



Our Club

RCSI is a nonprofit 501(c)(3) group open for membership to anyone interested in computers and related technology. Our aim is to provide an exchange of information between users of digital devices. We are not in any way affiliated with any computer manufacturer or software company.

Program Meetings

No admission fee for non-members. Everyone is welcome! Second Tuesday of every month, except August, from 6:30pm – 8:30pm.

Help's Half Hour (Q & A) 6:30pm – 7:00pm. *Members and Guests are welcome to attend and bring their computer related questions with them to get answered.*

7:00 – 7:15, Club Business

7:15 – 8:30+, Main Presentation

Come and join in the fun and enjoy a snack! **You are welcome to bring a guest.**

Become a Member

Go to our website, www.rcsi.org, and download a printed form for use by the Post Office mail, **or** enter your info online and pay with a credit card or PayPal, **or** attend a meeting.

The *Monitor* is published monthly by members of RCSI. Articles by our members may be reprinted by other user groups or nonprofits, without special permission, provided they are unaltered. A courtesy copy may be emailed to our author or Monitor editor.

The Rochester Computer Society, Inc. a computer/tech club open to everyone



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**November 10, TBA, plus
'Gifts and Gadgets' by Arpad Kovacs
December 8, TBA**

January 12, 'How Technology Has Changed the Way We Listen to Music', remote by Ray Baxter, via Zoom

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**** Because of COVID-19, all club meetings and the **
** Linux sig are currently being held online. ****

5 Worst Venmo Scams and How to Stay Protected

by Gavin Phillips

Venmo scams are becoming increasingly prevalent. It's time to learn what the scammers are doing and how to protect yourself. As one of the world's most popular money-sharing apps, Venmo has its fair share of scams. Where there is money to be swindled and stolen, you can always find willing thieves. As Venmo focuses primarily on transactions between friends, family, and other close acquaintances, that's what the



“Your Computer User Group of the Air”, Saturdays from 12:00 pm to 2:00 pm, with Nick Francesco, Dave Enright, and Steve Rae. Broadcasting on JAZZ 90.1 FM (WGMC) from Rochester, NY. Call 966-JAZZ (585-966-5299) or 800-790-0415
Sound Bytes is the longest running computer call-in show in the known universe.

We have stopped printing the Monitor newsletter and leaving hard copies at some area computer repair shops. Digital copies may be obtained from www.rcsi.org or my Pcloud storage at <https://tinyurl.com/tonydelrcsi> (this link works in PDF version only). Also includes presentation slides and articles too large for this newsletter.

Some Past Presentations:

Cut the Cord, Streaming Services
Autonomous Cars and Robots
Open Source and Free Software
Protecting Your Identity
Keeping Mobile Devices Secure
3D Printing, ENABLE project
Flash Drives-Not Just for Storage
Features, Mac OS X & Windows
Tablets, the Programs and Uses
Personal Finance Software
Amazing Browser Tips
Linux is Like Cars
Drones and Their Many Uses
Gifts and Gadgets for the Holidays

majority of scams focus upon. Venmo has other issues, too, lacking the fraud protections you might find with other payment apps. So, here are the five most common Venmo scams, how to spot them, and whether Venmo is safe for users.

1. Venmo Phishing Scams

Venmo users are frequent targets for phishing scams, usually delivered via SMS. These scams, also known as "smishing" (like **phishing** but with **SMS**), trick an unsuspecting user into clicking a disguised link delivered via a standard text message.

Phishing scam! I already reported this to Venmo! If you use Venmo and get this text PLEASE don't click on it. Just report it. [#scam #phishing pic.twitter.com/8vTwyERpy4](https://twitter.com/8vTwyERpy4)
— Vanessa Martinez?? (@vanessactress) [August 20, 2020](#)

The text appears to come from an official Venmo account, and the user is encouraged to click the link to fix an issue with their Venmo account or a previous payment. When the user clicks the link, they arrive at what looks exactly like a Venmo login page. The fake page will ask for login details, and potentially even straight-up ask for your credit or debit card information.

A Venmo phishing page [#cybersecurity #infosec #security #cybercrime https://t.co/jZxIqPpaY2 pic.twitter.com/u92uuI14CT](#)

— Bolster Inc. (@BolsterAI) [August 27, 2020](#)

In reality, the phishing page captures any information you input, and your user data is stolen. Phishing scams are everywhere and [feature consistently in our list of the top Internet scams](#).

How to Avoid Venmo Phishing Scams?

First, know that Venmo will never ask you to provide your card information via text message. That's a common scam technique that affects all payment platforms, including PayPal, your bank, and everything in between. Second, you should never click links in text messages or emails sent to you out of the blue. These links are usually scams. If you believe there is an issue with your account, contact Venmo's customer service---but not via the link in the message!

