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MARCH 25, 2020 — MEETING CANCELLED

A Recent Scam Experience

By Jeff Wilkinson, President, Sun City Summerlin Computer Club, NV
December 2019 issue, The Gigabyte Gazette — www.scscclb.club — [Clearmeadows11 \(at\) gmail.com](mailto:Clearmeadows11@gmail.com)

Recently I received the “Social Security” scam call, the recorded message informing me that I should call an 800 number because my account was about to be suspended. I decided to play along and see what the suspected scam pitch was; since I was 99.99% sure that Social Security doesn’t call you.

I called the 800 number, exclaimed my surprise that there was a problem and breathlessly asked what the problem was. The responder, “Officer Ronald Smith” explained, in an almost unintelligible accent, that he was a senior investigator and I should get a pencil and paper and write down his name and badge number, which he proceeded to give me. He then went on to outline the “problem” which included seven bank accounts opened under my social security number. He said the accounts had been used for money laundering and an investigation was underway with an arrest warrant about to be issued. In addition, there were multiple credit cards also under my social security number which had been linked to illegal activity. “Officer Smith” then asked if these were my accounts. Upon my answering No, he explained he needed to know how many bank accounts and their approximate balance and how many credit cards I had and their credit limits. I responded with fictitious information of course. He advised me that this conversation was being recorded and I was repeatedly told to listen to his instructions very carefully. When I told him in a frightened, exasperated voice that the accounts he described were not mine, he wanted the local police department phone number so he could call to see if we could clarify some additional information. I gave him a fake phone number and he put me on hold; he came back a short time later and said that the number I gave him was incorrect!

“Officer Smith” then told me I could get the number from the yellow pages or Google and said he would wait while I looked it up. When I asked why *he* didn’t have it, he exclaimed he did but was not allowed to give it to me. I looked up the number in the city I had claimed to live in and gave it to him; he again put me on hold and returned a couple of minutes later. He said he had a senior investigator on his other line, and she would be calling me. I was to put him on hold when she called. Then my phone rang! The call was from the number I had provided which was the number of the Palo Alto, CA police department! “Officer Smith” told me to put him on hold and to add the new caller to the conversation.

Throughout this entire 22-minute ordeal he had not yet asked for any money or access to my computer. I was tempted to continue the charade, but the language barrier became intolerable along with the level of minutia, so I ended the calls. Almost immediately my phone began ringing from an unknown 800 number, over and over until I blocked the number. I believe the ploy was to obtain my information such as date of birth, address and social security number so they could steal my identity.

Although I didn’t get far enough to determine the full scam, I was very surprised that they added so much credibility by calling me back and “spoofing” (faking the Caller ID) of the actual police department number I had provided and they had checked!! As we know, spoofing a phone number occurs often on junk and scam calls. This specific trick could cause a reluctant mark to falsely think they were maybe being too cautious. The scammer may attempt to retrieve your date of birth, name, address and partial social security number by asking throughout the conversation for you to verify the information. With those items, it is possible to initiate a change of address and phone number with Social Security and then redirect your direct deposit to a different bank.

Having repaired two cases of scammers gaining access to computers that week, one which was able to gain bank information and withdraw a four-figure sum of money from a retiree, I was interested in experiencing the actual pitch. It can’t be stressed enough that allowing remote access to your computer from random phone calls, emails or web page screens is to be avoided. Also do not release any personal information to unknown callers no matter how official they attempt to sound, with so much information available in the public domain many times only a small amount of additional information is needed to initiate an identity theft.

CD Players – Where did they go? What about all my music CDs?

Author: Phil Sorrentino, Contributing Writer, The Computer Club, Florida
November 2019 — www.sccccomputerclub.org / [Philsorr \(at\) yahoo.com](mailto:Philsorr@yahoo.com)

CD players used to be all around us, well, at least they could be found in our computers and our automobiles, but not so anymore. In the age of streaming Netflix videos and Delivery of Software Applications by downloads, CD players have lost their significance. But if you feel you must have a CD player on your computer, you can add an external CD player. These types of devices will usually read and write CDs and DVDs. They are fairly inexpensive, around \$30, and they connect to the computer using USB. (As always, the more USB ports on your computer, the better.)

In our automobiles, many domestic and foreign car models that used to have CD players as part of their infotainment center have eliminated the CD player. In its place, they have included a USB port, and they have included an MP3 player in the infotainment electronics. The MP3 player, in conjunction with the USB port, allows the entertainment center to play MP3 music from a flash memory device plugged into the USB port. That's all well and good, but how do you get your music on to a flash memory device? Fortunately, there is a simple answer – Windows Media Player (WMP). But before we look into how to use WMP, let's take a quick look at recorded music and a brief history thereof. Recorded music began with Thomas Edison, who invented the phonograph in 1877. Initially, the music was stored on metal cylinders. The cylinders were replaced by disks, tape and finally CDs. The disks evolved from 78s to 45s and finally the 33&1/3 albums. Tapes developed from Reel-to-reel to 8 Track and finally the very popular tape cassettes. All of these were developed to record “analog” music and was the way we recorded and played back music until around the late 1980s.

During the 1980s, even before the release of the iPod, research was being done to develop methods of compressing digital music. (The iPod would eventually replace the Walkman, a device that almost every music lover owned.) The outcome of the research was the .mp3 music file specification that allowed music files to be created that would be small enough to fit into the amount of memory that could be put into a portable device, in those days. Large memory devices were not as available then, as they are now, so the size of a music file was very important. (By the way, there are other music file types, but .mp3 has become the de facto music standard.) The .mp3 file type is considered a lossy compressed file, meaning that there is some quality degradation in the resulting music. The amount of “loss” is established when the original uncompressed file is compressed. This is accomplished by the use of a “Quality” setting. The quality is indicated in “Kilobits per second” (kbps). A setting of 128 kbps is termed “near-CD” quality, which gives you a file size of about one-tenth the size of the original file, and sound quality that is quite impressive. A file that produces a higher quality will be larger, but I'd be surprised if those of us over 65 could tell the difference, so the near-CD quality is probably more than adequate.

The .mp3 file specification allows us to create music files that we can use on our devices but it is the .wav file that creates a music file that is an exact reproduction of the originally recorded music; this is what you find on music CDs. The .wav file contains all of the musical quality of the original performance. The .wav file contains the digital results of the analog music signal being sampled at a rate so as to include all frequencies that can be heard by the human ear. This sampling results in a digital representation of the original music. To be technical, this is called a linear pulse-code modulation format. When played on a CD player, the stream of digital information produces music exactly as it was originally performed. But these .wav files are fairly large; most music selections will create files in the 30 to 40 Mbytes range.

So now that we know about .wav and .mp3 file types, we can get back to Windows Media Player. WMP is a component of Windows 10, so everyone has a copy of WMP which is currently at version 12. WMP not only plays CDs and music files, but it is capable of “ripping” the tunes from a standard CD. (“Ripping”, though it sounds horrible, it is perfectly legal.) When you start WMP you will not have controls for ripping if there isn't a CD in the CD tray (you will see “No disk” under the Tools tab). Once you put a CD into the tray, the “Rip CD” and “Rip settings” controls will appear on the WMP toolbar.

