> PC Update June 2022

Editorial

Hugh Macdonald

I'm back and so is PC Update after a one month unscheduled hiatus.

I do apologise about that. I took back the reins from David Stonier-Gibson, thinking I'd be right to produce the May issue, but had some complications with my recovery. By the time this happened it was too late for him to take over again, and by the time I recovered it was altogether too late for the May issue. I'll try and make it up to you with some extra content in each issue for the rest of the year.

Thank you to all the members that wrote in wishing me well. That really did mean a lot and was very good of you. I am feeling much better now and should hopefully only keep getting better from here on in.

You'll find some items of interest in this months issue. Cloud storage, how to find stuff on your PC, why phones aren't waterproof yet and how AI is replacing coders are some of the topics under discussion this month. There's also most of the usual segments you've come to expect.

So enjoy, and see you next month!

Monthly Meeting July 2022

David Stonier-Gibson

The July 2022 monthly meeting will be on Wednesday 6th July via zoom only: Click here to join meeting on Zoom a little before 7pm. Our MC, Peter bacon, will start at 7pm sharp.

Guest segment: The Nordic Edge

Our guest for July is Dr Andrew Scott, Professor of Politics and Policy at Deakin University. Andrew has a particular interest in the comparison of government policies between Australia and the Nordic countries, and is Inaugural Convenor of The Nordic Policy Centre at the Australia Institute.

Andrew and I will have a conversation around all that. As some members will know I lived in Norway from ages 9 to 19. What's more, I will be in Scandinavia in a few weeks time, so this should be a very interesting conversation.

... And then ...

We'll have an interval. Hugh Macdonald is back onboard, so hopefully he can pipe us a bit of music while we stretch our legs and replenish the wine glass or cuppa.

Then we/you will hear from:

Your's truly with a bit of a Prez's report

An update on iHelp activities

To wind up we'll have as long as you like to chat over Zoom. Please feel free to hang around; the socialising is good medicine in these stressful times.

The meeting will recorded and subsequently published publicly.

See you online on Wednesday! 7pm. Here

So this is how it feels when the robots come for your job: what GitHub's Copilot 'AI assistant' means for coders

Ben Swift, Australian National University

I love writing code to make things: apps, websites, charts, even <u>music</u>. It's a skill I've worked hard at for more than 20 years.

So I must confess <u>last week's news</u> about the release of a new "AI assistant" coding helper called <u>GitHub</u> <u>Copilot</u> gave me complicated feelings.

Copilot, which spits out code to order based on "plain English" descriptions, is a remarkable tool. But is it about to put coders like me out of a job?

Trained on billions of lines of human code

<u>GitHub</u> (now <u>owned by Microsoft</u>) is a collaboration platform and social network for coders. You can think of it as something like a cross between Dropbox and Instagram, used by everyone from individual hobbyists through to highly paid software engineers at big tech companies.

Over the past decade or so, GitHub's users have uploaded tens of billions of lines of code for more than 200 million apps. That's a lot of if s and for s and

print("hello world") statements.

The Copilot AI works like many other machine learning tools: it was "trained" by scanning through and looking for patterns in those tens of billions of lines of code written and uploaded by members of GitHub's coder community.



Copilot produces code from instructions in plain English (the pale blue text). <u>GitHub</u>

The training can take many months, hundreds of millions of dollars in computing equipment, and enough electricity to run a house for a decade. Once it's done, though, human coders can then write a description (in plain English) of what they want their code to do, and the Copilot AI helper will write the code for them.

Based on the <u>Codex "language model"</u>, Copilot is the next step in a long line of "intelligent autocompletion" tools. However, these have been far more limited in the past. Copilot is a significant improvement.

A startlingly effective assistant

I was given early "preview" access to Copilot about a year ago, and I've been using it on and off. It takes some practice to learn exactly how to frame your requests in English so the Copilot AI gives the most useful code output, but it can be startlingly effective.

However, we're still a *long* way from "Hey Siri, make me a million dollar iPhone app". It's still necessary to use my software design skills to figure out what the different bits of code should do in my app. To understand the level Copilot is working at, imagine writing an essay. You can't just throw the essay question at it and expect it to produce a useful, well-argued piece. But if you figure out the argument and maybe write the topic sentence for each paragraph, it will often do a pretty good job at filling in the rest of each paragraph automatically.

Depending on the type of coding I'm doing, this can sometimes be a huge time- and brainpower-saver.

Biases and bugs

There are some open questions with these sorts of AI coding helper tools. I'm a bit worried they'll introduce, and reinforce, winner-takes-all dynamics: very few companies have the data (in this case, the billions of lines of code) to build tools like this, so creating a competitor to Copilot will be challenging.

And will Copilot itself be able to suggest new and better ways to write code and build software? We have seen AI systems <u>innovate</u> before. On the other hand, Copilot may be limited to doing things the way we've always done them, as AI systems <u>trained on past data</u> are prone to do.

My experiences with Copilot have also made me very aware my expertise is still needed, to check the "suggested" code is actually what I'm looking for.

Sometimes it's trivial to see that Copilot has misunderstood my input. Those are the easy cases, and the tool makes it easy to ask for a different suggestion.

The trickier cases are where the code looks right, but it may contain a subtle bug. The bug might be because this AI code generation stuff is *hard*, or it might be because the billions of lines of human-written code that Copilot was trained on contained bugs of their own.

Another concern is <u>potential issues</u> about licensing and ownership of the code Copilot was trained on. GitHub has said it is <u>trying to address these issues</u>, but we will have to wait and see how it turns out.

More output from the same input

At times, using Copilot has made me feel a little wistful. The skill I often think makes me at least a *little bit* special (my ability to write code and make things with computers) may be in the process of being "automated away", like many other jobs have been at different times in human history. However, I'm not selling my laptop and running off to live a simple

life in the bush just yet. The human coder is still a crucial part of the system, but as curator rather than creator.

