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TC/PC Exists to
Facilitate and Encourage
the Cooperative Exchange of
PC Knowledge and
Information Across
All Levels of Experience

September 2025

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General Meeting Tuesday, September 9, 2025 7:00 PM

What's New in Edge and CoPilot?

Via Zoom Only

Microsoft has just released a new version of its Edge browser and its AI CoPilot. We'll take a look at some of the new features and test out the advanced Smart mode in CoPilot to see if they live up to the hype at this month's meeting.

Saturday SIG meetings are on vacation for the summer. They will return in September. Mark your calendars!

Note: All TC/PC Meetings and SIG Groups will be virtual until further notice. Visit tcpc.com for info.

Tech Topics with Jack Ungerleider via Zoom at 6pm before the General Meeting.



24-Hour Information • www.tcpc.comApplication form inside back cover

The Digital Viking

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Windows Mail App Officially Dead

By Joel Ewing Bits & Bytes, January 2025 http://bvcomputerclub.org President (at) bvcomputerclub.org

How many have used, or are still trying to use, the old free Email client app named "Mail" on Windows? As of December 31, 2024 the old "Mail" app is supposed to be dead -- no longer able to send or receive new Emails, although supposedly it is still possible to export data from the old application.

For several months, starting "Mail" on Windows 10 or 11 has been giving a warning that "Support for Windows Mail, Calendar, and People will end on December 31, 2024" and encouraging you to "Try the new Outlook". In the past it was possible to dismiss the warning and continue with Mail. Now you may be forced to try the new Outlook, in which case your data from Windows Mail and Calendar are carried over into the new Outlook app.

The new replacement free Email client "new Outlook" might be more accurately described as "Windows Outlook". This is a highly confusing name choice because this app is currently different and distinct from the Outlook component of the desktop Microsoft Office or the Outlook component of the web-based Microsoft Office, now called Microsoft 365.

On a system which has a desktop version of MS Office installed, the MS Office Outlook is listed as "Outlook (classic)" and the new free Email client is listed as "Outlook (new)". The new Outlook navigation bar has icons for Word, Excel, and PowerPoint; but these take you to the web-based versions. If you have a version of desktop MS Office installed, presumably you would want to use the desktop versions, not the web-based ones. With MS Office 2024, where Outlook becomes a significant-cost add-on, not part of the base, you might have to deal with the confusion of using both MS Office 2024 and the new Outlook, which attempts to steer you to the web-based counterparts.

Some find this new Outlook an improvement over Mail, but it has also been criticized for having flaws and missing features. Some have described it as being similar to the web-based Microsoft 365 Outlook minus some important features, but being able to access remote email services outside of Microsoft.

Supposedly the long-term goal is to enhance the new Windows Outlook app over a period of several years until it can eventually replace the version of Outlook in Microsoft 365. In the meantime it sounds like those that elect to go with the "new Outlook" will have to live with the inconvenience of change and serve as testers for several years as the product matures. One would hope that this app will continue to be free as part of Windows after it replaces the Outlook in Microsoft 365, but I haven't seen any official statements about this.

If you find the "new Outlook" unsatisfactory, this might be the time to take a look at some of the other free Email clients that are available, like Thunderbird.



The Birth of Quantum Viability?

By: David Kretchmar, Hardware Technician Sun City Summerlin Computer Club https://www.scscc.club dkretch (at) gmail.com

I discussed the potential and problems relating to a new type of computer, the quantum computer In the October 2024 *Gigabyte Gazette* Kretchmar's Korner, https://www.scscc.club/Gigabyte/gg_2024-10Oct.pdf. Most data scientists agree the quantum computer has the potential to revolutionize many aspects of our world; quantum computing has the promise of being the most important technological advancement of the 21st century. But that will take many years, possibly even a decade or longer, or our world might end before quantum computing becomes a reality.

Most of us do not have the education or intelligence to even begin to understand how quantum computers function, but neither do any but a handful of our fellow humans. What we can do is to "Follow the Money" and see the money flows into entities that have the potential to ride the wave of the coming quantum revolution. What can this tell us about the brave new world of quantum computing?

