# >PC Update

May 2023

Publishing Information 2
Editorial May 2023 3
Club News May 2023 5
Digital Technology Hub Links 7
Club view on Windows 9
Windows 11 OneDrive and a Microsoft Account 11
Amid a STEM crisis here is what the 2023 budget promises for Australian science and innovation 14
Is China out to spy on us through drones and other tech 18
Interesting Internet Finds 22
East SIG Report April 2023 23

**The newsletter of**

Melbourne PC User Group

Suite 26, Level 1, 479 Warrigal Road Moorabbin 3189

Office hours 9.30am – 4.30pm (Mon-Friday)

Email office@melbpc.org.au

ABN 43 196 519 351

Victorian Association Registration A0003293V

**Editor** Hugh Macdonald (editorpc@melbpc.org.au)

**Deputy Editor** Malin Robertsson (office@melbpc.org.au)

**Technical Editors** Roger Brown, Kevin Martin, Dennis Parsons, Malcolm Miles

**Proof Readers** Harry Lewis, Tim McQueen, Paul Woolard

**Librarians** Malin Robertsson (office@melbpc.org.au), Choy Lai (cplai@melbpc.org.au)

**Committee** Hugh Macdonald (President), Stephen Zuluaga (Vice-President), Aidan Kelly (Secretary), Peter McConnachie (Treasurer), Rob Brown, Stewart Gruneklee, Harry Lewis (committee@melbpc.org.au)

*Melbourne PC User Group Inc. is a member of the Association of Personal Computer User Groups*

**iHelp – Get the help you need with your computer**, Ph: (03) 9276 4088,

Email: ihelp@melbpc.org.au, Online Support Request

Online membership form

**Responsibility for content in this newsletter lies with individually named authors**

**Please remember to always bring your membership card to meetings**

SIG Listings and up to date calendar are available on our homepage

# Editorial May 2023

**Hugh Macdonald**

Welcome to the May 2023 edition of PC Update.

I'm back as editor for the time being. Joining the team as deputy editor is Malin Robertsson.

On resuming this role, I've decided to take a slightly different approach than last time around. Last time the choice of articles was a bit random and based on my own whims for the particular month in question.

This time I've decided to take a deep dive on a particular topic of computing that is relevant to the club each month.

Here is the proposed schedule for the next year, that might be subject to minor change:

| **Month** | **Topic** |
|---|---|
| May 2023 | Windows |
| June 2023 | Linux |
| July 2023 | Cyber Security |
| August 2023 | Backups |
| September 2023 | Smartphones |
| October 2023 | Video Editing |
| November 2023 | Photography |
| December 2023 | Genealogy |
| February 2024 | Website Design |
| March 2024 | Microcontrollers |
| April 2024 | Maker Space |

So this month we take a deep dive into Windows, which I think is at an interesting point in its history. Whereas once it was the overwhelmingly dominant operating system when the majority of computing was desktop based, in this era of devices it has now fallen to a reasonably distant second behind Android in terms of overall market share.

And these days when the majority of applications are written first for mobile based operating systems (mostly Android and iOS) and then secondly as web based applications, then it no longer really matters a great deal as to what desktop operating system you run.

Hence we've witnessed the growth of Mac OS and now we're starting to see the growth of Chrome OS as viable alternatives to Windows.

Even its relevance to Microsoft seems diminished. Their Microsoft 365 subscription product can be used just as well on every operating system, with native versions of their applications for Android, iOS, Mac OS and Windows and web based versions for every other operating system.

So with all that in mind we'll take a good look at Windows this month from a consumer perspective to see where things are at.

I hope you enjoy the issue.

# Club News May 2023

**Hugh Macdonald**

## Vale Phillip Lynch

The month of May began with the sad news that member Phillip Lynch had passed away. Phillip first joined the club in 2019. In 2020 he volunteered to be part of the Microsoft 365 to Google Workspace Transition project. He volunteered valuable technical expertise he had in email systems at first. He then moved onto volunteering in the member support aspect of the project, helping individual members to setup their new Google based email accounts, and ensuring that their emails had migrated successfully from Microsoft. When this wound down, he became an iHelp volunteer, and assisted members across all areas of operating their computers. He truly was a member who helped members, and he will be sadly missed.

## Thank you Peter Bacon

At this month's monthly meeting, we had our new master of ceremonies, Simon Rice, begin. This was due to the decision by our previous master of ceremonies, Peter Bacon, to step down from the role. Peter had been our master of ceremonies since 2019. When he began we were still holding large in-person meetings at Moorabbin. As MC, he had to contend with the move to Zoom during our original lockdown in 2020, a return to 'hybrid meetings' in 2021, then another lockdown and move back to Zoom meetings, another resumption of hybrid meetings, then a move back to Zoom again, and finally, a return to hybrid meetings. All throughout he was extremely professional and brought enthusiasm to the role. So, thank you Peter.

## Thank you David Stonier-Gibson

Our previous club president and committee member of five years, David Stonier-Gibson, has decided to retire from the committee. David volunteered for the role of club president with a lot of enthusiasm and with a vision to transform the club into a large makerspace while continuing to run its existing services and activities. Unfortunately, Covid-19 arrived and Melbourne was in various stages of lockdown for the best part of three years, making it exceedingly difficult to do anything during the time. David was instrumental during his presidency of bringing in Zoom meetings for all SIGs, and ensuring that they have been able to continue mostly uninterrupted since 2020. Thank you for all your contributions to the club, David.

# A terrific monthly meeting

This month we had Leanne Robertson and Martin Richardson join us from Digital Technologies Hub, an Australian portal and repository of teaching and learning resources for the Digital Technologies learning area. You can find out all about it at https://www.digitaltechnologieshub.edu.au/. It was a great presentation, and a lively discussion about STEAM education was had at the end. If you missed the meeting and would like to see it you can at https://youtu.be/GxqMxMbLWQ4.

