# East SIG Report – March 2024

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

Presentation 1: **Q&A** with George Skarbek
Presentation 2: **Best Windows Browsers for Privacy** by Trevor Hudson
Presentation 3: **Validrive** by Peter Carpenter
Presentation 4: **Tips for controlling MS Edge** by Peter Carpenter & John Thompson
Presentation 5: **Activate Reader View** by Paul Woolard
Presentation 6: **Preparing your Eulogy with an emphasis on computer issues** by George Skarbek

**Q&A** by George Skarbek.

**Question 1**: Windows download KB5034441 will download but will not install. Although I've got 500MB of recovery room, when Microsoft indicates 250MB is all that's needed, the update still won't load. I've tried numerous methods all without success, can anyone help?

**Answer 1**: The size of your recovery partition does not appear to be the problem, so there must be something else. In this instance I'd go to Windows Settings (Win key + i) and search for Updates. This will show you what updates are pending including KB5034441. Set "Pause update" to ignore that update and wait for the next update, which most likely will fix the issue. That will prevent the rogue update from installing.

[Richard Bradford] I've had the same issue but my recovery partition is less than 250MB. I'm not prepared to risk enlarging the recovery partition as that's not a simple procedure.

[John Hall] That update relates to problems with startup. If your computer is starting up correctly you don't really need that fix.

[Google] Devices attempting to install the January 2024 Windows Recovery Environment update (KB5034441) might display an error related to the size of the Recovery Environment's partition. The Windows Recovery Environment (WinRE) is used to repair or recover from issues affecting Windows. (Published 14 Jan 2024)

This update addresses the BitLocker Security Feature Bypass Vulnerability CVE-2024-20666 which allows attackers with physical access to the system to gain access to BitLocker-encrypted data. Windows 10, Windows 11 and Windows Server 2022 are potentially affected.

Since January 9, 2024, Microsoft has been trying to eliminate this vulnerability with an update and has provided some information on this under the support article KB5034441. Unfortunately, the update is rolled out automatically via Windows Update, regardless of whether Bitlocker is activated on a machine or not. An existing Win RE partition is sufficient – although the installation even failed if the partition was missing.

Microsoft had already indicated in advance that the installation of the update requires 250 MB of free disk space in the recovery partition in order to be installed successfully. If the recovery partition does not have enough free space, the update fails during installation with the error 0x80070643 – ERROR_INSTALL_FAILURE. (Published https://borncity.com 15 Jan 2024)

**Question 2**: Recently I had a random crashing problem with my desktop PCs. I've tried numerous things, including installing a more powerful power supply unit. On occasions I thought the issue had been solved, only for it to reoccur again. On one occasion the PC crashed 10 seconds after booting up. I sent the PC away to be repaired, where they discovered that the problem was a 5 port USB add on card I installed, was drawing more current than the system on the motherboard allowed. The USB card has been removed and the problem now appears to be fixed.

**Question 3**: A friend has a computer with both a C and D drive. How does he tell whether it's a partitioned drive or 2 separate drives in his computer?

**Answer 3**: Select the Windows key + X and select "Disk Management" from the list of displayed items. Alternatively, this can be accomplished via the Windows Control Panel. With the Control Panel screen set to display "All Control Panel items", click on Administrative Tools → Computer Management → Disk Management. Figure 1 displays the "Computer Management" window, where "Disk Management" is selected. The "Disk Management" window then opens as shown in Figure 2, for a computer having 2 separate drives.
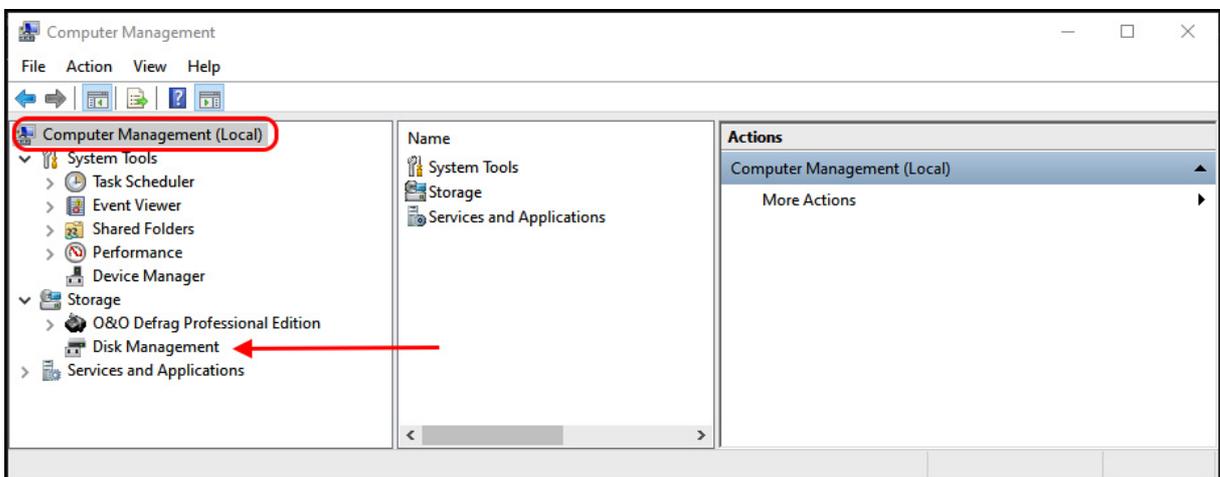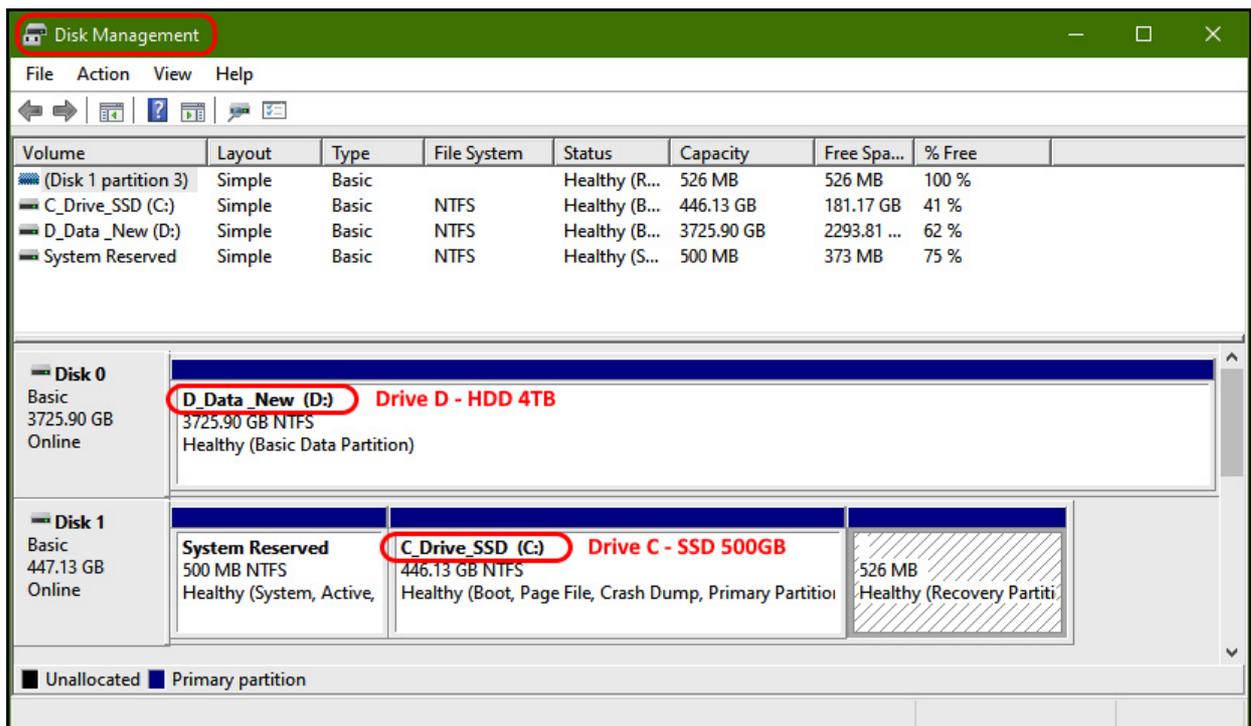