2. Venmo Credit Card Reverse Charge Scam

One common Venmo scam is a reverse charge scam, using a stolen credit card. This scam relies on you trusting the person you're dealing with, perhaps having sold something using an online marketplace. The scammer contacts you and makes the purchase. They transfer the funds to you using Venmo, and everything seems completely normal. Then, a few days later, the credit card company receives notification that the card in the transaction is stolen, the transaction reverses, leaving you out of pocket and without the item you sold.

How to Avoid Venmo Credit Card Reverse Charge Scam?

The official Venmo advice is not to "use Venmo to buy anything from anyone you don't know and trust." Which is, in fairness, good advice.

Special Interest Group

Linux Sig



We are back!

Linux Workshop,
**third Saturday of
each month, Noon-4PM**

NEW LOCATION:

Gates Public Library
902 Elmgrove Rd, 14624,
between Buffalo Road and
531 Expressway.

The room we use is on the second
floor, SE corner, by the restrooms.

[https://www.meetup.com/
Interlock-Rochester-Hackerspace/
events/psggnqybcbxb/](https://www.meetup.com/Interlock-Rochester-Hackerspace/events/psggnqybcbxb/)

Because of coronavirus,
we meet online. A link will be sent
by email.

Come and get your questions about
Linux answered. We have experts
on hand to fix problems and
answer questions about Linux and
FOSS (free and open source
software). **Bring your system in**
so we can help you get the most
out of it. Hope to see you there.

Carl Schmidtman

**Free, Virtual Technology
Conferences, ONLINE**
presented by APCUG

remaining 2020 Schedule
Saturday:
Nov 7

from 1 – 4 pm, EST

For Conference Descriptions
& Registration Links, go to
**[apcug2.org/category/
virtual-tech-conference](http://apcug2.org/category/virtual-tech-conference)**

Going one step further, if someone you don't know suggests using Venmo to complete a transaction for an online sale, you should force them to use an alternative platform. If they don't want to use an alternative platform, consider breaking off the transaction.

3. Venmo Fake Sale Scams

Running alongside stolen credit card scams are sales of items or services that don't exist. The proliferation of online sales platforms, especially those focusing on local sales such as Craigslist or Facebook Marketplace, make fake sales a major issue. The scam works as you might expect. You find something you want to buy, so you contact the seller. After agreeing to a price, the seller tells you to pay using Venmo, which you do. Then you wait, nothing ever arrives, and the seller disappears into the ether. There is no recourse via Venmo or the seller, and you've lost out.

How to Avoid Venmo Fake Sale Scams?

Like phishing scams, fake sale scams affect all online marketplaces, not just Venmo. You can boost your safety if you use services with seller rating systems or feedback systems, though [these do tend to have an internal or secure payment option, such as eBay](#). You can avoid fake sales scams by only using Venmo to make transactions with people you know and trust. Use a different platform if you need to make a purchase from someone you don't know.

4. Venmo In-Person Scam

The Venmo in-person scam is one of the boldest. The scammer siphons off cash from your Venmo account in front of you---after you put your phone in their hands. The premise of the scam plays upon your kindness and goodwill towards a person in need. The scammer approaches you on the street, asking to use your smartphone because there's an issue with theirs. They'll "try" to phone a friend, but say that the connection is failing---can they send a message instead? When you allow them to send the message, they open your Venmo app and instantly send a payment to their account before closing the app (potentially even deleting the app) and handing the smartphone back. It is a brazen scam that relies on you having Venmo on your phone to begin with.

How to Avoid a Venmo In-Person Scam

The easiest way to avoid this scam is to never lend your smartphone to a random person on the street. Alternatively, have them dictate the message to you along with the number they want to send it to. Another option is to make sure any monetary transactions require an additional security step, such as your password or a fingerprint.

5. Venmo Fake Payment Scam

A Venmo fake payment is another fairly common scam. A Venmo scammer will send you money out of the blue, appearing in your Venmo account. Then, they'll send you a message saying, "Oops, sent you some money by mistake, could you send it back?" When you send the money back, they reverse the initial payment and have their starter money and your money.

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Planning Meeting

Held on 1st Tuesday of each month
at 7 pm, at St. John's Meadows,
Briarwood building. ANY CLUB
MEMBER MAY ATTEND.
NOTE: Because of Covid-19, we
meet online, via Zoom.

Newsletter Printing

Limited copies will be printed and
available at some of the local
computer shops. *A few copies will
be available at our meetings.*

Club Mailing Address

Rochester Computer Society, Inc
PO Box 18516
Rochester, NY 14618

What do I do when a stranger pays me money and I think it's
a scam?

How to Avoid the Venmo Fake Payment Scam

If someone you don't know sends you money without warning, then
demands it back instantly, you should do two things. First, ignore
them---it's a scam. Second, report the scammer to Venmo. Hopefully,
they'll close the account before it scams anyone else.

Watch Out for Venmo Scams

These five Venmo scams represent the most common methods a thief
will employ to get at your cash. Some scammers are very persuasive,
while others will become downright aggressive in their attempt to steal
from you. In each case, take your time and assess the situation before
following a random link, pressing to accept a request, or transferring any
funds.

