



PC Update

August 2017





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Melbourne PC User Group Inc.
Suite 26, Level 1, 479 Warrigal Road Moorabbin, VIC 3189

Office hours 9.30am-4.30pm (Mon-Fri)

Phone (03) 9276 4000
Email office@melbpc.org.au
ABN: 43 196 519 351
Victorian Association Registration
A0003293V

PC Update Newsletter
Editor: George Skarbek
editorpc@melbpc.org.au

Librarians: Clemens Pratt 9802 5501
cpratt@melbpc.org.au
Choy Lai cplai@melbpc.org.au

Proof Readers:
Harry Lewis
Tim McQueen

Committee Executive

President	George Skarbek
Vice President	John Hall
Secretary	John Swale
Treasurer	Bill Ford



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

PC Update

August 2017

The Newsletter of Melbourne PC User Group Inc.

Monthly Meeting Live Stream

Tune in here at 7.00pm on Wed 2nd of August to view the Monthly Meeting live over the Internet.

Test Transmission usually commences at around 6.30pm

<http://tv.melbpc.org.au>

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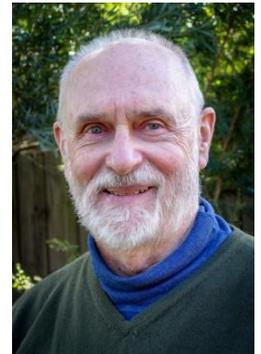
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Editorial

Photography Competition

In order to increase the number of members who read PC Update to more than the current low level, the committee has agreed that a photography competition may help. The subject for this competition will be Technology.



For full detail see: <http://www.melbpc.org.au/media/235047/aug-2017-photography-competition.pdf> but below are some of the main points.

The entries must be all your own work. Each member may enter up to two photos but will be eligible to win only one prize.

The first prize will be one year’s free membership. The second and third placegetters will receive six months of free membership. This competition is open to all financial members who are not professional photographers.

All images are to be submitted via email to editorpc@melbpc.org.au and I will reply to every submission. If you do not receive a notification within two days then please write to president@melbpc.org.au

All entries must be named according to the specified format: your member number-title.jpg

An example is: 12345-Worlds best technology picture The judge will receive only the image and its title, and no membership number.

Our Statement of Purpose

The purposes of the Association are to conduct on a non-profit basis activities to help members learn and use systems and devices using various technologies, especially computing, software, and communications technology (inc. the Internet and World Wide Web, personal computers & devices), to achieve the following outcomes;

- Advancing computer literacy;
- Advancing education and the exchange of ideas;
- Keeping members up to date on developments in computer and information technology and helping members to exchange information;
- Representing members in public debate in areas of interest including law reform proposals;
- Engaging with similar organisations and

President's Report

Member Management software progress

There is continuing progress into the implementation of this new software that is being developed for us. The executive and the project manager, Frank Maher, are meeting with the developer on a weekly basis to monitor progress. As well as the face to face meeting some progress reports are also received by email. Overall progress is satisfactory.

Electricity investigations

I have been trying to find the cause of the very high electricity usage. Examining the half-hourly reading for the last 12 months shows that our base load in the middle of the night, summer or winter is about 100 KWh per day.

In order to determine if the server room is responsible for over half of our \$10,000+ annual electricity bill, we will switch off all computers in the server room for an hour when the building is empty. Examining the half-hourly data will show if this is the cause. Adequate notice will be given to all members prior to this test. The main observable result will only be our web site going down.

There is also a possibility that this power usage is related to either an air conditioning unit on the roof that is permanently on or that we may have someone else's services wired into our switchboard.

Solar Panels

This is a preliminary suggestion to install solar panels. This will save on-going expenditure at the cost of spending some capital. I have received several quotes for solar panels for Moorabbin and the best, I believe, is a 5.3 KW system producing 18.7 KWh/day or 6,825 KWh pa. This is based on the average generation in Melbourne for a north-facing system.

The panels will result in an annual saving of \$1,000 on current prices. Total cost for this installation is \$5,300 ex GST. (Melb PC does not pay GST)

Approximate calculations for the justifications are: Interest received on money in the bank is about 2% so the \$5,300 spent on the installation will drop our income by about \$100. Our saving will be about \$1000 pa. This means a rate of return of about 1,000% pa on our investment.

If we will be in Moorabbin for at least another three years and that the cost of electricity will rise over that time, we will save over \$3,000 in operational expenditure during that time. Having solar panels should also help with the sale price.

I have contacted the Body Corporate and I have asked for at their approval to put these panels on our roof. Also I have requested that when our premises are sold in the future, the panels will go to the buyer. At their next meeting we will require 75% vote in favour in order to proceed.

PC Update readership has increased dramatically

During the week following the mailout which advertised the monthly meeting and had a direct link to the PC Update PDF file approximately 18% of our members visited that link. This is a huge improvement on the 3% of our members that went to the PC Update site by going through the members' area, which required a login.

Melb PC promotion

To help new members find us on the web, we have registered a new trading name **The Melbourne Computer Club**. The current name, Melb PC will still exist. As a part of the new Member Management System there will be a new web page written in WordPress. We will be implementing SEO (Search Engine Optimising) to enable new members to be found. This will help guide anyone who is searching for computer help or support in Melbourne to find us, and hopefully join us. This will be a very much easier process with the new MMS. Please note that your Melb PC email address will NOT change.

Special raffle - \$5 tickets

This month, as well as having our normal prizes, there will be an additional prize - a Samsung Galaxy Tab A (8-inch). The RRP is approximately \$400. It has the following specifications. Most are what you would expect from Samsung, but the surprise, for me, is that the GPS not only locks onto the US satellites but also to the Russian and to the Chinese satellite constellations as well.

In future monthly meetings tickets will be available on-line to allow members who do not come to the monthly meetings to participate in these special raffles.

DISPLAY: Resolution 1024 x 768
Touchscreen Multi-Touch
Multi-Touch Display Yes
Technology TFT active matrix
Diagonal Size 8 in
Diagonal Size (metric) 20.31 cm
Native Resolution 1024 x 768

PROCESSOR: Number of Cores Quad-Core
Clock Speed 1.2 GHz

MEMORY: Storage 16 GB
RAM 1.5 GB

COMMUNICATIONS: Wireless Protocol 802.11a/b/g/n, Bluetooth 4.1, Security Protocols & Features ANT+, Wi-Fi Direct

CAMERA: Focus Adjustment automatic. Video Resolutions 1280 x 720. HD Video Recording 720p

BATTERY: Run Time Details Web browsing over Wi-Fi: up to 13 hours. Video playback: up to 12 hours, Audio playback: up to 114 hours

EXPANSION AND CONNECTIVITY: Expansion Slots 1 microSD, Interfaces 1 headphones mini jack 3.5mm, 1 x Micro-USB

RAM: Installed Size 1.5 GB

FLASH MEMORY: Installed Size 16 GB

CARD READER: Slots (for SD) microSD slot. Supported Flash Memory Cards microSD, microSDXC. Flash Memory Cards Max Supported Capacity 128 GB

DIGITAL CAMERA: Cameras (for SD) rear camera + front camera
Focus Adjustment automatic. Video Resolutions 1280 x 720. HD Video Recording 720p

NETWORKING: Wireless Protocol 802.11a/b/g/n, Bluetooth 4.1. Wireless Connectivity Bluetooth 4.1, IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n. Security Protocols & Features ANT+, Wi-Fi Direct

GPS SYSTEM: Navigation GPS/GLONASS/BeiDou receiver

INTERFACE PROVIDED: Interface Micro-USB, headphones mini jack (3.5mm)

The raffle tickets will be \$5 each.

Letter to the Editor

It is not often that I receive letters from members who state that they appreciate all the time and effort the volunteers do on their behalf. Below is one such letter that I have received.

The Editor, Melbourne PC Update

Dear Sir,

I am writing to give thanks to the members responsible for production of the 'monthly disk' and videoing the meeting.

Attending the monthly meeting is almost out of the question for me due to distance that would require an overnight stay or a long late-night drive home. It's not a nice thought spending more time than necessary in chaotic Melbourne. Guess it shows my age!

Every month I receive the disk and quickly check the contents.

The President's 'What's new' is always of interest as is the Q&A ... I seem to share many of the problems put forward. Thanks George, Dave, and John et.al.

The guest speakers are always of special interest and last month's was a gem! 'The Story of Australia' with Robert Lewis was particularly enjoyable and a clip I must share with friends who also share an interest in local histories. I recognised the Kew Memorial at once although I have not seen it for about 75 years—as a small boy on the Mont Albert tram. Wow! Memories!! He mentioned the Mansfield Memorial remembering police killed in the line of duty—next time we pass that way I will make a closer inspection because I do not think much of a man who would steal from his neighbours as Kelly did—regardless of his station in life.
Thanks Robert for sharing a very interesting address.

The iHELP demo by Leighton West prompted me to quickly renew my acquaintance with Melb PC website. 'DAve' was a great help and I soon had my password corrected and set. What a difference and feel to the bulletin board of old— I hope it is as much fun!

PC Update on disk is great and I read it pretty well cover to cover. The SIG reports are of special interest; it is nice to know what others do with their computer interests and there are so many avenues to be self-creative.

When I paid my first subscription about 30 years ago I had no idea what was in store with nothing other than a willingness to learn something new. I have never regretted the move.

Special thanks to the people who first made the 'monthly disk' possible and now with the recorded meetings—for me you have overcome the tyranny of distance; Bless you!

To the members feeling left out or on the edge, a 'monthly-disk' subscription could well be one of your best expenditures with all of its information about 'users-helping-users'.

Louis Cook, Member No. 1761
20 July 2017

Monthly Meeting

Wednesday 2nd of August

At 7.00 pm sharp the meeting will open with our regular Q&A Session.
Then we will hear the President's Report.

At 7:30 our speaker will be Amy Jaballah who will let us know how to prepare for NBN.

Amy has worked at **nbn** for a number of years. The focus of her team's role is to communicate with councils on the roll out of the nbn™ network as well as educate the community on what the roll out of the nbn™ means for them, and what they need to do when it arrives. The roll out is well advanced across Melbourne, and Amy will also provide a general overview and status of the roll out.

After the break, George Skarbek will give a live demonstration of how to find out what actually is slowing your computer down and what you need to know when contemplating the purchasing your next computer.

Then George Skarbek will present a short section on What's New.
The meeting will close at 9:30 pm.

After the meeting, we get together for WAFFLE@FONG. The WAFFLE SIG ("Wine And Fine Food Lovers' Event") will be at FONG's Chinese Restaurant, 725 Centre Rd Bentleigh East, Corner of Francesco Street, Melways: 77: J-1

If you can't make it to Moorabbin, be sure to tune in to <http://tv.melbpc.org.au> for a live broadcast of the meeting. Test transmission usually begins at around 6.30pm

New MMS Update

As previously advised by our President we are introducing a new MMS. With your help, this new system will automate most of the routine office functions resulting in a major reduction in paid staff hours and savings to enable the Group to

remain financially viable. In addition to automating as many of the office procedures as possible it will also add new functions to assist our SIG leaders and the Group in general.

Some of the new features are;

- New members will be able to sign up and pay via the web site.
- Existing members will be able to update their personal records, pay their annual subscriptions via Bpay, Paypal or credit card and subscribe to SIG mail outs via the web site.

It is now intended that all routine correspondence from the office to members will be via email and generated automatically by the system. This will significantly reduce staff labour and postage costs. It will now be mandatory for every member to provide the office with an email address.

We are also introducing a new membership card. This will be a plastic card similar to those used by various retailers for membership of their advantage clubs. The card will be issued on a one-off basis thus significantly reducing labour and postage cost. The card will include a QR code so SIG leaders can scan the cards of members at SIG meetings and get an instant update on the members financial status. In addition, the member can be added to the automatic SIG mail out list.