Figure 1 –Computer Management window



Figure 2 – Disk Management window

2

## Best Windows Browsers for Privacy by Trevor Hudson

The following meeting topic, "Best Windows Browsers for Privacy," was presented by Trevor Hudson. Trevor commenced his presentation by showcasing a video he had prepared and uploaded to YouTube. The video's YouTube banner is as illustrated in Figure 3.
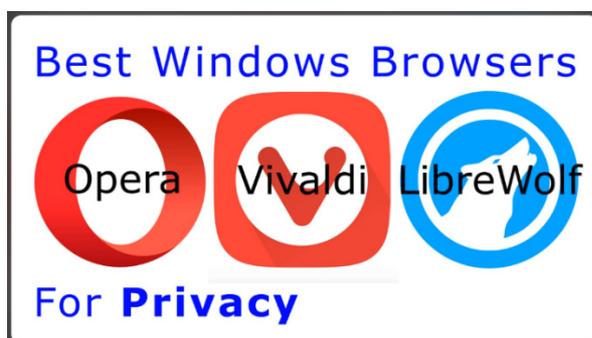


Figure 3 – YouTube banner for Trevor's video "Best Windows Browsers for Privacy".

Trevor's video begins by introducing four popular Windows browsers renowned for their strong privacy features: Opera, distinguished by its free VPN and excellent privacy, Vivaldi, LibreWolf, and Tor Onion. However, the focus of the presentation is the LibreWolf browser, which Trevor personally uses with Proton VPN.

The video guides viewers through the process of acquiring and installing LibreWolf, beginning with the recommended site for downloading the browser. Trevor then proceeds to demonstrate the installation process, how to import bookmarks, and concludes with an overview of the various setting options. The Settings menu options are found by clicking the Cog wheel to the top right corner of the browser window. The options are categorized into five tabs - General, Home, Search, Privacy & Security and LibreWolf, where Trevor briefly outlines each.

Librewolf can be downloaded from https://librewolf.net/installation/ . Trevor's video can be viewed at the following URL https://www.youtube.com/watch?v=SW2gN2XgfxA.

## Validrive by Peter Carpenter

Validrive is a utility program developed by Gibson Research Corporation, known for their renowned data recovery software, SpinRite. During the development of SpinRite v6.1, Steve Gibson, the developer and programmer behind SpinRite, identified a growing issue with fraudulent and substandard USB flash drives. To address this concern, he created Validrive, a free utility designed to verify the authenticity of USB flash drives and accurately assess their true storage capacity. Validrive also performs read/write error checks to ensure the reliability of the flash drives. For more information, visit: https://www.grc.com/validrive.htm



Figure 4 – Validrive from Gibson Research Corporation

The Gibson Research Corporation website highlights the deceptive practice involving the sale of counterfeit USB storage drives on Amazon.com. While consumers may initially think they have purchased a 1 or 2 terabyte drive at a bargain price, they actually receive a fraudulent drive with only 64GB of storage.

Despite appearing functional and allowing file copying, these drives lack the capacity to store data beyond the initial 64GB. _The directory listing gives the illusion that files are stored, but their contents are blank due to insufficient storage. Operating systems are unable to detect this deception, as the drives do not report errors and silently discard any data written beyond their limited capacity._

Utilities like H2TestW are often employed to verify the capacity of USB flash drives by reading and writing to each sector, a process that can take considerable time, especially when assessing the validity of large capacity "no brand" or counterfeit USB drives. In contrast, Validrive offers a more efficient approach with its data-preserving 576-region spot-check, ensuring thorough examination of readability, writability, and declared storage space.

When checking a USB drive, first start up Validrive then insert the USB flash drive. Validrive recognises the inserted USB and runs through the testing process. Peter tested Validrive on an 8GB flash drive and found the process took approximately 10 to 15 minutes to complete. Figure 5 below are screen captures from Peter's verification of the 8GB flash drive and demonstrate how the checking process proceeds.
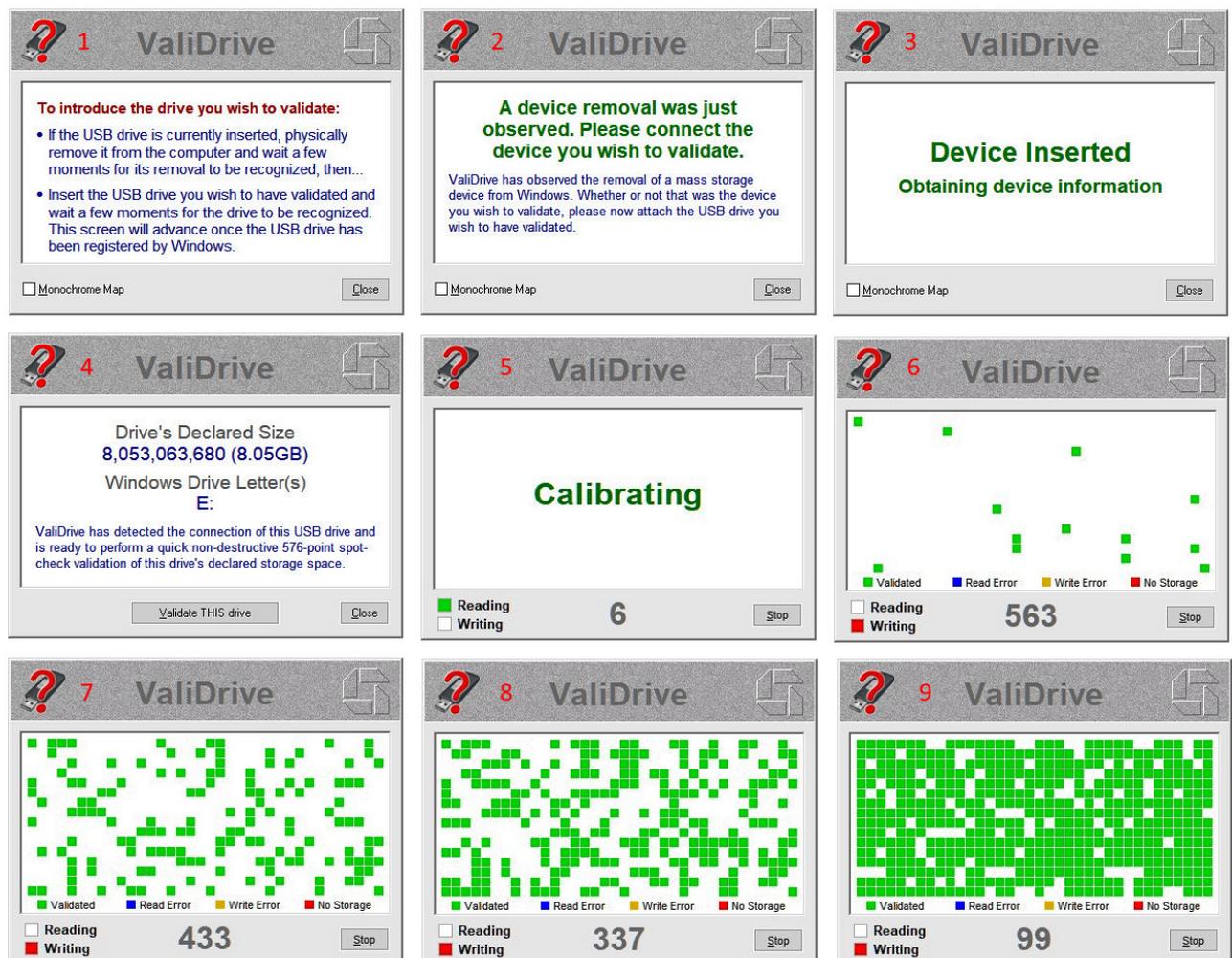


