

SUPERCOM COMPUTER CLUB TECH TIMES

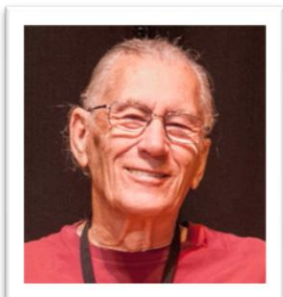
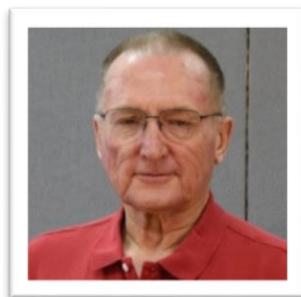
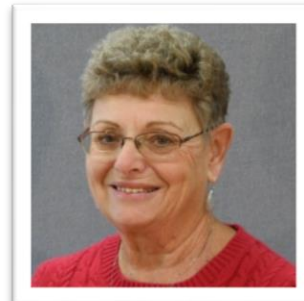
Volume 24 April 15, 2019

Objective:

To bring the latest technology news to you, our members. Tips and suggestions will help you to keep your device(s) running smoothly and help you be aware of threats. Technical tips will be coming to you through our Technical Committee.

Committee Members: (Pictured Below)

Ben Tarbell, Mike Gerkin, Peggy Bullock, Jim Mills, Rick Heesen, Lowell Lee, Steve Andreasen (Apple/Mac), Mike Smith, Jim Oliver & Keith Kuchar (not pictured). Dick Strong.



Dick Strong is elder Geek whom we call on for input on tough problems and suggestions from the sidelines. He has earned his "time off".

New Members added in 2018-2019 were Keith Kuchar and Sandy George. The website will be updated as soon as we get a picture of Keith & Sandy next season. WHEW!!!! I am not the only woman on the team!! Thank you Sandy!

The end of another Super Season at SuperSun Computer Club! Where did the season go? I was always told, “the older you get, the faster time goes”. I now believe it. Throughout the summer, your Tech Committee members, will be emailing out newsletters to keep our members up-to-date with any latest news, problems, Windows Update information, etc.

Remember.....DO YOUR MAINTENANCE TO YOUR COMPUTERS DURING THE SUMMER!!

Many of you left before the last meeting when Chairman, Rick Heesen, presented the End of the Year Report, recognition & accomplishments. You really need to see where our club has come from and where it went during the years.

On the website, www.supercomcc.org on the Home Page at the Bottom under Club History,

any year in “brown” is clickable and you can see Year End Reports. Hopefully we will get Rick’s presentation to add to this list soon.

Remember --- **All links in our Tech Times Newsletter are safe to click on.**

Starting with this email/Tech Times, I have made a new email address specifically for emailing members. It is peggytechtimes@gmail.com. When you receive this email, make sure you add it to your contacts so that it does not go to your Spam folder.

Al Jack and I have diligently brought our member list and distribution list up-to-date.