Frank Mahar. Project Manager

Random Access

John Swale reports on Questions and Answers from the opening session of the July monthly meeting and from members' written submissions.

Questions and Answers

Q: A few days ago Kaspersky warned that routers could be attacked and it would be necessary for the latest updates to be done. We have a router which is used for a laptop throughout the building. I could not get the logon name and password to work. If I do get in, by resetting to the factory defaults, is it likely that I will find that the router has been compromised and all the settings have been changed?

A: It would be very unlikely that there would have been any problem. Normally you can't get into the router using a wireless connection you have to be physically at the device. The IP address and default username and password are printed on the base of the router. You will need to press and hold the reset button (often it is concealed and requires a paperclip to push through the hole). Once you get in it is relatively easy to update the firmware. Go into the settings and you will find an option to update the firmware. Click on the option, wait until it indicates the update has finished and restart the router. If you have changed the SSID (the name of the wireless connection) that will have to be reset to your preferred name so all your devices will connect automatically. Then change the router logon username and password.

Q: My wife and I have old phones which we are about to upgrade to an Android different brand. On the SIM cards we have all our contacts which we want to transfer to the new phone. With the calendar and notes that were entered on the phone, how can you move them to a different brand of device?

A: There is no problem if you are staying with the same operating system (Android). I did it a little while ago. I logged into Google Gmail and it asked if I wanted to transfer all my apps, contacts and calendars. I said yes and everything was transferred to the new one.

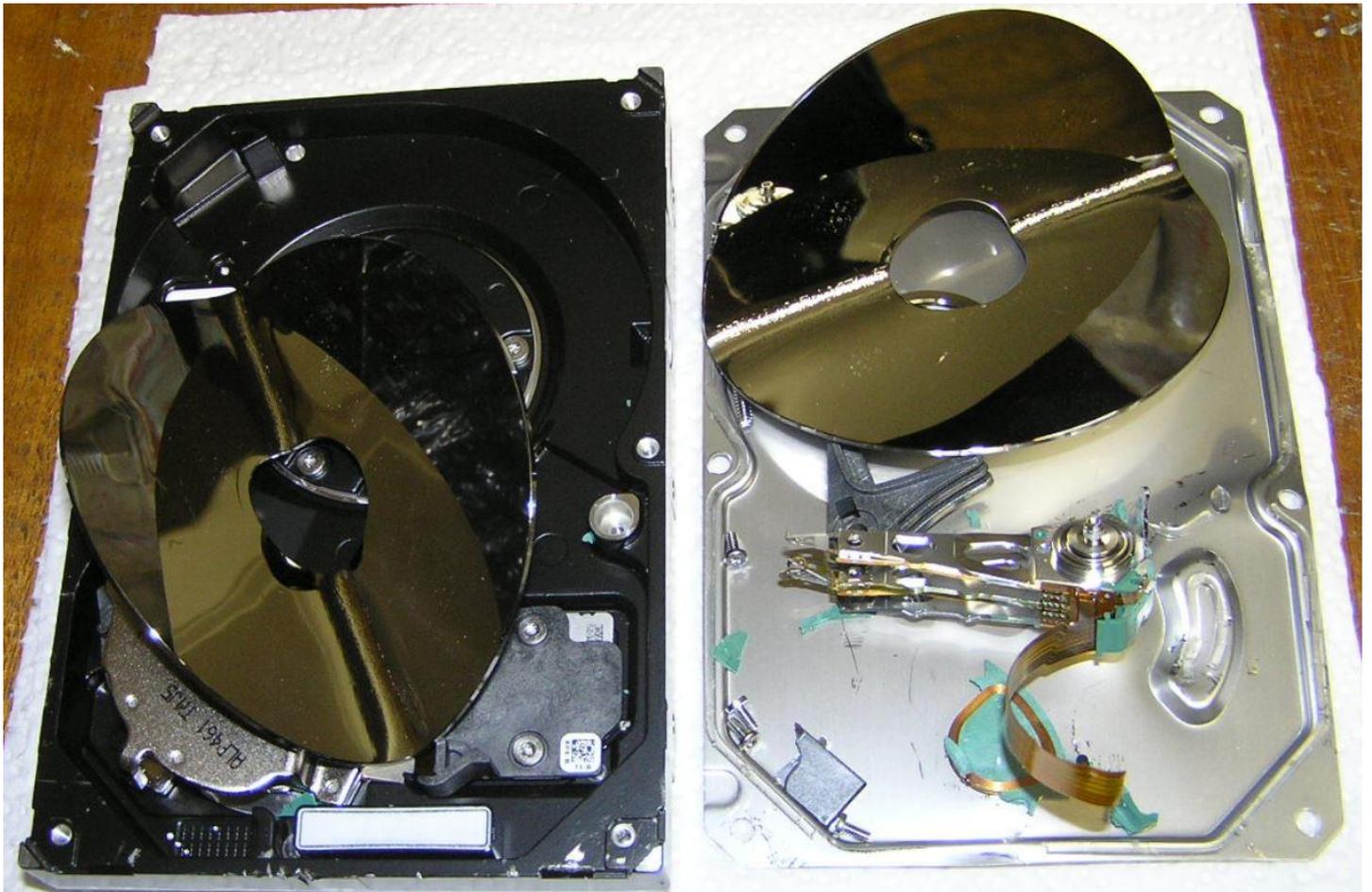
Photographic Competition entries

The titles of the cover pictures are:

Dreamliner
Opera House Projection

I have been asked why I did not name the photographers. The reason is that the judge may read PC Update and may be influenced if he knows the photographer.

Please note that you have just under one month to enter your photos.



Reliable Hard Disk Erasure



Very early technology

Using the Melb PC library at Moorabbin

Clemens Pratt, librarian, 9802 5501, cpratt@melbpc.org.au

Choy Lai, assistant librarian, cplai@melbpc.org.au

Here are brief details on how best to use the Melb PC library at Moorabbin.

1. The library holds a collection of over 900 books which are listed in an Excel spreadsheet located on the desktop of the No. 1 machine in the computer lounge at Moorabbin. A link to it is also located on the library's web page (<http://www.melbpc.org.au/services/library/>).
2. The catalogue uses a coding scheme which categorises books under various topics; the coding scheme is imperfect, as many books could be place in several alternative categories, so search the catalogue if you're looking for a book on a particular subject. A listing of the coding scheme is displayed in the library on the left hand end of the glass fronted cabinet, and also via a link on the web page.
3. From time to time notices are placed on the web page giving details of recent accessions which have been catalogued & placed on shelves for loan.
4. When taking a book on loan, please write the details in the log book on the table in the library; on returning the book, put it in the box on the table & enter the return date in the log book. This helps us to maintain current electronic records of loan history.

5. Subscriptions to three magazines are maintained, & recent issues of APC, PC & Tech Authority, and Choice Computer are on display in the library. The three most recent issues of each magazine are for reference only, but older issues are labelled as NOW AVAILABLE FOR LOAN & may be borrowed in the usual way.
6. Suggestions for books to be bought for the library are welcome & should be made to either myself (9802 5501, cpratt@melbpc.org.au) or Choy Lai (cplai@melbpc.org.au).
7. Donations of books are also welcome. More modern books newer than about 10 years old will be catalogued & placed on the shelves. Older books will be offered to members on a "FREE TO A GOOD HOME" basis.

Happy browsing & reading.
Clemens Pratt

New in the Library: 'Windows 10 for Dummies'

Book Review by Choy Lai & Clemens Pratt

With the recent release by Microsoft of Windows 10 in July, there has been a lively interest in this latest operating system within MelbPC, and many members are already trying it. At 419 pages and a price of \$35.95 the recently published 'Windows 10 for Dummies' from publishers John Wiley & Sons is not just for dummies! The "for Dummies" tag merely indicates that its treatment of the subject is a simple step by step guide for navigating through both the old and new features of Windows 10; for non-beginners it is a comprehensive reference.

It would be particularly valuable for anyone new to computing for whom Windows 10 is their first operating system.

Microsoft has designed Windows 10 to look and feel the same when implemented on PCs, tablet computers and smartphones, and author Andy Rathbone provides material for all three. He is an experienced writer whose use of headings, figures, lists, informative panels and marginal indicators makes it inviting to browse and easy to find useful information. Even experts in MelbPC will discover valuable features that they have previously been unaware of.

This book shows how to manage Windows tasks, troubleshoot problems and make quick fixes. It comprises 7 parts:

1. Windows 10 Stuff Everybody Thinks You Already Know
2. Working with Programs, Apps and Files
3. Getting Things Done on the Internet
4. Customising and Upgrading Windows 10
5. Music, Photos and Movies
6. Help!
7. The Part of Tens

Various icons in the margins highlight

- *what's new in Windows 10*
- *tips*
- *technical stuff*
- *warnings*
- *remember* and
- *touchscreen*.

It is worthwhile taking note of the icons, as they help the reader looking for a particular aspect.

The 'Start' button is back, with access to apps as well as settings, shutdown and restart options. Some features new to Windows 10 are:

- Action Centre serves as a hub for system notifications, such as when Windows wants to let you know updates

have been installed, and quick access to some key settings. Action Centre is a sensible, useful addition to the interface.

- Windows Explorer in Win 7 is now renamed as File Explorer and enhanced with the addition of a Quick Access section. For folders that are regularly accessed, right click them and add them to Quick Access. They are then there in Explorer and just one click away
-
- A new taskbar icon called Task View is very handy. Click it and all your apps are tiled on the desktop. Alt-Tab is great at flipping between application windows. The Task View icon offers a two-click method of switching. The ability to swap between multiple desktops will prove to be indispensable. For instance, one desktop may have Word, PDF document, and Excel to view. Alt-Tab switches between these windows. A second desktop may have reports to write. Seriously, this is a beneficial new feature.
- Another built-in application is Virtual Desktops. It runs several desktops on a single monitor. It does not take up precious system resources or space with the additional desktops because you are not creating a virtual machine. It provides more desktop space for separate task and also allows quick access to what you need.
- Internet Explorer has been replaced by a new browser, Internet Edge
- Universal Apps which make it simple for developers of Android and Apple iOS to convert their wares to Windows. These apps will run on Windows 10 phone, tablet, PC, laptop and X-box.

The last two parts of this book are great for problem solving. As with other books in the “for Dummies” series, it finishes with its so called Part of Tens, in this case:

- Ten Things You’ll Hate About Windows 10 (and How to Fix Them)
- Ten or So Tips for Tablet and Laptop Owners

These are worth perusing for making some DIY adjustments.

For both the novice with no prior knowledge of Windows and the expert, the book explains each step in its execution. It is simple and easy to follow. Being one of the early books on Windows 10, it provides a speedy way to become skilled in this latest Windows version.

Our new Membership System – CiviCRM

Why do we need a new System?

As our Project Manager – Frank Maher will have outlined elsewhere in this issue of PC Update - our existing system was over 12 years old and did not provide the on-line “Self-Service” facilities that we have become used to in the “Internet age” and which reduce the workload of Office staff and Volunteer Members. Also, from a technical viewpoint the existing System had become difficult to maintain and upgrade due to it being based on a very old version of the MySQL Relational Database.

Why CiviCRM?

We started out in December last year with a list of 12 candidate “Packages” that could possibly have met our needs for a “Modern” System and at the same time we set up a Systems Requirements team that gathered the requirements from all of the people who would be affected by this new System. This included our Special Interest Group leaders, IHelp Team, Committee Portfolio holders such as the Treasure and Secretary and of course our Office needs.

We then short listed 6 of the Candidate Systems and wrote to their Suppliers giving them a “Request For Proposal” which had been prepared for us by external consultants who could interpret our “Systems Requirements” into logical “Functional Specifications” that would be understood by the I.T. Vendors.

Our external consultants then evaluated the responses against their Proposals using an “Evaluation Weighting Matrix” in order to determine not only the most suitable Package but also the most skilled Supplier.

