different antivirus products) and Firefox, sync'd Firefox and I was up and running. On to my final challenge.

The final challenge is a desktop running Windows 7 Ultimate 64-bit with lots of installed software -- this unit was troublesome. It simply hadn't been running well for a while and I had put off doing anything about it because I knew Windows 10 was coming.

First, I performed a full backup. Then I tried to make a virtual drive using Paragon's Virtual Drive tool. This failed due to conflicts with the Visual C++ runtime library. Try as I might, I could not fix this issue, so the heck with it. I performed the cleanup as above, but forgot about Google Chrome (more a little later). I'd been toying with the idea of installing a 240-GB SSD as the boot drive, so I cleaned up the hard drive even though it had over 100 gigs of free space. How? Well I moved OneDrive, Dropbox, Downloads, iTunes and some others to other drives in the system. On to the update.

Yes, the update failed. Actually the desktop appeared to hang a couple of times so I did a forced reboot using the power off after letting the computer sit for at least an hour with nothing appearing to happen and no hard drive activity. Windows 10 update rolled back to Windows 7 with an error of "0xC1900101-0x40017 Installation failed in the SECOND\_BOOT phase with an error during BOOT operation"

Since I forcibly power cycled the computer not once, but twice, I figured I knew what happened...I didn't give it enough time. The next evening, I repeated the update letting it sit for houuuurrrs at each pause. Had to power cycle it again. With the same result. Darn!

More deleting of software. This time I remembered Google Chrome and removed it. I also turned off the Wi-Fi adapter to prevent the unit from connecting to the internet (some on the Internet suggested this). Off to the update again. I had to power cycle once this time, but the update succeeded..at least I thought so because I was able to sign in to a non-activated machine. It was late. Time to power off and perform the cleanup tomorrow.

Tomorrow came. On came the desktop. And it just wasn't right. The mouse and keyboard were sticking. Video resolution was low. It looked like the proper video card had not been detected. And on and on. I decided to return to the previous OS. Which failed reporting no OS on the drive.

I have to tell you that the drive in question did not fit Microsoft's standards in that is no boot partition. The boot partition is that 300 megish partition that Microsoft started installing separate from the system



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## BUG Web Page

<http://bugclub.org>

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## Brevard Users Group Secretary's Report

By Bill Middleton

Monthly General Meeting Report, October 12, 2020

MEETING NOTICE MEETING NOTICE

YES, WE ARE HAVING A GENERAL MEETING AT THE EAU GALLIE LIBRARY ON MONDAY, OCT. 12 ( YES, WE KNOW IT'S COLUMBUS DAY, BUT THE LIBRARY IS OPEN}. 2:00 PM as usual.

The construction is not finished. The meeting room is not available, yet, but the Library has reconfigured the quiet area in the northeast corner of the main library for Covid-safe meetings. They even have a large TV set up so we won't need

a projector. We are limited to less than a dozen participants, but this shouldn't be a problem since attendance has fallen because of the pandemic. Our meeting venues are providing pretty darn safe environments and there have been no reports of virus spread at any of them. If we exceed our limit, turn-aways will be given a FREE ticket to next week's meeting at Fee Ave.

Bill M We're Back! We WILL have our regularly scheduled meeting at One Senior Place on Monday, October 5 at the usual 2:00 PM. OSP has one of the safest possible venues for a public meeting so have no hesitation about attending. Our DD will again address Streaming Services

## My Windows 10.....from page 29

partition that actually has the operating system. I've not been a fan of the boot partition and on this machine simply removed it.

Now is where it gets fuzzy. Somehow during one of the attempts at booting with no OS drive, I was presented with an option to perform a full install of Windows 10. Exactly how I don't recall. Might as well I said...off I went.

After confirming to preserve the user files and that I would lose all the installed applications, the reinstall started. And went fine till the 1st reboot. After letting it sit for almost 2 hours, I power cycled the unit,

expecting it to lock up again, with another power cycle and then what? Reinstall Windows 7 Ultimate from scratch, then perform a Windows 10 update? Not a clue.

The 2nd power cycle never was required. Following the first power cycle, the install of Windows 10 continued and completed successfully. The install preserved the account I was using, so logging on I went.

To discover the computer was not activated, the proper video card had not been detected and Wi-Fi refused to work. Ready to pull my hair out (not a good thing, trust me!) I rebooted and signed on again using the local account. Then I connected the local account to the preview account, connected the Wi-Fi and rebooted.

Logged back in and Windows 10 was activated. Ok, why? Well I had been using the local user that I had created to log onto the computer. This time I used my preview ID. That has to be the key. I downloaded the updates and got the update for the video card. Apparently the AMD card in the unit is not supported by the install, but an update. Hey, at least it worked! I'm left to install antivirus and deciding what applications are critical and must be installed. I'm not unhappy about the results as I figured it was time to perform a clean OS install and reinstall applications. 6 of one, half-dozen of the other.

UPDATE! I'm adding this a few days after the original article was written. The updated Windows 7 Ultimate machine simply wasn't right. While it seemed to run, it was troublesome. I finally decided to reinstall from scratch again, this time preserving NOTHING.

Just in case, I booted from a rescue CD and copied the C drive to another drive then started the reinstall.