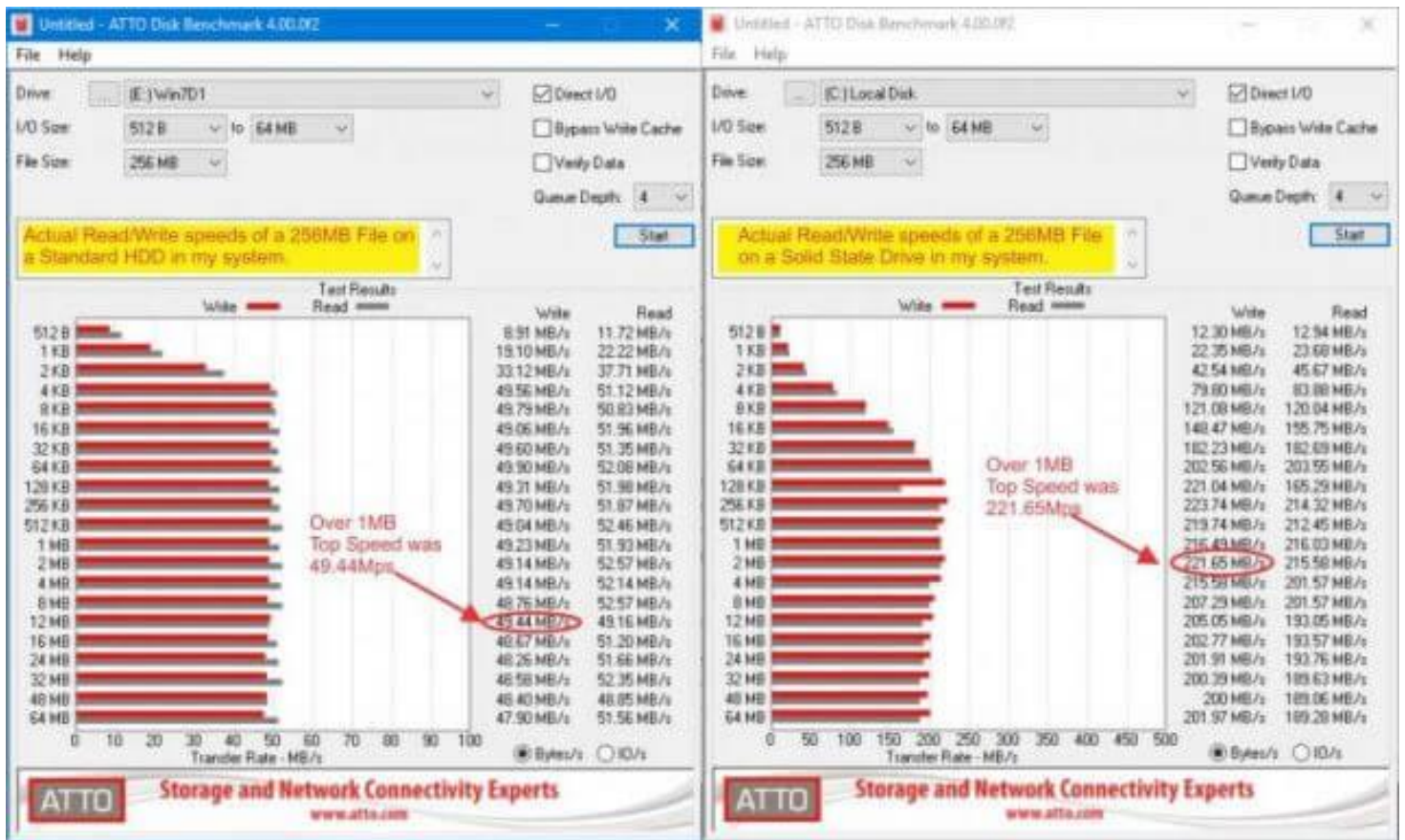
The following articles have all been **submitted by Mike Gerkin:**

With the price of many premium brands of Solid State Drives (SSDs) nosediving, perhaps it is time to investigate what an SSD can do for you. Upgrading to an SSD can feel like adding an additional 600 HP to your car. I say “feel like” because it just gives you faster access to your data. I have tried it and it offers what I think is really a minor benefit that feels like driving a racecar.