As a result we chose the CiviCRM Package to be implemented by Majestic Computer Systems.

Advantages of CiviCRM

CiviCRM is an “Open Source” package which is created and used by tens of thousands of individuals and organisations worldwide. As you will gather from the “Civi” part of the name it is aimed more at Community Groups rather than Retail or Manufacturing and the “C” in CRM stands for “Constituent” rather than “Customer” Relationship Management.

It was first developed in 2005 and is now used by over 10,800 “Not for Profit” Organisations with more than 24 Million registered “Event” participants and over 189 Million “Contacts”.

(If you are interested in more information please go to <https://civicrm.org/>).

Current Status (July 2017)

We are currently importing our existing Membership Data into CiviCRM but we have found some errors in that Data due to Data being entered incorrectly in the past. We have corrected most of those errors (4th week of July) and expect to have a Test System including a Web based “User Interface” – converted from our current Umbraco based Content Management System (CMS) to WordPress – by the beginning of August.

Why WordPress?

Umbraco – our current CMS – is a very well respected System that is used by Major Corporations Worldwide to handle millions of requests at a time. Unfortunately, there are very few Umbraco skills in Australia and we are struggling to find anyone to maintain and upgrade our current Umbraco base “Architecture”

WordPress is one of the most popular Web Content Management Systems and many of our Members already use WordPress to develop and maintain web sites for organisations such as Churches, Schools and Sporting Clubs.

It is hoped that our Web site can be kept more up to date and Dynamic by involving more of our Members in the Development and Maintenance of our Web Site using WordPress.

(If you are already familiar with WordPress you can find out more about how it interacts with CiviCRM at <https://docs.civicrm.org/user/en/4.6/website-integration/integrating-with-wordpress/>).

Can you help??

We are confident that we can build the right “Technology” for our Membership System but no matter how good the Technology is – it will not be successful unless it is adopted and used by all our Members.

(Our business case is based on the reduction of Office Costs through Member self-registration etc. but if people still want to pay by cheque etc. some of these benefits may not be realised).

This System will be “rolled out” to Members as their membership comes up for renewal but if you are interested in becoming an “Early Adopter” of this Technology you will be able to sign in to the System to update details such as your preferred email address etc. before you receive a Membership Renewal notice.

To register your interest in becoming involved as an early adopter etc. please visit our “CiviCRM Implementation Group” on Yammer (via your Melbourne PC Office 365 “Log-in”) and simply “join” that group to be notified of Status Updates – see https://www.yammer.com/melbpc.org.au/#/threads/inGroup?type=in_group&feedId=12374743&view=all .

John Hall,
Vice President.
Melbourne PC User Group

Trying out Linux - for Windows users

Introduction - Why try out Linux?

Many Windows users are entering the brave new world of Windows 10 with some concern - routines which they used to be able to take for granted are changing significantly. While there are good reasons for the changes from Microsoft's point of view, many users are not comfortable with the new regime.

The experienced Windows blogger Ed Bott wrote in his ZDNet column "The Ed Bott Report" on 4th April 2017 ...

"For the past year, I've been hearing a steady stream of complaints from longtime Windows admins and users. Consistently, those grumbles all boil down to a single objection: Because of "Windows as a service," we're losing control of our desktop PCs.

They have a point."

(Read the complete article at ...

<http://www.zdnet.com/article/windows-as-a-service-means-big-painful-changes-for-it-pros/>)

I'd suggest that one way to ensure that you are more in control of your desktop or laptop is to seriously consider a move to a modern version of Linux, particularly if you mainly use your computer for web browsing, email, creating documents and managing your photo collection.

Windows users can try out a modern Linux system using a Live Session. You can do this quite easily without disturbing your existing Windows setup.

A Linux Live Session is a way to run Linux from a bootable device - here a DVD or USB memory stick - which uses only the bootable device and the computers' RAM. A live session does not touch the Hard Disk Drive unless the user specifically asks to access it. This means that you can start a Live Session on your Windows computer to check that everything works well with Linux before you actually install Linux on that computer. If Linux turns out to be not what you expected you can simply shut down the live Session, remove the Linux boot media, and reboot into your normal Windows system.

In this article, I want to get you to the point where you can run a Linux Live Session from a DVD or USB memory stick, without touching your existing Windows installation. This will allow you to "try before you buy" and see if Linux will meet your needs.

So let's get to the details.

To get to the point where you can run a Linux Live Session, you will need to ..

- Decide which Linux to try out and check the hardware requirements.
- Decide if you want a 32 bit or 64 bit Live Session
- Select and download the Live DVD/USB .iso file.
- Create a Live DVD or Live USB from the downloaded .iso file
- Boot from your newly created Live DVD or USB to start a Live Session

Now that looks a somewhat long list, but each step is quite straight forward. The remainder of this article will give more detailed explanations to get those of you who are not familiar with some of the above tasks some guidance in order to successfully boot a Linux Live Session.

Which Linux should I start with?

For someone new to Linux, I'd suggest starting with the Linux Mint distribution, specifically the MATE (pronounced "MuhTay") edition. This will give you the basic Linux Operating System plus a relatively lightweight desktop with a good amount of customisation available to set up the desktop the way you want it.

In addition, a number of Linux desktop applications such as a Web Browser, an email client, an office suite, a photo viewer, audio and video players are included in the default installation. The idea is that immediately after you have started a Live Session or installed Linux on a hard disk you can start doing useful things.

The official system requirements for Linux Mint are ...

- A minimum of 512MB RAM - 1GB recommended for a comfortable usage.
- A minimum of 9GB of disk space - 20GB recommended.
- A monitor with at least 1024x768 resolution.

Most desktop or laptop computers made in the last 10 years will meet the above requirements quite easily. The minimum monitor resolution usually reflects the minimum resolution required by applications such as LibreOffice - personally I'd try for something a little bit above the minimum like 1366x768 or 1280x1024.

If you would like to find out more about Linux Mint, browse to *linuxmint.com* and click on the illustrated box marked "MATE Edition".

Preparing to download a Linux Mint Live DVD/USB.

If the computer on which you wish to use to try out Linux Mint has a DVD drive, creating a bootable Live DVD and booting your system from it is the most straightforward means to start a Live Session. Otherwise, you will need to create a bootable Live USB drive as described below. See Appendix A at the end of this article - "Using Rufus to create a Linux Live USB stick". A Live DVD will run a Linux session more slowly than a live USB drive, but there is no difference in functionality. And if you have installed Linux on a hard drive, it will run at full speed.

To create a bootable Live DVD, you will need to download an ".iso" file from the Linux Mint website. But before you download a .iso file, you will need to determine whether you need a 32 bit or 64 bit .iso. The easiest way to find this out is to see whether your Windows system is running a 32 bit or 64-bit version of Windows - see Appendix B "Checking whether your version of Windows is 32bit or 64 bit".

If after reading Appendix B you are still not sure if you have 32 or 64 bit Windows, assume you have 64 bit. At worst, if you try to boot a 64 bit linux Live Session on a 32-bit only machine, you will promptly get an error message. Then you will have to download a 64 bit .iso file.

Downloading a Linux Mint Live DVD .iso file

On the linux Mint home page - *linuxmint.com* - there is a download menu item at the top of the page. Moving your mouse pointer over this link brings up a subsidiary menu below the link - click on "Linux Mint 18.1. Note that the actual version number - here 18.1 - will change from time to time.

You will now see a page which displays various links - to User Guides, release notes and .iso downloads for various editions. Click on either the 32 bit or 64 bit version of the MATE edition, and you will then see a page of links where you can download the matching .iso file, organised by country.

Scroll down the displayed list until you come to the Australian links. Choose one of these links and click on it to commence your download. As the live DVD .iso files are generally around 1.5 to 1.8 GB in size, this might take a while.

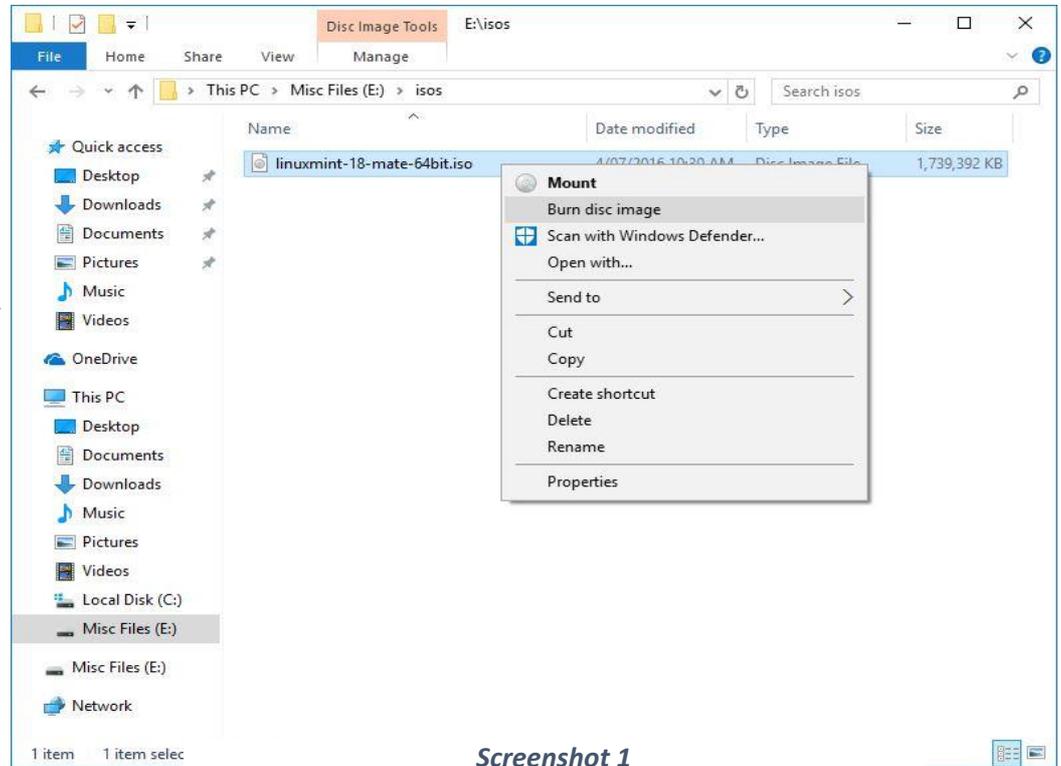
After the download has completed, scroll back to the top of the page and click on the "verify your ISO" link. On the web page that is displayed, click on the button which displays the version number of your downloaded file, and you will see a link to a file named sha2456sum.txt. Download this small file.

When you have successfully downloaded your chosen .iso file and the corresponding sha256sum.txt file, it's a good idea to check that the .iso file hasn't been corrupted during download. (See Appendix C - checking integrity of a downloaded Linux .iso file). If you are confident that your file has been downloaded correctly, you can skip this step and use the integrity check available when you boot the Linux Live DVD.

Creating a Linux Mint Live DVD.

The next task is to create a bootable Live DVD using the .iso file you have downloaded. First, put a blank DVD in your DVD drive. Then navigate to your .iso file using the File Explorer and right click to display the "Burn disc image" option at the top of the menu (see Screenshot 1 on the right-hand side).