Before you rip the CD, check that the settings are to your needs. Click the down-facing arrow next to “Rip settings” to check a few of these settings. First, select “Format” and then check the box next to “MP3” in the pop-up window. Next, select “Audio Quality” and check your selection (128 Kbps is probably fine and it will create the smallest files). Next, select “More Options” and it will open a window for making “Rip Music” adjustments. The first adjustment is where the ripped files will be stored. If you want to change the destination, click “Change” and in the pop-up window navigate to the location of your choice. Next, on the Options Window, click “File Name”. This is where you determine how the ripped music file will be named. Check the items that you want to be in the file name, like “Artist” and “Song title”, move the items up or down to get the right sequence. Next, choose the “Separator” like space or dash. The “Preview” shows the choices that have been made. (I typically name the files “Artist dash Song title”.) Click OK on the “File Name Options” window. The other two Rip settings, Format and Quality, have already been set up so now you’re good to go. Click “OK” in the Options window to get back to the main WMP window. Now all you have to do is click “Rip CD” and let’er rip. When you originally put the CD into the tray, all tunes were selected. If you don’t want a particular tune ripped, uncheck the box next to the tune’s name. The “ripped status” will show how the process is proceeding. When all the tunes are ripped, you will find them in the location that you set up in the Rip settings. They will be in a folder with the name of the artist or CD. Using File Explorer, move the tunes to your permanent “Music” folder. From here, you can put them on a flash memory device for use in your car, or put them directly into any of your devices, like a tablet, a music player, your smartphone, or another computer. Now you’re ready to take advantage of the music you previously purchased for a CD player on any of your other devices.

Making Your Tech “Fit” - Things in Your Hands

Author: Debra Carlson, Technical Advisor, CVC Computer Club, CO
Q3 2019 issue, Tech-Notes — [cvc.computer.club \(at\) gmail.com](mailto:cvc.computer.club@gmail.com)

Last quarter we talked about monitors. Now we will talk about Things in your hands.

Do you have hand, shoulder or neck pain while and after using your computer? Spend hours online without moving? Taking breaks is helpful, of course. Having good habits can help avoid some potentially debilitating conditions:

- Carpal tunnel syndrome happens when pressure on the inner wrist makes the median nerve swell causing numbness, tingling, pain, and weakness.
- “Mouse shoulder” (pain in shoulder, upper arm and forearm) can happen when time is spent slouching while moving the hand. It leads to muscle strain of the shoulder girdle or the spine itself.
- A mouse that fits the hand poorly can also cause thumb tendinitis.

Computer peripheral manufacturers mention three mouse grip styles: palm grip, claw grip, and tip grip.

1. The palm style mimics holding the mouse like a doorknob. Most of the palm / finger surfaces are in contact with the mouse and most of the hand's weight lies on it. Mice built for palm grip are big, wide, have a “hump” on the back, and an area to rest the middle or ring finger.

2. The claw grip arches the hand -- only the fingertips and a small part of the palm contact the mouse. It takes less hand weight to “flick the mouse” making it easy to change the cursor's aim. The hump on the mouse back is smaller, and the mouse is smaller than one built for palm grip.



3. Tip grip is "all" fingertip. No part of the palm touches the mouse. It's faster and more agile than claw grip, but also more tiring. Making small adjustments on the screen such as photo edits, can be tough because the mouse moves so quickly. These are small, like "travel" mice. If not from overuse, pain often comes from using a mouse that, because of mis-sizing, requires an awkward grip or too much pressure to click.

So, what can be done to minimize problems –

1. Figure out your grip type and buy the right mouse for it. If you can, go to a store and "try" some mice. If that isn't practical, pay careful attention to the size on the description -- and its relationship to your hand size. Don't wait until you hurt to start using a mouse correctly or to find a mouse that fits your grip style.

2. When you're using a computer, keep the mouse a little above elbow height with your wrists relatively straight.

3. Take frequent breaks to avoid repetitive stress injuries. Also ... Trackball, vertical mice, trackpads, and even some mice shaped like larger pens are made. Consider how you use your mouse and, if you have pain, consider one of these options as well. There will be a learning curve ... and, yes, these do cost more. It could well be worth the savings on pain relievers.



Another alternative is the touch pad. There is a learning curve associated with this, but some find it more comfortable. Capacitive touch and other peculiarities of smartphones / tablets that make finger temperature or humidity a factor do not impact desktop or laptop touchpads. Worth a mention if you are looking for a new mouse – cordless is nice, but it is possible to have increased latency (time lag) between mouse movement and the time the cursor moves on the screen.

- Spending a bit more when buying a Bluetooth mouse can increase quality / decrease latency.
- Making sure your mouse battery is not depleted also helps performance. "Wired" mice take power from the host machine, so this is only a consideration with wireless mice. Most mice are now optical, meaning they use light rather than a ball for movement. They do not require a mouse pad (the old "ball" mice often did to ensure consistent surface) but can react differently when placed on more reflective surfaces. If your cursor seems to be "jumpy", try putting a clean sheet of paper under it to mute some of the reflection.

Mouse choice, as with all input devices (keyboards, microphones, etc.) is very personalized. Don't believe it when someone says, "anything works". It's your comfort that counts.

Next quarter we will discuss: Cords, Voice, Sound, and other hazards.

Thoughts from a Clicker

Author: Tiny Ruisch, Member, Cajun Clickers Computer Club, LA
August 2019 issue, CCCC Computer News — www.clickers.org — [tsa70785 \(at\) gmail.com](mailto:tsa70785@gmail.com)

This month I'm going to rant, rave, criticize and complain just a little. About a year ago, before I moved to the Baton Rouge area, my wife and I were in one of the home improvement stores. I thought that it would be a good time to pick up a new water filter for our refrigerator. I went over to appliances and told them I needed a new filter for a Whirlpool. He immediately asked me which of the nine filters I needed. Of course, I didn't have the filter number memorized. So, I found our refrigerator on the sales floor and told the salesman, "One to fit that model." I got home and found that it was the wrong size filter. When I went back to exchange it, I found out that a different model year almost always uses a different filter.

What does all that have to do with computers and electronics? It got me to thinking about some things I hate about technology. I've probably got 10 or 20 different USB cables in the junk box in my computer room. Every time you buy something that is USB supported, you get another cable. Why is this? It's because each manufacturer has their own proprietary plug. They have to include a cable because none of my other 20 cables will work with the darn thing. I recently got a new cell phone. Same manufacturer, different model. You guessed it. I've got another USB cable in my collection. Wouldn't it be nice if everything had a standard plug and didn't have the cable included? Think of the money that could be saved. Wait a minute! Then they couldn't sucker people into paying \$20 for 3 dollars' worth of wire.

Another thing that makes me mad are End User License Agreements (EULA). I'm one of the few people who research them before installing anything on my computer. My complaint isn't the fact that lawyers write them by lawyers. I can use the internet to explain the legal terms. My objection is that I have seldom found a EULA that can be read full screen. Instead they write them in a little window that usually covers about a tenth of my screen. I think this is done to discourage people from reading the agreements. Just get them to click "I agree" and get it over with.