# Another great speaker for June's meeting

Our next monthly meeting will be on Wednesday June 7 2023 at 7pm. Our speaker this month will be Harini Karthik who is from STEM Incubators. STEM incubators is a grass root, for-purpose charity with a focus on creating a thriving young Australian generation by supporting them with key life skills such as analytical thinking and Innovation, complex problem solving, critical thinking and analysis, creativity, leadership and social influence, technology design and programming, resilience, reasoning and ideation. You can find out more details at https://www.melbpc.org.au/monthly-meeting/.

That's all the news for May 2023. We'll see you at Melbourne PC User Group in June.

| | |
|---|---|
| Digital Technologies Hub | www.dthub.edu.au |
| Turtle data lesson | https://www.digitaltechnologieshub.edu.au/teach-and-assess/classroom-resources/lesson-ideas/turtles-exploring-data-tracking-turtle-movements/ |
| Binary topic page | https://www.digitaltechnologieshub.edu.au/plan-and-prepare/scope-and-sequence-f-10/7-8-computers-and-binary/<br><br>https://www.digitaltechnologieshub.edu.au/teach-and-assess/classroom-resources/topics/binary/ |
| Soil moisture lessons | https://www.digitaltechnologieshub.edu.au/search/?keywords=soil%20moisture&p=1&items=8<br><br>Soil moisture How to guide<br>https://makecode.microbit.org/projects/soil-moisture<br><br>BBC Microbit tutorials:<br>https://www.digitaltechnologieshub.edu.au/search/a-14-week-introduction-to-computer-science-course/<br><br>About he Microbit<br>https://microbit.org/get-started/user-guide/overview/ |
| Teachable machine – guess your emotion | https://teachablemachine.withgoogle.com/models/wbAM1q1RE/<br><br>https://www.digitaltechnologieshub.edu.au/teach-and-assess/classroom-resources/lesson-ideas/can-ai-guess-your-emotion/ |
| Language translator | https://scratch.mit.edu/projects/559665569/editor/<br><br>https://www.digitaltechnologieshub.edu.au/teach-and-assess/classroom-resources/lesson-ideas/fun-projects-with-language-translation/ |
| Coding for GUIs | • https://jsfiddle.net/nathanesa/1oc03y9b/<br><br>• https://www.digitaltechnologieshub.edu.au/teach-and-assess/classroom-resources/courses-or-tutorials/coding-for-guis-javascript-edition-course/lesson-3-timers-and-triggers/<br><br>• Full course: |

| | |
|---|---|
| | • https://www.digitaltechnologieshub.edu.au/teach-and-assess/classroom-resources/courses-or-tutorials/coding-for-guis-javascript-edition-course/lesson-1-structure-style-and-function/ |
| AI explainer videos | https://www.digitaltechnologieshub.edu.au/search/?keywords=Artificial%20Intelligence%20Explainers&p=1&items=8 |
| Maths in schools – Find out what students learn at school and activities you can do at home. | Someone mentioned that they enjoyed hearing what their grandchildren were learning at school, to find out what they are learning, at different year levels, for maths and see ideas for maths at home go to:<br><br>https://www.mathematicshub.edu.au/families/for-parents-and-carers/what-to-expect-at-school/ |
| Our website to encourage girls into STEM activity and careers. | https://www.thegist.edu.au/ |

# The club view of Windows

**Hugh Macdonald**

For this month's deep dive into Windows, I decided to pose a couple of questions to people on spaces. They were:

What version of Windows are you currently running?

What are your favourite things about Windows at the moment?

What are your least favourite things about Windows at the moment?

Some of the issues that came up were as follows:

## Hardware Compatibility for Windows 11

Windows 11 is essentially a cosmetic upgrade to Windows 10. It introduced an updated user interface which was originally designed for Windows 10X, which Microsoft developed as an alternative to Chrome OS. Other than the cosmetic changes introduced and incremental changes to some applications, there have been no major changes under the hood between Windows 10 and Windows 11. Yet the somewhat arbitrary decision was made to only support seventh generator and later Intel processors (and their AMD equivalents) and that PCs must have a TPM 2.0 module. This has left some hardware that ran Windows 10 just fine unsupported by Windows 11. There is still the ability to install Windows 11 on unsupported hardware, but updates from Microsoft are not guaranteed this way. So this has caused consternation that hardware that works just fine cannot be updated to Windows 11, and support for Windows 10 will end in two years (in 2025).

## Software Compatibility

Windows is unarguably the operating system with the widest software support. Almost all major applications are available for it, which has always given it a big advantage over its competitors in Mac OS and Linux. And although more and more new applications are written to work inside a web browser, making the choice of operating system irrelevant, the legacy support that Windows has will always see it come out on top in this area. This was a strong reason why a lot of club members have chosen to stick with Windows.

## Backups

One member remarked that backing up Windows remains a point of frustration and is something that Microsoft could have surely developed a better system for before now. The gold standard in operating system backing up is Mac OS with Time Machine. With a few clicks you setup an external hard drive as a Time Machine drive and then your

computer is backed up automatically as long as that external drive remains connected. You can do it to a networked drive as well. Then if your computer crashes or is stolen, you can restore your computer fully from that backup.

The easiest system Windows has is OneDrive which can be setup to automatically backup your user folders (such as Desktop, Documents and Photos) to the cloud. But this is a paid subscription and requires you to put your trust in Microsoft to keep your data safe. It’s also not a backup of your entire computer so if your Windows computer is crashed or stolen, there is still a lot of setting up you have to redo compared to a Mac.

There is another option called File History which works somewhat like Time Machine in that you select an external hard drive (or network drive) and then Windows will automatically backup your user folders to this drive. But once again, it does not give you a full backup of your computer you can restore from in the event of disaster. Therefore people tend to turn to third party applications such as Macrium Reflect to keep their Windows PCs backed up.

Overall then, the view of Windows could probably be summarised as the operating system that is the least worst option for a lot of people within the club. It is ubiquitous in that in comes with the majority of new PCs that are shipped. And it is versatile because it will run almost any application available out there. But Microsoft's practices aren't always in the best interest of their customers, and the fact they don't have a better backup solution by now is puzzling.