2020 brought forward a new type of phishing scam. Here's how you
[spot and avoid COVID-19 phishing scams of all kinds.](#)

The complete article can be found at <https://www.makeuseof.com/venmo-scams/>.

Final 'Hard Copy' Newsletter Printing

The final *hard copies* of the 'Monitor' newsletter, being distributed to
some of the area computer stores, ended with the June issue. New
digital copies will still be posted to the club website.

Is It Illegal to Fix Your Own Gadgets?

By Bob Rankin, www.askbobrankin.com
a Translator for the Technology Impaired

If you try to fix, upgrade (or even dare to open the case of) your
smartphone, tablet, laptop, or other gadgets, does that act violate any
law or void the warranty? Read on to learn the truth about "warranty
void if sticker removed" and other dire warnings you may see on the
things you own....

The Big Lie Most Hardware Makers Tell You

Last year, my son dropped his expensive iPhone on the floor,
shattering the screen into hundreds of tiny shards. He checked with the
Apple Store, and found that the repair would cost about \$279. We did a
little digging, and found a variety of repair kits selling for \$25 to \$30 on
Amazon. The kit arrived two days later, and with the help of a Youtube
video, my son did the repair himself in about an hour.

But did that do-it-yourself repair void the warranty on his phone? The
screw holes and case seams of many laptops, game consoles, and other
devices are often covered by little stickers bearing the even littler
warning: "Warranty void if removed." Additionally, large vendors like
Sony, Microsoft, and Apple either explicitly state or strongly imply in

Tidbits of probably useless information

In the wild, crocodiles will clamp down on their prey with their massive jaws, crush it, and then they will swallow the prey whole. They do not have the capability to chew or break off small pieces of food like other animals.

To help with digestion, crocodiles swallow small stones that grind up the food in their stomachs. Thanks to their slow metabolisms, crocodiles can survive for months without food.

A tarantula can live without food for more than two years.

Penguins make their marriage proposal by offering a pebble.

A scorpion can hold its breath for one week, can survive a whole year without food, can climb almost any surface, and it glows under ultraviolet light.

Octopuses have three hearts.

Otters “hold hands” while sleeping, so they don’t float away from each other.

Hummingbirds are the only known birds that can also fly backwards.

Dolphins use toxic pufferfish to ‘get high’. Dolphins deliberately handle pufferfish causing them to release toxins as a defence mechanism. These toxins can be deadly in high doses, but also have a narcotic effect – and are a powerful hallucinogenic, which dolphins appear to enjoy.

their warranty agreements that your paltry year’s worth of protection against manufacturer’s defects is null and void if you try to fix the device yourself, or even if you have a third-party repair service do it.

Yes, that’s right; vendors say you can’t replace your smartphone’s broken screen (a relatively trivial task that typically requires only a sharp knife, a hair dryer, a screwdriver, and a pair of tweezers). And you can’t take it to a local repair shop and get it back the same afternoon. Otherwise, your manufacturer’s warranty is void.

This situation is ideal for OEMs (Original Equipment Manufacturers). Repair work is very lucrative, especially when you have a monopoly on it. The only problem is, this whole “warranty void if sticker removed” business is entirely illegal. But OEMs are fighting hard to shut down small businesses that sell parts and make repairs.

So says [The Repair Association](#), formerly known as The Digital Right to Repair Coalition. Whether you are a DIY hobbyist, a repair service business owner, or a recycler of obsolete electronics, The Repair Association claims to represent your interests in Washington DC and State legislatures; your main interest being the right to open up and fix what you own. And that includes more than just computers -- your right to repair extends to game consoles, cameras, household appliances, automobiles, medical devices, lab equipment, farm tractors and more.

Your Right to Repair and The Law

The claim that warranty terms which prohibit independent repairs are illegal rests upon a section of the [1975 Magnuson-Moss Warranty Act](#) that forbids “tying” consumers to specific repair services or specific types of parts. The MMWA is what allows you to take your car to an independent repair shop instead of the ludicrously expensive dealership that sold you the car. Likewise, you have the right to take your PC to a local repair shop, or to fix it yourself.

But big OEMs tell big lies, and tell them so often and skillfully that “99.9 percent of consumers have no idea of their actual rights,” according to Gay Gordon-Byrne, executive director of the Repair Association. “Apple and others have crafty attorneys that know darned well that Magnuson-Moss exists as do antitrust laws against ‘tying agreements.’ The contracts are very clever and appear to be within the law—but are anything but in practice,” he told the Motherboard tech news site in an interview.

Apple changed its policy on screen and battery replacement a couple years ago, so your warranty won’t be voided if you replace a failing battery or cracked screen, but there’s a caveat. Even slight damage caused by third-party repair shops will void Apple’s warranty. Any other repairs performed by a repair shop that’s not an Apple Authorized Service Provider will void your warranty.