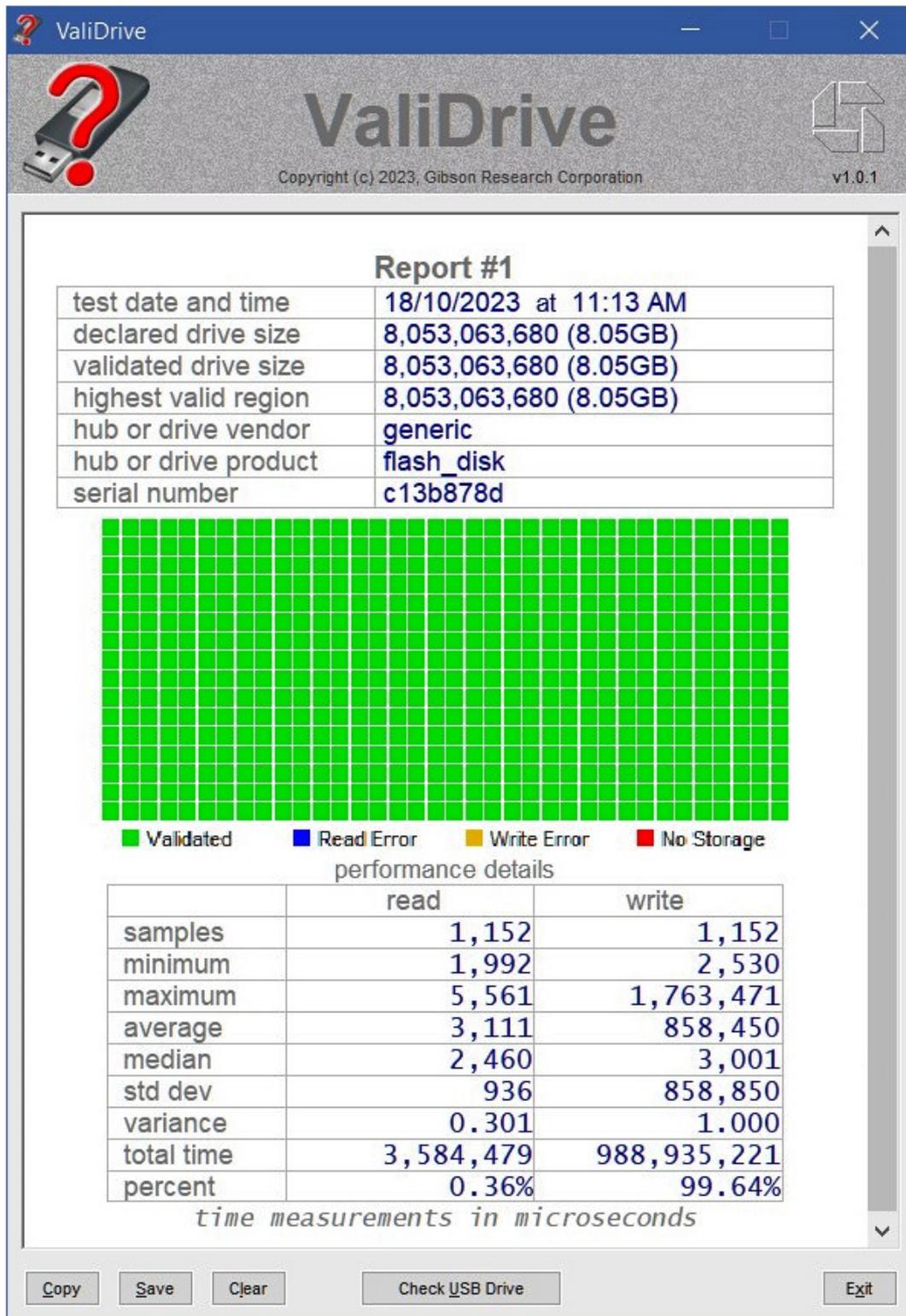Figure 5 –Screen captures of Validrive checking Peter's 8GB USB drive.

Figure 6 – Validrive report screen

Differing opinions arose among audience members regarding the feasibility of employing Validrive to accurately assess the true capacity of an SSD drive, mounted within an enclosure. However, one attendee shared their experience, indicating that they had successfully used Validrive in such a scenario, confirming its effectiveness.

# Productivity tips for controlling MS Edge for non-Edge users

This portion of the report features insights shared by both Peter Carpenter and John Thompson, offering valuable tips and strategies for optimizing the use of Microsoft's Edge browser.