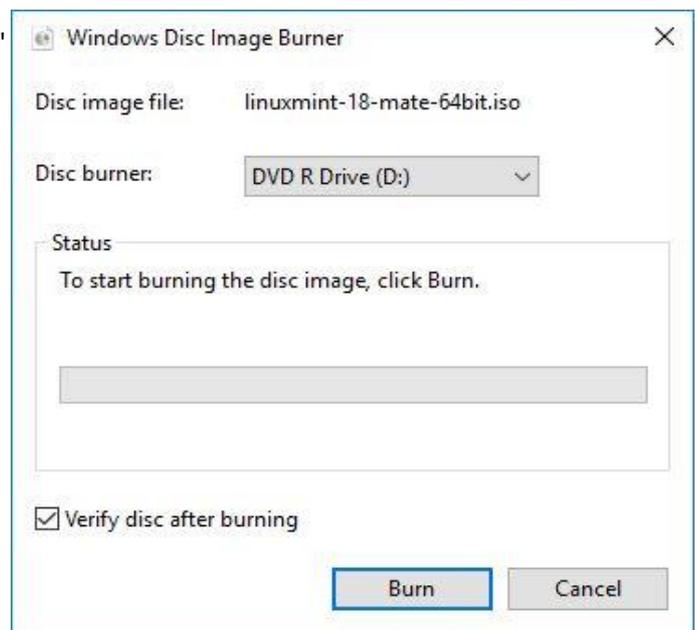
Click on this menu item, and a popup will appear - see Screenshot 2 below.



Screenshot 1

Select the DVD drive where you have placed the blank DVD, and make sure that the box labelled "Verify disc after burning" is ticked. When you are ready, click on the "Burn" button to start creating your Live DVD.

After a while the dialog will show a status message indicating that you have successfully completed burning the .iso file to disc - see Screenshot 3 on the next page.



Screenshot 2

Booting a Live DVD/USB.

Now that you have successfully prepared your live boot media, you are ready to try out a Linux Mint Live Session. You will need to set your computer to boot from the appropriate device, either the DVD drive or a USB memory stick.

On most recently manufactured computers there will be a briefly displayed message on the boot screen shortly after switch on which displays something like ...

"Press F12 for a temporary boot menu"

You need to press the key indicated - it may be Esc or F1 or something else depending on your hardware - before the message vanishes. This will typically result in a menu listing your bootable devices from which you can choose either the DVD drive or USB memory stick.

If you are using an older computer without a temporary boot time facility, you will need to enter the BIOS setup to check the boot order. The boot order tells the BIOS the sequence in which the hardware devices are checked for a bootable system. How you do this will vary from computer to computer - you will need to watch carefully for any boot time messages something like ...

"Press Del to enter BIOS"

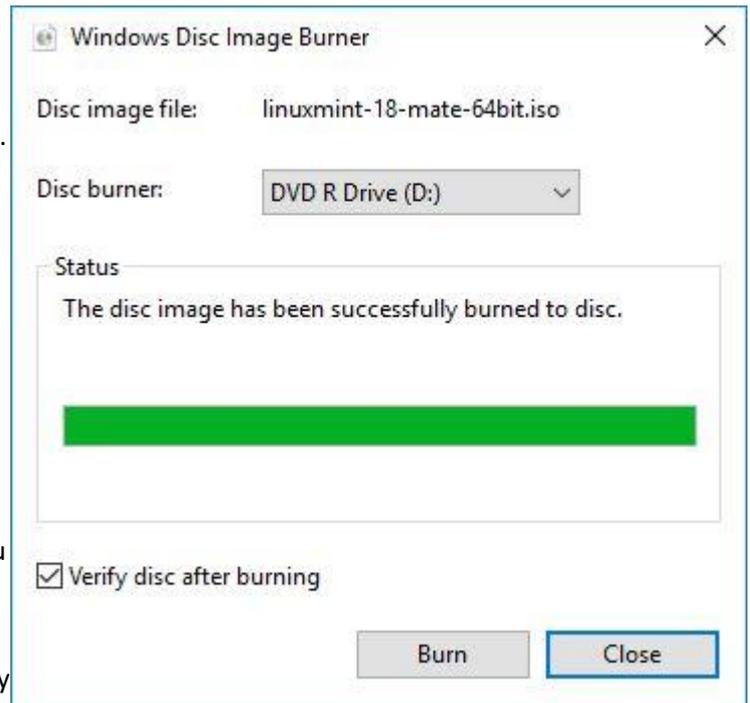
You will often need to refer to the manual that came with your computer for the details of how to set the BIOS so that the DVD or USB is checked first when the computer boots.

For the rest of this section, I'm going to assume that you are booting from a Live DVD - the procedure is exactly the same if you are booting from a USB memory drive.

When you successfully start Linux Mint from the temporary boot drive, you will see a screen with the message

"Automatic boot in 10 seconds"

If you quickly press the Esc key, a menu will appear - see Screenshot 4 below.



Screenshot 3

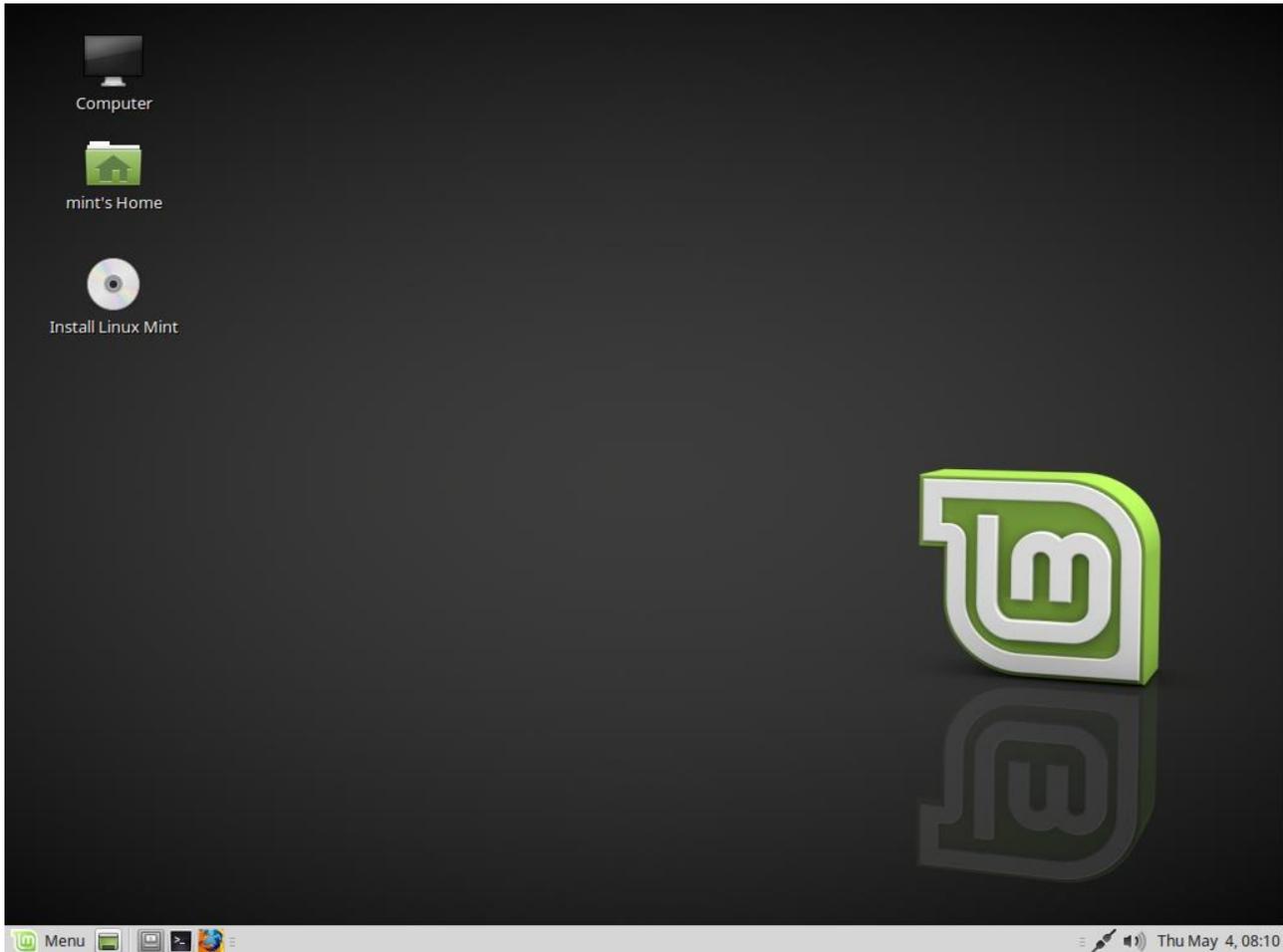


Screenshot 4

This menu includes the option "Integrity Check". The first time you boot your newly created DVD, it's a good idea to use the down arrow key to select this option, and press Enter to start it.

This routine may take a while to complete depending on the speed of your computer. When the check completes, a success or failure message will be shown. If the check is successful, you will be asked to press any key to reboot.

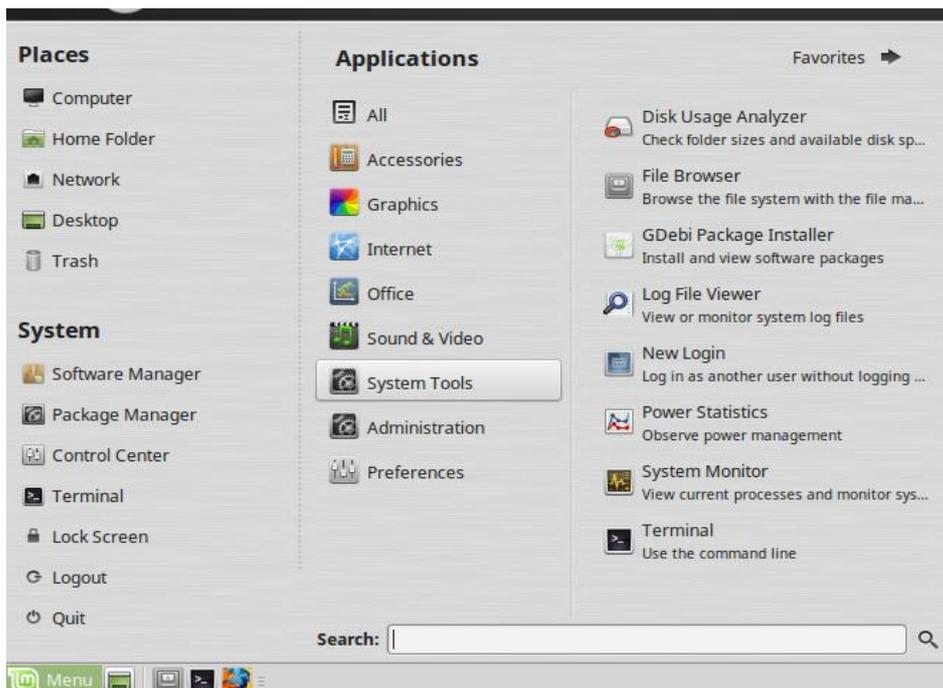
On rebooting, you can simply let the system boot from the DVD without pressing any keys. This will allow the default action of the Live DVD, which is to boot to the Linux MATE desktop - see Screenshot 5 below.