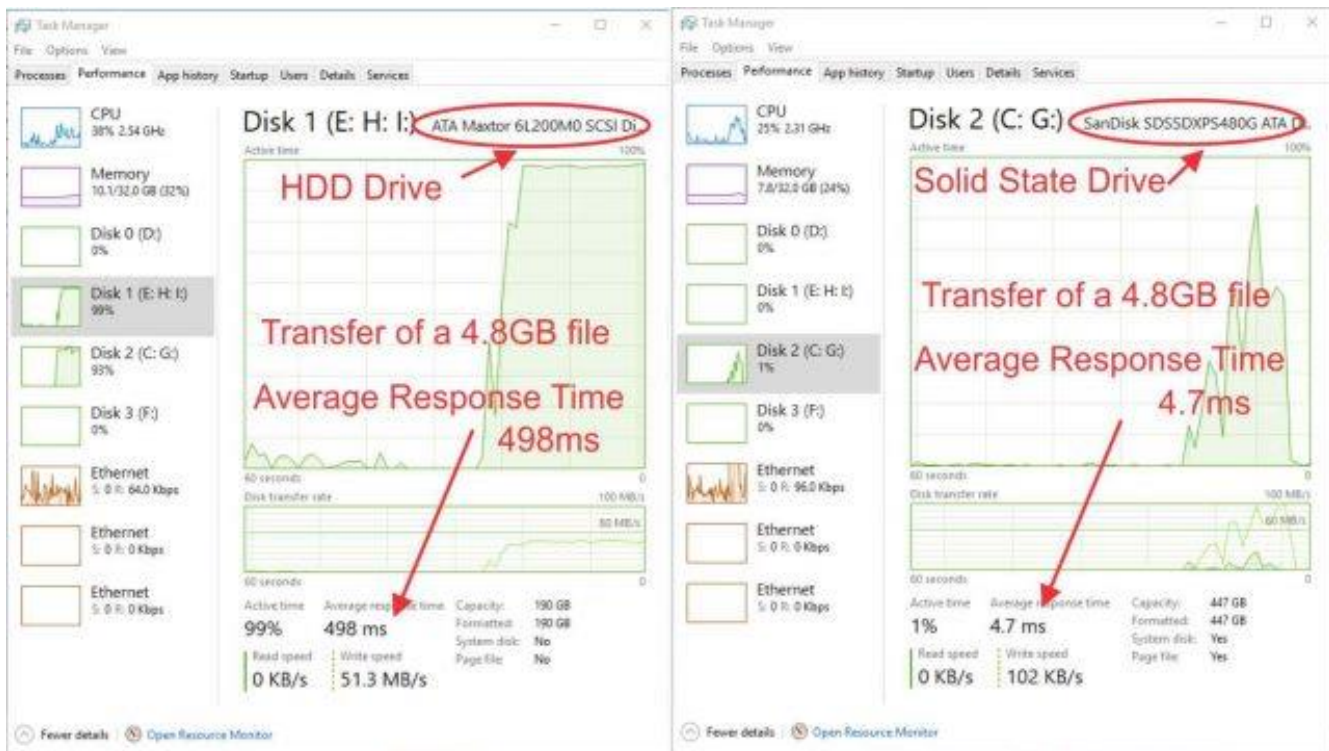
How Does It Do It?

The increase in R/W speed is one reason, but the ability to increase your hard disk drive (HDD) input/output (I/O) is another, but the biggest is disk latency. It is what makes the computer appear so much faster. Even if you are just browsing the internet with your computer, the constant I/O’s created because of everything required by your OS on your HDD is enormous. According to the Microsoft (MS) Core Team, “We can define disk IO latency as a measure of the time delay from the time a disk IO request is created, until the time the disk IO request is completed.”

The longer it takes for a disk to recognize a task, the longer it takes to start a read or write. In the graphics below from ATTO, the first is a comparison average Read/Write Speed for an HDD on a system against an SSD. Enlarge it to see that the SSD is almost 4.5 times in average read/write speed.



The next graphic from Open Resources Monitor was created to measure the transfer of a 4.8GB file and to show the difference in response time.



Benefits

If you have at least 4GB of RAM memory, upgrading to an SSD is certainly a good way to maximize your computer. The price-drops on these SSD drives have been incredible for the typical user. Most typically the price drops have resulted in costs of less than 1/4 of that 3 years ago.