# Windows 11 OneDrive and a Microsoft Account An Offer You Can't Refuse?

**David Kretchmar**

OneDrive is cloud storage that is built into the Windows 11 operating system. Microsoft has integrated OneDrive more closely into Windows 11 than Windows 10, presumably to get more users onboard with what OneDrive offers. In this article, I'm not going to get into the "nuts and bolts" of the operation of OneDrive in Windows 11 but discuss some advantages of using OneDrive, and hopefully convince users who have not taken advantage of this feature to consider it.

**What is OneDrive, and why do I need it?**

OneDrive is the Microsoft cloud service that allows you to access your files from any device connected to the internet. OneDrive enables you to store and protect your files, share them with others, and get to them from anywhere on any device. OneDrive can be used on many operating systems, including iOS or Android.

**What's in It for Microsoft?**

OneDrive and Microsoft Office 365 can provide Microsoft with "recurring" or "subscription" revenue, which is much more valuable than a one-time purchase of an operating system or a version of Microsoft Office. This explains why Microsoft appears eager to get users to have a Microsoft account as a first step toward using Microsoft subscription offerings.

**OneDrive Promoted to the System Folder**

OneDrive now has a prominent place in the **System folder** in Windows 11:

Click on the OneDrive icon shown at the top of the system folder, and you will see the folders on your system are backed up (synced) on OneDrive:

**Microsoft Account**

OneDrive requires a Microsoft Account. You already have a Microsoft account if you use other Microsoft features, such as Skype or the Microsoft Store. Microsoft strongly encourages Windows users to create a Microsoft account if they don't already have one, starting when a Windows 11 system is first configured. If a user does not have a Microsoft account, one can be created anytime at the Microsoft website.

**Levels of OneDrive storage**

Different storage levels and other features are available for a Microsoft account. The basic free program provides a minimum of 5GB OneDrive storage. Individuals qualify for additional free storage based on the length of time they have had a Microsoft account or on the length of time they have used a Microsoft email address (Outlook, Hotmail, or Live.com). For example, I have had a Hotmail account for many years and get 15 GB of free OneDrive storage due to "loyalty bonuses."

For $1.99 per month, you can get 100GB of storage. Microsoft 365 Personal subscriptions ($6.99/month, $69.99 a year) provide a massive1TB (1024 GB) of OneDrive online storage. Microsoft 365 Family subscriptions are $99.99 per year and $9.99 per month. They provide 1TB of OneDrive space for up to six users.

**Do I really need a Microsoft account?**

A Microsoft account is required to install and activate Office versions 2013 or later and Microsoft 365 for home use. You might already have a Microsoft account if you use a service like Outlook.com, OneDrive, Xbox Live, or Skype; or if you purchased Office from the online Microsoft Store. If you have no interest in OneDrive, Skype, Microsoft mail, or any of the many applications available from the Microsoft Store, you don't *need* a Microsoft account.

**Conclusions and Recommendations**

Microsoft has evolved OneDrive into a reliable and useful service that gives you a minimum of 5GB of cloud storage for free. Over time free OneDrive cloud will grow to 15GB. Users should strongly consider using at least the free storage furnished by Microsoft to back up vital documents and pictures or any files they might need to access from any device on any internet connection in the world.

*Reproduced with permission of Sun City Summerlin Computer Club.*

# Amid a STEM crisis, here's what the 2023 budget promises for Australian science and innovation

**Kylie Walker**

Australian innovation has the capacity to protect us – our environment, our digital world, our borders and our health. All of these are focuses of this year's federal budget.

But the science, technology, engineering and mathematics (STEM) sector has been sounding the alarm for years that our research system is in crisis. Reviews in progress – including the Universities Accord, National Science and Research Priorities, and the Australian Research Council – are an opportunity to examine and respond to systemic problems.

---

***Read more:*** ***Teaching and research are the core functions of universities. But in Australia, we don't value teaching***

---

However, they don't take a whole-of-sector view to designing a research and innovation system that is not only functional but harmonious, and which makes the best use of Australian talent.

**No agenda. Just facts.**

Donate today

While we wait for these reviews to be complete, here's where the 2023-24 budget stands in terms of Australia's science, technology and innovation sectors in my assessment as the CEO of the Australian Academy of Technological Sciences and Engineering (ATSE).

## More STEM degrees

The Advanced Strategic Capabilities Accelerator will see A$3.4 billion over a decade to translate disruptive new technologies – such as hypersonic research and quantum decryption – into defence capability.

The nuclear submarine workforce will be bolstered by $128.5 million for 4,000 new places for tertiary STEM education. This is necessary to meet our commitments under AUKUS. We'll never say no to more STEM degrees in this engineer-poor, rapidly innovating world.

This budget also aims to make safer online spaces with a welcome $7.9 million for combating misinformation and disinformation via the Australian Communications and Media Authority, and $101.6 million for cybersecurity.

---

***Read more:** **Australia needs a robust cybersecurity overhaul – not whack-a-mole bans on apps like TikTok***

---

But here, too, is a miss in the education and career pathways to train, support, and continue to develop Australia's digital workforce. We're already behind our OECD counterparts – Australia trains an insufficient number of engineers, with just 8.5% of Australian university graduates receiving engineering degrees compared with over 12% in Canada and over 23% in Germany. Our engineering and technology workforce is studded with gaps in areas such as civil engineering, telecommunications and mining, to name just a few.

The National Quantum Strategy, Australian Centre for Quantum Growth, and national artificial intelligence (AI) centre are a necessary trio to keep pace with this rapidly transforming field.

---

***Read more:** **Australia has a National Quantum Strategy. What does that mean?***

---

Small business is supported to commercialise research through the $392 million Industry Growth Program, adding to the already-committed Australia's Economic Accelerator program. This will continue to build a positive commercialisation environment and lead to more of Australia's world class research becoming world class innovations.

**En route to a net zero superpower**

In a decarbonising global economy, Australia has the potential to be a clean energy superpower. We are home to leading minds in most of the key technologies that will drive the clean energy revolution – next-generation batteries, computing power, machine learning and clean hydrogen to name a few. We have abundant critical minerals, sun and wind.