Screenshot 5

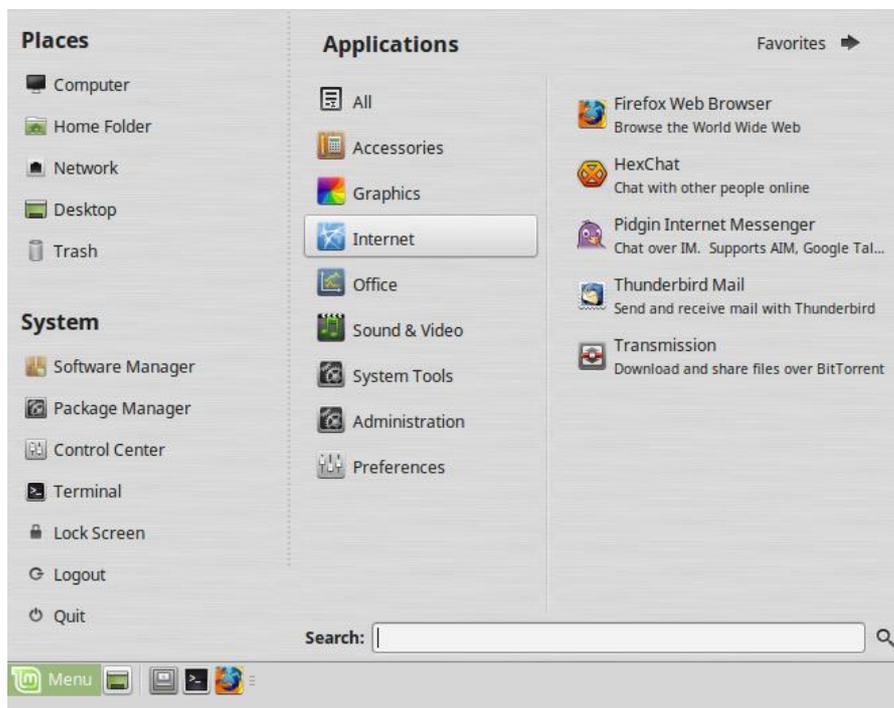
You may see the odd text message flash across the screen before arriving at the desktop - this is quite normal as the Live DVD has to be able to check for a wide range of hardware, some of which will not be present on your computer.

You can now try out the Mint Live Session which is now running on your computer. For a start, try clicking on the Menu label at the bottom left hand edge of the screen. This will bring up the default main menu panel - click on "All Applications" at the top right hand corner to display the Applications menu as shown in Screenshot 6 below.



Screenshot 6

If you then hover the mouse over each Application category in turn to get an idea of the application software installed as part of Linux Mint. In Screenshot 7 below the internet menu is shown in the rightmost column.



Screenshot 7

Some of the things you could try next are ...

- Check that the network connection is working by starting a web browser and displaying your favourite web page.

- Start LibreOffice and create a short test document, save it, and find it in the Caja File Manager. Pressing the F3 key in the file manager will display a two paned view of your files, which some people prefer.
- Use a Web browser to download a pdf file, and see if you can read it with the Document Viewer.
- Copy one or more images from a separate USB memory stick using the File Manager, and see if you can display them in the gThumb image viewer.

The above items will give quick check that the commonly used programs are working OK with your computer. Sometimes, you may have to make a change to the monitor resolution with System -> Preferences -> Monitors.

It's also a good idea to plug in your printer at this stage, and see if you can print the test document you created earlier.

You can save any of the items you create during the Live Session by plugging in a spare USB drive and saving to it. Otherwise, when you shut down or reboot from a Live Session, any items downloaded or created will be lost.

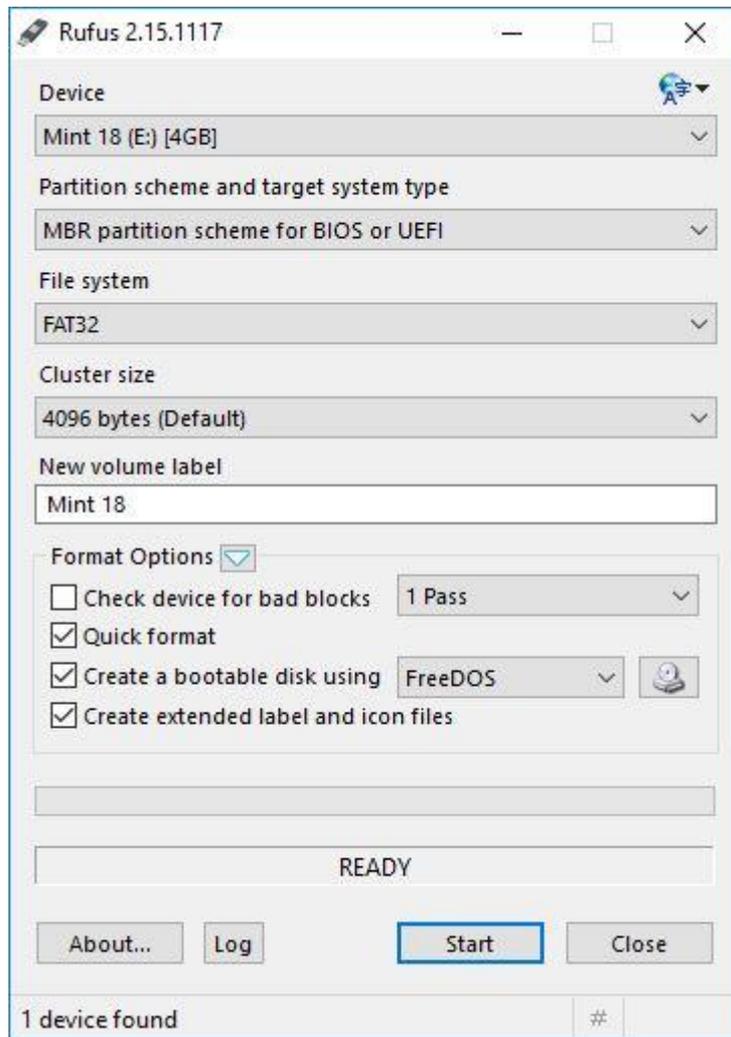
Like all good things, you will need to spend a little time exploring what can be done with a Linux installation - a Live session provides you with a convenient way to do this.

Remember, you can always contact either of the MelbPC Linux SIGs to ask for help. Just send an email to the SIG email address or come along to the SIGs monthly meeting. Details are on the Northern Suburbs Linux SIG and Linux Workshop - Moorabbin SIG web pages. Alternatively, you can ask questions in the Linux Chat group on Yammer.

Appendix A - Using Rufus to create a Linux Live USB stick

Download rufus.exe from <https://rufus.akeo.ie>

You can run the downloaded executable file directly without having to install it. A window with a series of options will appear - see Screenshot 1a below.



Screenshot 1a

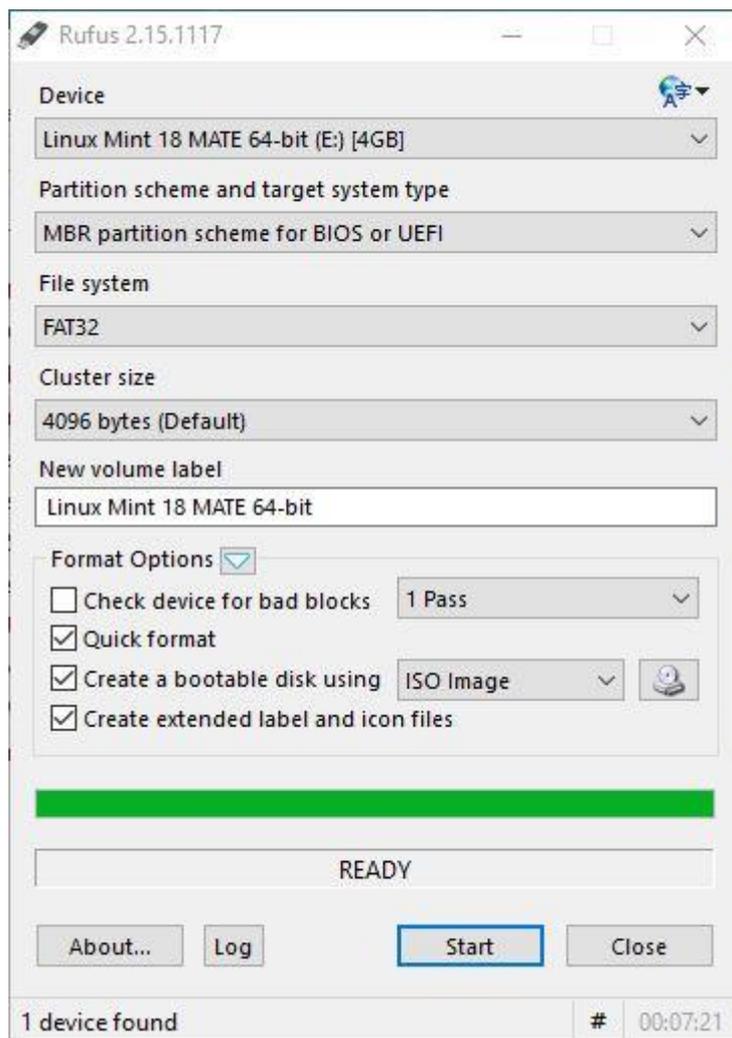
Check that you have the correct device shown in the top text panel under “Device”

Click on the drop down box next to the label “Create a bootable disk using” and select “ISO image”. This will automatically fill in the New Volume Label with the default label from the .iso file.

Click on the Start button. You will be given an option to write in ISO mode or DD mode - try ISO mode (recommended) first. If you have problems with booting the USB drive, try again using the DD option.

You will then see a warning that the entire contents of the target USB memory stick will be erased in the course of creating the bootable USB stick.

Once the USB writing process has started, a green progress bar will be displayed. When the process has completed a “READY” indicator will appear below it as in Screenshot 2a below. Click on close to finish up.



Screenshot 2a

You can now try booting from the newly prepared USB drive as outlined in the section “Booting a Live DVD/USB” above.

Note that occasionally computers may have problems with booting from a USB memory stick. For example, I prepared a bootable USB memory stick on a (relatively) old desktop computer and then tested that it would boot on two other computers, one a desktop and one a laptop. I was able to boot into a live session with no problems at all on these two test computers, but not on the computer that created the USB bootable drive.

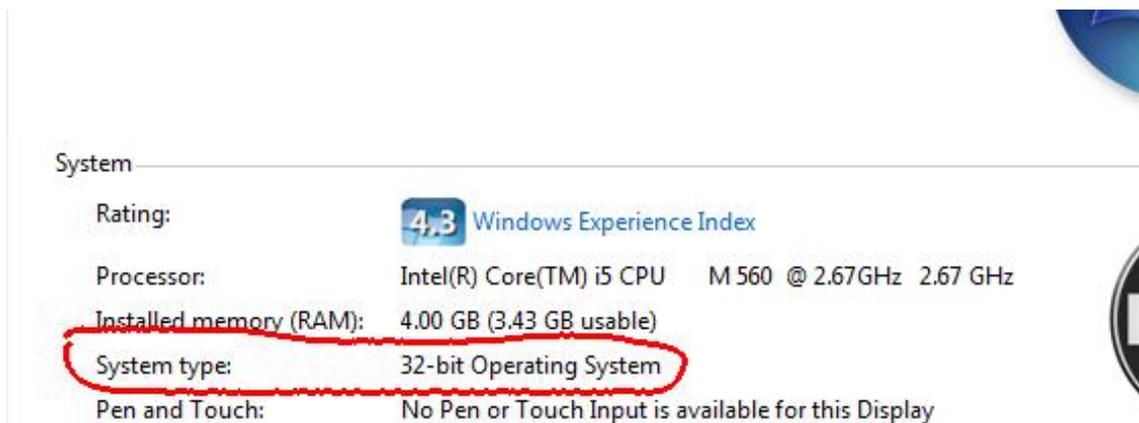
Appendix B - Checking whether your version of Windows is 32bit or 64 bit)

In Windows 7, click on Control Panel in the Start Menu, then System and Security. Displayed under the Heading "System" will be an option to "View amount of RAM and processor speed" - see Screenshot 3a below



Screenshot 3a

Click on this link, and the resulting window will have an item about halfway down listed as "System type" where you can check if you have a 32 bit or 64 bit version of Windows 7 - see Screenshot 4a below.



Screenshot 4a

In Windows 8 press the Windows logo key and the i key, which will display a Settings panel. Click on "PC Info". A popup will appear titled "View basic information about your computer". Again, the item labelled "System type:" will show you if your system is 32 bit or 64 bit.

In Windows 10, click on the "Settings" (cog wheel) in the start menu, and then on 'System'. In the left hand side menu that appears click on 'About'. Look for "System type" about halfway down the page, and check if your installed system is 32 bit or 64 bit. - see Screenshot 5a below.

