

East SIG Report – February 2023

After welcoming members to the first meeting of East SIG for 2023, host Frank Maher outlined the nights agenda below:

Presentation 1: **Q&A** with Georg Skarbek

Presentation 2: How to **Create Contact Groups Using Labels** by Trevor Hudson

Presentation 3: How to **Download eAudiobooks Using BorrowBox** by Trevor Hudson

Main presentation: **Internet Functions using Artificial Intelligence** by Dave Botherway

Q&A by George Skarbek

Question 1: I recently purchased from Amazon a no name 15TB external SSD formatted in exFAT. The SSD is for backing up my photos, music and documents. When copying files, one aspect I'm having trouble understanding is the mention of cluster sizes and their effect. I can copy documents to the drive without any problems, but I can't copy photos or music files successfully. The photos will often appear with black lines through them.

Answer 1: I have a 512 GB (½ TB) drive formatted in exFAT drives and have no trouble copying largeish files. The cluster size you mention will be quite large for a drive of that capacity. For speed and versatility, you might be better formatting the drive as NTFS. The only disadvantage would be if you have an Apple device. It could read a SSD formatted in NTFS, but not write to it. However, Apple iOS can read and write to FAT32.

I recommend you format the SSD to the NTFS file system. There are two ways to format the drive, the "Quick Format" option, or if you remove the tick from "Quick Format", that will enable you to do a full format. The latter may take over a day in some cases but will verify every single cluster.

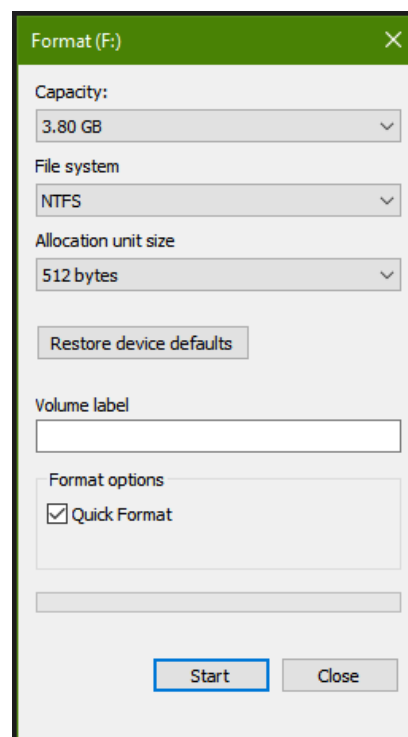


Figure 1 – Windows Format dialogue box

Question 2: My Samsung (Android) phone picked up a program called "wertusrardr.com". It appears to be a virus of some sort and sits in the background. It comes on when I first start the phone up and triggers a number of webpages to appear. It doesn't appear as an app, otherwise I would have been able to remove it in the normal way. It appears to be an executable. Has anyone heard of "wertusrardr.com" and know how I can get rid of it? Malwarebytes doesn't pick it up, so are there any other scanners I could use to identify it?

Answer 2: No one was able to assist with this problem. However, members present from the Android SIG (i.e. North East & Android) will try to assist at their next meeting.

Download eAudiobooks using BorrowBox by Trevor Hudson

The second presentation was by Trevor Hudson who played a video he'd uploaded to YouTube detailing how he downloads and listens to audiobooks from his local library.

Using an Android phone, Trevor details how to download an app called "BorrowBox" from the Google Play store and then install it. The user must be a registered user of a library (i.e. have a library card) to borrow audiobooks. The library must also have a hard copy of the physical book on its shelf, to be able to use the App.

Once the app is installed, you type in the library name, your library ID and your library PIN number. When searching for eBooks to borrow, Trevor suggests ticking the "Available only" tick box if you want the audiobook immediately, otherwise you'll be placed on a waiting list. Next you have the option to search by the book Title or Author. Once your selection is made, you have to "Confirm Loan" then select "Download Now". The loan period is for 21 days.