Google shakes up the world

On December 9, 2024, Googles Hartmut Neven, Founder and Lead, Google Quantum AI,



announced a breakthrough in quantum computing by their latest quantum chip, Willow. Willow performed a standard benchmark computation in under five minutes that would have been impossible for today's fastest supercomputers. Neven stated that, "Willow moves us significantly along that path towards commercially relevant applications". Google has been developing the Willow chip over the past 10 years – this was no overnight success.

While Neven's claim has been met with a mix of excitement and skepticism in the scientific community, it underscores the revolutionary potential of quantum computing technology. Over the next two days Google stock jumped by \$20, over 10%, to an all-time high.

Google is a \$2.3 billion dollar corporation earning profits of 100 billion dollars a year. There is no way even a significant advancement in quantum computing is going to add anything to Google's bottom line, probably for at least the next decade. Quantum computing is currently nothing but a cash drain on Google and anyone else involved in quantum research, yet the market rewarded Google's announcement. Investors are not required to act rationally, but when we see that kind of activity in one of the most significant companies on earth, there must be something going on.

IBM is a leading player in the development of quantum computers, and this seems to play into IBM's concept of huge, centralized computers. Yet IBM's stock price has fallen a few percentage points since Google's announcement. This indicates that investors either think IBM is on the wrong track,

or maybe just that IBM, even with decent technology, lacks the capacity to be a successful quantum player.

Pure quantum plays

Some much purer and more speculative quantum stock plays took even bigger jumps than Google.



lonQ, Inc. rose over 300% in December 2024. Rigetti Computing, Inc. was happily bumping along at less than \$1 per share as late as October 2024. As I write this article the money flow into Rigetti mainly during December 2024 has pushed the share price to over \$16. Rigetti trading volume has increased from a few million shares a day to over 200 million shares per day – out of the 280 million shares it has outstanding! Each of these quantum computing companies had their own positive announcements concerning corporate quantum activities and progress.

The universe of pure quantum stocks is tiny. Obviously just a bit of news can result in dramatic price swings. I mention lonQ and Rigetti specifically because these seem to be the quantum stocks followed most closely by analysts. I was unable to identify a mutual fund or ETF that could serve as a proxy for pure quantum plays. Defiance Quantum ETF (QTUM) is a well-known fund that sounds like it would be a good candidate, but no more than 15% of its assets are in pure quantum plays. Its two biggest holdings are lonQ and Rigetti.

Public interest in quantum computers

CBS's 60 Minutes television show featured a piece on the state of quantum computing that was



rebroadcast on December 24, 2024. The original episode aired on July 28, 2024, and that episode was an update of a December 2023 piece. This was an unusually technical topic for mainstream TV audiences, but it introduced many quantum concepts and was interesting even for non geeky viewers. In that segment 60 Minutes visited Google's quantum lab in California and explored one of the first quantum computers working in the real world at Cleveland Clinic. Stories such as this have helped stimulate the general

public's interest in quantum computers and possibly precipitated some of the cash that is now being poured into quantum stocks.

Artificial Intelligence (AI) and quantum computers

The value that real world quantum supercomputers will provide the world will only be realized by leveraging the power of AI to bridge the gap between quantum and conventional computers. The power of AI can be increased exponentially when AI is combined with the power of quantum. This is becoming clear to those working in quantum computing, and that realization is forcing greater

corroboration between AI and quantum experts.

For the past 70 years AI has been around mostly as a concept. Only in the past several years has AI started to live up to its hype and promise and now is appearing increasingly in our world.

The manifestation of AI in the real world was preceded and accompanied by massive flows of money into AI companies and corporate entities (the Magnificent Seven) that have data gathering capabilities. This has enabled them to accumulate vast amounts of data, the new gold. Nvidia, the biggest beneficiary of the world's adoption of AI technology, is often mentioned as a company with the potential to connect quantum computing and AI.

Conclusions

Could the flow of money into quantum stocks be an indication that the world is on the verge of an even more sophisticated - and possibly more life-changing technology that will have its century in the sun?