Home

Find a setting



Windows 10

System

Display

Apps & features

Default apps

Notifications & actions

Power & sleep

Storage

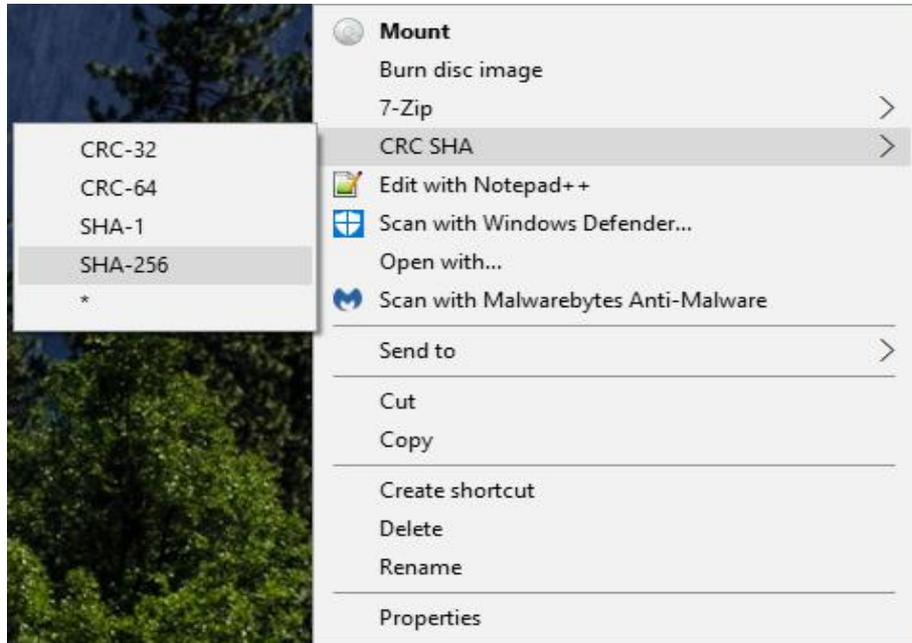
PC name	i3
Organisation	WORKGROUP
Edition	Windows 10 Pro
Version	1607
OS Build	14393.1066
Product ID	00330-80000-00000-AA489
Processor	Intel(R) Core(TM) i3-4160 CPU @ 3.60GHz 3.60 GHz
Installed RAM	4.00 GB (3.87 GB usable)
System type	64-bit operating system, x64-based processor

Screenshot 5a

Appendix C - checking the integrity of a downloaded Linux .iso file)

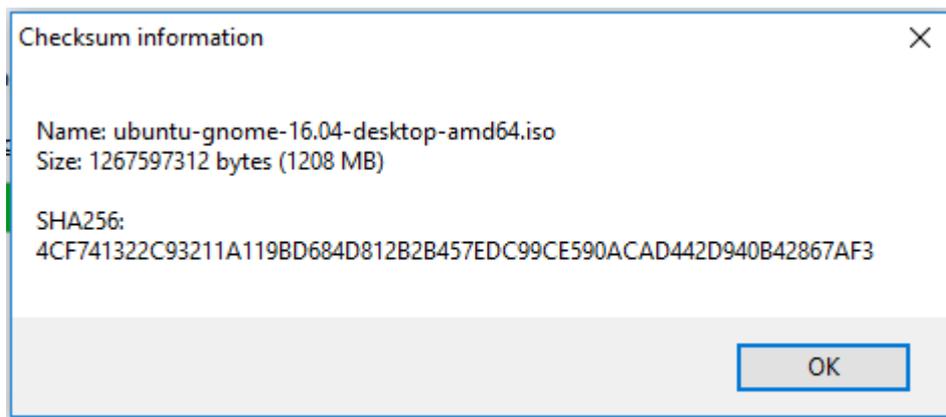
To check that a file has not been corrupted during download, you will need the Windows version of 7zip installed. 7zip has an option to perform a CRC check on a file, using one of a number of methods.

The CRC is invoked by displaying your .iso file in the file manager - you can use File Explorer for this - and right clicking on the file to display the available options for the CRC SHA - see Screenshot 6a below.



Screenshot 6a

Left click on the SHA-256 method. After a little while, a popup will appear with the result of your SHA256 CRC check in the form of a very long hexadecimal number - like that seen in Screenshot 7a below.



Screenshot 7a

Now you need to check that the hexadecimal number displayed in the popup is the same as the hexadecimal number shown in the sha256sum.txt file you have downloaded. If they match you can have confidence that the .iso file has been downloaded without corruption.

Two Ways to Keep Track of your Word Files

By Nancy DeMarte, SarasotaTechnology User Group, FL

I often hear people say that they have so many documents saved in their computer in so many different folders, that it's hard to locate a specific document. They can't remember where they saved it. If you have found yourself in this situation, these tips might help.

To find a Word document on your computer, you need to know some information about it. Newer Windows systems have better searching capabilities than in the past, but you still need to know the document title or a few key words. Alternatively, you might just open File Explorer and start looking through folders for a logical location. Besides being time-consuming, often this approach does not locate the file you want.

Every computer file has a "file path," or the specific address where the file is located. An example of a path is C:\Users\Nancy\Documents\Recipes\Carrot Cake, which can be read this way: The Carrot Cake recipe is stored in a folder called Recipes, which is stored in my Documents folder in the Nancy folder, in the Users section of my hard drive or C.

Ideally, each of our documents should contain file path information to help us locate it. I find the footer as the most convenient place to put a file path. It is out of the main document area and is always visible when the document is open. And it's easy to add a File Path to a footer.

Open an already saved document which does not have a footer. Double click in the footer area at the very bottom of the document, which opens the Header & Footer Tools Design tab. Click that tab, and, In the Insert group, click Document Info. The menu shows the kind of information you can include in the footer. Choosing File Name might be sufficient if you only have a few documents, but if you have a large number, choose File Path, which will put the entire path of the document's location in the footer. Then, if you keep a printed copy of the document, you'll always be able to find it again. But what if later you change the location of a document? The path will not change automatically when you save it in another place until you click Print, which acts as Print Preview in later versions of Office. If you don't want to print the document at this time, click Save and return to the document. You'll find the path has been updated.

If you don't want the long file path at the bottom of a document, but still want to see its exact location when it is open, try putting the File Path on the Quick Access toolbar above the command ribbon. This handy area for favourite commands is often under-used. You can put nearly every command that exists for an Office Program here, although most people choose only a few of their favourites. By default, the Quick Access bar contains Save, Undo, and few other common tools.

To add a file path to Quick Access, click the tiny down arrow with a line over it at the right end of the Quick Access bar, which shows a list of the most common tools, with check marks indicating which tools are already on the toolbar. Click More Commands to open the Quick Access Customizing window.

On the left side, click the arrow next to Popular Commands (1) and choose All Commands. Scroll down the alphabetical list and click Document Location (2). Then click Add (3) in the centre of the window which moves Document Location to the Quick Access bar side, and finish by clicking OK (4). Now every time you open a document, its path will be displayed in a box at the right end of the Quick Access bar. If it isn't completely visible, click inside the left end of this box and drag to the right to see the rest of the path.

This view shows a Quick Access bar which includes the Document Location (file path) box.

Once you add Document Location to the Quick Access toolbar, the path for any document will display there automatically when the document is active. The advantage is you don't need to put the path into the document at all. The disadvantage is that you will not have the file path to refer to when the document is printed. You can decide what method works best for you.

The two methods, by the way, are updates from an earlier method of adding a File Path. Putting a file path in a footer could only be done by adding a field from the Quick Parts menu (Insert tab – Quick Parts -- Field), clicking Filename from

the list, and checking a box to add the path. The path would then appear in all documents where you put the field, most often in the footer. That method is still available in all recent versions of Word, even version 2016. The process of customizing the Quick Access bar has not changed in Windows 8 or 10, either.

I add file paths to footers of important documents that I don't need to open often. I print one copy of these so I know exactly where to find them by checking the footer. If I want to print one of these documents for distribution, I delete the footer, knowing how easy it is to add it back later.

SIG Reports

East SIG Report – July 2017 By Neil Muller

The June meeting commenced with **Paul Woolard** welcomed members followed by Q&A conducted by **George Skarbek**.

Q: I'm thinking of building a new PC and thought I'd use an i5 CPU with 16 GB of RAM. I've been given advice by a friend who's a computer "expert", that I should go for an i3 and maximise memory to 32 or 64GB instead. What is your opinion?

A: Without knowing specific details, I think that's terrible advice. Look at what's slowing your current PC down, is it memory, is it CPU, is it the hard drive or a combination these. Whatever components you plan to use, you must have a solid state drive (SSD). This is the single biggest factor that will make a PC faster. This is because most of the time when using your PC you'll be opening or closing things and that is where an SSD excels. If you're only opening a few page Word document, web browsing or checking email, there's very little improvement if you have more than 4GB of RAM. There may only be a 3% to 5% improvement for 8GB of RAM. If you go for 16GB, in some cases it will actually slow you down.

Q: My current system has 8GB of RAM and recently I installed an SSD. Ever since then I keep getting messages that I'm running out of resources. When I look at my RAM usage I see that I'm using up 80 to 90% of my memory, so I assume I have to close something to free up memory?

A: Resources is different to memory. Your problem is unlikely to be caused by the SSD as it uses minimal resources, so it must be something else causing the problem. Open Task Manager and look at the Performance tab to see how much memory is being used. If Windows indicates it's running out of resources, open the Resource Monitor (bottom left in the Performance window in Win 10) and you can see what is using your memory. Make sure you have programs open when you go to Resource Monitor and look at the memory tab to see what program is using your memory. If you're running out of physical memory any programs you then open will have to page to disk and then page back again. Make sure you're not loading too many programs in Start-up as they will sit there and use up memory and your resources. If you get page faults it means the disk is too slow or you need more RAM. Resource Monitor is where you need to look to find what's using your resources and then kill that program.

Q: When you open Outlook and have a lot of files in your Inbox, do they all get loaded or are they only loaded when you click on them?

A: Only the headers get loaded into RAM when opening a mail client. If you have a 300 page document it's dormant and doesn't load anything until its open.

Q: With SSDs drives, SATA3 was the traditional connection to your PCs motherboard. I've noticed M.2, PCI and PCIe are now alternative motherboard connections. Are any of these connections better than the other?

A: M.2 is definitely better than the others due to its through put.

Q: What is M.2? Is it a SSD or a stick that goes on the motherboard?

A: M.2 is solid state memory that fits in a slot on the motherboard and is used instead of a SSD or hard disk drive. You can only use M.2 storage if your motherboard has a M.2 slot. The M.2 slot is small and the most commonly 22mm wide. M.2 drives also come in a number of different lengths the most common being 60mm, 80mm and 110mm.

Q: I find loading web pages agonisingly slow and wonder whether my ISP is the cause? I've run "speed test" and initially my download speed starts off at about 2 Mbps, but after a few minutes increases to 10 Mbps.

A: There's something else going on here and your ISP is only partially to blame. The location of the website and the number of people using that connection plays a part in the download speed. Not everyone going to a particular website is going to get their advertised download speeds, as it depends on the bandwidth available. The times you're likely to achieve your advertised speed is when downloading files from local servers. ISP's will often store common downloaded files such as virus updates or Microsoft patches on local servers. Other factors for slow internet speed are the distance to your exchange and the time of day. When children get home from school is often a time the internet will slow right down.

The first presentation after Q&A was on Window 10 issues by **Trevor Hudson**. Trevor played 3 short videos he's prepared titled "**Addressing Windows 10 Privacy Concerns**", "**Addressing Windows 10 Data Concerns**" and "**Addressing Windows 10 Upgrade Concerns**". These videos are available on YouTube and Vimeo by searching the above titles.