I can live with SPAM (I usually don't even see it). I don't mind getting bombarded with internet advertisements (I can always go to other sites). What I hate it when websites pop up a window asking for information that they will likely never use. For instance, there is a website that I won't name that wants to know my age, sex and country. They then store the data in a cookie on my computer. When I tell them that I'm a 28-year-old female, I get the same advertisements as the dirty old men get. Why do they waste my time? I also dislike software that isn't user-friendly. Some programs have windows that can't be resized. I'm getting older and my eyesight isn't what it used to be. If I can't make the window bigger and read the font, I likely won't use the software. Then there is software that won't let you choose where to install it. I don't install all programs into "program files". Many times, I don't even install them on the C drive.

I wonder if Microsoft will ever fix one little thing that has bugged me for as long as I remember. When you use file explorer to copy, move or delete a list of files; Windows estimates how long it will take. If you're doing an operation on a lot of files, the estimated time will change every time you check it. On older systems it can be even more aggravating. Wouldn't it be nice if the estimate was close once in a while?

Hate might be too strong of a word, but I've always disliked how companies will use a proprietary document format. The perfect example is word processing. Why must each program have a different extension? Is it good for a business to make consumers remember .doc, .odf, .wps, .docx, .odt, .txt, .rtf, .abw, .abi and hundreds of others? Almost all word processing software has a save as feature to save files to other formats. They can't be that much different. Why isn't there a standard where all programs save in a standard format? After all, this idea seems to work well for HTML internet files.

That's enough ranting and complaining. Next month I promise to write something useful for the newsletter. By the way, did I mention that the two water filters had two different prices? Does that remind you of anything else technology related?

Keep on clicking and thanks for reading.

Tiny Icons for Big Functions

Author: Nancy DeMarte, 1st Vice President, Sarasota Technology Users Group, FL
July 2019 issue, Sarasota Monitor — www.thestug.org - nanellend (at) gmail.com

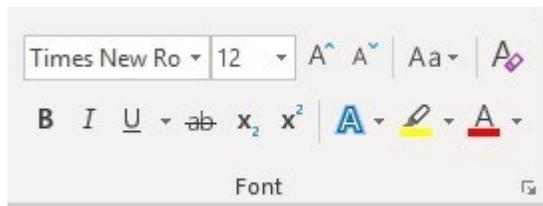
In recent years, the number of functions that computers and other devices can perform has increased greatly. It appears that to make more room on the screen, tech companies have reduced the amount of text and replaced it with symbols or icons, often without giving users notice. A good example is Google’s block of dots representing their many apps. One day about a year ago I found my Gmail contacts list was missing. Eventually, I found it in the center of the Google app icon (shown at right) on the Google home page. This change to icons was so subtle that many users didn’t notice it until they couldn’t find a tool or function.



The trend is not only on the Internet, but also in Microsoft’s Windows and Office apps. When I click the Windows 10 Start button, I see a list of important functions represented by icons. Fortunately, Microsoft has tried to make each icon resemble its name, as shown below. But not all the icons are as obvious as the gear for Settings or a house to indicate the Home page.



In Office, some icons are so small that they are easy to miss. On the Home tab in Word, for example, several of the groups of tools have a tiny diagonal arrow in the lower right corner. Clicking this icon in the Font group opens a dialogue box which lets me set specific properties for text, as shown. I can make my choices and, if I wish, set them as the default font, meaning that these settings will remain until I change them.



Similar results are found throughout the Office applications.

Another useful, but tiny icon in Windows is often overlooked. It is called ‘Ribbon Display Options’ and is located at the right end of the bar at the top of the Windows and Office screens. If I want to increase the visible space for typing in Word, I click this icon and choose to hide the ribbon or show only the tabs. It would be hard to guess what this icon means.





One of my favorite icons in Word is 'Layout Options.' When I insert a picture or object into a document, it is accompanied by the icon shown at the left. Its function is to allow a picture to fit smoothly with the text. I click the icon and choose how I want it to interact with text. It can wrap the text around the photo (as shown) or have it appear in front of or behind the text, among other options.



Internet browsers use icons widely, too. Firefox, my current browser, uses icons in the address bar: three dots to indicate 'More information or tools,' and a star icon to open my bookmark list. The icon in the center lets me view my Pocket contents. Pocket is a personal online storage library for articles, videos, etc. that I have copied from many sources. It was developed by Mozilla, the company that created Firefox, and is available for iOS and Android devices as well as computers. Search the web for Pocket to learn more about its features.

On the Firefox home page is an icon group that includes my search history, bookmark sidebars, Last Pass (a password keeper), and an icon for my account which also can synchronize Firefox history and bookmarks with my other devices. Can you identify their icons in the illustration? The three lines at the end of the Firefox icon group give me access to several settings and functions of Firefox.



As you can see, not all icons match their functions. You can avoid frustration by holding your mouse pointer over an icon to see at least its name. Better yet, click the icon and explore its content. Don't be intimidated by these icons, but don't ignore them either. Look around the screen. Some of the most helpful tools and information can be found by clicking those tiny icons.

President's Column—Truth in Advertising

Author: Andrew Cummins, President, ICON Users Group, MO
August 2019 issue, The ICON Newsletter—www.iconusersgroup.org—[andrewcummins \(at\) yahoo.com](mailto:andrewcummins@yahoo.com)

I saw in a store PCs being sold which boasted of incredible amounts of system memory for their price, such as 24GB. Looking at the smaller print, that 24GB is 8GB of RAM plus 16GB of "Optane memory." Optane memory is just a small SSD to cache a large HDD. It gives the PC the performance similar to an SSD for not much more than the cost of a cheap HDD. Don't be confused by my jargon, and don't be fooled into thinking Optane is system memory, or RAM. At least Optane memory does what it does well and so shouldn't be avoided.

I'm really excited about LED lights, but if you go out to buy high-powered LED lights, they often are advertised with false wattages, such as 600 watts for something that actually uses 60 watts. Sometimes you can't even find the actual wattage used on the packaging. They want you to think you're getting more light for your money than you're actually getting. At least the power savings of LED lighting versus older technology is incredible, regardless of advertised power.

If you've ever checked with Windows to see how large your PC hard drive is, you've always been presented with a smaller number than the advertised capacity for your hard drive. Hard drive capacities are advertised with redefined terms to make them appear larger. At least it's not a large difference between advertised and actual capacity.

When you look into it, there's an incredible amount of misleading, if not false, advertising. It's not just the tech industry. Go buy a flowerpot and see if it's really the gallon capacity advertised. It's almost certainly smaller. At least pots are often sold by inches in diameter, a less abused measure of pot size.

If you want help finding something to buy, ask at your tech group meeting. I have people often asking more for buying advice. You can read user reviews online for advice. Make your decision on themes you find in comments, not on any one person's review. You can ask the salespeople for advice. Remember, salespeople are trying to sell you something, even if they don't have what's best for you. At least these days, technology is so advanced that you're still getting a great product in spite of dubious advertising.