Samsung warns that your warranty is void if you crack open



[AskBobRankin.com](#)

Jere's Tech Tips

By Jere Minich, Apcug Advisor,
Region 5 (AL, FL, GA, SC)

WE ASKED, YOU TOLD US: MANY ARE CHARGING THEIR PHONES ALL NIGHT, EVERY NIGHT –

I've been thinking a lot about battery degradation lately. With new and exciting quick charge tech coming out every few months, companies are touting super-fast charge times, even on phones with big batteries. But one thing they don't advertise is how badly some of these quick charge methods degrade your phone's battery over time.

Go to this Android Authority article and read about charging.
<https://bit.ly/3jHH4nO>

CAN DATA BE RECOVERED FROM A FAILED SSD? WHAT YOU NEED TO KNOW –

When solid-state drives (SSDs) began to hit the market, they were hailed for their speed and reliability. Users assume that because an SSD has no mechanical parts, it is less likely to suffer a mechanical failure. Those users are largely correct. Numerous studies indicate that an SSD will last longer and perform better over an extended period, especially as the technology becomes more efficient and with larger storage to boot. But that doesn't mean your SSD will not fail at some point. And when that does happen, how do you recover your data? Can you recover data from an SSD?

Read more of this MakeUseOf article: <https://bit.ly/3gpRkPC>

the case of your device, or even replace the factory-issued software by rooting your phone.

And some products are designed with such demanding standards for weight and thickness that they are almost impossible to repair. In a teardown of the latest Microsoft Duo, iFixit came to the conclusion that "the thin, premium, category-creating Duo is not something meant to be repaired, maybe not even by Microsoft." That seems to fly in the face of their recent public commitment to "Zero Waste."

In 2018 the U.S. Federal Trade Commission warned companies against using unlawful and misleading statements in their warranty clauses. They specifically called out language like this:

"The use of [company name] parts is required to keep your . . . manufacturer's warranties and any extended warranties intact." "This warranty shall not apply if this product . . . is used with products not sold or licensed by [company name]." "This warranty does not apply if this product . . . has had the warranty seal on the [product] altered, defaced, or removed."

For hundreds of years, consumers have been free to do whatever they wished with whatever they purchased. But in recent decades, manufacturers have imposed upon that right with contractual agreements that limit who can repair their products, which they presume remain "their products" forever. The Repair Association and other activist groups fight back against this arrogant threat, and they have won in a very big consumer product category.

Groups like iFixit.org are also advocating for the right to repair the things you own, and to unlock or "jailbreak" those devices if desired. They also underscore the importance of having the same manuals and diagnostic tools that the manufacturers use for repairs. Many of those companies claim that information is proprietary and have tried to shut down independent repair shops.

iFixit does give kudos to certain vendors for being more "repair friendly" than others. Their [repair scorecard](#) shows the best and worst smartphones, tablets and laptops for repair. Topping the phone list was the Fairphone 3 (2019 model) which scored a perfect 10 for repairability and upgrades. The reviewer mentioned that "Visual cues inside the phone help with disassembling and replacing its parts and modules." But sadly, no phone released in the past 5 years scored an 8 or 9. The 2017 OnePlus5 scored a 7, and several recent iPhone and Google Pixel models scored a 6.

The Repair Association, iFixit and other grass-roots organizations are fighting for your repair rights with electronics makers and their "authorized service centers." It's a battle well worth fighting, and supporting.

###

Scam Alerts

www.aarp.org/money/scams-fraud/info-2020/new-medicare-chip-card-scam.html

Latest Medicare Scam: Don't Divulge Your ID Number When a Stranger Calls

'Dangerous' fraud schemes are targeting older Americans by Katherine Skiba, [AARP](#), September 30, 2020 |

If you're on Medicare, be aware: You will **not** be receiving a new chip card to replace your paper ID card. If somebody tells you that, they're lying. It's the latest [Medicare scam](#).

A 73-year-old widow in a small town in North Dakota learned about it the hard way. Early in September, a man called unexpectedly and offered her a plastic chip card to [replace her paper Medicare ID](#).

A chip card, the size of a debit or credit card, contains a microchip to encrypt transactions for greater data security. But [protecting your data](#) is the last thing bad actors want. Often they aim to defraud the taxpayer-financed Medicare program — or to steal your identity and rip you off.

Unfortunately, this widow gave the scammer her Medicare number, which officials say [should only be provided to health care professionals whom you trust](#), such as doctors, pharmacists and insurers.

This took place in North Dakota, but criminals rarely target a single state, so it's important to be aware of this crime no matter where you live. A couple of Tennessee residents have reported similar scam calls.

[AARP's Fraud Watch Network helpline](#), 1-877-908-3360

LINUX SIG

You guessed it. The library is closed, so Carl sent out a link in April to try an online meeting, using Jitsi. You might not get the total hands on approach, but you can ask questions and share screens during the meeting. The Linux Workshop will take place, **third Saturday of each month**, from Noon-4PM. No, you can't bring your machine in, but you can describe your problem and Carl and the other Linux gurus will try and help you. This is a video conference, so dress appropriately.

If you are not on the Linux emailing list, you can request a link to the workshop by contacting Carl Schmidtman, at unixgeek@faultline.com.