Of course, you may be thinking "that's what a coder *would* say" ... and you may be right. Al tools like Copilot, OpenAl's <u>text generator GPT-3</u>, and Google's <u>Imagen text-to-image engine</u>, have seen huge improvements in the past few years. Many in white-collar "creative industries" which deal in text and images are starting to wrestle with their fears of being (at least partially) automated away. Copilot shows some of us in the tech industry are in the same boat.

Still, I'm (cautiously) excited. Copilot is a force multiplier in the most optimistic tool-building tradition: it provides more leverage, to increase the useful output for the same amount of input.

These new tools and the new leverage they provide are embedded in wider systems of people, technology and environmental actors, and I'm really fascinated to see how these systems reconfigure themselves in response.

In the meantime, it might help save my brain juice for the hard parts of my coding work, which can only be a good thing.

<u>Ben Swift</u>, Educational Experiences team lead (Senior Lecturer), ANU School of Cybernetics, <u>Australian</u> <u>National University</u>

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It's 2022. Why do we still not have waterproof phones

Ritesh Chugh, CQUniversity Australia

While manufacturers have successfully increased the water-repelling nature of smartphones, they are still far from "waterproof". A water-resistant product can usually resist water penetration to some extent, but a waterproof product is (meant to be) totally impervious to water.

Last week, Samsung Australia was <u>fined A\$14 million</u> by the Australian Federal Court over false representations in ads of the water resistance of its Galaxy phones. The tech giant admitted that submerging Galaxy phones in pool or sea water could corrode the charging ports and stop the phones from working, if charged while still wet.

Similarly, in 2020, Apple was fined <u>€10 million</u> (about A\$15.3 million) in Italy for misleading claims about the water resistance of iPhones.

It's very common for phones to become damaged as a result of being dropped in water. In a 2018 survey in the US, <u>39%</u> of respondents said they'd dropped their phones in water. <u>Other surveys</u> have had similar results.

So why is it in 2022 – a time where technological marvels surround us – we still don't have waterproof phones?

Waterproof vs water-resistant

There's a <u>rating system</u> used to measure devices' resistance against solids (such as dust) and liquids (namely water). It's called the Ingress Protection (IP) rating.

An IP rating will have two numbers. In a rating of IP68, the 6 refers to protection against solids on a scale of 0 (no protection) to 6 (high protection), and 8 refers to protection against water on a scale of 0 (no protection) to 9 (high protection).

Ingress protection (IP) ratings guide

IP ratings are represented by combining the first and second digits of the below columns



The International Electrotechnical Commission is the body behind the IP ratings guide. International Electrotechnical Commission

Interestingly, the benchmark for the water-resistance rating varies between manufacturers. For example, Samsung's IP68-certified phones are <u>water-resistant</u> to a maximum depth of 1.5m in freshwater for up to 30 minutes, and the company cautions against beach or pool use. Some of <u>Apple's iPhones</u> with an IP68 rating can be used at a maximum depth of 6m for up to 30 minutes.

Yet both <u>Samsung</u> and <u>Apple</u> are unlikely to consider repairing your water-damaged phone under their warranties.

Moreover, IP rating testing is done under <u>controlled</u> laboratory conditions. In real-life scenarios such as boating, swimming or snorkelling, factors including speed, movement, water pressure and alkalinity all vary. So, gauging a phone's level of water resistance becomes complicated.

How are phones made water-resistant?

Making a phone water-resistant requires several components and techniques. Typically, the first <u>point of</u> <u>protection</u> is to form a physical barrier around all ingress (entry) points where dust or water could enter. These include the buttons and switches, speakers and microphone outlets, the camera, flash, screen, phone enclosure, USB port and SIM card tray. These points are <u>covered and sealed</u> using glue, adhesive strips and tapes, silicone seals, rubber rings, gaskets, plastic and metal meshes and water-resistant membranes. After this, a layer of ultra-thin polymer <u>nanocoating</u> is applied to the phone's circuit board to help repel water. Nevertheless, a phone's water resistance will still <u>decrease</u> with time as components age and deteriorate. Apple <u>admits</u> water- and dust-resistance are not permanent features of its phones. Cameras are not entirely impervious to water, but some can tolerate submersion a lot better than smartphones. Often that's because they're relatively simpler devices.

A smartphone has much more functionality, which means internal components are more sensitive, fragile, and must be built into a smaller casing. All of these factors make it doubly difficult to afford phones a similar level of water resistance.

Adding water resistance to phones also <u>increases their price</u> for consumers (by 20% to 30%, according to Xiaomi's co-founder). This is a major consideration for manufacturers – especially since even a small crack can render any waterproofing void.

Keeping devices dry

Apart from nanocoating on the internal circuit boards, applying <u>water-repellent coating</u> to the exterior of a phone could boost protection. <u>Some companies</u> are working on this technology for manufacturers. Future phones <u>might also have</u> circuitry that's fabricated directly onto (waterproof) silicone material using laser writing techniques, and further coated with water-repellant technologies.

For now, however, there's no such thing as a *waterproof* phone. If your phone does find itself at the bottom of a pool or toilet and isn't turning on, make sure you take the best steps to ensure it dries out properly (and isn't further damaged).

You can also buy a waterproof case or dry pouch if you want to completely waterproof your phone for water activities.

<u>Ritesh Chugh</u>, Associate Professor – Information and Communications Technology, <u>CQUniversity Australia</u> This article is republished from <u>The Conversation</u> under a Creative Commons license. Read the <u>original</u> <u>article</u>.