Virtual Machines

Author: Dick Maybach, Member, Brookdale Computer User Group, NJ
August 2019 issue, BCUG Bytes — www.bcug.com — n2nd (at) att.net

A virtual machine (VM) is a program on your PC (called a host in virtual-machine speak) that creates a box that appears to be a PC to an operating system (called a guest in virtual-machine speak) that resides in it. In Figure 1, the outer gray box is your PC hardware and software. The blue box within it is the program (called a hypervisor) that creates the software boxes that hold the guests, each shown as a light gray rectangle. Each guest has its own virtual hardware (in yellow) with which it communicates just as though it were a PC. Each guest also needs its own operating system (in orange) and applications (in green).

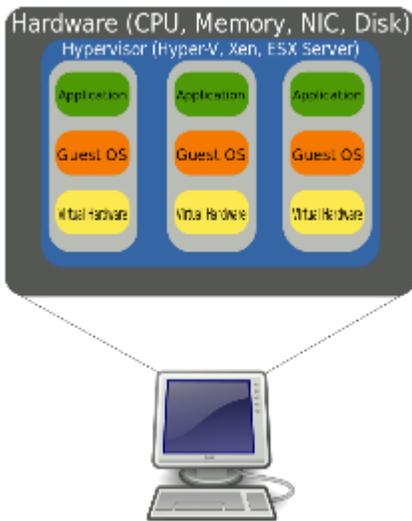


Figure 1. Virtual Machine Organization.

From the host's view each guest is just an application, and each can operate independent of other applications on the PC, which means you can have two or more operating systems live at the same time. Moreover, you can copy and paste data and transfer files between them at any time.

It's not shown in Figure 1, but the hypervisor has an interface to configure and control the VMs; Figure 2 shows an example, in this case VirtualBox. Note that there are five different VMs here, Windows 7, FreeDOS, Tails, Ubuntu 18.04, and Ubuntu 18.10, and all are powered off. The right portion of the screen summarizes the characteristics of the Windows 7 guest.

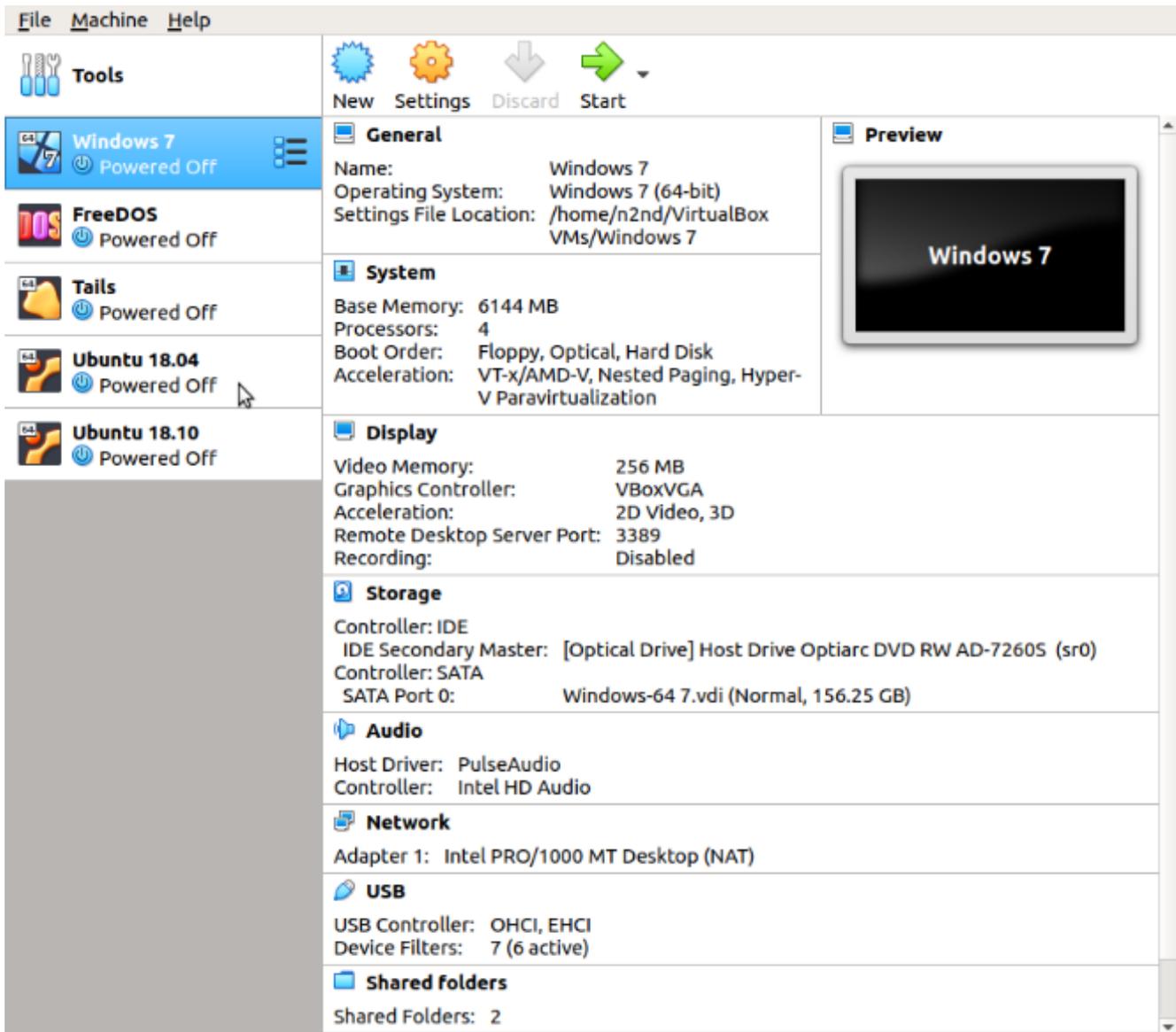


Figure 2. VirtualBox Administration Panel.

Figure 3 shows Windows 7, running as a guest under VirtualBox.