There are some reasons for these price drops but the biggest is the introduction of 3D Vertical NAND. Think of V-NAND as building high-rise apartment buildings instead of individual housing (NAND) on a block. You can increase your capacity without having to increase your area. Higher capacity drives are cheaper which automatically reduces the desirability of low capacity drives making their prices drop accordingly. The technology is a few years old but manufacturers still held on to higher prices. Now the dam is broke and there is no going back. With a one Terabyte SanDisk SSD available for under \$125 it won't be long before all new builds will only be delivered with SSDs. If you are in the market soon for a new computer, begin to look for an installed SSD.

Another benefit is life expediency. In the past, there were questions about their reliability and lifespan but honestly, the experts say that is just not a problem anymore. The mean time between failure rates has surpassed HDDs with even low-end models advertising 1 billion hours. (that's 114 years by the way) Higher-end models can top 2 billion. The benefits don't stop there. They only draw 2-3 watts, about a third of traditional HDDs and they can increase a laptop's battery life by 30%. SSDs have no moving parts— this produces less noise, and the lower power draw means cooler operation.

Speed Benefits

Typical HDDs have an R/W between 40 and 120 MBps while older HDDs tend to run even slower. A fragmented HDD can have very high latency. SSDs, however, have a sequential start R/W of around 500 MBps minimum with expensive models performing even better and with exceptionally fast response time.

What Can You Expect To See?

Even with the higher speeds all around, it is hard to say exactly how much improvement you will have. If your current HDD is performing like new, the new SSD will still show a marked improvement. On the other hand, if your HDD is on its last leg, and you purchase an SSD, you will be amazed. This was my condition with an older device with a nice processor, but a slow hard disk drive.

Average boot times were around 30-40 seconds before SSD and about 12 seconds after.

If this article has piqued your interest and you decide to purchase a new SSD for your computer you might be wondering, "Now what?"

1. How do I install it in my system?
 2. How do I preserve my existing data and programs?
 3. Anything I must do differently, once it is installed?
 4. Will it be better to wait until they are cheaper?
- Because questions 1 and 2 have various answers depending on your personal and your system requirements. I will recommend that you consult with one of the SuperCom Tech Squad Team, or seek trusted professional help unless you feel confident of your abilities to search out and use the process of installation and data backup and transfer.
 - The answer to question 3 is NO. All you have to do is enjoy the feeling of a new computer

- I believe the price will continue to drop over time, but it is to the manufacturers' benefit to delay that as they did when 3D V-NAND was introduced. However, with the very low cost of SSDs, now is the time for just about everyone to upgrade their computer and enjoy the benefits of solid-state storage. When you are talking about 500GB models that cost around \$65, there is no good reason to wait until they are \$49. By the way, I have already found an offer at \$49!

Summary

There is no doubt that installing an SSD can make your computer feel brand new again. Just having your computer boot up three or four times faster will do that. But, do not think you will get a new computer. Maybe in your case it is simply time for you to replace that tired old computer with a brand new one.

I previously shared this with the SuperCom Geek Team: Seagate offers a 15TB SSD that provides sequential performance up to 2.1 GBps. That means that if they can already produce SSDs with performance times four to six times the current personal installations, it is only a matter of time before they are available to everyone. We will just have to wait until their price of \$10,000 drops.

The following is just for number junkies like myself– Seagate unveiled their 60TB drive four years ago. Only 17 of them are needed to create a Petabyte (PB). If you are interested in numbers and comparisons like I am, [this link will show what a zettabyte](#) is and a lot more. Just five Zettabytes can hold all the words ever spoken by human beings!!