Huge entities like Google have the capacity to support internal quantum development, but others will feel the need to acquire this capacity by buying smaller pure quantum plays. This might have contributed to the runup in the stock price of many of the pure quantum companies.

Will the success of companies like those comprising the "Magnificent 7" be echoed in the stocks in corporations with significant quantum computing exposure. The world's most successful corporations, like the "Magnificent 7", will require quantum computing technology to remain magnificent. We might be witnessing the birth of the quantum revolution at the end of 2024.

Or is the nascent bubble in quantum stocks a tiny blip in the long-term story of the market? Could the runup in these stocks be telling us that quantum is the next bubble, successor to investors frenzied buying of AI stocks or cryptocurrencies? Is quantum computing the "Next Big Thing?"

I believe the quantum revolution is for real, but we can expect bursts of optimism and deluges of disappointment over the next few years.

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RustDesk Remote Desktop For Remote Help

By Joel Ewing, President Bella Vista Computer Club Bits & Bytes, July 2025 https://bvcomputerclub.org president (at) bvcomputerclub.org

In the past we have used various tools like TeamViewer and AnyDesk to allow our Help personnel to do remote help for our members over the Internet. Both of these products now have licensing plans that make them unattractive for a non-profit organization of modest financial means. We use an application like that only several times a month, but over the course of a year may connect to many different computers of our members. Our pattern of non-commercial use of these products has been repeatedly misinterpreted as a for-profit business usage, causing various issues when using the only licensing plans our budget can afford.

There is finally an open source remote remote desktop application **RustDesk**, that has matured to the point that we are exploring using it as our primary method for remote desktop help.

You don't want to install any of these remote desktop tools on your computer using downloads or instructions from an un-trusted party.

A primary consideration for all remote desktop applications is security. All of these tools can be intentionally or accidentally mis-configured in ways that could allow someone to potentially gain control of your computer from the Internet without your explicit knowledge and consent and do bad things to your system and data.

There are documented scams where these tools have been abused. Someone unknown person convinces a willing victim they have a computer problem that can be easily resolved if they install one of these tools, and once you grant them access to your desktop they can do anything they want. The object could be to download and install malware, other programs that allow them to use your hardware, search for sensitive data, or possibly just reconfigure the remote desktop program so they can gain access and do damage at a later time without your knowledge. Somehow they plan to make money at your expense.

We have looked closely at RustDesk and are convinced it can be configured for safe use, provided that BVCC runs its own RustDesk Server, through which the remote desktop connections are established. It turns out we happen to have a Training Center with business Internet service and spare computers lying around, so the cost of running our own open-source RustDesk Server on a free Linux Operating System is just the time to install and configure the server and to enable our router to allow server access from the Internet.

All computers connected to the Internet these days are connected through a WiFi or wired Ethernet cable connection to a router of some kind. By default a router hides the computers behind the router from inbound connections from the Internet, so there is no way my computer behind my router can directly initiate a connection with your computer behind your router.

The way all these remote desktop client tools work is that both computers involved in the remote desktop setup process must first have their copy of the desktop client started and running. Each client connects over the Internet to the same remote desktop server, and identifies itself by telling the server the client's unique ID value (which is established when the client is installed). The party that wants to control the desktop must be told the ID of the target computer (by direct contact with the other party) and can request his desktop client to establish a connection to that ID. The server relays that request to the remote machine, and if the other party approves, a connection is established using the server to relay data between the two computers. At that point the controlling computer sees a window with a copy of the desktop of the other machine and his keyboard and mouse actions on his copy of the desktop are mirrored on the remote machine. Once the two computers are communicating, there are some "tricks" that may work to allow the two computers to bypass the relay server and talk directly, but if that fails they will continue to use the server to relay data between the two machines.

TeamViewer and AnyDesk each have a vendor-supplied server to which all their clients connect. RustDesk also has a public server, but it is only intended for testing and does not support encrypting data, which would make it a security exposure for general usage.

The recommended usage for RustDesk is for an organization to set up their own RustDesk Server, protect it with an encryption key, and supply all those entitled to use that server with the server Internet address and the corresponding key to access the server. We have a server in the BVCC Training Center that is being tested. The plan is to set up an installation process for the RustDesk Client that will only be available for BVCC members that will configure the RustDesk client with the BVCC server address and corresponding access key.