Trevor's video can be viewed on YouTube at <https://www.tinyurl.com/dxb3yww5>. A second YouTube video on downloading audio books using Libby is available at <https://www.tinyurl.com/2s38esm6>

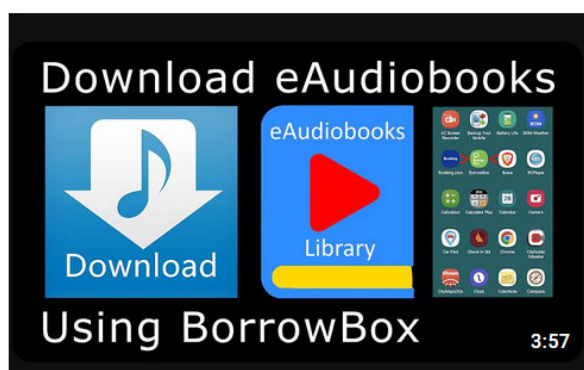


Figure 2 - eAudiobooks using BorrowBox



Figure 3 - Contact Groups & Labels in Gmail

Create Contact Groups Using Labels in Gmail by Trevor Hudson

Trevor's second video presentation is divided into two parts. In Part 1, Trevor shows how to create an email account in Gmail and add contacts. Part 2 shows how to setup labels within the Contact Group created in Part 1.

To demonstrate the use of Contact Groups and Labels within Gmail, Trevor uses a club as an example. The video commences by first outlining how to create a Gmail account and then add all the club members email addresses to a Contact Group. Within the club there is a committee comprising the President, Secretary and Treasurer. To send regular emails to just the committee members, Labels are used. Using Labels eliminates the need to enter the email addresses of each committee members as the one Label covers all 3 email addresses.

Trevor's video can be viewed on YouTube at <https://www.tinyurl.com/uprxv8a5>

Internet Functions using Artificial Intelligence by Dave Botherway

The main presentation by Dave Botherway on “Internet and A-I” (Artificial intelligence) was suggested by many in the audience as Dave’s best. Dave commences by explaining in simple terms how the internet functions and concludes with day old news on the AI (Artificial Intelligence) fight between MicroSoft and Google.

Internet

The internet is a worldwide “loose” network of servers. Dave uses the term “loose” to mean anyone with a registered IP address can add a server to the network. Once a server goes live, it may provide the following services:

- Information – YouTube being a typical example, Wikipedia etc.
- Email – Gmail, Outlook, Yahoo mail
- Storage – Many servers have storage for your photos, documents, video, backups etc. This storage allows the user to access their stored data from multiple devices, from anywhere in the world.
- Applications – numerous applications are available including Chatbots which Dave demonstrated later in his presentation.

Servers are connected by an IP (Internet Protocol) address which is based on a unique 4 sets of numbers called the IP4 standard (e.g. 164.122.1.203). This system was developed many years ago and is now reaching the stage where available numbers are running out. A new more sophisticated system called IP6 has been developed that will take over when needed.

Users don’t know or need to know these numbers as a DNS or Domain Name Server converts the IP4 or IP6 number into a www address such as www.melbpc.org.au or URL (Uniform Resource Locator). When a user types in a URL, the Domain Name Server converts it into the IP number used by the internet.

Browsers

A browser is a program that runs on a device such as a desktop computer, notebook PC, tablet or smart phone that can access the Internet. Examples are Firefox, Edge, Chrome, Opera, and many others.

A browser takes the URL such as www.melbpc.org.au and sends it to a DNS where it’s converted to an IP address. This process enables the browser to talk to other servers. It’s the IP address that is embedded in the internet traffic, where the source and destination numbers are contained in the record header.



Safari

Apple



Firefox

Mozilla



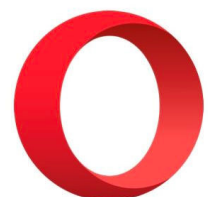
Chrome

Google



Edge new

Microsoft



Opera

Opera Software

Figure 4 – Browser logos

Search Engines

A Search Engine is an application, usually found within a Browser. The Search Engine takes the input criteria and searches the Internet sources for data that “best” meets the search criteria. Often the sequence of the “best” results may be influenced by advertisements, or those sites prepared to pay to have their site ranked higher in the order.

Search engines may retain a history of your searches and will use that data to display advertising it believes would be of interest to you. Search Engines such as DuckDuckGo claims it does not retain your history and is used by those people concerned with their privacy.