After a short break **Barry Horn** spoke to a number of Microsoft Excel spreadsheets he developed while working as a consultant. Barry emphasized some of the formulae, Excel features and actions he used in these spreadsheets. The spreadsheets themselves did not involve complex calculations, but were complex due their large size. Most comprised a large number of sheets requiring extreme care to ensure data was entered in the correct cells. A key feature of Barry's spreadsheets was therefore the use of the colour coding of cells to aid clarity and ease of data entry. Another feature of Barry's spreadsheets was to use colours for cells containing formulae. Barry protected these cells from being written to and showed how this was done. Where data was to be entered, Barry left these cells unprotected and uncoloured. This technique made it easier for other users to enter data in the correct cells. The first sheet of some of the multi-page spreadsheets displayed an index to subsequent sheets while others displayed a summary of the results of the data gathered in subsequent sheets.

Northern Suburbs Linux SIG Report—July 2017 by Paul Addis

The meeting started with the latest Linux News, provided by Nick Vespo. (Normal service has been resumed).

Google is close to releasing its successor to Android, called Fuschia. The code is all new, and not reliant on the Linux kernel. The aim has been to support only mobile phones and tablets, and avoid the extra code that Linux contains to handle the wide variety of devices that it supports. The new kernel has the name Magenta. Google must be employing colour consultants.

Firefox has released a version of its browser aimed at supporting iOS and Android only. The name is Firefox Focus. It is available as a free download, and has built-in blockers to protect against advertisements and other unwanted observers.

Libreboot is an open-source boot facility that avoids the use of a machine's BIOS. The video showed a comparison of booting using it and BIOS. Libreboot was much faster for the machine to display the full desktop. It is claimed to be free of backdoors that might allow unwanted programs to gain access to the machine, and to be more reliable than non-free alternatives.

Then there were three short items about in-car infotainment and diagnostic systems. The first was an infotainment system for the Toyota Camry that is open source and based on Linux. The claim was made that the system could also be available for other vehicles shortly. Then a diagnostic system was described. It can be either in-car or under-bonnet.

The final item described a CAN-sniffer for vehicles. The Controller Area Network (CAN bus) allows devices and controllers to communicate without a host computer. It was primarily designed for vehicles. The sniffer allows a user to see traffic on the CAN, and to use the information for purposes such as problem diagnosis. The video showed the device in operation and its output captured on a computer screen.

The open forum included a discussion about Raspberry Pi usage. A twin-core machine showed a CPU usage of 140% as reported by the top monitoring program. The question discussed was whether the report meant that the usage was the equivalent of 140% of a single core, and how the usage might be distributed between the cores.

After the social break - a lively one, as usual - the main session of the evening was a presentation by David Hatton on Multics.

The Multics system, a mainframe timesharing system, was created as a joint research project of MIT, General Electric and Bell Laboratories. It was started in 1964/65 and became operational in 1968/69. A transfer to Honeywell happened gradually after that and it became a fully supported product in 1973.

Development continued until 1983, and it was wound down during the 1990's with a final switch-off happening in 2000. The system was a significant influence on the thinking of the Unix developers.

David showed slides contrasting the size and cost of a mainframe system - an IBM 704 with approx. 144 KB of memory costing \$3.5 million in 1969 - with a typical Unix system at around the same time - a PDP7 with approx. 8 Kb of memory costing around \$72,000.

Some attributes of the Multics system, common on present day systems but unusual at the time of its creation, were ...

- * Symmetrical multi-processing and input/output
- * Segmented memory pages
- * Shared data
- * Security to meet U.S. government B2 level
- * Stack, re-entrant procedures, inter-language calling
- * Dynamic linking
- * Callable system interfaces

David demonstrated the Multics simulator `dps8` running on Linux Mint. The simulator can also run on a Windows machine and even on a Raspberry Pi, which can be purchased for less than \$A100. The comment was made that the simulator only runs at about half the speed of the original. Very good in price/performance terms.

The simulator's name is derived from the name of the Honeywell computers that ran Multics from 1979. It can be downloaded from

<http://ringzero.wikidot.com/r1-0-load-and-go>

There are pre-built versions for Linux and Windows. For other operating systems the simulator needs to be compiled from source code.

David started the simulator and showed the execution of a few commands, many of which are similar to the Linux commands to perform the same sort of function.

There is an extensive collection of Multics information in various forms available on the website

<http://multicians.org>

An informative look back into the history of computing that helped those present to better understand one of the major influences on Unix and hence Linux.

Special Interest Groups

SIG Meetings & Contact Details

Amendments: Please advise changes/corrections to:
[calendar-admin@melbpc.org.au/](mailto:calendar-admin@melbpc.org.au)

Most recent changes are at:

<http://www.melbpc.org.au/interest-groups-resources/sig-changes/>

Access (database) and Excel

Date Jan No Meeting
Feb-Nov Second Mon of month (inc. Public Holidays)
Dec Second Mon of month
Time 6:30pm - 8:30pm
Email access@melbpc.org.au
Location Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s) Craig Evans
craig_evans@racv.com.au

Bayside

Date Jan Third Thu of month
Feb-Nov Third Thu of month
Dec Third Thu of month
Time 10am - 12noon
Email bayside@melbpc.org.au
Location St Stephens Church Hall, 111 North Road (cnr Cochrane St), Brighton Melway:67.F7
Convenor(s) Peter Carpenter - 9596 3441
Brian Fergie
Les Johnston

Beginners East (BEAST)

Date Jan No Meeting
Feb-Nov Third Sun of month
Dec Second Sun of month

Time 10am - 12:30pm
Email beast@melbpc.org.au
Location Vermont South Community Centre, 1 Karobran Drive, Vermont South Melway:62.G7
Convenor(s) Dave Botherway

Casey

Date Jan No Meeting
Feb-Nov Second Fri of month
Dec Second Fri of month. (Christmas function - check location/time etc with Convenor)
Time 1pm - 3:30pm
Location Beaconsfield Neighbourhood Centre, 8 O'Neil Road, Beaconsfield Melway:214.A1
Convenor(s) Jan Whitaker - 9705 9009
jwhit@janwhitaker.com
Jan Weiner - 9796 2807
weiian@westnet.com.au

Casey Workshop

Date Jan No Meeting
Feb-Nov Fourth Fri of month
Dec No Meeting
Time 1pm - 3:30pm
Location Beaconsfield Neighbourhood Centre, 8 O'Neil Road, Beaconsfield Melway:214.A1
Convenor(s) Jan Weiner - 9796 2807
weiian@westnet.com.au
Jan Whitaker - 9705 9009
jwhit@janwhitaker.com

Communications

Date Jan No Meeting
Feb-Nov Second Wed of month
Dec Second Wed of month
Time 7 - 9:30pm
Email phil@melbpc.org.au
Location Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s) Phil Lew - 0418 567 019

Digital Images

Date Jan Third Fri of month
Feb-Nov Third Fri of month
Dec No Meeting
Time 10am - 12noon
Location Wadham House, 52 Wadham Parade,

Convenor(s) **Mount Waverley** Melway:61.E12
Ian Bock - 9807 3701
bockey@melbpc.org.au

Centre, Doyle Street (corner
Somerset St),
Avondale Heights Melway:27.D6
Convenor(s) John Guegan - 9317 7114

East

Date Jan No Meeting
Feb-Nov Second Thu of month
Dec Second Thu of month
Time 7:30pm - 9:30pm
Email east@melbpc.org.au
Location Eley Park Community Centre,
87 Eley Rd,
Blackburn South Melway:61.H5
Convenor(s) Paul Woolard - 9877 1059
Ian Dewhurst - 0438 480 500

East Workshop & 3D Printing

Date Jan No Meeting
**Feb-Nov Second Sun of month. NO meeting in
May - Mother's Day.**
Dec Second Sun of month
Time 10am - 2pm
Email eastwsh@melbpc.org.au
Location Wadham House, 52 Wadham Parade,
Mount Waverley Melway:61.E12
Convenor(s) Paul Woolard - 0417 566 209
pwoolard@melbpc.org.au
John Swale (3D printing)
- 0417 530 766

Essendon - Main meeting

Date Jan No Meeting
Feb-Nov First Fri of month
Dec No Meeting
Time 9:30am - 12noon
Email essendon@melbpc.org.au
Location Nancye Kirchner Neighbourhood
Centre, Doyle Street (corner
Somerset St),
Avondale Heights Melway:27.D6
Convenor(s) John Guegan - 9317 7114

Essendon - Open Forum

Date Jan No Meeting
Feb-Nov Second Fri of month
**Dec Second Fri of month. (Christmas
Function, 10:30am)**
Time 9:30am - 12noon
Email essendon@melbpc.org.au
Location Nancye Kirchner Neighbourhood

Essendon - Varies

Date Jan No Meeting
Feb-Nov Third Fri of month
Dec No Meeting
Time 9:30am - 12noon
Email essendon@melbpc.org.au
Location Nancye Kirchner Neighbourhood
Centre, Doyle Street (corner
Somerset St),
Avondale Heights Melway:27.D6
Convenor(s) John Guegan - 9317 7114

Everything Apple

Date Jan No Meeting
Feb-Nov Fourth Sun of month
Dec No Meeting
Time 2pm - 4pm
Email everything-apple@ausom.net.au
Location Melb PC HQ, Level 1, 479 Warrigal Rd,
Moorabbin Melway:78.D8
Convenor(s) Julie Ackland
Peter Emery

Genealogy East

Date Jan No Meeting
Feb-Nov Third Sun of month
Dec Second Sun of month
Time 1pm - 3:30pm
Email geneast@melbpc.org.au
Location Vermont South Community Centre,
1 Karobran Drive,
Vermont South Melway:62.G7
Convenor(s) Denis Street

Hardware

Date Jan No Meeting
Feb-Nov Second Fri of month
Dec Second Fri of month
Time 10am - 12noon
Location Wadham House, 52 Wadham Parade,
Mount Waverley Melway:61.E12
Convenor(s) Kelvin Cording - 9438 1047
kcording@bigpond.net.au

iHelp

Date Jan Approximately 6 monthly
Feb-Nov Approximately 6 monthly
Dec Approximately 6 monthly
Time 7pm - 9pm
Email ihelp@melbpc.org.au
Location Melb PC HQ, Level 1, 479 Warrigal Rd,
Moorabbin Melway:78.D8
Convenor(s) Dave Simpson

Investment Tools - WASINT

Date Jan No Meeting
Feb-Nov Second Tue of month
Dec Second Tue of month
Time 10:30am - 12:30pm
Email wasint@melbpc.org.au
Location Melb PC HQ, Level 1, 479 Warrigal Rd,
Moorabbin Melway:78.D8
Convenor(s) Richard Solly

Linux Workshop - Moorabbin

Date Jan No Meeting
Feb-Nov Second Sat of month
Dec Second Sat of month
Time 10:30am - 1:30pm
Email linuxworkshop@melbpc.org.au
Location Melb PC HQ, Level 1, 479 Warrigal Rd,
Moorabbin Melway:78.D8
Convenor(s) David Hatton

MACE (Atari Computers)

Date Jan Third Sun - BBQ - check with
Convenor for location
Feb-Nov Third Sun of month
Dec Third Sun of month
Time 10am - 2pm
Email maceatari@gmail.com
Location Melb PC HQ, Level 1, 479 Warrigal Rd,
Moorabbin Melway:78.D8
Convenor(s) Andrew Boschan
andrewbosc@gmail.com

Microcontroller

Date Jan Second Wed of month
Feb-Nov Second Wed of month
Dec Second Wed of month
Time 7pm - 9:30pm
Email microcontroller@melbpc.org.au
Location Melb PC HQ, Level 1, 479 Warrigal Rd,
Moorabbin Melway:78.D8
Convenor(s) Phil Lew - 0418 567 019

phil@melbpc.org.au

John Hollow - 0417 031 164

Microcontroller Workshop

Date Jan Second & Fourth Sat of Jan.
Feb-Nov Second & Fourth Sat of month.
Dec Second Sat (only) of Dec.
Time 12noon - 5pm
Email