The new Net Zero Authority is an important step towards the urgent need to decarbonise and transform our domestic and export energy markets. But to achieve this bold transformation, government investment in research and development must match innovation-leading nations like Japan, Germany and the United States.

---

***Read more:** **Australia finally has a Net Zero Authority – here's what should top its agenda***

We need a coherent plan for clean energy research, development and deployment, with the backing to realise the vision. To keep the top tech and innovation minds here, we must invest around 3% of our gross domestic product (GDP) in research and development (R&D).

Direct government spend on R&D currently sits at 0.49% of GDP – its lowest level since 2014, leaving researchers competing for scraps. By contrast, visionary investment prioritises creating and applying new knowledge over the long term, and invests in building Australia's new economy.

We need a structural review of R&D funding now to future-proof the system.

'Clean' hydrogen is among the renewables needed to transform Australia's energy sector for a future with reduced carbon emissions. Shutterstock

**What's missing from the budget for STEM**

Research funding grants have flatlined: inflation means their real value is falling. As we await Universities Accord outcomes, the government has avoided supporting the full cost of teaching STEM degrees. Nothing has been announced to address urgent STEM professional shortages, and to support STEM workforce diversity.

Likewise, there's silence on much-needed industry bodies – a National Engineering Council and the National Indigenous STEM Professional Network.

International STEM collaboration is more important than ever, but has taken a hit with a $25 million reduction to the Global Science and Technology Diplomacy Fund. The fund was planned to support international collaboration in advanced

manufacturing, AI and quantum computing, hydrogen production, and emerging applications of RNA vaccines and therapies to improve health outcomes.

In our region, and across the globe, collaborative and diplomatic relationships in STEM are essential.

We are yet to leverage Australia's true capacity to grow a thriving R&D economy that supports our health, wealth, wellbeing and sustainability, and grows our stature as an innovative and future-focused, inclusive international leader.

Every budget has winners and losers. Next year, the reviews of our STEM sector will be complete, the government will have been in power for two years, and the window for game-changing investment will be shrinking.

My hope is that Australia's long-term future as a safe and resilient nation will be the winner. We need a comprehensive and well funded plan to drive national progress and prosperity through research and development.

# Is China out to spy on us through drones and other tech? Perhaps that's not the question we should be asking

**Ausma Bernot, Patrick F Walsh**

Australian government agencies' use of Chinese-made technology has been making headlines again. This time, the potential threat comes from DJI drones produced by China-headquartered company Da Jiang Innovations.

A cessation order signed earlier this month will see the Australian Defence Force (ADF) suspend its use of DJI products, pending a six-month security audit of the force's supply chain. DJI drones were being used for training and military exercises.

DJI joins a growing list of Chinese technology producers spurring anxiety in Australia and among allies. But the disproportionate focus on Chinese-made technologies might not be doing Australia's national security much good.

## A history of pointing the finger at China

It is important to note DJI does have links with China's ruling political party, the Chinese Communist Party (CCP), which has its own branch within the company. DJI also supports public security efforts in Xinjiang. Recent research has demonstrated how private surveillance companies in China will keenly adopt the CCP's language to position themselves advantageously in the domestic market.

All of the above has raised national security concerns in Australia – and not for the first time. In 2018, Malcolm Turnbull's government blocked Huawei from supplying Australia's 5G infrastructure to ensure the security of critical infrastructure. Turnbull said Australia must "defend our sovereignty with the same passion that China seeks to defend its sovereignty".

An ongoing case is also being made against TikTok, with critics pointing to the potential for the CCP to use the app to harvest data. The platform was banned from Australian government devices in April.

---

***Read more:*** ***Even if TikTok and other apps are collecting your data, what are the actual consequences?***

---

In another example, the shadow cyber security and home affairs minister, James Paterson, earlier this year called for the removal of all CCTV cameras at government sites supplied by China-based companies Hikvision and Dahua. This came after an audit that involved counting the number of Hikvision and Dahua cameras being used on government premises (there were more than 900).

## The problems, according to recent debates

Paterson's reviews of the use of TikTok, Chinese CCTV camera and DJI drones by government agencies have been accompanied by two key arguments.

The first considers Chinese companies' links to human rights violations. In 2022, the United Nations published an assessment that determined there was evidence of serious human rights violations against Uyghur and other predominantly Muslim-minority people in Xinjiang province.

---

***Read more:*** ***Even if TikTok and other apps are collecting your data, what are the actual consequences?***

---

The Australian Strategic Policy Institute has monitored Chinese technology companies and their sales in Xinjiang since 2019, and curated a list of 27 companies supplying surveillance infrastructure to the region. DJI, Hikvision and Dahua all compete for market share in China, and this includes sales to public security agencies in Xinjiang.

The second argument considers potential risks to Australia's national security. In the case of DJI, Australia has acted in tandem with the US since 2017, when DJI drones where first prohibited from use by the US military. The same year, Australian Defence Forces suspended their use of DJI drones for two weeks. A recommendation was then made to use them only in non-sensitive and unclassified contexts.

In 2019, the US Department of Defence banned the purchase and use of drones and their components produced in China, and in 2022 made DJI a blacklisted supplier – less than a year before the ADF announced its current security audit.

## What should Australia be doing?

In a 2017 parliamentary hearing that included a discussion on DJI drones, the ADF's then deputy chief of information warfare, Marcus Thompson, noted "there were some concerns regarding the cyber security characteristics of the device". The conversation continued behind closed doors.

More recently, Australian Security Intelligence Organisation (ASIO) Director-General Mike Burgess responded to concerns about CCTV camera use by saying: "There's nothing wrong with the technology; it's that the data it collects and where it would end up and what else it could be used for would be of great concern to me and my agency."

These scenarios suggest, when it comes to China, there are risks of potential foreign interference, espionage and data leaks. Yet, at the same time, we don't have concrete evidence of Chinese government agencies accessing Australians' data via tech companies and their products.

Either way, starting a new debate on the use of Chinese technology every few months is not a sustainable security strategy, as much as it is a whack-a-mole tactical response. Nor is it very useful to conduct audits that merely count the number of Chinese-made devices in use.