* * * * * SOFTWARE and HARDWARE * * * * *

Cloud Storage

By Dan Douglas, President
Space Coast PCUG, FL

This month I'll be taking a look at cloud storage and what that means. The mystery of what is the 'Cloud' is actually very simple. On the Internet, each accessible device has an IP address assigned by the Internet Service Provider (ISP) that connects that device to the Internet. This Internet address is then shared among the many servers worldwide that link all Internet paths together. This is how you can access a given PC or Server that provides services such as a web site.

The SCPCUG web site, for example, is actually on some PC that no-one in the club has ever seen, likely based in the company facilities, of the company that we pay to 'host' our web site. So, when you use a browser to access www.scpcug.com, your ISP (Spectrum or AT&T, most likely in our county), refers to the Domain Name Servers (DNS) to locate the actual IP address to go to, to request the web pages for the SCPCUG.

Now when it comes to cloud storage, the process is quite similar. The app that you use to perform cloud backups or copies of your files, like DropBox, Apple iCloud, Microsoft OneDrive, Google Drive, etc., connects to the target PC for that service across the Internet and then proceeds to do whatever you have instructed the app to do. For example, I use OneDrive to back up all of my personal files on my home PC. The app is associated with my personal Microsoft account, which is required to use OneDrive services. That way my data is accessible to only my Microsoft account, from whatever app is requesting it. I have a OneDrive app on my iPhone as well as on all other Windows 10 PCs. As long as I log into that app with the correct credentials of my Microsoft account, I can access the files stored in my account.

Each remote PC is, in essence, just like your PC, except it has much more data storage available to it. Enough data storage to create a directory or folder for each user that has an account for that service. In reality, it is not one PC but rather a cluster of PCs or servers that appear as one logical server to provide connections to the various apps accessing the storage. Email works in a similar manner, where each Email

Some Interesting Websites and Internet Finds

By Steve Costello
scostello@sefcug.com

The Wonders Of Wordpad – Cyn Mackley

<https://cynmackley.com/2020/01/15/the-wonders-of-wordpad/>

You don't have to go out and buy a word processing program or learn a whole office suite just to write simple documents if you have a Windows operating system. The Wordpad program is built right in. Cyn explains some of the basics in this post.

What Is Creative Commons & Explanation Of Each License

<https://www.online-tech-tips.com/computer-tips/what-is-creative-commons-explanation-of-each-license/>

Every once in a while I like to remind anyone who blogs, edits a newsletter, or wants to use information or photos, that there is a legal way to do so. There is a great amount of good information and images available for use under Creative Commons licensing. Check out this post to learn more.

The Best Antenna Set Up For Cord Cutters

<https://thestreamingadvisor.com/the-best-antenna-set-up-for-cord-cutters/>

There seems to be more and more interest in cutting the cord these days. If you are thinking about going with an antenna, you should check out this post first.

account (email address) has its own storage directory and is accessible only when the correct credentials are used (email address and password). A few years ago, many email servers would limit the size of your email storage, as storage was relatively expensive. Now, with storage being so much cheaper, your email provider either has increased your storage limits or has removed restrictions altogether. This may depend on whether you pay for your email account or if it is free.

When it comes to my personal preferences for cloud storage, I like OneDrive as I'm a Microsoft partner, and the ease of accessing OneDrive can't be easier in my situation. DropBox and Google Drive, both offer some nice features if you are part of a company where multiple users may need to access common files frequently and keep changes to those files in sequence.

No matter what your choice may be, the important thing to remember is to back up your data somewhere! Cloud storage makes it easy and automatic which is what I've learned is the key to having good backups in place.

From the April 2020 issue, The Space Coast PC Journal,
www.scpcug.org, datadan@msn.com.

SSD or HDD: Which is Better?

Latest update by David Webb .

*When choosing storage for a computer, one of the most frequently asked questions is **which of the following is better: HDD or SSD?** The truth is that there are several differences between both and the choice of one of the other ultimately depends on what your intended use is and what your storage needs are. In this article we will explain the **characteristics of each one, which one is faster, and how to choose yours.***

What is an HDD

An **HDD (Hard Disk Drive)** is the hardware element that permanently stores your data on the computer. Unlike RAM, the data stored on the hard drive does not disappear when you turn off your PC.

HDDs contain a rotating platter with a magnetic coating. To write 0's and 1's, a head moves over the platter and to magnetize (storing a 1) and demagnetize (storing a 0). The quality and speed of recording depend on how thin the discs are and how fast they spin (the higher the spin speed, the faster the reading and writing speed). Of course, as the head has to move to the required position, this requires considerable time.