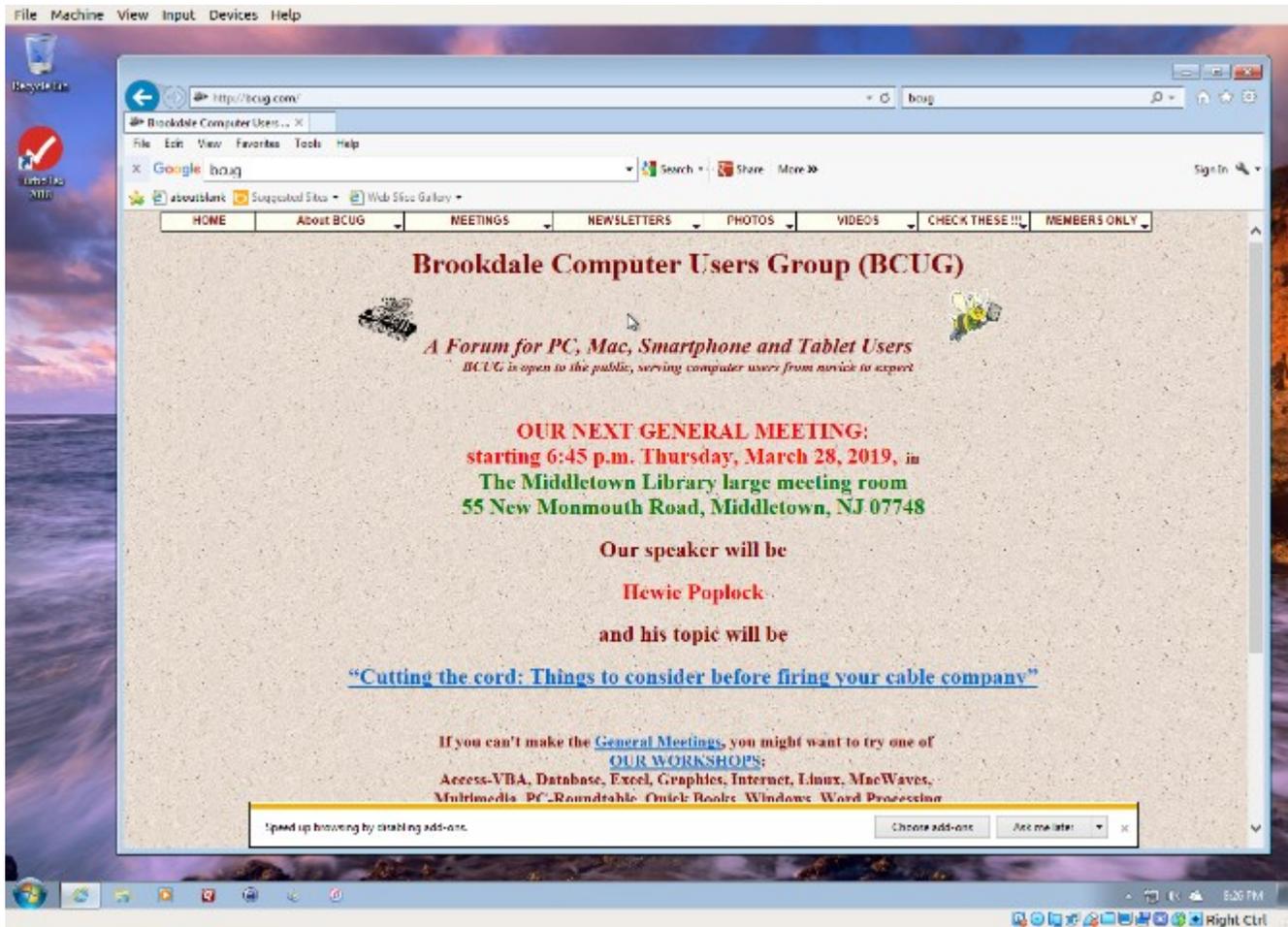


Figure 3. Windows 7 under VirtualBox.

As with most other applications, control follows the cursor. Place the cursor within the VM window and mouse clicks and keystrokes are sent to the VM. Move the cursor outside the VM window, and they affect something else.

Why bother with this? As you probably suspect, adding a software layer between the guest OS and the PC slows down the guest and complicates the host. Here are some possible uses.

- Run a different OS – my host runs on Linux, but there are a few applications available only on Windows, such as TurboTax and the software needed to update my GPS. If your host is Windows, putting Linux on a VM is far superior to running it from a live USB.
- Trial OS upgrades – I prefer to try a new version before I commit to it on the host, as often some applications aren't compatible. In the case of Windows, free trial versions are often available before a new version is introduced, and a VM lets you play with these without risk.
- Test alternate configurations of your host OS – making such experiments on a VM can save you from serious, "It seemed like a good idea at the time," calamities. This is more difficult with a commercial OS but look for ways around this. I've made a duplicate installation of Windows on a VM, and while it complained, it did run long enough for me to complete my tests.
- Trial applications – testing applications on a VM means you don't have to uninstall them when they don't work out. This is made easier with the VM snapshot feature. Before you install, create a snapshot (equivalent to cloning the hard disk). You can then revert to the snapshot if you decide to discard the application.

- Test live USBs or DVDs – much software is available on live media. You download an ISO file, burn it onto a medium, and boot your PC from it. With a VM, you just designate the file as being installed on the guest's virtual DVD drive, which now boots from the virtual DVD instead of its virtual hard disk. As a result, you don't have to burn the file to a medium.

Before I used VMs, I relied on dual booting for the similar tasks. Here, the alternate OS has direct access to the PC, which means it's substantially faster than when running as a VM guest. However, this requires repartitioning the host's hard drive, where an error can be catastrophic, and moving data between the two hosts is awkward.

There are many VM systems available, with the four most popular being VMWare (for Windows, OS X, and Linux), VirtualBox (for Windows, OS X, and Linux) Parallels Desktop (for OS X) and QEMU/KVM (for Linux). I've used VirtualBox for several years and have recently begun experimenting with QEMU/KVM, so everything I say about the other two is hearsay. From what I've read, it appears that VirtualBox is the easiest to configure and use, plus it's free for home users. VMWare, the oldest of the four, is possibly faster than VirtualBox, but configuring it requires some experience, and it's a commercial product. A free version is available, which is missing only a few unimportant features. QEMU/KVM is not for the faint-hearted, as it was designed by Red Hat for use in professionally staffed server farms. Also, although it appears to be quite fast it runs only on Linux. Making configuration changes such as, increasing the screen resolution and enabling host/guest file sharing involves working at the command line and being familiar with the Linux file organization and permissions. However, once set up, it's as easy to use as VirtualBox. GNOME Boxes (which I haven't used) allows Linux users to use KVM with a simple set-up process and user interface, although with more limited control of the virtual environment.

Figure 4 shows the QEMU configuration panel, which has essentially the same information as that of VirtualBox. After a VM has been installed, the day-by-day configuration is done from here.