Did you bring it with you - the cloud is always with you

There is just so much room on your phone for pictures, videos, music, and such. So, what if someone asks about that video of your grandchild or pet or that list of current movies that you keep up to date? They are probably right there on your computer... at home. And you probably think you can't bring your computer everyplace. Well, you're right; you probably can't or at least don't want to bring your computer with you every place, even if it is a lightweight laptop. You especially don't want to bring it if your computer is a desktop. So, here's a solution to this, not really too serious, problem. Keep those items in the cloud, your own personal cloud. You always have your phone with you, or at least that's what the statistics and casual observance leads us to believe. (85% of Americans have a smartphone [96% for people between 20 and 30], and from casual observance, 99% of those who have smartphones carry their phone all the time.) Smartphones don't have hard drives, and their storage is limited, so the cloud is essentially your phone's hard drive.



The cloud we're speaking of is the personal storage services available to all of us with a connection to the internet. Many cloud storage services are available, such as Microsoft's Onedrive, Google's Google Drive and Google Photos, Apple's iCloud, Amazon's Drive (formerly known as Cloud Drive), Dropbox, Box, SugarSync, Evernote, SpiderOak, and iDrive. Each of these provides a certain amount of memory storage for free. For example, OneDrive gives you 5GB, Google Drive gives you 15GB+, iCloud gives you 5GB, Amazon Drive gives you 5GB, Dropbox gives you 2GB. (The amount of free storage is subject to change, so check with the specific provider before you start sending all of your pictures to your new cloud storage account.) If you need more storage, in addition to the free amount, the cost for additional storage is pretty reasonable. For example, OneDrive will give you 50GB for \$2/month, Google Drive will provide you with 100GB for \$2/mo, Amazon will give you 100 GB for \$12/year or 1TB for \$60/year. Of course, prices for bulk amounts of storage vary from provider to provider. There are several different plans even from one particular provider, so check out the plans and prices before you start to upload your total picture and video libraries.



Today Google Photos limit is 15MB, but up until this past June 1^{st,} it had a little additional twist. Google Photos would store as many pictures and videos as you were willing to upload. There was a limitation on the quality of the pictures and the videos, but within those limits, they would store as many as you uploaded to Google Photos. (The picture limit was a photo of 16 megapixels, and the video limit was a resolution of 1080p.) Are you wondering why Google was so magnanimous? I know I was. When you use any of these services (and most Apps, for that matter), you agree to their policy agreement. The language in the agreement grants the company broad rights to reproduce, use, and create "derivative works" from the contents stored on Google Photos. (A "derivative work" is based on one or more preexisting works, which in this context implies pictures or videos, so it sounds like your picture or video could become part of a future picture or video creation. Some of the things they offer to users are albums of pictures of particular people or events of your choice. These albums are derivative works.) While the agreement confirms that the user retains the intellectual property rights, privacy advocates raise concerns that the license grants Google the right to use the information and data to customize the advertising and other services that Google provides. Basically, Google can use this information to develop targeted advertisements. They want to get to know you and your habits, and what better way than through your pictures and videos. After all, with the convenience and quality of the smartphone cameras, we could be creating a picture diary of our lives stored in Google Photos.

The fact that these popular cloud storage services are free and easy to use will probably make them useful for most people. But if security is a concern for you, you might consider the less known Tresorit storage service. The Tresorit storage service claims that "Many of the popular cloud-based services such as Dropbox, Box or OneDrive usually employ server-side encryption." In essence, this means that any data you store on their servers is encrypted using a master key to which the server administrators have access, but you do not. With this type of encryption, you have to trust that your cloud storage provider will not be subjected to a court order to hand over data. (If you have that kind of concern, you may need to re-think the whole reason you are using the cloud.) More probably, the concern would be that it might be hacked by an outside party or disgruntled employee. Tresorit says that it uses a different approach in that its encryption technology secures your files so they cannot be decrypted in the cloud. This makes them much safer because you control the encryption key. No one else can access your data, not even the company's administrators. Only you can un-encrypt your files. So if security is your main concern, you might want to look at the Tresorit storage service. But for most of us, without an unusual need for security, the popular storage services will probably do just fine.

So, by using one or many of these storage services, you can now have all of your information available to you anywhere, anytime. You'll always be able to show those latest pictures of your grandchildren or the one of two cats playing with a cute little dog (as long as you have a connection to the cloud).

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Locate files and folders instantly

Jasmine Blue D'Katz

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I have been watching Tech for Seniors for several months, and like attending our monthly club meeting, I learn about different programs available to make using my computer easier. Recently, during his Evernote presentation, one of the TFS hosts was asked a question about finding files and folders on his computer. He suggested and showed a program called Everything.

Everything is a piece of Windows software that bypasses Windows search, and in the blink of an eye, it gives you a list of all files and folders on your local storage device. If that is what you want, then basically that is what it does, and it is efficient, effective, stable, and uses low system resources.

When I run Everything, it creates an index of all the files and folders on my machine. Now I am talking about indexing a 4 TB hard drive that may have millions of files, but this program is wicked fast. Furthermore, the searching is done in real-time.

The screen display can be shown with several different files: Name, Path, Size, Last Write Time, Creation Time, Last Access Time, and Attributes. Sorting by any field will take a little longer than the search.

You no longer must struggle with Windows search again to find files on your disorganized system so you might want to give Everything a try.

The best part of Everything is it is a **FREE** download and works with Windows 10, 8, 7, and XP. Everything is a simple app and one of the most useful ones I use on my computer. <u>Everything – Download</u> (softonic.com)

Interesting Internet Finds

Steve Costello

While going through more than 300 RSS feeds, I often run across things that might be interesting to other user group members. The following are some items I found during August 2021.

Internet Problems? Here's How To Tell If It's Your ISP's Fault

https://www.howtogeek.com/740382/internet-problems-heres-how-to-tell-if-its-your-isps-fault/ It is a matter of when not if you will have internet problems. Do you know how to tell if it is your ISP's fault or your fault? Check out this article to find out how to know whether it is you or them.