## MS Edge Redirect by Peter Carpenter

When initiating a search from the Windows taskbar, the results are directed to open in the Edge browser, regardless of whether Edge is set as the default browser. However, users can overcome this annoyance by installing a small program called **MSEdgeRedirect**, accessible on Github at https://github.com/rcmaehl/MSEdgeRedirect. Once executed, this program redirects searches to the user's preferred browser.
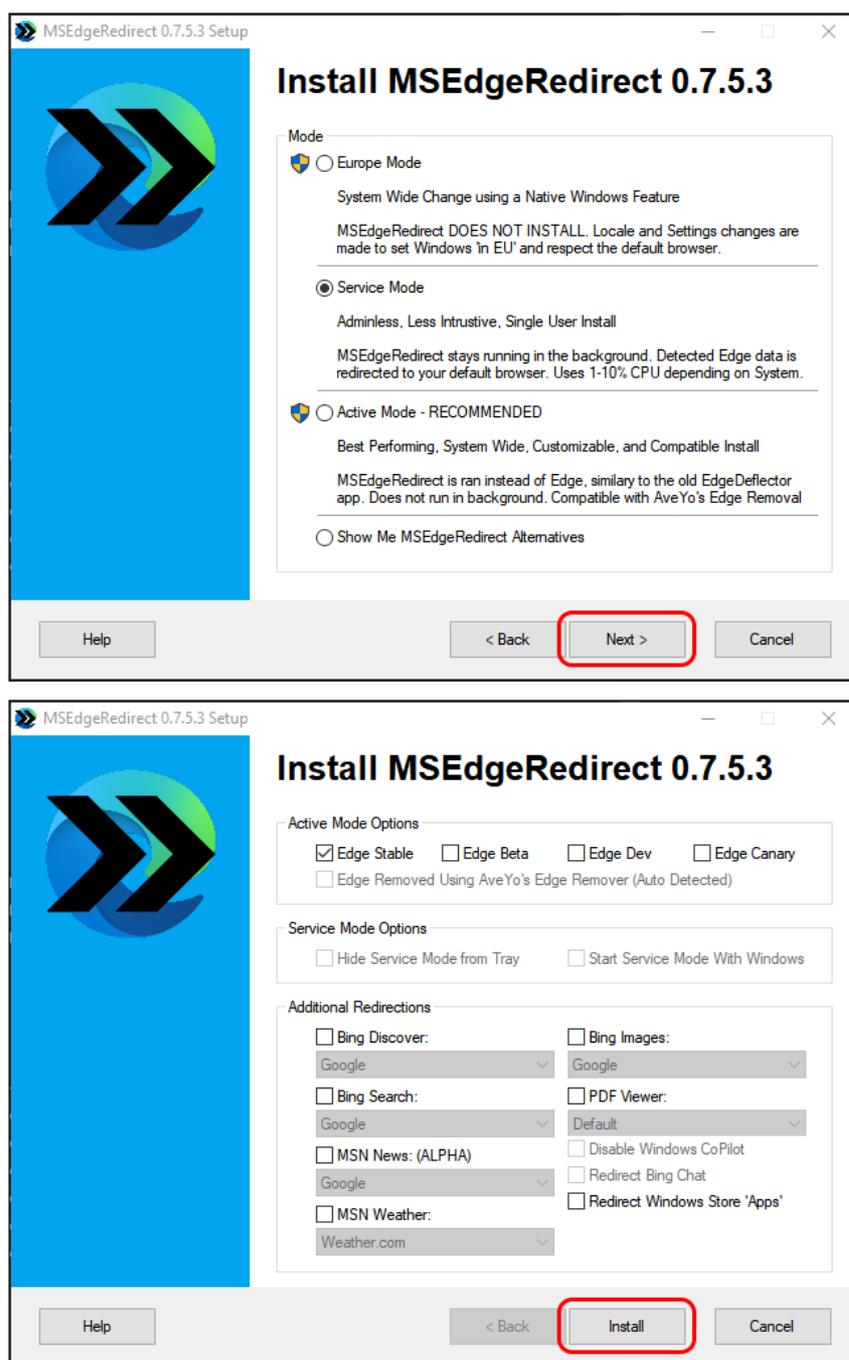
Figure 7 – MSEdgeRedirect installation screens

The Github.com website details the 2 installation options available, "Service Mode" and "Active Mode", as seen in the upper screen capture in Figure 7. "Active Mode" is the default option and the best performing install choice. It's also the option Peter selected.

Full details from Github can be found at http://tinyurl.com/5k2mnn6d.

**MS Edge Pre loading** by Peter Carpenter

When Windows 10 starts up, the Edge browser preloads processes that sits in the computer's memory until Edge is needed. These services run in the background allowing Edge to open quicker than other browsers, but uses up the computers resources (memory). For those who don't use Edge, these optimizations are wasting resource and slowing startup. With 2 quick Registry hacks, you can disable Edge from preloading and pre-launching.

In this short presentation, Peter Carpenter drew attention to an article on the howtogeek website. The article details methods to optimize memory usage by preventing Windows from preloading services for Edge during startup. The proposed change involves making 2 small edits to the Windows Registry. The howtogeek article detailing the process can be found at http://:tinyurl.com/krbu7sm3

For those who don't feel comfortable editing the Windows Registry, the howtogeek website has created some Registry files to simplify the process. These hacks can be downloaded in a zip file which contains 2 registry files, one for disabling pre-launching and the other for disabling preloading. Two additional files are included for re-enabling both features.

The contents of the zip file are shown in Figure 8. Once extracted, double-click the Registry file you want and accept the prompts asking whether you're sure you want to make changes to your Windows Registry.
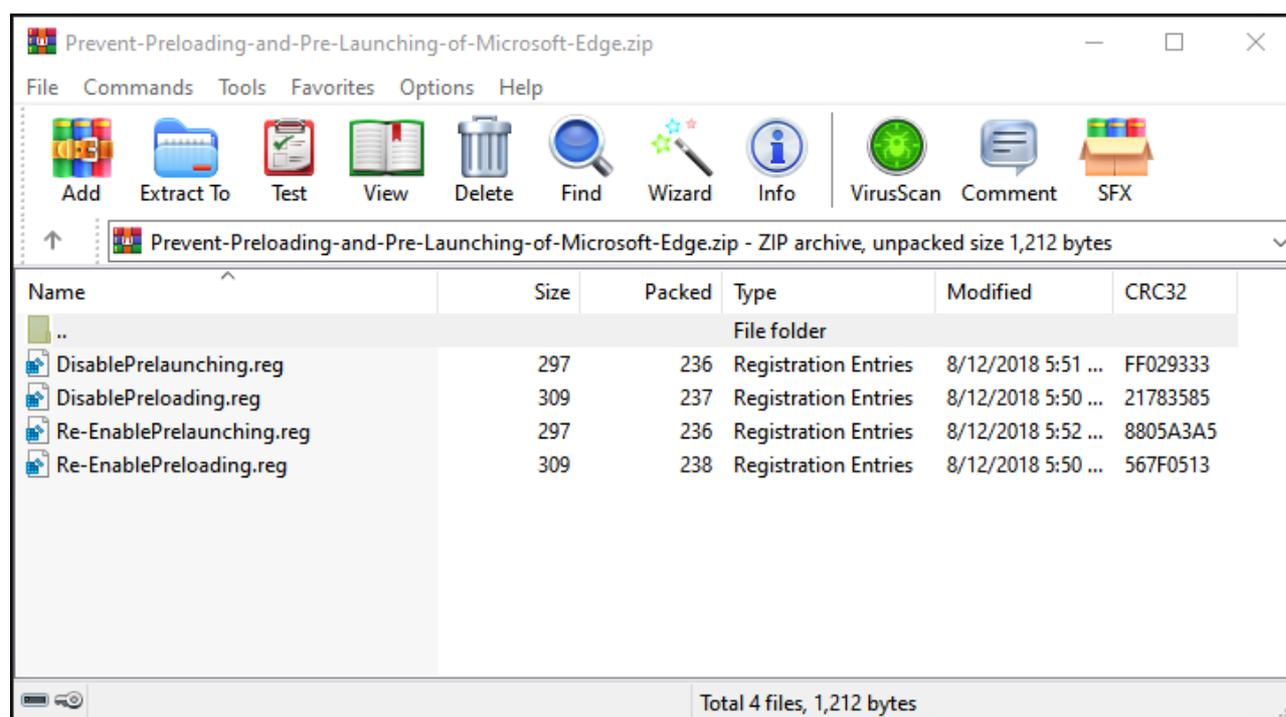


Figure 8 – Zip file contents for disabling Edge prelaunch & preload

**<u>Controlling MS Edge & Windows Apps from Starting up</u>** by John Thompson

An alternate method for controlling Edge and other Windows Apps when Windows starts up is via Windows Setting. This works for both Windows 10 and 11 by selecting **Settings → Apps → Startup**. On the Startup screen shown in Figure 9, turn off all Apps that are not needed when starting Windows.