Credit: Jim Canfield (2019)

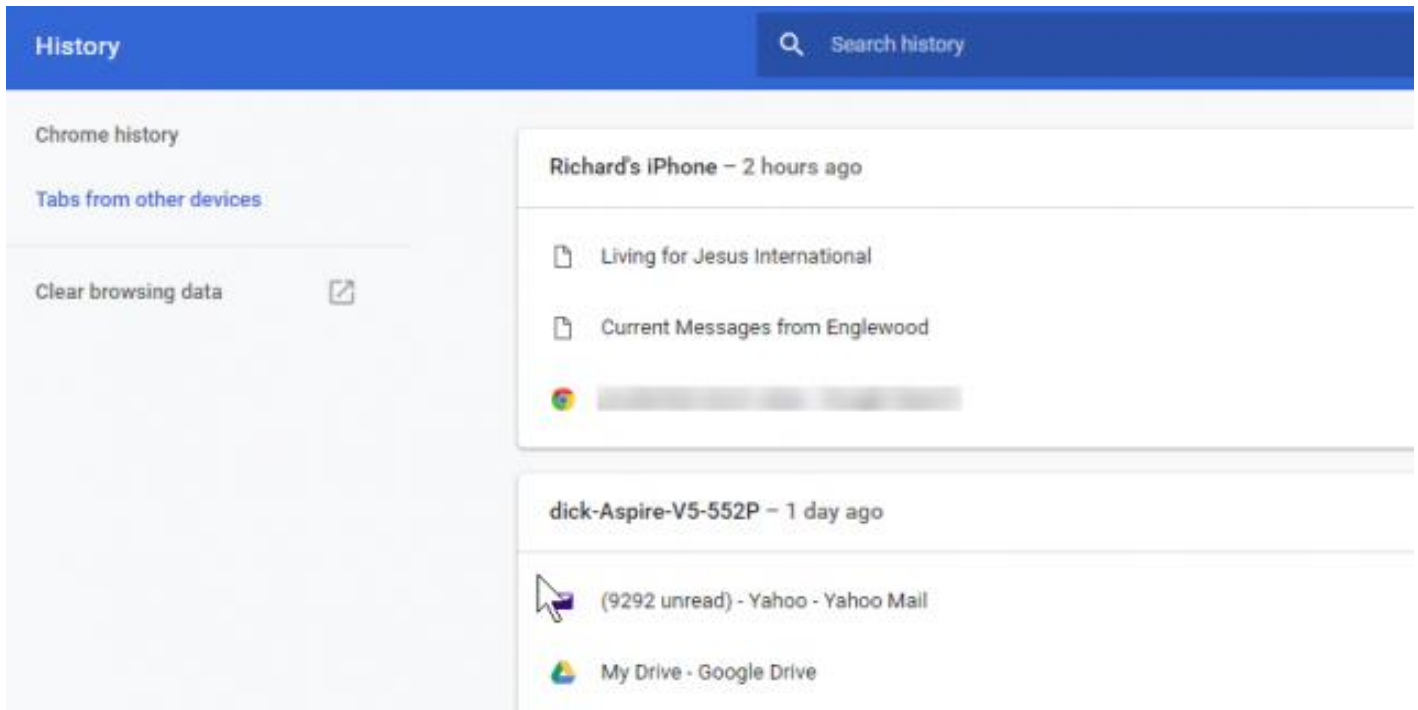
I remember being a boy in a “tech-less” society. The most tech thing was our first black-and-white television and the new electric beater my Mom had. One game we would play as kids was hide-and-seek outside with my friends. Some would hide and the rest of us had to find them. I don't know if you have ever had to find a hidden friend, but in today's technical world, we have other hidden things to find.

Often, we find ourselves locked into our computing devices and not knowing where to go to locate something we know we have. Maybe we wonder about that article on a website we read just the other day. Where was it? Or that file that was downloaded. Where did it go? I know I wrote a letter to John last month, where is it? Mary emailed me last month and I can't find that email.

This article is about how to find things on our devices, in our email, and on the internet. It is meant to give you some ideas on ways to find things without covering all the details. I will certainly leave some discovery for you.