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I have been using Foxit PDF Reader (free) for years. It is lightweight and can notate PDF files. My main use today is to download lists of books by authors I read and notate as to where they are stored and if read or not. If you would like to learn more about Foxit PDF Reader and get the online installer for Windows or macOS.

How To Improve Your TV's Speech And Get Rid Of Muffled Dialogue https://www.cnet.com/tech/home-entertainment/how-to-improve-your-tvs-speech-and-get-rid-ofmuffled-dialog/

As we age, it seems dialog gets increasingly muffled from TV. For me, things improved when I got a soundbar. However, I don't have a soundbar on the spare TV. Things improve after following steps in this post.

Your Earbuds Are Nasty—Here's How To Clean Them https://www.mentalfloss.com/article/649228/how-to-clean-earbuds

Do you know how to clean your earbuds? If not, check out this post to learn how. If you have never thought about cleaning them before, you might be surprised that they last longer before they need replacing if cleaned regularly.

How To Print An Article Without Ads In All Major Browsers https://www.digitalcitizen.life/print-page-website-without-ads/

You don't need special software to print articles from your web browser without ads, most of the time. Check out this article to find out how.

Tired Of Paying For TV? Try These Free TV Options

https://askbobrankin.com/tired_of_paying_for_tv_try_these_free_tv_options.html

Most of the *free* TV options listed in this post will have ads. Some of the options will allow you to watch without ads for free. (I use several of the options listed and find the ads are not as intrusive as cable or regular TV.)

Effective Ways To Stop And Bypass Bandwidth Throttling With VPN

https://trendblog.net/effective-ways-to-stop-and-bypass-bandwidth-throttling-with-vpn/

Are you having problems with your ISP throttling bandwidth? If that is the case, read this article to learn how to bypass that throttling.

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East SIG Report April 2022

Neil Muller

Host Paul Woolard opened the April meeting, again from home via Zoom. The first presentation of the night was by **George Skarbek** presenting his usual Q&A segment. This month there were only two questions, the first resulted in an interesting array of responses from our Zoom audience. Q. Has anyone heard of problems with Amazon Prime? I've had 3 strange items from Amazon Prime show up on my credit card. As I've had no previously dealings with Amazon Prime, I've had to cancel the credit card. Fortunately, I've been able to claim back the unwanted costs from my bank.



Figure 1 – Amazon Prime

A. [George] As you've had no previously dealings with Amazon Prime, I don't know how they would have got your credit card. There have been a lot of scams lately involving Amazon Prime. My wife does not have an Amazon Prime account and she's regularly receiving SMS messages saying that "your Amazon Prime account has been debited with \$83.55 (or a similar amount). If you don't want this to continue automatically, please click here and". If she was to click as suggested, she'd be in real trouble. Each SMS message has a different contact number, so there's no point in blocking the number. You also need to be careful when receiving emails asking similar type questions.

[Reply] I definitely didn't click here as the SMS suggested. I had 2 items debited for \$6.99 then a third soon after the first for \$600.99. This has caused me no end of strife, sorting the bank out, cancelling the credit card and getting a new one. I'm still having problems as the original credit card automatically debits payment for a number of other services.

[Audience] Have you contacted Amazon as that \$600.99 charged to your account was obviously used by someone to buy something, which probably had to be delivered. Contact the Police with that information

[Reply] I have the name, phone number and full address where the item was sent. I gave those details to my bank and they have duly credited the cost back to account.

[George] I changed many of the regular payments such as Gas, Electricity, Water etc. that where previously linked to my credit card. I did this a few years back when my wife fell victim to such a scam. I now have these regular payments as a direct debit to my bank account. Now if I have to change my credit card, that removes all the problems of contacting each authority with the new credit card details.

[Further audience responses to this issue]

• I'd be more wary of using a debit card than a credit card. With a credit card you have some protection as the banks are more likely to chase up and refund payments. If you use a debit card, it's your money and the bank may be less interested in chasing up dodgy transactions.

- Bendigo Bank were very good when I had a similar problem with unknown payment from a debit card. They chased up a fraudulent debit and refunded my account. I believe it depends on the bank you're with.
- If your bank account number gets hacked from one of the places George mentioned, there's a likelihood that the scammers can extract money from your bank account. I believe the credit card is the safest option.
- I have two accounts with the bank. On the debit card account, I only keep enough to cover bills, and all my other cash goes in the other account.
- I use PayPal as it reduces the risks outlined by others in the audience. PayPal stops people getting into my account, gives protection from when buying things online.

Q. I keep getting emails from Microsoft stating they've received a request for a single use code. The emails state that if you didn't request the code, you can ignore it. There's no evidence that anyone is getting into my account as far as I can tell. However, I keep getting these emails, so should I be chasing it up?

A. I can't fully answer your question. If Microsoft say you can ignore it, but the emails keep coming, I'd create a rule in your email client, that emails from Microsoft with that subject are to be deleted. After that you won't see the emails anymore. Most email clients have a junk or spam filter and that will get rid you of the problem emails. If it was something real, Microsoft would only send emails once or twice.

[Audience member response] I assume you have changed your password on that account. (The reply was yes.) It's possible that someone has got hold of your password and the double protection is the reason you're getting the email messages from Microsoft. It seems to me someone is trying to get into that account and that's why you're getting the message coming through.

Following Q&A, **Trevor Hudson** presented a video he'd prepared on how to cast a laptop to a smart TV. The video commences with Trevor outlining the two methods of connecting a laptop to a wireless display. Once the wireless connection is set, a list appears where the TV can be selected from a list of wireless devices. When the laptop connects to the TV, you select the projection mode. That then enables you to view the video on both screens simultaneously.

Trevor's video is available on YouTube by searching the title "Cast Laptop Screen



to Smart TV" or use the link <u>https://tinyurl.com/v84c43b6</u>.