***Read more:*** ***Australia needs a robust cybersecurity overhaul – not whack-a-mole bans on apps like TikTok***

---

Protecting Australia's national security interests will require in-depth security reviews of all foreign technologies used, as well as a review of our overall national security strategy. ASIO has a foreign interference task force, which could consider incorporating the vetting of imported tech. Such an approach would help avoid hypotheticals.

It would also clearly articulate roles and responsibilities within government for whatever new technology comes along next. It is not just China that poses risks to Australia's national security. Our politically driven focus on China takes away from efforts to weed out potential harms from elsewhere, such as Russia, Iran and non-state actors.

*Reproduced with permission from The Conversation*

# Interesting Internet Finds

**Steve Costello**

While going through more than 300 RSS feeds, I often encounter things I think might interest other user group members. The following are some items I found interesting during September 2022.

***What To Do If You Forget Your Android Phone's PIN, Pattern, Or Password***
**https://www.howtogeek.com/226942/what-to-do-if-you-forget-your-android-phone%e2%80%99s-pin-pattern-or-password/**
It used to be easy to reset things if you forgot this information. Recently it has been becoming much harder. If you have an Android phone, you need to read this post.

***Gmail: Send A Group Email***
**https://cynmackley.com/2022/09/12/gmail-send-a-group-email/**
I know a lot of user group members use Gmail. But, I also know not everyone knows how to send a group email with Gmail. If you don't know how to do this, read this post to learn how.

***How To Create A USB Image To Back Up Your Data***
**https://www.maketecheasier.com/create-usb-image-data-backup/**
This is a little bit more advanced than what I usually post. I use this process frequently enough that it has become a habit.

***How To Make Android Faster: 11 Things That Work (And 3 That Don't)***
**https://www.makeuseof.com/tag/android-faster-works/**
I have Android phones and tablets, so this post got my attention. I am always looking for ways to make these devices work faster. I have used most of the tips at one time or another, and I no longer use the 3 that don't work even before reading this.

***What Is Smishing?***
**https://askleo.com/what-is-smishing/**
I am sure you have heard of phishing, but do you know what smishing is? Check out this post to learn about it, what to watch for, and what to do about it.

**********

*This work by Steve Costello is licensed under a Creative Commons Attribution 4.0 International License. As long as you attribute this article, you can use it in part, or whole, for your newsletter, website, or blog.*

# East SIG Report – April 2023

**Neil Muller**

After welcoming members to the April meeting of East SIG, host Frank Maher outlined the nights agenda below:

Presentation 1: **Q&A** with George Skarbek
Presentation 2: A selection from the YouTube video **"66 Most Useful Websites Everyone Should Know!"** by Frank Maher
Main presentation: **Most Useful Free Software** by Dave Botherway

## Q&A by George Skarbek

**Question 1**: I use Microsoft Outlook as my email client and about once a week I get an email with the heading "photos", from a friend who passed away 3 years ago. I currently just delete these emails, but should I open the emails to see photos of what it's like up there? Is the reason I get these emails at her end or my end?

**Answer 1**: Someone has to send the emails and normally they don't come from the other side. It's certainly not at your end, but someone else's end. If you want to do some detective work, look at the emails header information to see where the emails are coming from. Look at what server it comes from, that will locate what country and most likely a city. This will require a little bit of technical knowledge but it can be done if you're curious.

If the emails include photos that are jpegs, they are safe to open, as I'm not aware of any executables that can be embedded in a jpeg file.

As the emails are from the same sender and email address, it's possible to set up a rule that any emails from that address go straight to a junk folder.

**Question 2**: One of our members has a collection of photos (jpegs) and audio and video files (.wma & .wmv) within an application that I believe is called PicMusic Viewer. I believe it's a slideshow or photo album application that has jpegs, audio and video files attached to it. Is that a program you've heard of? If not, is there a program that is easy to use and can combine the file types mention into a photo album for a presentation slide show, similar to PowerPoint?

**Answer 2**: I've not heard of a program called PicMusic Viewer. However, there are quite a few applications that can put together a good slideshow. ProShow Gold was an excellent program for producing slideshows but I don't think it's still on the market. You may still be able to find an old copy. It was very easy to learn and use, and very versatile for what it does.

There's also PhotoStory, a Microsoft product that is included in Windows. It is easy to use and can also put together an audio-visual slideshow. PhotoStory can add titles, music and transitions between your digital photos, it uses the Ken Burns Effect for pan and zoom and allows adding narration. The slideshow is saved as a Windows Media Video (wmv) movie file.

[Update] PhotoStory is no longer supported by Microsoft but is still available from the Microsoft store and will run in Windows 10. The replacement app can be found under the "Photos" app in Windows 10 and 11. To create a slideshow, you first select the Photos app then click on the "Video Editor" tab then select "New video Project". Refer Figure 1 below.

[Barry Horn] I have used ProShow Gold but as you indicated it is no longer available. Even though I still have ProShow Gold, I now use Adobe Premier Elements to do Slideshows, as I find it easier. Premier Elements is not free but you could use any of the free video editing programs to insert images for a slideshow.