Search History

Every web site we have gone to is saved in the browser history regardless if you are using Edge, Chrome, Firefox or some other browser. If you are syncing between devices, then history from your phone searches and your computer searches can all be found in browser history. With your browser open, use **Ctrl+H** to view the history.

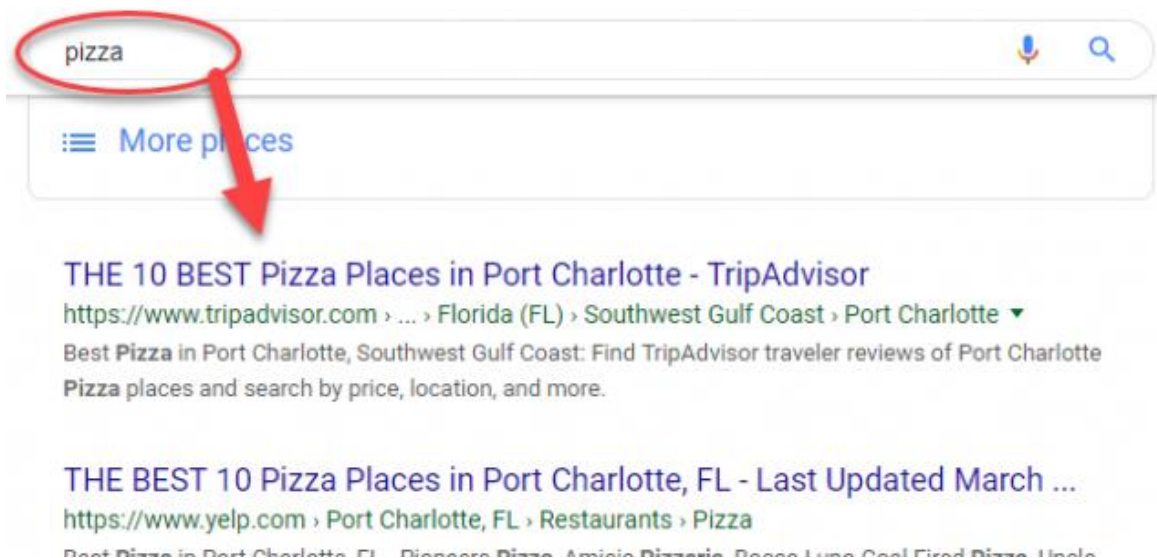


There is a search capability so we can look for a known word or two. Once you locate the site you were hoping to find, click the link and the page you were on last will open. In most browsers there are different time views to expand or limit your searches.