Figure 2 – YouTube Video, Cast Laptop to Smart TV

The following presentation was by East SIG convener Paul **Woolard**. Paul played two YouTube videos by the same presenter (CyberCPU Tech), on Windows 11. The first video is titled "What Sucks in Windows 11" and can be viewed at https://tinyurl.com/m9jynneu.



Figure 3 – YouTube Video, "What Sucks in Windows 11".

The first video outlines what the presenter "hates" about the current version of Windows 11. He does acknowledge that in time, many of the features he hates are likely to be rectified. I recommend MelbPC members watch the video, as the arguments for each of his criticisms of Windows 11 are demonstrated on screen. Below I've listed a summary of items from the video.

- Hardware requirements UEFI BIOS, TPM 2 & the arbitrary cut off, for required CPUs.
- Complications setting your non-Microsoft default browser
- The requirement that Home versions of Windows 11 must have a Microsoft account.
- The lack of Task bar customisation.
- Poor implementation (i.e. simplification) of the Start Menu.
- Making things harder to do the same thing than in previous Windows versions, by requiring more clicks.
- Windows settings is not as intuitive as Control Panel. Not all functions have been moved to the Settings menu. Control Panel is still necessary but inconvenient to find.
- Unwanted Bloatware in Windows 11 and the Start menu.
- Plagued with bugs since release

The second video Paul played was again by CyberCPU Tech titled "What is Great in Windows 11" at (<u>https://tinyurl.com/2p845aan</u>). This video gives the opposing view of Windows 11.

Below is a summary of the opposing view, which outlines the features the presenter thinks are "pretty amazing" about Windows 11. Surprisingly, the added security provided by Windows 11 was not on the list Again, it is worth viewing the video to hear and see the arguments for each listed item.



Figure 4 – YouTube Video, "What is Great in Windows 11".

- Polished User Interface.
- Improvements to the Windows 11 Settings menu, but different to Win 10 in the right spots.
- Implementation of multiple desktops
- Ability to opening a Windows Terminal window from within File Explorer, and in the directory being viewed
- Opening different Terminal windows within the Terminal
- The Windows subsystem for Linux

East SIG Report May 2022

Neil Muller

After 15 years as convener of East SIG, Paul Woolard has decided to retire from the role. On behalf of all members present, new host Frank Maher, thanked Paul for his many years' service to the Melbourne PC East SIG. Frank then opened the May meeting, again from home via Zoom.

The first presentation of the night was by **George Skarbek** presenting his usual Q&A segment.

Q. Can you buy a new computer with Windows 10 installed, as I can't see any advantage of Windows 11?



Figure 1 – Windows 11

A. Until quite recently you still had the choice of Operating Systems when purchasing a new computer. If you upgrade Windows 10 to 11, you can only roll it back to Windows 10 within the first 2 weeks. If you're not sure what to do, stick with Windows 10. Later if you decide you want Windows 11, you can get a free update.

I'd suggest you only upgrade to Windows 11 if it offers something you really need. My personal preference is that I'll be sticking with Windows 10 for the foreseeable future.

Q. Has anyone else noticed that the Windows communication drivers of late are a little bit flaky? I'm occasionally getting dropouts with WiFi, internet and ethernet.

A. I personally haven't noticed any dropouts with my Window 10 PCs.

[David King responds] I'm running both Windows 10 and 11 and haven't noticed any problems.

Q. I run Firefox as my browser with an add-on previously shown at East SIG called Simple Tab Groups (Refer PCUpdate meeting report March 2021). Using Simple Tab Groups, I find I have over 100 tabs running due to the numerous Tab groups I've created. My computer seems to be running slowly so could the add-on be the cause? Do you know of any feature that would sleep dormant tabs?

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Figure 2 – Firefox Add-on, Simple Tab Groups

A. I don't run that many tab groups, so I can't really comment on Simple Tab Groups.

[Neil Muller responds] I use Simple Tab Groups as a defacto bookmark manager. I currently run 26 different tab groups, with probably over 300 tabs between them. My understanding is when Firefox and Simple Tab Groups load, all tabs are dormant except the current webpage. Only those tabs you visit during a session are open, all others remain dormant. While the computer is on, the remaining tabs (webpages) act as a shortcut to the webpage. I close my computer each night, when I start Firefox the next day, it starts off with only the displayed webpage open.

[Reply] When looking at the memory usage of Firefox in Task Manager, it is small at around 20 to 30k, so maybe there's another reason for the computer to be running slow.

[George] I'd put the temporary Firefox files into a RAM drive and they'll then open blindingly fast when you need them. If your computer is slow, one of the first things I'd do is to use Task Manager to see what is loading when your computer starts and disable anything you don't really need. This does not uninstall the program, it simply stopping it from loading into RAM, where it sits taking up valuable resources until you need that program. Often a slow computer could be due to the hard disk running an anti-virus scan or Windows doing an update in the background.

Following Q&A, **Trevor Hudson** presented a new video he'd prepared, detailing how to "**Cast Kayo Sports to a Smart TV**". Kayo Sports (<u>https://kayosports.com.au</u>) is a video streaming subscription service available in Australia, owned by Streamotion. The service offers sports live and on demand from Fox Sports, ESPN, belN Sports, and Racing.com. (reference WikiPedia). The technique Trevor outlines in his video, follows a similar technique he used in last month's video tutorial shown in Figure 3, "Cast Laptop Screen to Smart TV" at <u>https://tinyurl.com/v84c43b6</u>.





Trevor's new video commences by outlining how to sign up to Kayo Sports and the cost of the various Kayo Sports packages available. He then outlines how to search and select a sports video and finally play the video found on the Kayo website.

Trevor provided the following tips for anyone planning to cast Kayo Sports to a smart TV.

- Do not use a VPN on your computer,
- Do not connect your TV through a PVR
- The TV and computer must be on the same WiFi channel.