With a unique BVCC RustDesk server, the exposure to abuse is even less than with AnyDesk or TeamViewer. Even if someone learns your RustDesk Client unique ID, they can't request a connection unless they first connect to the BVCC RustDesk server -- and they can't connect to that server without a copy of the fairly long server access key. Provided we don't mess up and publish the access key, the number of people that could attempt to gain access is limited to the small subset of Internet users that are or have been associated with BVCC.

Even with access to the BVCC RustDesk Server and your RustDesk Client ID, someone can't request to connect unless you have manually started your RustDesk Client, and even then the connection must either be approved at the target machine or the requester must know a password (that by default is unique for each new startup of the client). If you don't auto-start your RustDesk Client, or leave it active when not in use AND tell someone your RustDesk password, you should have no exposure to unauthorized access using RustDesk

Assuming there are no problems and the RustDesk Client gets rolled out to our members, those astute users may realize that this arrangement means the same RustDesk Client would allow free remote desktop support between two of their own computers. But, keep in mind our RustDesk Server is running on old hardware and primarily for use by the Help Clinic personnel and remote help. We have no idea how many concurrent connections it can handle. We also don't currently have any process in place to monitor the RustDesk server, so it could go down and we wouldn't know it needed fixing until the Help Clinic personnel complained they couldn't access it.



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Tips for fall photography

by Lynda Buske Ottawa PC Users' Group, Canada (lynda.buske (at) opcug.ca)

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Autumn is by far my favourite time of the year for photography. There is just so much to capture! Last year was not atypical and I shot on Oct 17, Oct 18, Oct 19, Oct 20, Oct 21, Oct 24 ...you get the idea! I just keep heading out and usually something photo-worthy appears.

One of the things I most look forward to is the presence of early morning mist caused by the air temperature dropping lower than the water temperature. It doesn't last long if it's a sunny day but well worth the early rise! And actually, it's not all that early during fall months compared to mid-





While I am not a bird photographer, there are many species that migrate through Ottawa in the fall. Even I can shoot geese as you don't need a super long lens or a fast exposure. They are big and flap relatively slowly. They are very verbal just before the sun rises and take off when it appears so you get lots of lead time to set up a birds-in-flight shot. I can often photograph multiple flocks in the same image as they are so numerous.

Of course, in this area of the world, the star of the show is the fall foliage! To help plan day excursions or especially longer stays, use the links below to determine when the colours are peaking in the various regions of Ontario and Quebec.

https://www.ontarioparks.ca/fallcolour

https://www.bonjourquebec.com/en-ca/explore/seasons/fall

There is lots of flora to photograph in the fall, such as asters and fungi. I especially love when the milkweed plants open up their seed pods to let them drift away. Morning frosts can make even dried-up leaves or blossoms look enchanting!





November tends to be underutilized by many photographers. While it doesn't have the stunning colours of October, there is still lots to photograph and some advantages. You have a greater chance of frost, late dawns and no leaves on the trees. The latter comes in handy when shooting long exposures at waterfalls or during blue hour. For example, during a 4 second exposure, leaves can often move but branches are not likely to budge unless the wind is very strong. That means everything in your photo will be in focus regardless of the exposure time. November trees can look lovely in a sunset image since the colours are not blocked by leaves. The branches just become nice sharp silhouetted shapes.



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Meetings start at 7:00 PM (9:00 AM on Saturday) unless otherwise noted. *Virtual Meetings during Covid pandemic.

October

September

Sun Mon **Tues** WED THU Fri SAT 7pm General Mtg Linux on Sat-What's New in urday SIG Edge & CoPilot? 9:00-Noon 6pm Tech Topics MS Office SIG (includes Access) 9:00-Noon Linux on Saturday SIG 9:00-Noon 7pm General Mtg TBD MS Office SIG (includes Access) 9:00-Noon 6pm Tech Topics

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September 9, 2025

7:00 pm General Meeting

What's New in Edge and CoPilot?

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