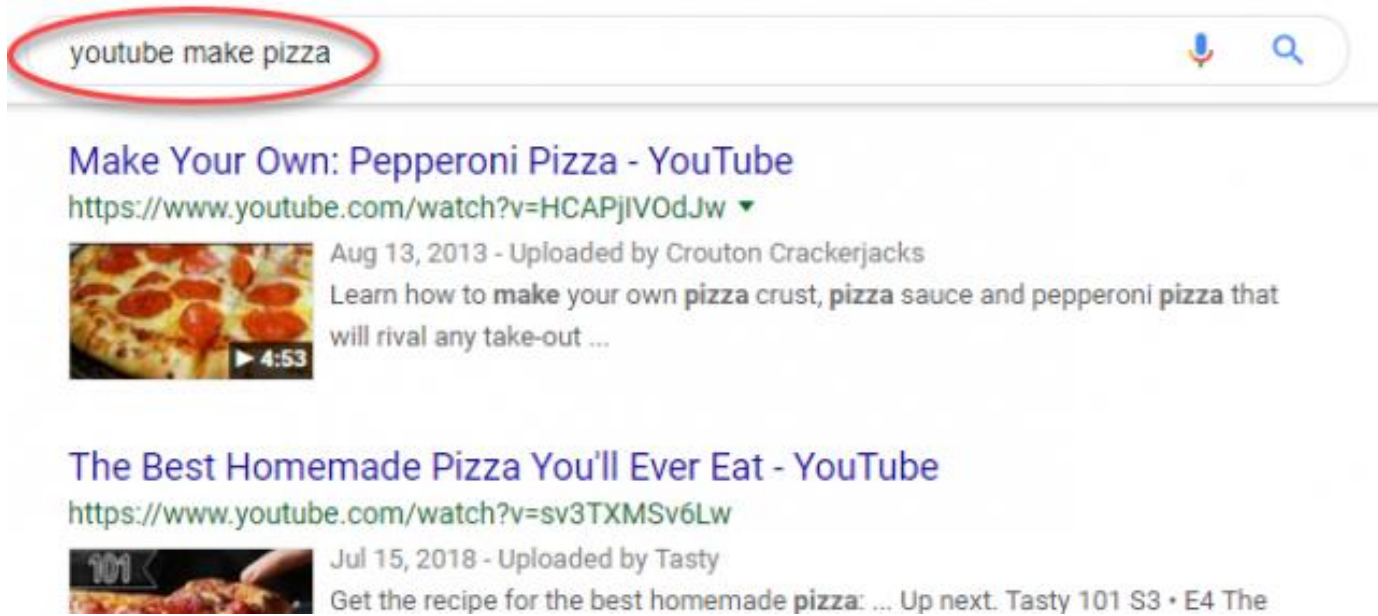
Search Engine Finds

My basic rule is this: if you want to find out about a topic, [Google](#) it. If you want to see how to do something, [YouTube](#) it.

Let's say I want to find a place to order a pizza. I open my browser and type in the search box: **pizza**. A result pops up often with a few ads and then a list of pizza places near my location. It knows my location from the IP address associated with my computer at the time. At the top of that list are a few ads that direct me to specific pizza places. Under the ads are the search results. Who needs a telephone book anymore... my fingers do the walking on my keyboard. And the pizza actually isn't better in Port Charlotte FL.



If I want to learn how to make a pizza, I use **YouTube** and type into my search engine: “**YouTube make pizza**” for example.



The results show a number of videos on YouTube for how to make my own pizza.

Find An Article On The Web

If I want to locate articles on Kim Komando tips about keyboard shortcuts. I know I have seen it before, so I do a Google search on “keyboard shortcuts”. The results are overwhelming– 497 million results! Instead, I narrow the search to only author Kim Komando by entering this:

Keyboard shortcuts:kimkomando

Much better– 204k results! In seconds I have narrowed down the list to just what I was looking for and where I wanted to focus my search. Usually, the ones I want are near the top of the choices.

Finding A File

What about that file I just saved? Where did it go? The software I use has default locations to save files. Most programs save into the Documents folder on the C: drive. When I **Save**, I am given an opportunity to change to any location I wish. When receiving attachments from others in their email, the attachments end up in the **Downloads** folder. Anything downloaded from a website also goes there. Therefore, look in **Downloads** first.