What is an SSD

Unlike HDDs, **SSDs (Solid-State Drive)** store data on microchips with flash memory connected to each other, in a similar way to USB



Penguin Platform

By “Free John” Kennedy, Apcug
Advisor, Regions 3 and 6/7

HOW TO AUTOMATE REPETITIVE TYPING (TEXT EXPANSION) WITH AUTOKEY ON LINUX

– Text expansion (or substitution) helps you save time by transforming abbreviations into a long string of text. Use it to boost your productivity by quickly inserting a phrase that you need to type frequently, your address, code and so on, in any application. This article from Linux Uprising explains how automate repetitive typing using AutoKey, a desktop automation utility for Linux / X11: <http://bit.ly/2Y2cASZ>

HOW TO EASILY OPEN MULTIPLE FILES WITH SPACEFM IN LINUX

– If you’re using a customizable file manager like SpaceFM, you can add a menu to its toolbar that allows you to quickly open multiple files with the application you want in a single click. You can follow the steps in this article from maketecheasier: <http://bit.ly/2Y0rYPG>

WHAT’S THE DIFFERENCE BETWEEN 5G AND 5GHZ WI-FI?

– 5G and 5 GHz Wi-Fi are both used for wireless connectivity, but they don’t have anything else in common. Anyone referring to “5G Wi-Fi” actually means 5 GHz Wi-Fi, which is different from the 5G cellular standard.

Go to this How-To Geek article and learn the difference between these terms. <http://bit.ly/35zYYAu>

memory sticks. They work with an **integrated processor** to perform operations related to reading and writing data.

Differences Between HDD and SSD

These two types of disks present a number of differences, among which is the speed of reading and writing, but there are also other aspects to take into account.

- **Boot time** : Solid State Drives take less than half the boot time of hard drives (7s for SSD, 16s for HDD).
- **Data transfer** : on average, between 200 and 550 MB per second in the case of SSDs, while HDDs usually transfer between 50 and 150 MB in the same amount of time.
- **Capacity** : The maximum capacity of an HDD (as of 2020) is 18TB, whereas a 100TB SSD has been built by [Nimbus](#) for \$40,000.
- **Resource Consumption** : SSDs generally consume less than HDDs.
- **Writing**: SSDs allow a limited number of writing to their cells, something that does not happen with HDDs.
- **Noise**: due to their mechanical operation, HDDs generally make more noise than SSDs, which are quieter and vibrate less.
- **Failure & Longevity**: HDDs and SSDs can both fail over time, however the way in which they fail differs. An HDD is more prone to impact damage (from being dropped) as it contains moving parts which can be damaged. An SSD is less affected by impacts, however they can still fail. Each time an SSD’s storage cell is written onto, the cell is degraded. The more they are used, the more they will degrade to the point when it is no longer possible to write. However, an HDD would most likely start showing signs of wear before an SSD gets to this stage.
- **Price** : HDD disks can offer a higher storage amount per cost. Typically you can find a 4TB HDD for less than \$100, whereas a similar SSD costs around \$600. However, the prices of SSDs are reducing, making them more affordable.

As you can see, there are notable differences between each type of disk, especially in terms of storage, price and speed. If you want a quick response to which one is faster, then the answer is an SSD. SSDs take less than half the time to start the operating system and can double or triple the speed with which they read and record data.

Which One Should You Choose

Whether you select an SSD or an HDD ultimately depends on what your intended use is for your PC. If you usually store **a large amount of content** on your PC, such as movies, series, etc., or if you have a tight budget, the most appropriate thing is that you keep an **HDD**.

Comparatively, if you have a larger budget and are more interested in **speed**, for example if you play a lot of **video games** or use your PC for activities that require reaction speed like **video editing**, graphic design, etc., then an **SSD** is the obvious choice.

*** * Computer Jokes * *** **Stolen from Everywhere**

When Kids Speak !

One day a little girl was sitting and watching her mother do the dishes at the kitchen sink.

She suddenly noticed that her mother had several strands of white hair sticking out in contrast on her brunette head.

She looked at her mother and inquisitively asked, 'Why are some of your hairs white, Mom?'

Her mother replied, 'Well, every time that you do something wrong and make me cry or unhappy, one of my hairs turns white.'

The little girl thought about this revelation for a while and then said, 'Mummy, how come all of grandma's hairs are white?'

###

A teacher was giving a lesson on the circulation of the blood. Trying to make the matter clearer, she said, "Now, class, if I stood on my head, the blood, as you know, would run into it, and I would turn red in the face."

"Yes," the class said.

"Then why is it that while I am standing upright in the ordinary position the blood doesn't run into my feet?"

A little fellow shouted, "Cause your feet ain't empty."

###

An alternative solution would be to purchase a smaller 256GB SSD for your PC, that you install all of your necessary systems (so it runs fast), and then add an external HDD for additional storage.

###

Dan's Desk

What is Streaming?

By Dan Douglas, President

On the surface, we have been 'streaming' since the days of radio. Basically, you have a receiving device, like a radio, and a 'broadcast', like a radio frequency that you use the device to select and play. The same concept applies to TVs as well. You select a particular channel on the TV to play a selected broadcast frequency received through an antenna.