Windows 10 has a decent reinstall process. Go to Settings, Update, click Recovery and answer the questions. My answers were to reinstall, preserve nothing, and reformat the C drive. Away we go. Things looked good. I gave it all the time it wanted. Ok, after waiting 5 hours for the process to finish, I power cycled the unit. It restarted at the 64% mark and finished successful.

Because I left the Internet connected, the update connected to the Internet and grabbed "critical" updates during the final install phase. For this reason, the proper

video drivers were already installed when I signed into the system after install.

I preceded to install required applications, antivirus, Quicken, Office and am using the updated Windows 7 Ultimate machine to finish this article. So far so good!

So what did I learn?

- 1) Prepare for the worst...you might lose the applications and associated data. Determine what are critical apps and find the install media BEFORE the installation.
- 2) Copy your documents to the cloud or other storage.
- 3) Uninstall antivirus (NOT disabled), before the upgrade is run.
- 4) Clean up software that is no longer used or needed.
- 5) Look at any attached devices to see if they might be a problem to the upgrade. Uninstall them unless you are totally sure.
- 6) Remove Google Chrome. It simply doesn't work with Windows 10 now. I'm sure Google will release a fix, but as of late August, 2015, get rid of it.
- 7) Check on free space and cleanup up. Empty the Recycle bin. Cleanup the temp folder.
- 8) Perform a good backup
- 9) Check the integrity of the hard disk (Right Click on the C drive, select Properties, Tools, Error Checking, Scan drive and fix errors found)
- 10) Don't be afraid to power cycle the unit. Sometimes it seems the install process hangs during the install and power cycling may be the only option.
- 11) Have patience!

The last one is the key. Don't get too discouraged...at least try not too! ☐

# Calendar of Events

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**Going North for the summer  
or coming back?  
Don't miss a single issue of your  
Space Coast PC Journal**

**If your email address will be different**

**Please give us the correct email**

**For your temporary location**

**\*\*\*Reminder\*\*\***

***We need your e-mail addresses!***

We'd like to keep in touch with you,  
especially if there is a last minute  
change in venue for the club meeting.

Please send e-mail addresses and changes to  
Linda Glassburn [glassburn@earthlink.net](mailto:glassburn@earthlink.net)

**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.**

October 15, 2020 - Club Meeting, 2 PM  
Auditorium, Merritt Island Library

October 31, 2020 - Deadline for Journal Input

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**Port Canaveral**  
505 Glen Creek Drive  
Cape Canaveral, FL 32920  
321-868-2226

**Riverside**  
6075 N Highway US1  
Melbourne, FL 32940  
321-242-8999

Casual Waterfront Dining  
Live Entertainment  
Boat Access Available

## **Presentations Schedule**

**October 15, 2020**

**Meet in the Auditorium  
2 PM**

**Get together welcome meeting  
Discussion, Q&A**

**Bring Some Friends or Neighbors**

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

at Your SCPCUG

## **Learning Center**

**Open 1st, 3rd, 5th Saturdays,  
12 to 3:30 p.m.  
Merritt Island Library  
Conference Room**

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.

## *The Space Coast PC Users Group Journal*

*is produced using*

### ***Adobe InDesign CS3***

*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.X (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  
Charter***



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

Free Remote Support  
For those using Windows 10  
Quick Assist



The above member will help you with *a particular* computer glitch on your personal (not business) computer. In some cases, he may even make a house call. But, please do not expect him to install your computer nor teach you how to use it. If you have continuing problems or need additional help, please take a class, or check the ads in the *Journal* and hire a consultant, etc.



Computers 4 Kids

C4K Volunteers Need  
Donated

Computers, Keyboards, Mice  
etc

for

Building PC Systems

complete with software  
for

Needy School Children

Call

Ken Clark @ 223-7402

To arrange pickup

# Space Coast PC Users Group, Inc.

## MEMBERSHIP APPLICATION

**Membership Dues**  
**\$25.00** [ ] Check [ ] Cash

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? [ ]  
 an ADVANCED DOS class? [ ]  
 a WINDOWS class? [ ]  
 an ADVANCED WINDOWS class? [ ]

What other topics would you like covered in a class? \_\_\_\_\_

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 , 801 Del Rio Way, #304, Merritt Island, FL 32953**

**Are You CPU**

**Bewildered?**

DRAM
HTML
Windows
Modem

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

**Membership benefits:**  
 The *SCPCUG Journal*  
 Computer Literacy Classes  
 (e.g. Windows 7-10)  
 Seminars and Workshops  
 Computer Doctors - computer  
 help - **FREE!**  
 Group Purchases, Raffles, and  
 Door Prizes!  
 Helplines - get help from the  
 experts

**Join Now!**

### ADVERTISING RATES

SIZE	1 Month	3 Months	6 Months	1 Year
	~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:

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.

801 Del Rio Way, #304,  
Merritt Island, Fl , 32953

## STATEMENT OF PURPOSE

The Space Coast PC Users Group is an independent, 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.

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## Initial Membership \$25 . Annual Dues have Been Suspended

**BENEFITS:** Members get the monthly *Journal*. In addition, *only* members can:

- copy from the Shareware library
- participate in meeting drawings
- attend special seminars/workshops
- talk to one of our computer ‘doctors’
- use the Helplines

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## NEXT MEETING

**October 15, 2020 2 PM**

Merritt Island Library Auditorium 1185 North Courtenay Parkway, Merritt Island, FL

To get to Auditorium after entering the front door, go to the second door on the left.

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