To play the selected Kayo Sports video from your Windows computer on a smart TV, first select the Notification symbol on the Windows 10 Taskbar. Enlarge the Notification, by selecting "Expand" and then select the "Connect" icon. Once the wireless connection is made, a list will appear. Here you allow the use of the mouse by ticking a box and then use the mouse to select "choose projection mode". Using the mouse will enable you to pause and stop the video.

Cast Kayo Sports to Smart TV - YouTube



www.youtube.com > watch

Cast Kayo Sports to Smart TV is a 1080p video tutorial showing how you sports fans, can **cast** Kayo Sports from a Computer to...

YouTube · PC Techtips · 1 month ago

Figure 4 – YouTube Video, "Cast Kayo Sports to Smart TV"

To see the complete details of how to cast Kayo Sports to a smart TV, Trevor's

video is available on YouTube by searching the title "Cast Kayo Sports to Smart

TV", or use the link <u>https://tinyurl.com/5c97u9a9</u>.

Following Trevor's presentation was **Dave Botherway**, demonstrating how he linked his Android smart phone to his Windows PC. After a brief introduction, Dave gave a live demonstration of the "phone Link" app. The graphics below are abridged screen captures taken from Dave's presentation. In Windows 10 and 11, an application called "Phone Link" enables users of Android Smart phones to access their phone from Windows, without actually touching the phone. To use this feature, a companion app called "Link to Windows" first needs to be downloaded to the phone. When the app is first launched on an Android phone, you'll be asked to sign into your Microsoft account. From then on, the app works seamlessly without the need to log in again. The "Link to Windows" app is a free download from the Google Play store for Android phones.

The "Phone Link" app wirelessly connects to and mirrors your Android phone on a Windows computer. The app lets you read and send messages, view photos taken on your phone, view and run Android apps (only on recent Samsung phones), view notifications and monitor phone calls. Dave found when working on his computer, it was more convenient using the "Phone Link" app to access messages, notifications and calls, than to reach for his phone.

The "Phone Link" app is shown in Figure 5, and comprises an information area on the left and a tabbed interface to its right. Across the top are 4 tabs labelled, Messages, Photos, Apps and Calls. Selecting one of the tabs opens the relevant data from the phone. On the left of the app window, is the Notification panel, where notifications from the phone are displayed.



Figure 5 – Window "Phone Link" Messages window.

The "Phone Link" window shown in Figure 5 above, is open with the "Messages" tab displayed. Here SMS messages received on the phone are displayed in the centre of the window. When a SMS message is selected, such as the one shown with the red boarder, the complete message is displayed to the right. To reply to this message, you just start typing on the blue line on the bottom right of the "Phone Link"

window. To send a new SMS message you select the icon below the "Messages" heading labelled "+ New message".

When working on his computer, Dave has found replying to, or sending a message using his computer keyboard, is more convenient and quicker than on his phones tiny touch screen.

The panel on the left of the "Phone Link" window is always visible, no matter which of the 4 tabs is selected. In this panel, the phones name, model and battery power level are displayed. Below that are 4 icons that displays current settings on the phone. These are from left to right, "Do not disturb", "Bluetooth", "Volume on" & "Audio player on". Below the 4 icons is the "Notifications" area. This is where notifications received on the phone are displayed. In figure 5 you can see Dave has missed a phone call and has been sent a notification from his calendar about the upcoming East SIG meeting.

If the "Photos" tab is selected, thumbnail images of photos taken and stored on the phone are shown, the most recent at the top. (Refer Figure 6). Selecting a photo by right mouse clicking on it, gives you the option to Open the photo in Windows, Open with, Copy, Save as, Share or Delete the image from the phone. Alternatively, you can double click on an image to enlarge it to fit the preview panel. From there you can carry out the same operation as offered by right clicking on the image.



Figure 6 – Window "Phone Link" Photos window.

Under the "Apps" tab you can see all the apps that are on your Android phone. These are grouped under headings, "Recently used", "Favourites" and "All apps", as seen in Figure 7 below.

In some newer Samsung smart phones, clicking on the icon for an App, displays the phones screen within Windows, where apps can be run using your computers mouse. This was not a feature Dave demonstrated.



Figure 7 – Window "Phone Link" Apps window.

Finally, when selecting the "Calls" tab, the "Phone Link" window displays a list of all phone calls made and received, along with their date and the time calls were made. To the right of the list of phone calls, is a graphical keypad from which phone calls can be made and received without touching the phone. This requires a microphone and speaker attached to the computer, such as a headset.

To conclude his presentation, Dave selected the "Calls" tab and arranged for Frank to phone him. The Phone Link app displays the incoming call, which would normally be answered using the "Phone Link" app. Although this feature was tested and working before Dave's presentation, Murphy's Law applied, possibly caused by interference from using Zoom.

The final presentation of the night was by **John Argall**, who updated us on his solar journey titled "**Running on Sunshine – an update**". John gave a very entertaining and informative presentation, commencing with the installation of solar panels, next how he updating the system with micro-inverters and battery, and finally the addition of an electric vehicle, a Renault Zoe to soak up the extra power being generated. To do John's talk justice, I've included a number of screen captures and graphics taken from his presentation.

In June 2014 John installed a 3-kilowatt array of twelve 250 watt north facing solar panels. The electrical DC power generated from these panels was connected to a single inverter. The inverter then converted the DC power generated from the panels to AC for use in the house. Any excess power generated by the panels was exported to the power grid. This was the standard and most economic connection method at that time. With string inverter systems like this, shading on any one panel reduces the generation of the whole array, not just the panel in shade. This was not a problem for John except in winter months when the sun is low, causing some shading of his lower row of 6 panels. It is now 8 years since the system was installed and it has performed without any major issues in that time. In those 8 years, his system will soon have generated 28,000 kilowatt hours of power.