John is yet to confirm whether this tip takes the place of MSEdgeRedirect to prevent Edge from preloading at startup. Nevertheless, John's tip is valuable for controlling other Apps from preloading at Startup.
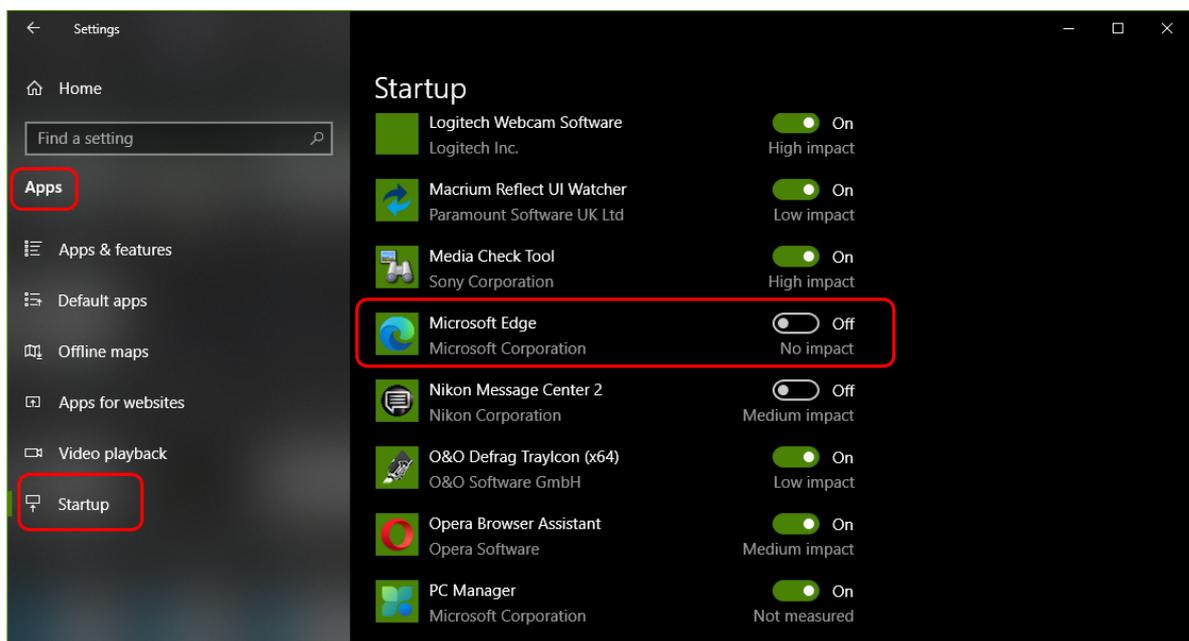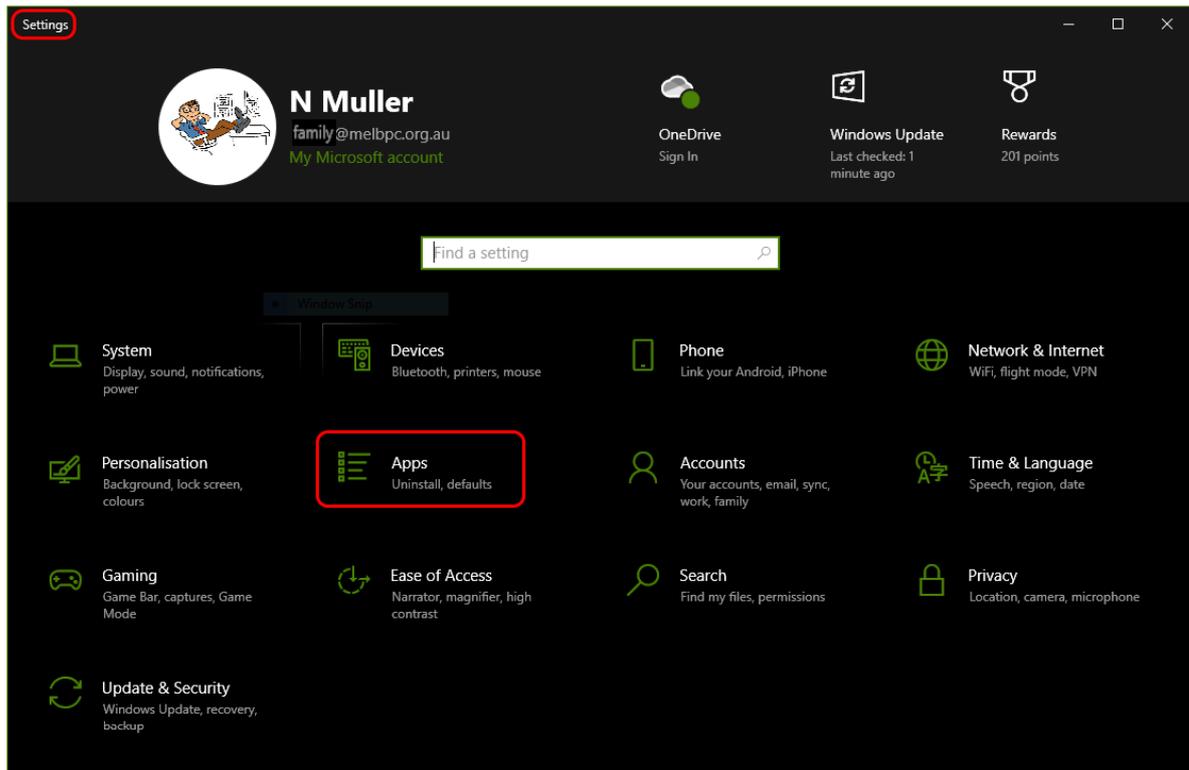




Figure 9 – Turning off unwanted Apps at Startup in Windows 10.