Search engines may also sell a user’s history to third parties. This is their business model and how they get their income to provide this free service. Many would be familiar with receiving advertising for items they may have searched for.



Figure 5 – Popular search engines & their logos

Cloud Computing

Cloud computing refers to applications that are provided by the servers as opposed to applications running on your desktop computer, laptop, tablet, or phone. Functions used for Cloud computing are provided by a browser or a specific client application installed on the computer, which sends instructions to the server in the cloud and back again.

There are many examples of applications that run from your browser which don’t require the user to have the software installed on their computer. Some examples of these are:

- Gmail, Hotmail, Yahoo Mail
- Photo Editing, PDF creation
- Office 365 (Word, PPT etc)
- Document translation from one language to another.
- Automated Chat functions such as found on a Help Desk, may often save time compared to calling from a phone for assistance. A human based chat function will often be assisting 3 or 4 people at once, so may be slower getting answers than an internet search.



Figure 6 – Cloud Computing Logo & Google Chromebook

The Google Chrome Book is an example of cloud computing. All the functionality is provided in the cloud, as there are no applications stored on the Chrome Book as everything runs in a browser from the cloud. One disadvantage is to do anything, such as looking at emails, you have to be online.

As mentioned previously, a Server may also provide User Storage. By storing data in the cloud, the user has access to their data from multiple devices via an internet connection. An additional benefit is a user can allow others to access approved data from their storage. This is a good way to share or make data available to others, whether the user is online or not. Examples of these are Drop Box, OneDrive from Microsoft, Google Drive.

Internet Assistants

Internet assistants are cloud-based applications that provide special functions.

- Text based assistants are used for chat-based assistance, such as Help Desk queries, where there is no human interaction.
- Voice based assistants give voice responses, using Natural Language Processing or NLP. These assistants may use search engines to give a response. Examples of these are Siri (Apple), Cortana (Microsoft) and Alexa (Amazon). These assistances use NLP to analyse what is said and reply in voice or text with an answer.
- Action based assistants are simple pre-planned requests. An example of these would be “Alexa, make a phone call to ...”, “Alexa”, turn on the lights, “Alexa”, change the TV channel to 7.

Internet A.I. (Artificial Intelligence) Assistants

Internet A.I. assistants are cloud-based services providing complex functions. A Google search provides a word or phrase translation, whereas A-I assistants provide context or paragraph translation.

An Internet A.I. assistants may compose complete answers to queries such as “write me a poem about xxxxx”. “Write me an essay in context re zzzz” “Generate music (Google is the only A.I. assistants which was released last week (2nd Feb 2023) that is able to generate music)

There are major educational concerns regarding plagiarism. However, there are tools available that can rate the extent of the use of A.I. to generate an answer. All Australian States except South Australia have banned the use of ChatBots for students. However South Australia argue all these tools should be available and when their students get out in the workforce they will have access to them, so why stop them from using them now.

Internet AI ChatGPT

A Beta version of ChatGPT was released in November 2022, by Open AI. Open AI is a research organisation working with artificial intelligence applications. ChatGPT stands for Chat Generative Pre-trained Transformer and uses its own database, last updated at the end of 2021. Therefore, its unable to answer queries for events that have occurred after that date.

Microsoft has shown interest in ChatGPT and has taken a large shareholding in the company. Dave noted that there are many addons already available for ChatGPT.



Figure 7 - ChatGPT

For those wanting to use ChatGPT it's necessary to create an Open AI account, then logon to "chat.openai.com". You then enter a query or instructions in text mode, with the response currently also in text mode. Dave indicated Open AI are currently working to have ChatGPT use Natural Language Processing or NLP.

Google's Response

Two days before Dave's presentation Google trialled its own AI chatbot named Bard, after the success of rival ChatGPT. Google planned to have the technology added to its search engine given the popularity of rival ChatGPT, which is backed by Microsoft. However, in the morning of Dave's presentation (9th February 2023), Google's parent Alphabet recorded stock losses of \$100 Billion after its A.I. Chatbot Bard gave a wrong answer to a particular query.