After observing that significant power was being exported to the grid, in December 2017, John decided to retrofit a battery storage and backup system to his existing solar array. John employed Bradford Solar to install 6 SolarEdge micro inverters (AP systems model YC500A) and an LG lithium battery system (LGchem

400V - 10) to store the excess power his system generated. John noted that only 9 kilowatts of the power stored in the 10-kilowatt battery is useable. Each micro inverter is connected to 2 solar panels, rather than a micro inverter per panel as is the norm, the latter deemed unnecessary in John's situation.



Figure 8 – Inverter & LG Battery installation Figure 9 – DC charging point

More recently and at random times John noticed that the battery system would turn itself off. This meant all the power being generated went straight to the grid and not the battery. He had contacted Bradford Solar a number of times about this. In February 2021, John noticed the complete system had turned itself off, with the word "Fault" displaying on its LCD screen. Under Australian consumer law, even when a product is out of warranty, it must be "fit for purpose". John contacted Bradford Solar again and within a month after lodging a complaint, LG replaced the battery. The new battery system has worked without fault ever since. In the peak of summer, John found the battery system would often be fully charged by lunch time. Not wishing to send the excess power back to the grid, for little return, he purchased a small Renault Zoe electric vehicle in November 2021.

John described his experience and the differences driving the Zoe, compared to other conventional internal combustion engine cars he'd owned. The first vehicle a 1930 Austin 7, to the last a Honda Jazz.



Figure 10 – John's Renault Zoe Electric Vehicle

SolarEdge monitors John's system remotely, giving him a wealth of graphical performance data which he can access by logging into the SolarEdge website. John displayed numerous charts, some of which I've included in this report. Most are self-explanatory.



Figure 11 & 12 – SolarEdge Power & Energy charts

The Power & Energy charts in Figure 11 (from late October), Figure 12 (from early June) and Figure 13 (from mid-December) show the daily power generated in green, power used from the solar panels in blue and power used from the grid in red. The purple area seen in the charts is the drain from the battery. A second line graph below the main chart, displays the percentage power remaining in the battery versus time of day.



Figure 13 & 14 – SolarEdge Power & Energy charts

The bar graphs in Figure 14 displays the yearly view of John's solar system for 2021. The 2 charts here reveal that during the warmer months, even with a 10-kilowatt battery, power is being exported to the power grid, while in the colder winter months power is being imported from the grid.

In addition to the graphical data available, digital data in the form of comma separated value files (.csv) can be downloaded from SolarEdge and John's electricity distributor United Energy.

From this point on in his presentation John spoke mainly about his experience driving the Renault Zoe and range issues he needed to consider when planning trips.

The Zoe John purchased has a 42Kwh battery with an approximate range of 300km. This equates to an economy rating of 14Kwh per 100km travelled or 7km range per each Kwh of battery drain. John mostly charges his Zoe at home, partly due to the current poor state of public charging of EVs around Melbourne. He initially used the slower Level 2 charging at home through a DC outlet. John likens this to running a bar radiator. He referred to it as the equivalent of trickle charging at around 8.3 Amps. John often takes advantage of free charging at the Brickworks and Chadstone shopping centres, when out doing his weekly shop.

John was rather critical of the spacing and number of high-speed charging outlets offered by ChargeFox in Australia. Currently these outlets are located mainly along the east coast. Another complaint was drivers who leave their vehicle at charging stations and stay longer than needed. These drivers seem to use the charging station as a standard parking bay while they go off shopping, some for hours on end. These selfish drivers are monopolizing the space when others might wish to charge their vehicles. Often standard ICE vehicles will park in the free charging bays, to the annoyance of EV drivers who wish to charge their vehicles. John has not had this happen to him but knows of others who have.

Regeneration is very important when using EVs. John always resets the odometer to zero for each trip he takes so he can keep track of distance travelled and battery level usage. On freeways where there is greater drag on the vehicle and no regeneration for the battery, the range drops well below claimed figures. An EV driver who drove onto the Calder freeway and travelled for 76km, observed that the vehicles quoted range dropped by 99km. That driver said he "dropped" 1 km range for every 3km he drove on the Calder freeway.

A month ago, John had installed a \$2,200 Jet Charge Chargemate fast charge unit seen in Figure 15. This unit charges at 25 Amps compared to his original DC charging at 8.3 Amps. The Chargemate unit was provided by United Energy at no cost to John, except for the electrician's installation cost. It was provided to John on the understanding that he enters into a one-year study. The Chargemate connects to John's WiFi, where the results can be monitored remotely by United Energy.

The presentation concluded with numerous questions from the audience.



Figure 15 – Jet Charge Chargemate home charging station

DOTW Winners April 2022

Roger Brown

DOTW is a lighthearted look at some of the sillier events of the week which has been posted weekly in the Chit Chat group in Yammer.

From the start of June, this poll will transfer to Spaces as our Yammer facility is being wound down and will close on June 30th.

So if YOU were one of the members who enjoyed and contributed to DOTW please make sure you have joined Spaces and have also joined the Chit Chat Space where future editions have been posted.

If you have not joined (access is not automatic) post a message in the All Companies group in Yammer.

Winners of the DOTW poll for May were:

• Prominent Nationals including Senator Mat Canavan, who now insist the 2050 net zero emissions target is dead. With the benefit of hindsight we can suggest that Canavan and Co cost the LNP the election

• Outspoken Victorian Liberal MP Bernie Finn who has posted he is "praying" for abortion to be banned, telling a follower he was not supportive of abortion even in the case of sexual assault. Fin is now an EX Liberal MP.

• NDIS for its reported failure this week to provide a blind worker with the basic accessibility features required for her to comfortably perform her duties. Other similar cases have since been reported.

• (Former) Aged Care Minister Richard Colbeck who tells us that despite a Federal Government increase of \$10 per resident in the basic fee paid to nursing home operators, these operators will still not be required to provide proof of how much is spent on food per resident.

See you all in Spaces!