**Activate Reader View** by Paul Woolard

Reader view is an addon or extension to web browsers that improves the reading experience on websites, by providing a simplified and distraction-free view of the content. A simplified view of a web page is shown in Figure 10, and displays both a standard Wikipedia webpage and the same webpage viewed in reader view mode.
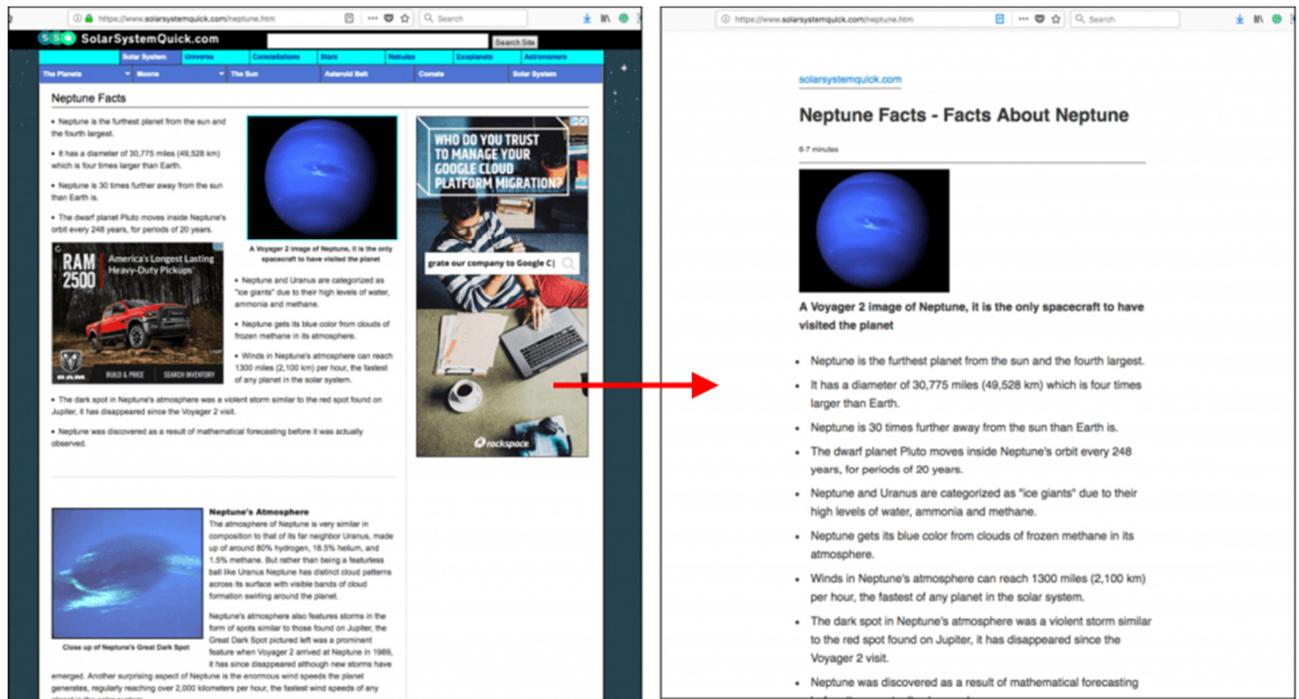


Figure 10 – Standard webpage versus Reader View

Paul had installed a reader view extension into Firefox years ago, yet used it spasmodically until recently. It wasn't until by chance that Paul stumbled upon an unexpected usage for his reader view extension, called "**Activate Reader View**." This discovery came about when he encountered a website that detected his use of an ad blocker, subsequently blocking his access to the site's content. Despite his attempts to disable various ad blockers, some of which were individually loaded, while others were integrated into antivirus packages or his VPN system, Paul found himself unable to appease the website's restrictions. Despite investing time in disabling the ad-blockers he remembered installing, he remained thwarted by the website's "gatekeeper".

Several months later, in frustration when again stopped by an ad blocker, Paul resorted to clicking on each extension's icon on the Firefox's toolbar. To his surprise, when he clicked on the "Activate Reader View" icon, the blocked page currently displayed on his screen, seamlessly transitioned into reader view mode. This action effectively stripped away the obstructive ads and circumvented the website's gatekeeping measures.

Paul demonstrated "Activate Reader View" on a webpage open in Firefox, providing an overview of the extension's features. Positioned adjacent to the reader view textural content to the left, is a small menu offering four choices. The first menu option toggles the reader view off. The second option enables users to customize various aspects such as text type (sans-serif or serif), font size, content width, line height, and dark or light display mode, allowing for adjustments for readability or printing purposes. The fourth option enables the saving of text to Firefox Pocket. A detailed illustration of the aforementioned features is shown in Figure 11.
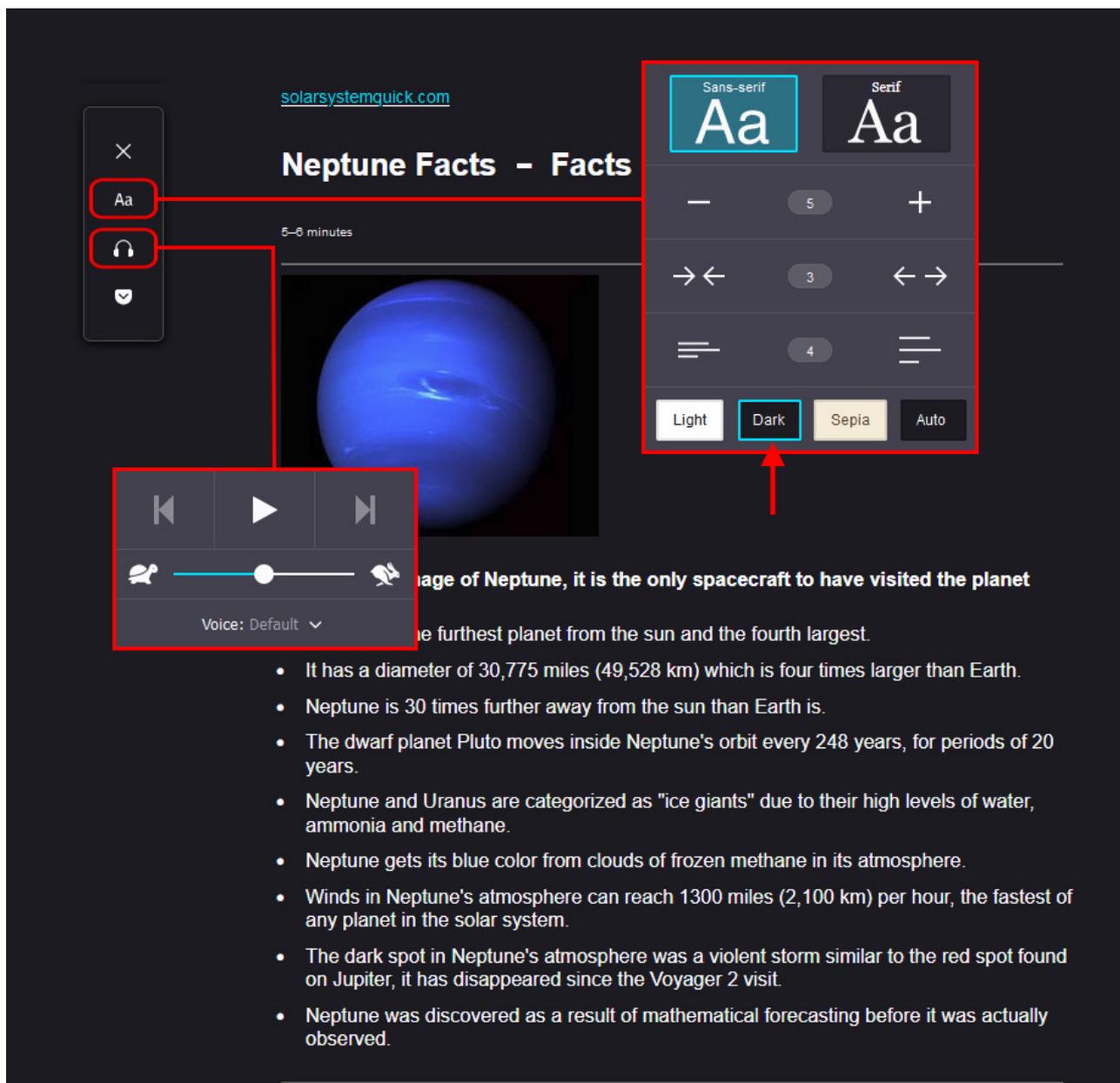
Figure 11 – Activate Reader View webpage options

If you're a Firefox user and haven't yet installed a reader view extension, Paul highly recommends "**Activate Reader View**" as the one to choose.