Streaming in the current sense is very similar; we use an application (app) to select a particular stream of data through the internet. In effect, we use the app to communicate to a remote server to request that a particular file is sent to our device. The app and the device then decode that file in a way that is appropriate for the user. On a smart TV/Roku/Apple TV/Fire TV stick/Chromecast/etc., an app like ESPN will allow you to select a particular show (like a channel or data stream) for playback on the TV. For a computer, it is the same; the app will select a particular data file to be displayed on the monitor and/or played through the audio system. The advantages of subscribed or paid apps versus free ones are usually two factors: fewer or no commercials and access to more content. Many apps, such as Hulu have multiple tiers of use: Free, limited commercials, no commercials, live TV channels. Some apps such as CBS All Access may offer shows such as Star Trek Discovery or Picard to only the subscribers of that channel.

Common Streaming Devices

Smart TVs – TVs connected to the Internet that have apps available to play back content from free or subscribed providers.

ROKU, Apple TV, Fire TV Stick, Chromecast, etc. – a standalone box that connects to a display of some sort, like a TV, that contains access to various apps that provide for streaming content from free or subscribed providers.

Web Browsers (Microsoft Edge/Internet Explorer, Google Chrome, Firefox, Safari, etc.) - the web browser is an app running on a PC Operating System (Windows, Mac OS, etc.) that allows you to select a server to connect to through the use of the Uniform Resource Locator (URL), or more commonly called the web address. The address itself can be the actual stream that is then played through various web browser functions.

Popular Apps

Here is a list of some of the frequently installed and mentioned apps across all devices in no particular order. You can go to the website for each for details on content, pricing, etc.

Odds and Ends

History of Computers: A Brief Timeline

By [Kim Ann Zimmermann - Live Science Contributor](#)

The TRS-80, introduced in 1977, was one of the first machines whose documentation was intended for non-geeks

1977: Radio Shack's initial production run of the TRS-80 was just 3,000. It sold like crazy. For the first time, non-geeks could write programs and make a computer do what they wished.

1977: Jobs and Wozniak incorporate Apple and show the Apple II at the first West Coast Computer Faire. It offers color graphics and incorporates an audio cassette drive for storage.

1978: Accountants rejoice at the introduction of VisiCalc, the first computerized spreadsheet program.

1979: Word processing becomes a reality as MicroPro International releases WordStar. "The defining change was to add margins and word wrap," said [creator Rob Barnaby in email to Mike Petrie in 2000](#). "Additional changes included getting rid of command mode and adding a print function. I was the technical brains — I figured out how to do it, and did it, and documented it."

1981: The first IBM personal computer, code-named "Acorn," is introduced. It uses Microsoft's MS-DOS operating system. It has an Intel chip, two floppy disks and an optional color monitor. Sears Roebuck and Computerland sell the machines, marking the first time a computer is available through outside distributors. It also popularizes the term PC.

Movie Streaming

Netflix, VUDU, Movies Anywhere, Amazon Prime Video, Hulu, Disney +, Apple TV +, Fandango Now, Tubi (free), Google Play Movies & TV, Roku Channel (free), Acorn TV, BritBox, YouTube (free), Crackle (free)

Live TV Watching

Hulu, AT&T TV, Sling TV, YouTube

TV Channels on Demand

CBS All Access, PBS (free), Showtime, NFL, ESPN, HBO Go, A&E, ABC, Fox, NBC, SYFY, USA, BBC America, AMC

Music

Amazon Music, Stingray Qello Concerts, Sirius XM, Pandora

Plus thousands of others with more being created every day it seems. No matter what your tastes are, there is an app for it! I hoped this served as a general introduction to streaming and now enjoy!

From the March 2020 issue, Space Coast PC Journal, www.scpcug.com, datadan@msn.com.

* * * * * BITS and PIECES in the NEWS * * * * *

Editor's Note: To continue reading the following articles, you may copy the long URL at the end of the article and enter it into a web browser or click on the URL in the web version of this newsletter.

Encrypted messages don't always stay private. Here's what that means for you

By [Laura Hautala](#)

An alleged plot to kidnap the governor of Michigan puts the spotlight on secure messaging apps.

As a group of alleged conspirators recently learned, encrypted messaging isn't a guarantee that your private conversations will stay between you and the recipient. The [FBI arrested six men](#) on Thursday for allegedly [plotting to kidnap Michigan Gov. Gretchen Whitmer](#). How did the feds get the information they needed? They read the group's encrypted conversations.

To be clear, accessing the communications wasn't a highly technical effort. The FBI had a confidential informant who participated in the group message threads in which much of [the conspiracy was laid out](#), according to a criminal complaint. That kept the FBI in the loop even when the group changed messaging apps to avoid detection.

"Because the group still included [the informant], the FBI had maintained the ability to consensually monitor the chat communications," FBI special agent Richard J. Trask II said in the complaint. The incident underscores a basic fact about encrypted

messaging apps, like Signal, Telegram and WhatsApp. While they all offer a layer of privacy, there are plenty of ways for someone to access your messages from these services.