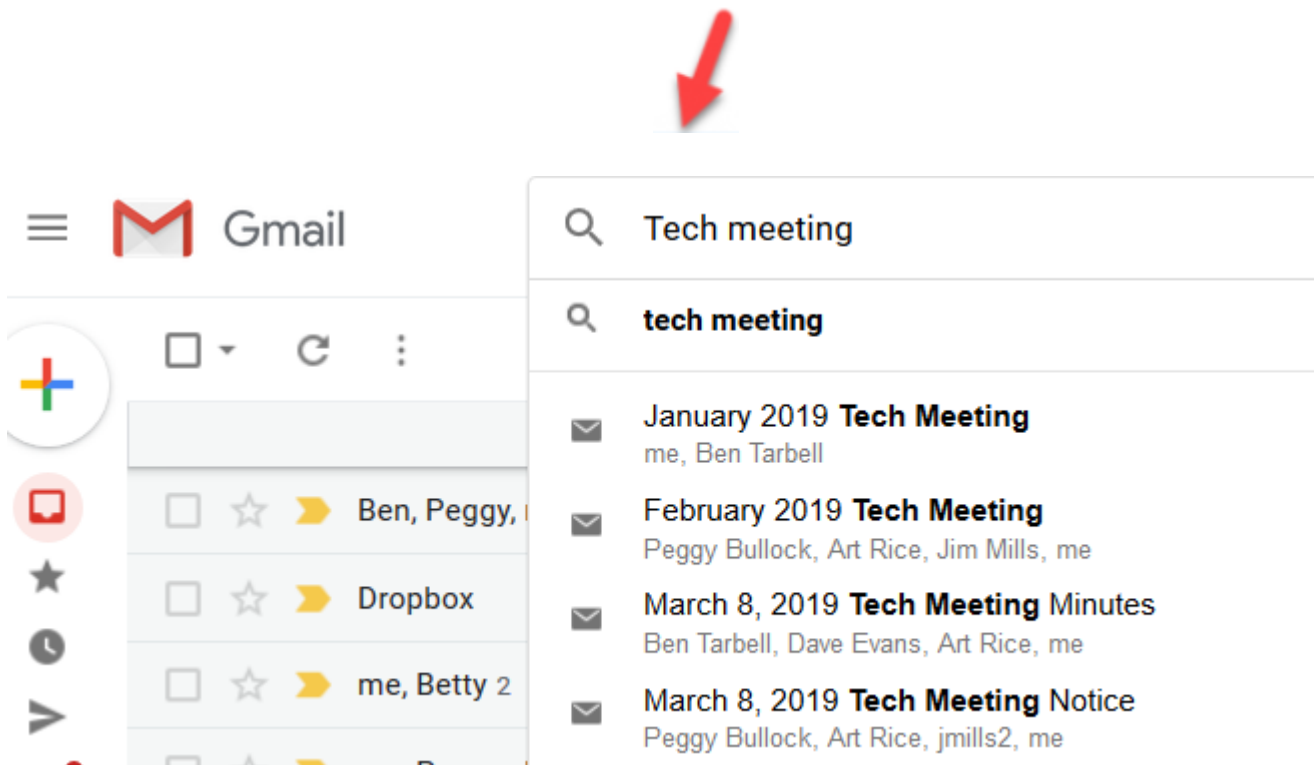
Another place to look is in **File Manager** under **Quick Access**. There you will find the most recent files you have accessed. It lists the file names as well as the location of the file. This includes the files you have worked on and the downloads from the web or attachments in email.



Under **View** in the drop-down menu of **File Explorer** you will find several different ways to view your files.

Searching Email

While there are differences between email programs, there is a **Search Box** at the top of most email programs. I have typed **Tech meeting** into a Gmail **Search** space and all email messages with those words appear below.



You can use that same **Search Box** top of an email screen, to type the name of the person you may be looking for, or a word or more that was in the email and press the **Enter** key. Perhaps I had purchased a software product and have misplaced the key code they emailed. If I enter the name of the product in the search box all the email containing that product name will appear. Or I can type a person's email address and press **Enter**. All the email from and to them will appear. This is much easier than scrolling down and down and down to find them.

Summary

I know this is the just tip of the iceberg on finding things. We could go deeper into each type of search, but I hope it has given you some insight as to how to go about using the various methods. Discovery is still a good way to learn what your computing device can do for you. Don't be afraid to explore.

Credit: Ideas from Dick Evans



"You should check your e-mails more often. I fired you over three weeks ago."



"Oh, that's a time-saving system we came up with. If we ever forget our user name or password we just look it up on one of the sticky notes."

That's it for this first summer Tech Times Newsletter. If you have any questions or problems during the summer.....First – GOOGLE; Second – check the website & contact one of our Tech Committee Members!

Have a great summer!!

Peggy Bullock and Mike Gerkin