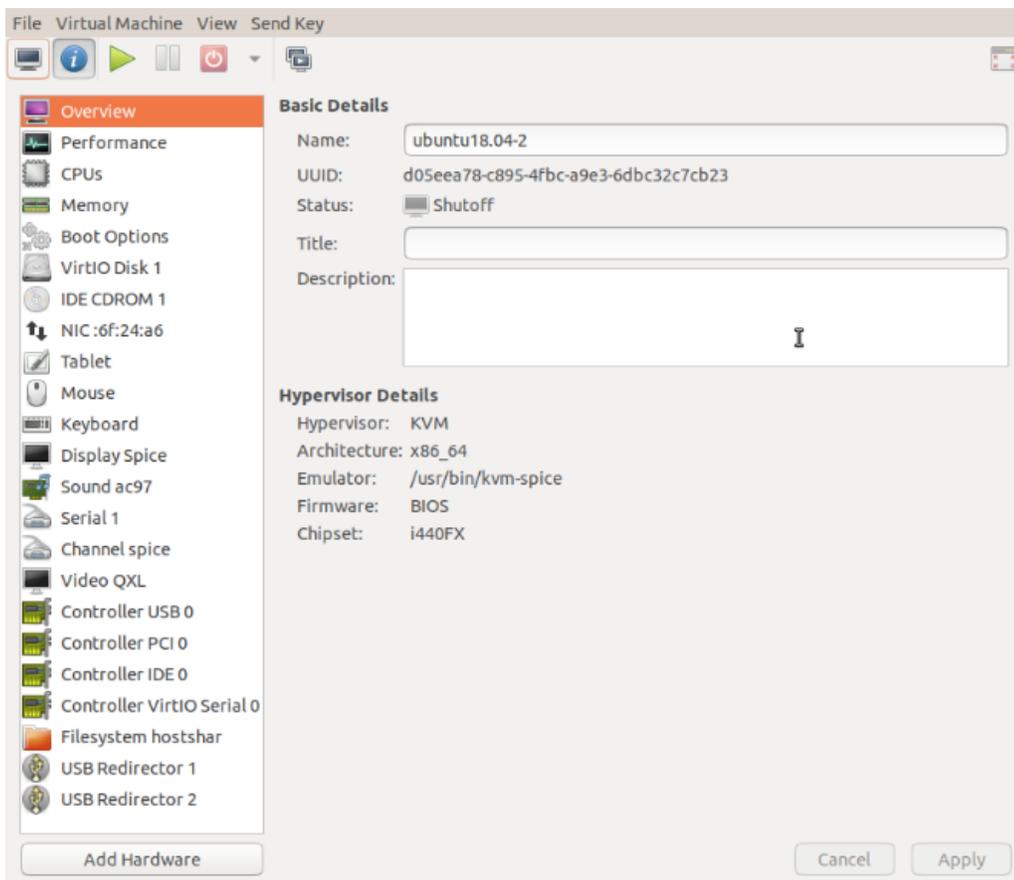


Figure 4. QEMU/KVM Configuration Panel.

A VM operating under QEMU/KVM appears in Figure 5, also essentially the same as it would appear under VirtualBox.

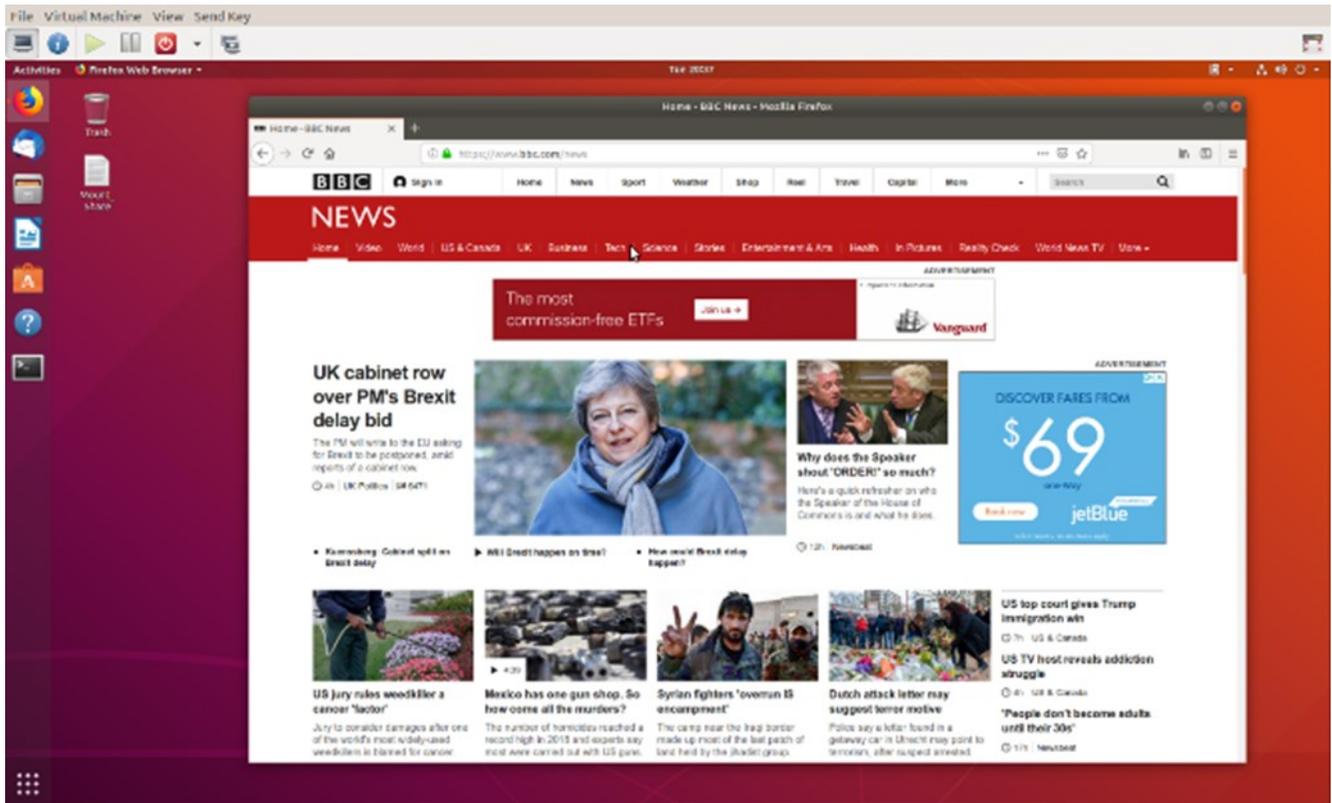


Figure 5. QEMU/KVM in Operation.

Running VMs requires a host with adequate resources. It needs four Gbytes RAM (absolute minimum, eight is preferable) and 12 free Gbytes disk space for each guest (again more is better). VM features on CPU are desirable (VT-x on Intel and AMD-V on AMD processors). Check your VM documentation, as these features may be disabled in your BIOS.

Guest speed will be lower than those of a host, but for most applications this isn't important. Of course, you should run any resource-intensive tasks on your host. Graphics in particular will be slower and probably have fewer features than your host hardware. Resources used by a guest are no longer available to the host. For example, if your host has eight Gbytes of RAM and you allocate four to a guest, the host now can use only four.

A VM is completely defined by its file, which is essentially an image of its virtual hard disk. If you back up this file, you've backed up the VM. This isn't an unmixed blessing, as any time you boot the VM there will be changes in the file, which typically occupies at least several Gbytes of disk space. As a result, your backups will take longer and occupy more space.

Guests are reasonably well isolated from the host, except for any shared directories, making you fairly secure against the common risks, such as operator error and software bugs. However, some malware attacks can get through to the host, which means a VM is not a good vehicle for investigating malware.

Although VMs are valuable, they do introduce complexity and add risk. I used VirtualBox for several years but noticed beginning with Ubuntu version 18.04 that after a few minutes Ubuntu guests would drastically slow, to the point of being unusable. This can be remedied by turning off VirtualBox's 3D display acceleration, which is enabled by default. The developers have acknowledged the problem but say they don't have the resources to correct it. After the last VirtualBox update, it refused to run my Ubuntu 16.04 guest at all, which is why I ventured into QEMU/KVM land, and fortunately the trip was successful. Using

VMWare might also have solved the problem, but since my host is Linux, QEMU/KVM was a better approach.