Google Spaces, a replacement for Yammer

With Melb PC moving away from using Microsoft services for the general membership we'll shortly be closing down Yammer as the host for our Online SIG. It was recently announced after a period of testing, that Google Spaces will be the replacement for Yammer due to "economy and ease of use" – it's part of our existing Google based services. Even though Spaces is in relatively early development it provides enough functionality to be a usable replacement and should mature into a more sophisticated platform. The announcement here:

<<u>https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=1750364370067456</u>> Greg Eden, our resident Google enthusiast, decided to set up various spaces to emulate Yammer as a test and this quickly demonstrated it was a viable replacement. Of course being a different product it's not going to just be a duplicate, so differences are to be expected. Setting up the spaces has been a bit of a learning experience as once created they can't be reconfigured with different parameters, but with a bit of experimenting Greg has worked out a suitable configuration and our spaces.

So far we have about 80 members signed up as part of the testing process and the traffic has gradually been picking up. We currently sign everyone up to all the spaces, from there they can leave any spaces they aren't interested in, but we're moving to a system where people are signed up to "All Company" and the "List of Club's Spaces" space containing links to join other spaces as desired.

If you'd like to participate in our Spaces before the cut-over simply add a request to the following thread in Yammer and you'll be joined up to Spaces:

<<u>https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=17374289</u> 80408320>

On your computer Spaces is accessed either via the Gmail web interface or via the Chat app which you open using the Google apps "nine dots", just make sure you're signed into Google using your Melb PC account and not another Google account. Personally I prefer to use the separate Chat app.

Spaces is similarly accessible on you phone via either the Gmail app or the separate Chat app, again making sure you're logged into your Melb PC account. Several usage tips:

You can't reply to a specific message in a conversation so use the "@" symbol followed by the name of the person you're responding to, e.g. @Fred Dagg. On your computer pressing the Enter key sends your message. If you're want a new line use Shift+Enter. On your phone the Enter key functions as expected to give a new line.

Only one image can be posted at a time, i.e. you can't select a group of images to upload, but if you aren't too slow when you post them individually they will appear sequentially provided no-one responds in the meantime.

If you wish to send an private message to another member use the Chat function – it's available in both the Gmail and Chat apps.





Posting a message is very easy so please give it a go. There's a dedicated Test space for just this purpose so join up there and feel free to make use of it to get comfortable with the ins and outs of Spaces. It won't take you long to feel comfortable.

We have a "Using Google Spaces" group on Yammer and "Spaces Help" on Spaces where you can ask questions or find useful tips.

<https://www.yammer.com/melbpc.org.au/#/threads/inGroup?type=in_group&f eedId=105054347264>

Security, Scams and Phishing

Cedric related the following cautionary tale – a timely reminder for all of us: ATO Phishing SMS

My daughter, who doesn't understand many digital concepts, received the SMS below. Don't know the phone number it came from, but that's probably irrelevant. The message below is probably the second SMS, as she deleted the first one. But with this one she went to the site, believed that all the ATO icons

and so forth were genuine, and entered at least some of the data they asked for. It's hard to get her to understand URLs.

PS: I have modified the URL to neutralise it. I assume you can spot the change. "ATO: You are required to confirm their data, non-compliance with this obligation may result in penalties https://ato-verify,net/data"

I am told that this SMS is circulating quite widely in Victoria. The ATO, VicPol and probably others are well aware of it.

They have just got some ID. Probably not enough to be of much use unless they have other ID from other sources, which of course quite likely they do have. We now just have to change things like drivers license (apparently takes quite a while), and disable some types of financial transactions.

For anyone using an Android phone it is well worth investigating installing the Google Messages app to handle SMSs as it's very effective at filtering dodgy messages. It's also worth noting if you're a Telstra mobile user they've recently turned on SMS filtering to remove malicious text messages.

<<u>https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=17458696</u> 90716160>

<<u>https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=14978382</u> <u>13455872</u>>

Linux Chat

Frank treated us to another of his requests for help that resulted in an epic 130+ post thread, which while well short of the longest we've had, was still a worthy effort. The beauty of these threads is they cover a lot of basic ground so are a great learning experience for everyone.

It all started off with him being unhappy with using the MATE desktop (on Ubuntu as it turned out) and wanting to switch to using the Cinnamon desktop he was more familiar with from his usual Linux Mint. Things were a little confused to start with due to misunderstandings about desktops and distros but once we got that sorted we could proceed with installing Cinnamon so Frank could log in using that instead of MATE.

Sounds simple? It should have been but unfortunately it was anything but due to various tools not being installed. He started on Ubuntu 20.04 so we got him upgraded to 22.04 and got Cinnamon installed. Then Gnome system tools was missing so that got installed which would allow him to disable auto-login. Finally after a bit more faffing about he was able to select Cinnamon from the login screen and successfully logged in with it. It was a bit of a journey but everyone persisted and Frank got there in the end.

<<u>https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=17387788</u> 56235008>

NBN Questions and Comments

Kev has been keeping us updated on the saga he's been involved with getting the NBN connected at a club he belongs to – something that took two months to

resolve. Fortunately for his club Kev is a registered cabler who worked for Telstra in a past life so knows his way around telephone networks and is more than a little persistent and patient to boot.

It all started out with failure of the phone line that went unnoticed for several months, possibly caused by Telstra works. The street address of the club rooms wasn't known to the NBN and the line comes in from another street and that wasn't known to the NBN either. They might have lost their phone number due to inactivity and the 18 month grace period for switching over to NBN has probably expired.

After a great deal of rigmarole the day came for the NBN appointment to activate the connection. When Kev indicated the location of the lead in and where the conduit ran to the NBN tech his response was that's not what his work order showed. Fortunately the tech was able to talk to the back office and gain their agreement to proceed and shortly after that the service was active, which I'm sure felt somewhat miraculous!

It's still not known whether the phone number can be retrieved for use with the NBN service.

<<u>https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=16400416</u> 56631296>