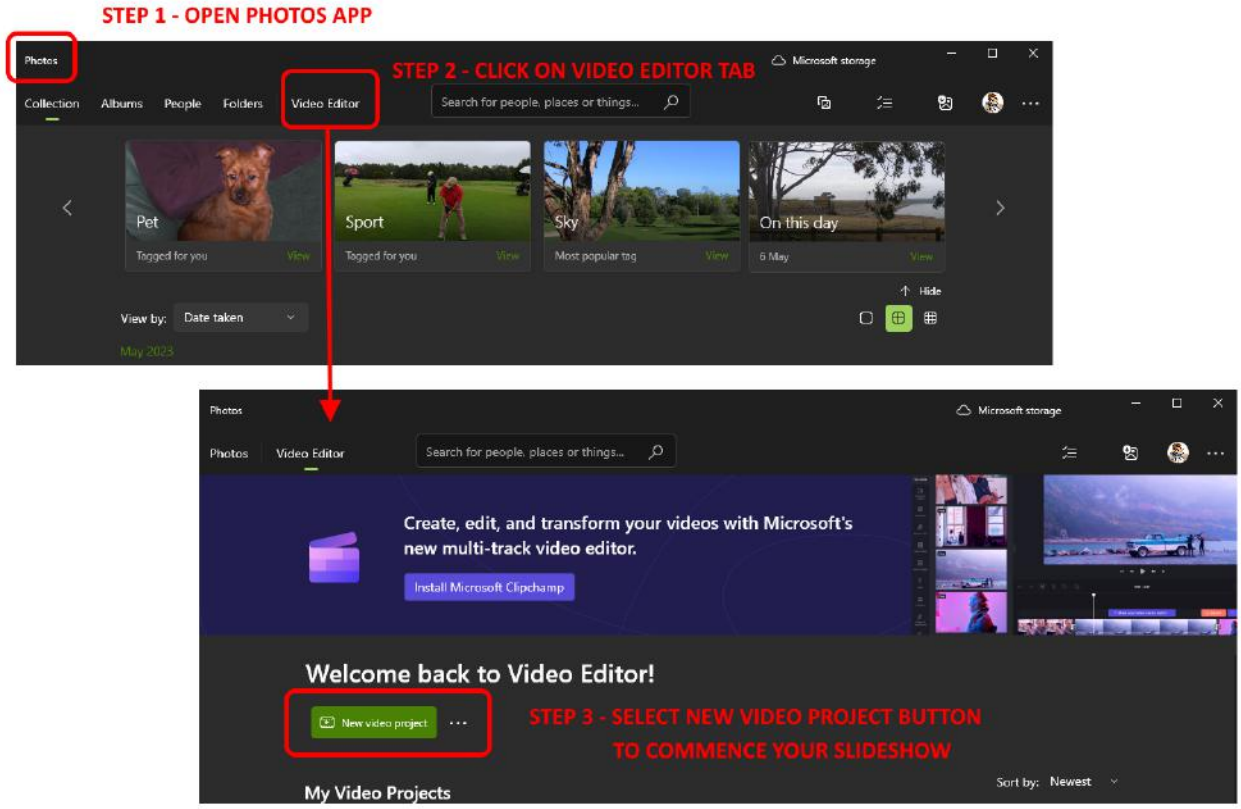


Figure 1 – Windows Photo Slideshow App

**Question 3**: Is there a way to automatically open Outlook when you boot up your computer, other than writing a batch file? I tried placing a shortcut in the startup folder but that doesn't seem to allow Outlook to run.

**Answer 3**: You should be able to do that without writing a batch file. I would have thought you could place a shortcut in the startup folder to open Outlook. Alternatively you could use Task scheduler to open Outlook on start-up

**Question 4**: I've recently listened to a podcast by Steve Gibson the author of SpinRite which mentioned he's soon to release a new version of SpinRite. I wonder whether anyone has used it and what was their experience? [SpinRite is a hard drive recovery program]

Figure 2 – Steve Gibson's SpinRite

**Answer 4**: I've certainly used SpinRite. It's an absolutely brilliant program that graduated from floppy to hard drives. With large rotating drives it's very slow, as it examines each sector. However, the current version is no longer applicable for solid state drives.

[Phillip Lynch from iHelp replies] I've been using SpinRite for years and like George found the current version very slow on contemporary drives. The longest it took me to recover photos from a hard drive was 37 days. In that time SpinRite recovered all but one photo.

I've tried the latest beta version of SpinRite that's due to be released in a few months, and it whips through large drives in under 2 hours. My reading of some of the forums indicates there's been a good deal of success reading SSDs. The new version doesn't pump the SSDs too hard in terms of rewrites, but does lots of reads for recovery of data. If you have a drive that is not reading correctly, SpinRite will keep going when Windows has given up.

**Question 5**: I want to build a CCTV system for use on a farm, where most of the time there will be no activity. If the owner is off site for a week and needs to find a section of the video containing movement from an intruder, I wonder how I can go about that? Is there any software that can do a search for activity, rather than a person having to sit down and go through the whole video? I've searched the internet but didn't know what search term to use, so didn't have any success.

**Answer 5**: If I was building a CCTV system, I'd look for an off the shelf system. These systems come with software that can be set to record only when there is activity.
If you plan a DIY system, I've heard of software that can extract one frame a second from the original video and compile a new video from that. The new video would be much shorter and quicker to search through. Once you find the passage showing movement, use the time stamp from that passage and go back and view that section of the original video. I can't remember the name of the software that can do this, as I haven't looked at this topic recently.
When playing back the original DIY video, play it at fast forward speed or use the play indicator to carefully scroll along the video's timeline.

[Brian Haywood] I have a Swan system which records only when it is triggered by motion. You can set the sensitivity and have it send emails to you when it detects motion. The Swan system is not that expensive and I've found it very good.

Figure 3 – Swann budget CCTV system

## 66 Most Useful Websites Everyone Should Know! by Frank Maher

In this presentation, Frank Maher looks at a selection of websites that he thought would be of most interest to members. The websites featured are from the YouTube video by Brett In Tech titled the "66 Most Useful Websites Everyone Should Know!" at https://tinyurl.com/mthp8a7t or https://www.youtube.com/watch?v=fDdeeMCMJ1c

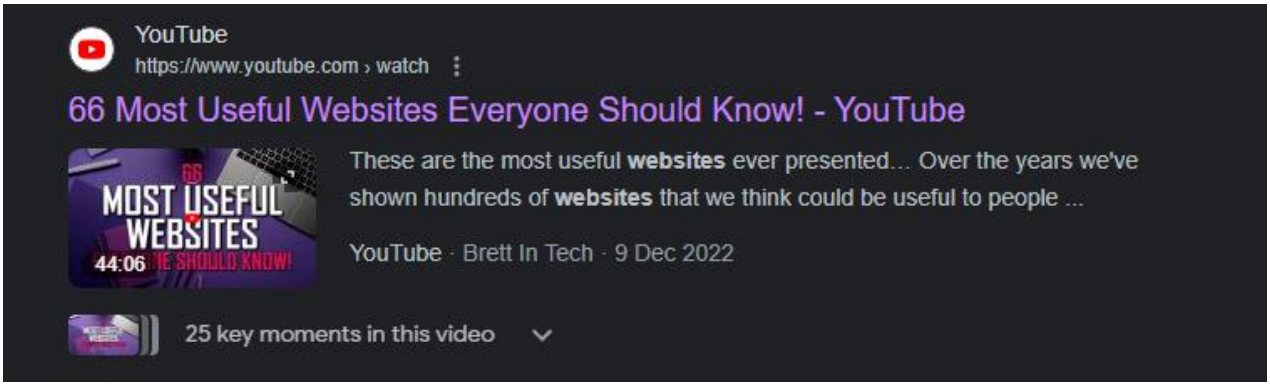


Figure 4 – YouTube banner for "66 Most Useful websites …."