Despite their disadvantages, VMs are a valuable resource for me, one I use almost every day. They allow me to run software experiments more easily and with less risk than do their alternatives. Without them, many of my articles would have been just cut-and-paste cribs from other folk’s work.

Freshly Squeezed Review - You Seem to Have an Assistive Touch, Yeah

Author: Frank Petrie

September 2019—<https://ympnow.com>

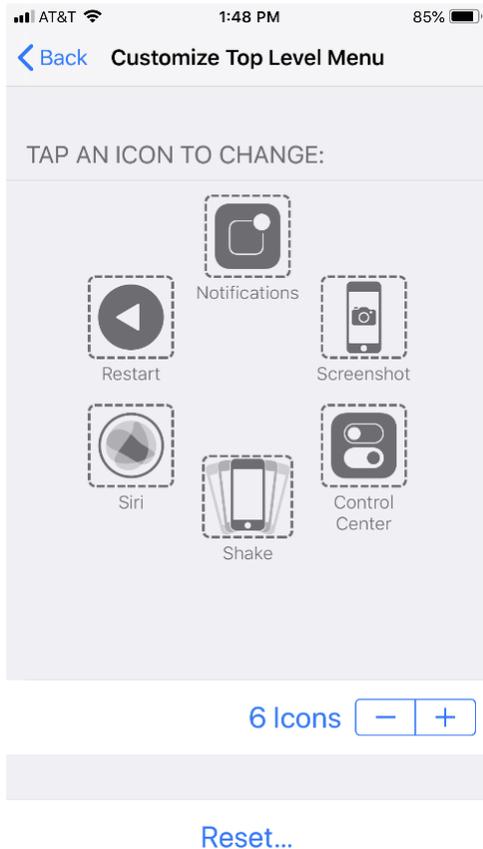
Recently Apple acquired Workflows, added some features, cleaned it up, and Voilà! - Siri Shortcuts. But I stumbled across a few articles that showed me an additional plethora of shortcuts that can be had in iOS using an additional method. That’s AssistiveTouch, which perfectly dovetails with Siri Shortcuts.

As you command Siri Shortcuts via your voice, you order AssistiveTouch to do your bidding with your fingers. It’s just that simple and I’ve found that it can perform several actions that I have found irksome to do.

You access AssistiveTouch in Settings > General > Accessibility. Scroll down a little and click on AssistiveTouch to turn it on.

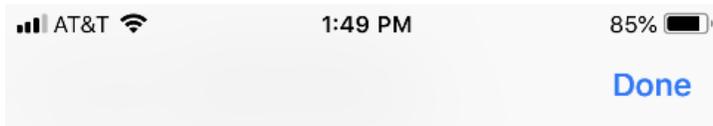
When you click on the bar, you’re presented with a base configuration of six commonly used actions. You can stay with the preset actions or personalize it to your needs. Click on the “Customize Top-Level Menu” bar and you can work its magic.

The preset screen has six buttons. But you can either lessen the number or increase it. It’s accomplished by touching the ‘+’ or ‘-’ buttons at the bottom of the screen.



To change a function, tap on its icon. This will present you with a screen with roughly two dozen functions to choose from that run the gamut of actions you might wish to execute regularly or find obnoxious to do. Choose the function(s) you desire, click Done, and it will replace the current functions in the box.

Among the selections are: Lock Screen, Mute, Pinch, 3D Touch, SOS, Analytics, Pay, and many others. And you're not limited to Apple's presets. You're free to create your own. Again navigate to AssistiveTouch and click on Create New Gesture. You can create a series of taps or swipes and combine them into one gesture!



Shake

App Switcher

Screenshot

Lock Rotation

Pinch

3D Touch

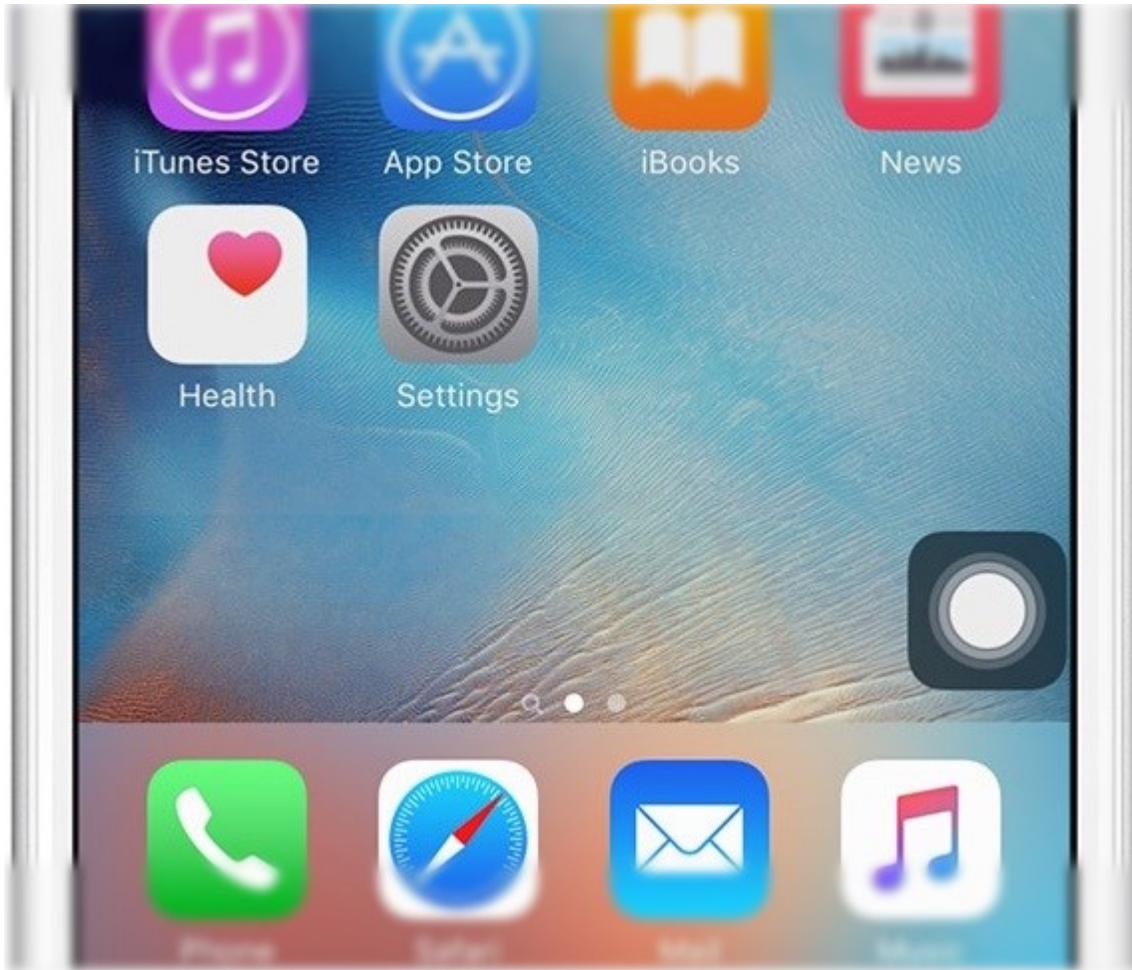
Double Tap

SOS

Analytics

Reachability

To navigate using AssistiveTouch, you will find a round button encased in a square. You can drag it to anywhere on the perimeter of your screen. In certain instances, I've found that with some apps it will move itself if it's covering a button. Click on the button and your selections are presented.