That's good news and bad news. On the bright side, it means criminals plotting violence can't rely completely on encrypted messaging services to hide their plans from the police. While law enforcement has warned that encryption threatens to make their investigations into the worst criminals "go dark," this case is one example of how investigators can continue to read messages sent with encrypted services.

Read the rest at www.cnet.com/news/encrypted-messages-dont-always-stay-private-heres-what-that-means-for-you/.

Chrome and Edge users will never have to worry about losing tabs again

By [Joel Khalili](#)

Microsoft is a regular contributor to the open-source Chromium project, which benefits both Edge and Chrome.

Microsoft has announced a new addition to the open-source Chromium platform that will benefit users of both [Edge](#) and [Chrome](#) web browsers. The company has pledged to improve the browsers' tab retention facilities, which come into play when a session either crashes or is closed out by accident. It is usually simple for users to restore lost tabs and continue where they left off, but the tab retention feature is sometimes temperamental, leading to loss of data. With a view to limiting the risk of this happening, Microsoft will make alterations to the tab retention architecture in Chromium, benefiting Edge and Chrome users alike.

Chrome and Edge upgrades

Since shifting from HTML-based Edge Legacy to the new Chromium-based Edge, Microsoft has been a regular contributor to the open-source Chromium project. Earlier this year, for example, the company deployed a fix for a bug that prevented Google Chrome from opening the correct web page via notifications in the Windows 10 Action Center. Microsoft also later contributed to a Chromium update that minimized the amount of battery and memory sapped by Chrome when in use.

Continue reading at www.techradar.com/news/chrome-and-edge-users-will-never-have-to-worry-about-losing-tabs-again.

* * * * * CLUB and REGIONAL NEWS * * * * *

Fast COVID-detecting Nasal Swab Card, Tested at URM, Gains FDA Approval—Ideal for Home, School Use

Sep. 23, 2020

A \$5 test that detects COVID-19 from a nasal swab within 15 minutes -- and has been evaluated in a clinical trial at the University of Rochester Medical Center (URMC) -- has received FDA [Emergency Use Authorization](#) for use by doctors, nurses, school nurses, pharmacists and other health care providers.

"This is really exciting," says Kian Merchant-Borna, M.P.H., M.B.A., faculty in the [Department of Emergency Medicine](#), who is the site principal investigator of the study and of the [Emergency Medicine Industry Sponsored Research Program](#). "Eventually, anyone in their home will be able to



Credit: Abbott Laboratories

use this, before you send your children off to school, or before you go to visit your grandparents. It's the same technology as a urine pregnancy test, and just as easy to use."

The [Abbott BinaxNOW COVID-19 Ag Card](#) Point of Care (POC) diagnostic test, which is the size of a credit card and detects the presence of COVID-19 antigens, also provides a free phone app for persons who receive a negative result. The app will display a temporary encrypted digital health pass via a QR code (similar to an airline boarding pass). Businesses, schools, and other organizations will be able to view and verify the information on a mobile device.

Read the full report at www.urmc.rochester.edu/news/story/quick-covid-detecting-nasal-swab-card-tested-at-urmc-is-approved-for-use.

RCSI

No, we haven't closed. Our usual meeting place has closed to outsiders, but **we are practicing 'social distancing' online**. We have used Zoom for several of our planning meetings. These meetings are held the first Tuesday of each month, at 7:00 pm and are open to any member. A link will be emailed to members, before our next planning meeting. **ANY CLUB MEMBER MAY ATTEND** and voice their opinions about club operations.

We have already completed several general online meetings, with a few hiccups while showing videos. The next online presentation will have been presented before this newsletter is sent out. So, we are working out the bugs.

APCUG

APCUG is pleased to announce that we will be having online workshops during the summer and fall.

Getting to Know Windows from An Insider's Point of View, finished on August 12.



We will use the same Zoom password encrypted meeting URL for each workshop. You will receive the URL after you have registered by [completing this form](#).

Judy will be the contact point for these workshops and will be available to assist you in connecting to the Zoom sessions. The registration list will be used to identify everyone in the Waiting Room before being admitted to the session.

The next series of workshops will be on Home Automation for Seniors:

The second Wednesday of the month at: 9 am PT, 10 am MT, 11 am CT, 12 pm ET

November 11, 2020 December 9, 2020

Week 3 - Lights, doorbells, locks, and cameras **Week 4** - Doing It Myself vs Having It Done

We will begin by explaining why home automation is important to seniors. What products are on the market, costs, security, and some real-world testimonials. In the second week, we will talk about how to go about planning your home automation project and best practices. In the third week, we will talk about applications using lights, doorbells, locks, and cameras. Lastly, we will talk about the benefits of making it a DIY project or having a professional install.

Our Usual Meeting Place
St John's Meadows at
Johnsarbor Drive, is on the left,
past Clinton Avenue, when going
West on Elmwood Avenue. The
opening in the white fence is
Johnsarbor Drive. At the 'T',
turn right. The meeting is in the
first building on the left –
Briarwood.
Our meeting place can change.
Please check our website before
each meeting. **www.rcsi.org**