In the YouTube video each website is viewed, briefly described and demonstrated. Most video clips are between 30 seconds and a minute long. The selection Frank played to members is shown in the list below.

- Alternatives to Popular Software at https://alternativeto.net
- Amazon Price Tracker at https://camelcamelcamel.com
- Check If a website is Down at https://downdetector.com.au
- Internet Speed Test at https://fast.com
- Hyperlink Identifier at https://www.getlinkinfo.com
- DIY Electronics Repair Guides at https://www.ifixit.com

- Windows Software Package Manager at https://ninite.com
- File Converter at https://www.online-convert.com
- Free Stock Photos at https://pixabay.com
- Makes Websites Print Friendly at https://www.printfriendly.com
- Road Trip Planner at https://roadtrippers.com
- Temporary Email Address at https://10minutemail.com
- Files/Website Security Checker at https://www.virustotal.com

Following the video, Frank demonstrated some of the above sites that he felt deserved a second look.

**AlternativeTo (**https://alternativeto.net)

AlternativeTo is a site that suggests alternate free software to commercial applications. When Frank entered Microsoft Word the program suggested Libre Writer, Google Docs, WPS Writer, OnlyOffice, Apache OpenOffice Writer, TextMaker, Pages, AbiWord plus others as free alternatives to MS Word.

**Downdetector** (https://downdetector.com.au)

Downdetector is a website that help when you have a problem loading a website and you're not sure if the problem is at their end or yours. When Frank entered his broadband supplier Aussie Broadband, the site displays a timeline graph that indicates the site did have a problem that lasted over an hour and a map where the outage occurred.

**Fast** (https://fast.com)

Fast is an Internet Speed Test, that's independent of your broadband supplier. Franks has a 100mbps download and 20mbps upload internet plan with a VPN. When he tested his connection, the speeds recorded were slightly below specification, but reasonable for an 8pm test.

**Print Friendly & PDF** (https://www.printfriendly.com)

Often when you want to print a webpage, the layout contains ads and the site isn't always suitable for printing. Using "Print Friendly & PDF", you enter the websites URL into a text box and the site generates a new layout that can be printed or saved as a pdf file.

**Road Trip Planner** (https://roadtrippers.com)

Road Trip Planner lets you plan your road trip and discover points of interest along the way. Although American centric, Frank demonstrated how he would plan a trip from Lorne to Port Campbell. Once selecting his trips start and end destinations, a map displayed the route, which he then zoomed into to show more detail. Selecting places on the map that he wanted to visit, updated the route to include those points. The trip can be saved and then linked to the roadtrippers app for turn-by-turn navigation.

# Most Useful free Software by Dave Botherway

Determining the most useful software for a computer user, is a very subjective topic, as each user's requirements and interests are different. This variation is evident from the 2 videos highlighted in Dave's presentation, and also for any search of YouTube on the topic. In this presentation, Dave Botherway looks at 2 YouTube videos on the topic, the first by Kevin Stratvert and the second video by Brett In Tech, both produce very professional quality videos on numerous computer topics.

**Best FREE Software for PC** ( https://www.youtube.com/watch?v=C3QUKwITVcw ) or https://tinyurl.com/3revptsm

Figure 5 – YouTube banner for "Best free Software for PC"

The first video was by Kevin Stratvert titled the "Best free software for PC". Kevin Stratvert has produced many professional videos on numerous computer topics and this one is no different. Dave played this video in full, being less than 8 minutes long. In the video, Kevin outlines his top 10 best freeware programs which are listed in order and briefly summarised below.

1. **GIMP:** https://www.gimp.org/
   GIMP is a fully functionality image editing program that is comparable to Adobe Photoshop. You can transform images, add effects, adjust colours, and more.

2. **Greenshot:** https://getgreenshot.org/
   Greenshot is a screenshot tool that allows you to capture your screen and annotate your images. This is especially helpful when pulling together documentation. It is far superior to the Windows Snipping tool.

3. **Handbrake**: https://handbrake.fr/
   Handbrake is a video transcoder which will convert a video from numerous formats to mp4 or mkv. It will also reduce the resolution of a video.

4. **Microsoft PowerToys:** https://github.com/microsoft/PowerToys
   PowerToys gives Windows lots of additional utilities, including a colour picker, a mouse highlighter, an app launcher, FancyZones, Awake and much more.

5. **OneNote:** Pre installed in Windows
   OneNote is a digital notetaking app and productivity tool. It provides a single place for keeping all of your notes, research, plans, and information.

6. **Signal:** https://www.signal.org/
   Signal is a free open-source messaging app that puts privacy first with end to

end encryption unlike other messaging apps that are owned by large corporations, like What's App and Messenger, which are owned by Facebook, iMessage by Apple and Skype by Microsoft.

7. **Microsoft's To Do:** https://apps.microsoft.com/store/apps
   Microsoft's To Do app has all your standard task tracking capabilities. You can add tasks, add steps to a task, assign tasks to others.

8. **TeamViewer:** https://www.teamviewer.com/
   Team Viewer lets you remotely control another computer. This is especially helpful if you're trying to help someone with their PC. It lets you take control of their PC and you can also transfer files between your computers.