By passing the Ad blocker was not the only discovery Paul made. While doing research on the web using "Activate Reader View", he found a reference on Reddit which suggested reader view could bypass paywalls. This sounded too good to be true, but he tried it and it worked.

Paul proceeded to demonstrate how to add the "Activate Reader View" extension to Firefox. Simply click on the "hamburger" menu icon located near the top right corner of the screen, then type "Activate Reader View" into the "Find more add-ons" box, and then press Enter. Once installed, the extension adds an icon to your browser's menu bar adjacent the hamburger menu. Selecting this icon toggles the viewed webpage into reader view mode, enhancing readability and removing distractions.

In some instances, the "**Activate Reader View**" icon might not appear alongside other installed extensions' icons, which are adjacent the "hamburger" menu icon. If this situation arises, you need to click on the extension icon, which bears a resemblance to a jigsaw puzzle piece, and then choose "Activate Reader View" from the Extension menu options. This process is illustrated in Figure 12.
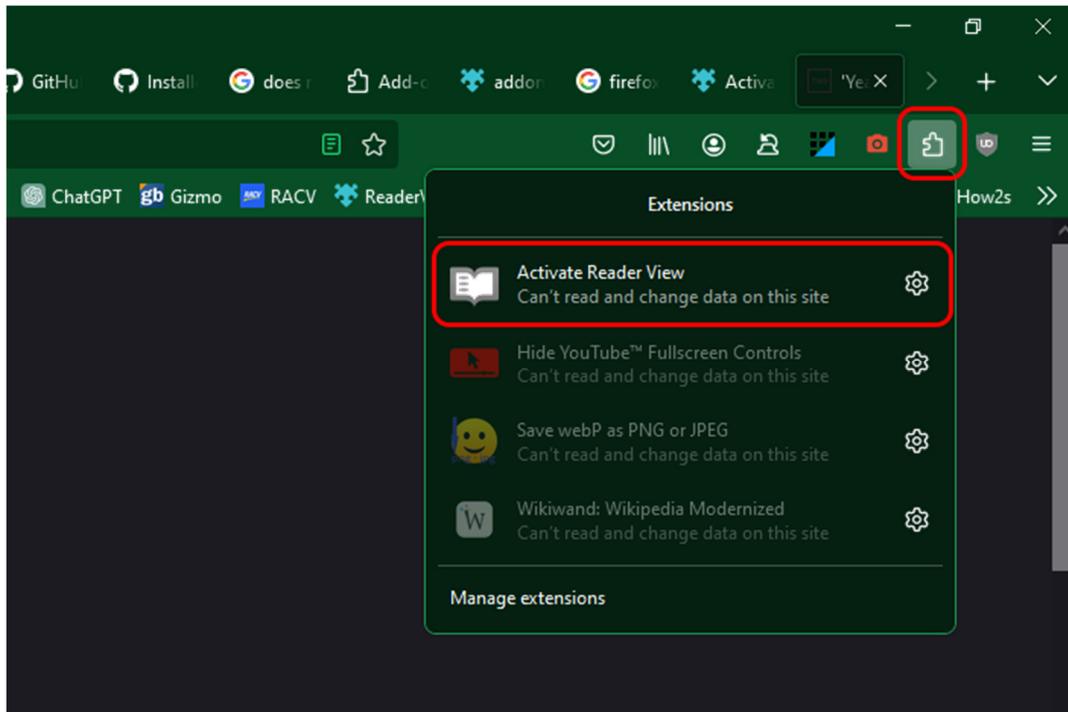


Figure 12 – Activate Reader View from the Extensions icon.

## **Preparing your Eulogy with an emphasis on computer issues** by George Skarbek

**Resources**
Preparing for the inevitable is a serious yet essential task, and George Skarbek's presentation on this matter, focusing on computer-related issues, offers valuable insights. Prior to delving into the core content, George directed Melbourne PC User Group members to an informative presentation by John Hall, highlighting resources available for safeguarding one's digital legacy, on both government and private websites. Recognizing the importance of the topic, George highlighted its relevance to most members. Interested members can access John's presentation via the Wadham House SIG webpages on the MelbPC's website. https://tinyurl.com/dmzujzry



Figure 13 – John Hall's Digital Legacy presentation frontpage

**Preparations**

Outlined within George's presentation were important preparations every individual should have in place. Chief among these is a current Will, which not only ensures the designation of an executor but also facilitates the management of one's affairs and finances. Resources for drafting a Will, whether through online platforms or legal assistance, were recommended. Additionally, George emphasized the importance of an enduring Power of Attorney, essential for managing legal and financial matters in case of incapacitation.

Addressing health concerns, George shared personal experiences, underscoring the significance of maintaining one's well-being. His endorsement of exercise, demonstrated by his own use of a battery-powered bike, emphasizes its potential to enhance health and vitality. Yet, he candidly discussed the onset of health issues and the necessity of proactive measures, illustrated by his creation of an "in case of my death" document. This document, includes vital information ranging from financial details to contact lists and physical assets.

**"In case of death" document**

Key components of George's "in case of my death" document include password management strategies, financial particulars, backup procedures, and contact information for relevant organizations and individuals. Emphasizing the importance of safeguarding this information, George highlighted the use of encryption and the dissemination of pertinent details to trusted family members.

Additionally, George's presentation touched upon the significance of addressing practical matters such as the safekeeping of valuable physical items and pertinent documents. Notably, he discussed the importance of web assets, including domain names and websites, and outlined measures to ensure their continuity in the event of his demise.

Items George has included in his "In case of my death" document:
- Details of where to find all passwords. (Passwords are not written down anywhere but hidden and encrypted.)
- Superannuation and banking details,
- An old passbook account for emergency purposes containing $1,000
- Passwords for all computers. (Many websites accessed from George's computers are likely to require SMS authentication, while some websites will require 2 factor authentic verification. These SMS requests will go to George's phone.)
- Smart phone. (Keep up payments for the phones monthly account for a number of months, in case of website authentication requirements.)
- Energy and insurance providers and account details,
- Computer backups & photos. (Detail where to find backups and photos, as some photos are stored in the cloud, while others are on his computer.)
- Who to contact. (Contact organizations and people George has been involved with, such as gliding, camera club, MelbPC and others.)
- What physical item to sell. (Things of value such as cameras and lenses can be sold at market value to Ted's or sold privately.)
- Fireproof safe contents. (Original documents are kept in a fire proof safe along with a hard drive with all the backups.)
- Website and Domain name. (George's domain name, Skarbek.com, needs to be retained as both George and his wife's email addresses are tied to the domain name. Recently, George updated notifications with his webhost, ensuring that both he and his wife receive alerts when renewals are due. Domain name renewal occurs every two years, while website hosting occurs more frequently.
  Details regarding the hosting provider, key contacts, and the inclusion of his wife in notifications are crucial aspects in retaining Skarbek.com.)

George's document ran into 3 pages, was encrypted, then emailed to his wife and son. The encryption password for the document was then sent sometime later in a separate email.

The document lists the sort of things one needs to consider in order to make it easier for your wife or whoever will administer your estate.