Personally, I immediately replaced two of the boxes with functions I find a real pain - Restart and Undo.

To Restart the iPhone 8+, you must press the Volume Up button, then the Volume Down button, then press and hold the Power button until the Apple logo appears. With AssistiveTouch, I merely tap the Restart button and all of this is performed electronically. No more dexterous gymnastics.

Another pet peeve I have solved is Shake, which is iOS's equivalent to ⌘-Z. Instead of shaking the iPhone to erase what I've just typed (and it normally only works about half of the time), all I need do now is push the Undo button and the offending passage is removed immediately. (Supposedly, Apple will incorporate this as a feature in iOS 13.)

Basically, I've used AssistiveTouch to replace any action that requires me to physically utilize the iPhone's buttons. I've chosen screenshot, which captures your screen sans AssistiveTouch's on screen box (and that's how I captured some of my screenshots for this review).

You can set-up Custom Actions. Choose from: Single-Tap, Double-Tap, Long Press, and 3D Touch. For example, I have set 3D Touch to take me back to my Home Screen and Long Press to start Restart. As with choosing your gestures, you have a multitude of choices for your custom actions.

Using Siri Shortcuts and AssistiveTouch reminds me of a joke by Jay Leno. As he's driving, the car in front of him keeps slowing down and speeding up. The result: the lead car gets through the yellow light and he's stuck at the red light. He becomes aggravated and screams, "Who are you to waste 20 seconds of my life?"

I'm using both apps in most cases to accomplish something by touching one button instead of two or three. Definitely a first-world problem.

Yet if I can make accomplishing something as simple as me, I'm there. AssistiveTouch definitely saves me difficulty when I'm operating the iPhone's physical buttons. But, to be honest, if I can accomplish something with a single touch ...

Give it a bash.

Cleanup for the NEW YEAR 2020

Author: Jim Cerny, Forum Coordinator

January 2020 issue, The STUG Monitor—ww.thestug.org—[jimcerny123 \(at\) gmail.com](mailto:jimcerny123@gmail.com)

It's time to give your Windows computer a good look and clean out all the junk! I bet most people clean out their garage more often than their computer. Sure you can run apps that delete stuff and you should do that regularly. But to start the New Year I am talking about going over ALL your files on your C-drive and your emails as well. Deleting the files you no longer want or need will not just free up some space (does anyone really care about space anymore?) but will make your backups run much more quickly and you will be able to find things so much more easily. Trust me on this – make it your new year's resolution! So here are my tips on what to look at to delete those unwanted files.

1. BEFORE YOU START deleting files, why not back them up first? Use a small portable drive (a "thumb" drive that plugs into your USB port) and copy everything you want to it. You should do this monthly anyway.
2. USE WINDOWS EXPLORER and go through ALL your folders and look at all your files. You need only look into the folders you save files in – such as Documents, Downloads, Music, Pictures, and Videos. You can SORT the list of files in a folder by DATE, so you can look for those old files easily and delete them. You can delete multiple files at one time by left-clicking the first file you want to delete, then holding down the "Ctrl" (control) key while you click on other files. When you let up on the Ctrl key you will have selected multiple files. Or you can hold down the "Shift" key when left-clicking on the second file and all files in-between will be highlighted.
3. DO NOT DELETE A FOLDER without looking inside it and seeing everything in it. Deleting a folder will delete all files and other folders in it. Look before you delete.
4. DELETING FILES AND FOLDERS FROM YOUR C-DRIVE will put them in your Recycle Bin, so you need to delete them from there too. If you delete files from an auxiliary drive (such as a USB "thumb" drive) they will NOT go to your Recycle Bin.
5. PHOTOS – Go through all your photo files, every photo, and delete the ones you do not want. Each photo is a file. Get a small portable drive and put all your photos on it and then delete them from your C-drive. Copy them to another device for backup. Or, use "Google Photos" and put them all there – it's free and really nice.
6. BANKING – Review ALL your charge or debit cards and cancel those you no longer need or want. Review ALL AUTO-payments. Are you still auto-paying for a service you do not use? Lots of people do not stop their auto-payments when they need to.
7. CONTACT LIST – Review ALL contacts on your contact list. Do you have more than one contact list? Delete all those old contacts you no longer need. Cut the cord.
8. APPS and programs – delete those apps you no longer use.
9. OLD CDs? -- Do you still have any old CDs? Copy them to a portable drive and throw them away. Yes, you can copy music and other files too.

10. REORGANIZE – Now that you have deleted a lot of files, review the folders you have remaining and reorganize what you are keeping. Delete old folders you no longer want and create new and more meaningful folder names and move the files into them. You can change file and folder names using Windows Explorer.
11. BOOKMARKS – Review your bookmarks (web page shortcuts) and “tabs” on your web browsers and delete the ones you no longer use.
12. EMAIL – Review all your saved email folders and delete the ones you no longer need. How many emails are in your Inbox? More than 50? You can set your email option to automatically delete old emails for you.

Maybe this is a bit much to do in one session, so just pick one at a time. And give yourself a nice reward for doing it! Your computer will thank you and you will be thankful yourself the next time you think “Where did I put that file?!”

Interesting Internet Finds October 2019

Author: Steve Costello - [scostello \(at\) sefcug.com](mailto:scostello@sefcug.com)

In the course of going through the more than 300 RSS feeds, I often run across things that I think might be of interest to other user group members.

The following are some items I found interesting during the month of September 2019.

How To Reinstall Windows Without An Installation Disc

<https://askleo.com/how-to-reinstall-windows-without-an-installation-disc/>

This question comes up all the time at user meetings. Leo Notenboom provides several excellent answers. Basically everything he says in the post boils down to being ready before the need comes up.

How (And Why) To Use Google's Chromebook Simulator

<https://www.howtogeek.com/439256/how-and-why-to-use-googles-chromebook-simulator/>

If you are like me and considering buying a Chromebook, you should check out this post.

4 Things To Look For When Buying A USB Hub

<https://www.maketecheasier.com/things-look-out-for-buying-usb-hub/>

There are still a lot of USB devices around, and less USB ports on computers these days. If you don't have enough ports on your laptop, or desktop, you will need a USB hub. This post tells you what you need to look for to make the best purchase. (Note: I have several hubs that I use often.)

How To Optimize Your Google Drive Storage

<https://www.online-tech-tips.com/google-softwaretips/how-to-optimize-your-google-drive-storage/>

If you use Google Drive storage (and if you have a Google account you should) it should be optimized. This post explains how to optimize the storage.

Encrypt Public WiFi With Firefox Private Network For Secure Connection

<https://www.ilovefreeware.com/12/windows/internet/plugins/encrypt-public-wifi-with-firefox-private-network-for-secure-connection.html>

If you use Firefox there is now an option to have a free secure connections. Check out this post to learn all about it. It is not the best option, but is better than no VPN at all.

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