9. **VirtualBox:** https://www.virtualbox.org/
   VirtualBox is a free and open-source virtual machine made by Oracle. It allows users to extend their existing computer to run multiple operating systems including Microsoft Windows, Mac OS X, Linux, and Oracle Solaris, at the same time.

10. **Shotcut:** https://www.shotcut.org/
    Shotcut video editor has several features usually only seen on paid video editors, such as a full-colour grading option. It installs on relatively lightweight computers. Anyone familiar with video editing software will find Shotcut relatively easy to use.

**55 Most Useful Free Software Everyone Should Know!**
https://www.youtube.com/watch?v=ocqvRdcM_pk or https://tinyurl.com/2p8nj4ak

A second video titled the "55 most useful free software everyone should know!" by "Brett In Tech", was referenced by Dave to assist those members looking for quality free programs. Dave found it interesting that this video only includes 5 of the 10 programs mentioned by Kevin Stratvert in his "Best free software for PC" video. This shows how subjective this topic of best software is.

For those interested in watching the video, the video clip for each program is around a minute long, with each program listed and timestamped for easy access. The video is a compilation of previous YouTube videos by Brett In Tech and gives a quick snapshot of each program. Dave did not play this video due to its length at 48 minutes, but recommended it as well worth watching.

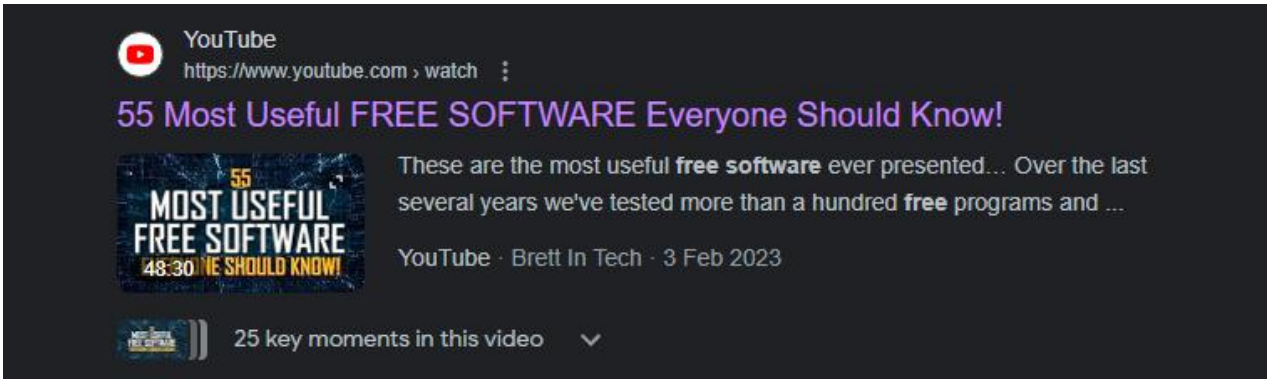


Figure 6 – YouTube banner for "55 Most Useful Free Software ….."

In the video, the presenter lists his 55 most useful programs in alphabetical order. The playlist below the video gives a timestamp for each video and a brief description of the program, but not the programs name. In his presentation, Dave arranged the programs into categories, to make finding software for a certain task easier. Dave's categories are shown below with each program listed with a brief description.

**Internet Browsers**

- Brave Browser — Privacy Focused Browser
- Chrome — Browser (ex Google)
- Firefox — Browser- with many add-ons
- Tor Browser — Privacy focus, relay function
- Vivaldi — Privacy Focussed Browser
- WaterFox — Browser, No tracking or History

**Video Editors and Players**

- HandBrake — Convert Video files
- KdenLive — Video Editing (ala Shotcut)
- Kodi — Media Player, Server
- OBS Studio — Editing & Streaming s/w
- Olive — Video Editing (ala FinalCut Pro)
- OpenShot — Video Editing (easy to use)
- Plex Media Server — Streaming Services
- PotPlayer — ala VLC, many codecs
- Shotcut — Simple Video Editing
- SMPlayer — alt to VLC
- VLC — Media Player - all OS, ad free

**Audio Editors and Players**

- Audacity — Audio file editing
- Media Player Classic — Media Player - all OSs
- Mixxx — DJ Mixer/Xfade, Playlists

**Image Editors**

- Darktable — Photo enhancement (ala DaV Resolve)
- DaVinci Resolve — Photo Enhancement
- FotoSketcher — Modify photos - with effects
- GIMP — Photo Manipulation
- ImageGlass — Image Viewer
- Krita — Vector Graphics editor
- Nomacs — Image Viewer, Slideshows
- XNView MP — Photo Viewer / Editor, Batch conversion

**Office programs**

- Inkscape — alt to Adobe Illustrator
- Libre Office — alt to MS-Office
- Only Office Free — ala Libre Office
- Scribus — Desktop Publisher
- Sublime Text — Text Editor
- Sumatra PDF — Lightweight PDF, ala Adobe Acrobat

- Thunderbird Email Client

**PC Maintenance**

- 7-Zip Pack/Unpack files (many options)
- BleachBit Cleanup disk space
- Blender AV, Modelling (ala CCleaner)
- CPU-Z CPU Stats and Benchmark
- DNS Benchmark DNS checks (ala ftp Gibson)
- Everything Search Directories
- Glary Utilities Tools to Boost / Clean PC
- HWiNFO Details of PC, Performance
- Revo Uninstaller Clean Un-installer
- Rufus Create bootable USB Drives

**PC Security**

- Bitdefender Anti-Virus (vs MS Defender)
- Bitwarden PSW Manager (vs LastPass)
- Malwarebytes Free AV Scanner
- ProtonVPN free VPN (also Proton eMail)
- qBittorrent Lightweight Torrent client
- VeraCrypt Encrypt Files, partitions

**Screen Capture**

- Greenshot Capture Screen, Window
- ShareX Screen Capture (far better than Win)

**Sundry Other programs**

- Google Earth Pro Zoom into anywhere on earth (was $299)
- LMMS Create Music / Design
- Stellarium Virtual planetarium
- Virtual Box Virtual O/S protected
- Visual Studio Code Editing Code s/w

At the conclusion of Dave's presentation members discussed their most useful software that did not make the list.