**Physical items to be retained**
George possesses a significant collection of historical computer artifacts, which he anticipates will appreciate in value over time or hold intrinsic significance in computing history. During the presentation, several items shown from his collection can be seen in Figure 14 below.
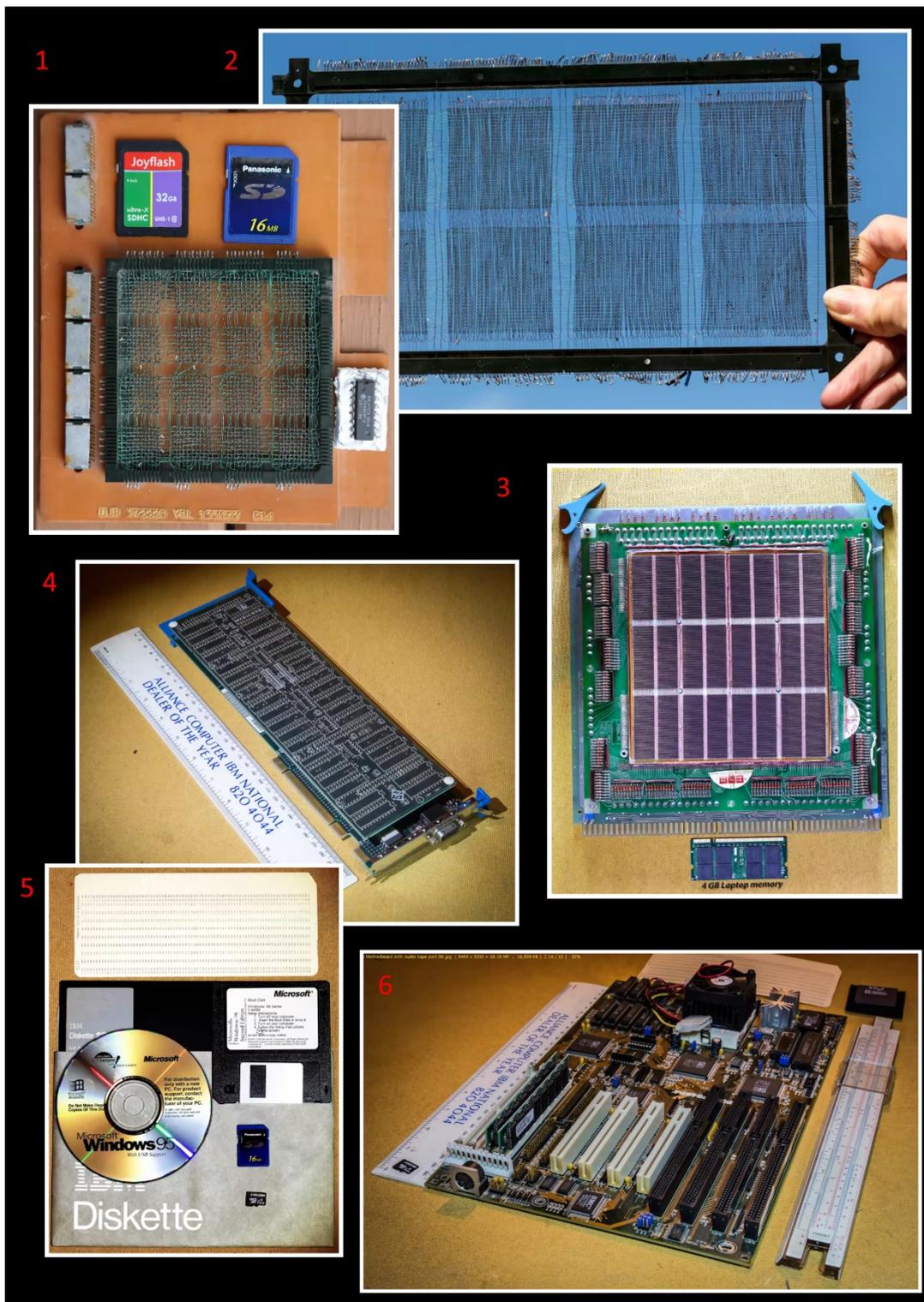


Figure 14 – A collection from George's historic computer items

Among the historic items shown in George's collection is a rare 2KB (kilobytes) hand-woven ferrite core memory, believed to date back to the late 1950's or early 1960's, possibly crafted in India (1). Additionally, a significantly larger 4KB hand-woven ferrite core memory (2) and a 20KB machine-woven ferrite core memory (3) were featured, highlighting the evolution of memory storage technology. Also included in George's collection is an original manual for the IBM 1620 Data Processing System, a symbol of computing's early days. Other artifacts showcased encompass an early VGA video card (4), a vintage computer punch card, 5 ¼" diskette, 3 ½" floppy disc (5) and an original IBM motherboard (6). These artifacts not only serve as relics of computing's past but also offer invaluable insights into the evolution of technology over the decades.

**Why create your own eulogy**
The motivation behind George's decision to prepare his own eulogy stems from a practicality viewpoint and consideration for his loved ones. In the event of his sudden demise, George anticipates that his wife may face challenges, particularly with technology, as her experience with computer presentations like PowerPoint is limited to just one instance. Moreover, given George's extensive experience as a photographer spanning decades, he has amassed a vast collection of photographs, totalling 50 gigabytes across approximately 450 folders, dispersed across various storage mediums. The prospect of his wife or children locating these scattered photos and compiling them for his eulogy, presents a formidable task.

Recognizing the potential time constraints amidst funeral preparations and other responsibilities, George foresaw a limited window to undertake this daunting endeavour. By pre-emptively preparing his own eulogy, George not only alleviates the burden on his wife, but also ensures that his final tribute reflects his life and legacy as he desires, sparing his loved ones from the added stress of organizing his photographic archives under duress.

**How to create your eulogy**
In preparing his eulogy, George initially turned to PowerPoint, intending to organize the content chronologically. However, he encountered challenges due to his extensive involvement in various clubs and organizations throughout his life, leading to a disjointed story. To address this, George opted for a combined approach to ensure consistency and avoid redundancy. Selecting music to accompany the eulogy was a fairly easy one for George, as he chose classical music as background accompaniment.

As George progressed with PowerPoint, he was disappointed with the manner PowerPoint handled timing between slides, transitions, and zooming of photographs. He was happy with the slides created in PowerPoint, so opted to save each slide as a JPG image and transfer them to ProShow Gold, a slideshow program he was more skilful at. In ProShow Gold, he gained greater control over timing, transitions and zooming, enhancing the visual appeal and flow of his eulogy.

Photodex, the company that produced ProShow Gold is no longer in existence, with the last version of ProShow Gold 9, released in 2017. Although now out of production, versions of ProShow Gold have been found on the internet archive software collection at https://tinyurl.com/2jfxma77.

Figure 15 -2005 version of ProShow Gold

Despite the challenges encountered, George recommended PowerPoint as a suitable starting point for eulogy preparation, offering practical tips during his demonstration. These included techniques for creating a title page, managing slide transitions, adjusting text boxes, incorporating images, and optimizing text placement to avoid obscuring photos.

In conclusion, George's presentation serves as a comprehensive guide for preparing for death, particularly in the area of digital and legal considerations. By outlining essential preparations and sharing personal insights, George equips attendees with the knowledge and tools necessary to navigate this sensitive yet vital aspect of life planning.

To conclude the presentation, George showcased a brief excerpt of his eulogy. As an esteemed member and past president of the Melbourne PC User Group, it is the collective hope of members that George's completed eulogy remains unseen for many years to come.



Figure 16 -Opening slide of George's eulogy.