Microsoft Announcement

The day before Dave's presentation, Microsoft debuted a new version of its Bing search engine using AI technology from Open AI, along with an update to the Edge browser that can summarise and help create content.

ChatGPT Examples

Using the free beta version of ChatGPT, Dave gave several examples, the first query was from the 2022 HSC English exam. The answer is extensive, but worth including in full to indicate the capability of ChatGPT.

Example 1

Question: How has your study of King Henry IV Part 1, altered and expanded your understanding of dishonour? In your response, make detailed reference to the prescribed text.

Answer: The study of Shakespeare's play King Henry IV, Part 1 has greatly altered and expanded my understanding of the theme of dishonor. The play explores the idea that

dishonor is not just a result of one's actions, but can also stem from the actions of those around us, as well as societal pressure and the need to conform.

One of the most prominent examples of dishonor in the play is the character of Prince Hal, who is portrayed as a wild and reckless youth. He is often seen carousing with criminals and drinking heavily, which is considered dishonorable behavior for a prince. However, as the play progresses, it becomes clear that Hal's actions are not entirely his own choice, but are also influenced by the pressure he feels to live up to his father's expectations and the societal pressure to be a certain way.

Another example of dishonor in the play is the character of Hotspur, who is portrayed as a brave and honorable warrior. However, his actions in the play lead to his downfall, as his impulsiveness and lack of foresight cause him to make poor decisions. Hotspur's behavior is also influenced by societal pressure, as he feels the need to prove himself to be a great warrior and live up to the expectations of others.

Furthermore, the play also explores the idea that dishonor can be inherited, as seen in the character of Falstaff. He is a criminal and a liar, but he is also a close friend of Prince Hal and serves as a mentor to him. Hal is aware of Falstaff's dishonorable behavior, but he is unable to completely distance himself from him, as he feels a sense of loyalty towards him. This shows that dishonor can be inherited through our relationships and associations.

In conclusion, the study of King Henry IV, Part 1 has greatly expanded my understanding of the theme of dishonor. The play illustrates that dishonor is not just a result of one's own actions, but can also stem from the actions of those around us, as well as societal pressure and the need to conform. Additionally, the play also shows that dishonor can be inherited through our relationships and associations.

Dave indicated that he should have qualified the query by requesting the answer in Australian English as audience members commented on the American spelling throughout the answer.

Example 2

In this second example ChatGPT was asked to write and debug computer code.

Question: What is wrong with this JavaScript code?

```
for (let i = 500; i <998; i++) {  
  if (i % 2 == 0) {  
    console.log(ii);  
  }  
}
```

Answer: There are two syntax errors in this code:

1. The comparison operator `==` should be `===` for equality check.
2. The variable `ii` instead of `i` is being logged to the console.

Example 3: ChatGPT can explain computer code

Question: What is wrong with this JavaScript code?

```
for (let i = 500; i <998; i++) { ,  
  if (i % 2 == 0) {  
    console.log(i); I
```

```
}  
}
```

Answer: There is nothing syntactically wrong with the code. It will iterate from 500 to 998 (excluding 998) and log all the even numbers on the console. However, if the desired behavior is different, then the logic of the code needs to be changed.

Live Demonstrations

To demonstrate ChatGPT further, Dave asked audience members to suggest search queries. Below are listed some of those queries plus others Dave prepared earlier in case a live connection to ChatGPT was unavailable.

“Got any creative items for a 10-year old’s birthday”,
“Explain quantum computing in simple terms”,
“What topic for a PC user group presentation”,
“Build a presentation on Cyber Security including user aspects”
“Should I invest in crypto currency”,
“Write a poem in the style of Shakespeare.”
“Build an Excel spreadsheet for household expenses”.
“Dealing with a girl friend who keeps hiding her phone password from me.”

Answers to all the questions above were extremely comprehensive and always relevant to the question asked.

Currently ChatGPT is text based, but Open AI are presently developing a Natural Language front end where users can use voice for questions and receive a verbal reply rather than text.

To conclude, Dave summarised his presentation and answered further questions on AI, followed by informal discussions between audience members on AI and other computer related topics.

Neil Muller