Location Melb PC HQ, Level 1, 479 Warrigal Rd,
Moorabbin Melway:78.D8
Convenor(s) John Shirt - 0409 568 267
Rob Brown - 0419 285 806

Mornington Peninsula - General, Q&A

Date Jan Third Mon of month
Feb-Nov Third Mon of month
Dec No Meeting
Time 9:30am - 12noon
Email peninsula@melbpc.org.au
Location Mornington Community Information and
Support Centre, 320 Main St,
Mornington Melway:104.E12
Convenor(s) Terry Said - 0427 750 327
dulnain@gmail.com
Ian Thomson
iaroth@netspace.net.au
Colin Ackehurst

Mornington Peninsula - Family History

Date Jan Third Mon of month
Feb-Nov Third Mon of month
Dec No Meeting
Time 1:30pm - 4:30pm
Email peninsula@melbpc.org.au
Location Mornington Community Information and
Support Centre, 320 Main St,
Mornington Melway:104.E12
Convenor(s) Colin Ackehurst
colin_a_ackehurst@bigpond.com

Mornington Pen. Family History: Adv.DNA

Date Jan last Wed of month (5th Wed if there
is one, otherwise 4th Wed)
Feb-Nov last Wed of month (5th Wed if there
is one, otherwise 4th Wed)
Dec No Meeting
Time 2pm - 4pm
Email peninsula@melbpc.org.au
Location Mornington Community Information and

Support Centre, 320 Main St,
Mornington Melway:104.E12
Convenor(s) Colin Ackehurst
colin_a_ackehurst@bigpond.com

Multimedia Home Entertainment

Date Jan No Meeting
Feb-Nov First Fri of month
Dec First Fri of month
Time 10am - 12noon
Email MHE@melbpc.org.au
Location Wadham House, 52 Wadham Parade,
Mount Waverley Melway:61.E12
Convenor(s) John Hall - 9803 2731
johnhall@melbpc.org.au
Kelvin Cording - 9438 1047
kcording@bigpond.net.au

Music

Date Jan Third Thu of month
Feb-Nov Third Thu of month
Dec No Meeting
Time 7:30pm - 9:30pm
Email music@melbpc.org.au
Location Melb PC HQ, Level 1, 479 Warrigal Rd,
Moorabbin Melway:78.D8
Convenor(s) Bill Sakell
John Shirt - 0409 568 267

North East Android

Date Jan No Meeting
Feb-Nov Third Wed of month
Dec Second Wed of Dec - join with North
East Daytime SIG - end-of-year
breakup
Time 10am - 12noon
Email ne-android@melbpc.org.au
Location Hawdon Street Community Hall,
80 Hawdon Street,
Heidelberg Melway:32.A4
Convenor(s) Colin Lampshire
9857 5372 or 0413 640 408
lampshir@melbpc.org.au
Kelvin Cording - 9438 1047

North East Daytime and Photography

Date Jan No Meeting
Feb-Nov **Second Wed of month**
Dec **Second Wed of month**
Time **10am - 12noon**
Email neday@melbpc.org.au

Location Hawdon Street Community Hall,
80 Hawdon Street,
Heidelberg Melway:32.A4
Convenor(s) Colin Lampshire
9857 5372 or 0413 640 408
lampshir@melbpc.org.au

North East Genealogy

Date Jan No Meeting
Feb-Nov First Wed of month
Dec First Wed of month
Time 10am - 12noon
Email negen@melbpc.org.au
Location Hawdon Street Community Hall,
80 Hawdon Street,
Heidelberg Melway:32.A4
Convenor(s) Lynn. Hammet
lynnhammet@gmail.com

Northern Suburbs Linux

Date Jan Third Mon of month
Feb-Nov Third Mon of month
Dec No Meeting
Time 7:30pm - 9:30pm
Email nslig@melbpc.org.au
Location Community Meeting Room, Watsonia
Library, 4 Ibbotson St,
Watsonia Melway:20.E4
Convenor(s) David Hatton
Stephen Davidson

Online

Date Jan Available online at any time
Feb-Nov Available online at any time
Dec Available online at any time
Time Available online at any time
Email kazkev@melbpc.org.au
Location Melb PC Yammer online forum
Convenor(s) Kevin Martin
Evening only - 5964 7627
or 0407 343 162

Programming

Date Jan Fourth Wed of month
Feb-Nov Fourth Wed of month
Dec No Meeting
Time 6:30pm - 9:30pm
Email programming@melbpc.org.au
Location Melb PC HQ, Level 1, 479 Warrigal Rd,
Moorabbin Melway:78.D8
Convenor(s) John Viney

Raspberry Pi - Moorabbin

Date Jan **Second Sat of month**
Feb-Nov **Second Sat of month**
Dec **Second Sat of month**

Time 2pm - 4pm
Email raspi-moorabbin@melbpc.org.au
Location Melb PC HQ, Level 1, 479 Warrigal Rd,
 Moorabbin Melway:78.D8
Convenor(s) Mohan Gupta - 0421-214-081
 Rob Brown - 0419 285 806

Raspberry Pi - Mt Waverley

Date Jan **Fourth Fri of month**
Feb-Nov **Fourth Fri of month**
Dec **No Meeting**

Time 10am - 12noon
Email raspi@melbpc.org.au
Location Wadham House, 52 Wadham Parade,
 Mount Waverley Melway:61.E12
Convenor(s) John Hall - 9803 2731
 johnhall@melbpc.org.au
 Lance Lloyd - 9884 5559
 lancelloyd@melbpc.org.au

Sunbury Daytime - New Users

Date Jan **No Meeting**
Feb-Nov **First Thu of month**
Dec **First Thu of month**

Time 9:30am - 12noon
Email sunburydaytime@gmail.com
Location Sunbury Senior Citizens Centre (back
 room), 8 O'Shannassy Street,
 Sunbury Melway:382.E4
Convenor(s) Kevin Hale - 9740 5786

Sunbury Daytime - Advanced

Date Jan **No Meeting**
Feb-Nov **Second Thu of month**
Dec **Second Thu of month**

Time 9:30am - 12noon
Email sunburydaytime@gmail.com
Location Sunbury Senior Citizens Centre (back
 room), 8 O'Shannassy Street,
 Sunbury Melway:382.E4
Convenor(s) Kevin Hale - 9740 5786

Sunbury Daytime - Main Meeting

Date Jan **No Meeting**
Feb-Nov **Third Thu of month**
Dec **No Meeting**

Time 9:30am - 12noon
Email sunburydaytime@gmail.com
Location Sunbury Senior Citizens Centre (back
 room), 8 O'Shannassy Street,
 Sunbury Melway:382.E4
Convenor(s) Kevin Hale - 9740 5786

Sunbury Daytime - Maintenance & Linux

Date Jan **No Meeting**
Feb-Nov **Fourth Thu and Fifth Thu of month.**
Dec **No Meeting**

Time 9:30am - 12noon
Email sunburydaytime@gmail.com
Location Sunbury Senior Citizens Centre (back
 room), 8 O'Shannassy Street,
 Sunbury Melway:382.E4
Convenor(s) Kevin Hale - 9740 5786

Video Inner East

Date Jan **No Meeting**
Feb-Nov **Second Mon of month**
Dec **Second Mon of month**

Time 7:30pm - 9:30pm
Email rbalse@tpg.com.au
Location Copland Room, Ashburton Library, 154
 High St,
 Ashburton Melway:60.C9
Convenor(s) Richard Balsillie - 9809 4116

Video Production - Pinnacle

Date Jan **Fourth Wed of month**
Feb-Nov **Fourth Wed of month**
Dec **No Meeting**

Time 10:00am - 12:30pm
Location Melb PC HQ, Level 1, 479 Warrigal Rd,
 Moorabbin Melway:78.D8
Convenor(s) Wayne Spicer - (03) 5971 1617
 spisawn@optusnet.com.au
 Tony Pickup - 9878 0706
 tonypickup@optusnet.com.au

Video Production - Sony

Date Jan **Second Wed of month**
Feb-Nov **Second Wed of month**
Dec **Second Wed of month**

Time 10am - 12noon
Location Melb PC HQ, Level 1, 479 Warrigal Rd,
 Moorabbin Melway:78.D8
Convenor(s) Roger Wragg
 rdwragg@fastmail.fm
 Bob Flack

WAFFLE - wine & fine food lovers event

Date Jan No Meeting
Feb-Nov First Wed of month
Dec First Wed of month
Time 9:35pm (after the Monthly Meeting)
Email phil@melbpc.org.au
Location Fong's Chinese Restaurant, 725 Centre Rd (cnr Francesco St), **Bentleigh East** Melway:77.J1
Convenor(s) Phil Lew - 0418 567 019
Tom Rado - 9807 4072

Website Design - Tutorials

Date Jan No Meeting
Feb-Nov Fourth Sun of month
Dec No Meeting
Time 2pm - 4pm
Email webdesign@melbpc.org.au
Location Melb PC HQ, Level 1, 479 Warrigal Rd, **Moorabbin** Melway:78.D8
Convenor(s) Fleur Stephens - 0407 330 963

Website Design - Troubleshooting

Date Jan No Meeting
Feb-Nov Fourth Sun of month
Dec No Meeting
Time 4pm - 6pm
Email webdesign@melbpc.org.au
Location Melb PC HQ, Level 1, 479 Warrigal Rd, **Moorabbin** Melway:78.D8
Convenor(s) Fleur Stephens - 0407 330 963

Windows Plus

Date Jan No Meeting
Feb-Nov Third Sat of month
Dec No Meeting
Time 10am - 12noon
Email winplus@melbpc.org.au
Location Melb PC HQ, Level 1, 479 Warrigal Rd, **Moorabbin** Melway:78.D8
Convenor(s) John Swale - 0417 530 766
Barry Stone

Wyndham PC Users/Multimedia

Date Jan No Meeting
Feb-Nov Third Tue of month
Dec Second Mon of Dec for break-up party.
Time 7:30pm - 9:30pm
Location Room 3, Central Park Community Centre, 80 Lonsdale Circuit (off Franklin Blvd), **Hoppers Crossing** Melway:206.J1
Convenor(s) John Healey
jpfh@melbpc.org.au
Brian Hallam - 0407 493 454
b_hallam@yahoo.com

Yarra Ranges

Date Jan No Meeting
Feb-Nov Fourth Tue of month
Dec Third Tue of month
Time 9:15am - 12:30pm
Email yrig@melbpc.org.au
Location Japara Living and Learning Centre, 54-58 Durham Rd, **Kilsyth** Melway:51.J5
Convenor(s) Bryan Paten - 0429 430 640
Shane Mason - 9733 5390



Membership Drive

Introduce a new member* to Melbourne PC User Group and receive credit towards your membership fees.

Did you know that Melb PC held its first meeting in November 1983?

Yes! it's true.

The group flourished and in 1993 started its own Internet service, becoming one of the founding suppliers of the Internet in Australia, and it is still a licensed ISP. Melb PC is Australia's largest and most active personal computer/technology group with thousands of members participating in more than 40 Special Interest Groups (SIGs) that meet regularly throughout Melbourne.

New members will receive all the benefits you already enjoy – the digital newsletter, the help lines, the Special Interest Groups (SIGs), the Monthly meetings and access to mobile broadband, personal email or IP4 Rental/Web Hosting/Private email Hosting, Microsoft OS discounts and you will be helping your club to grow.

You know how much you enjoy being part of Melbourne PC User Group. So why not bring along a friend to enjoy it too? Prospective new members are always warmly welcome at the Monthly Meeting and SIG Meetings.

Each new member* you enrol gives you **three months credit** towards your membership renewal. (approx. \$24.00 value against a full membership). The more new members you enrol, the more credit towards your next membership renewal.

(* This does not include Family members or anyone re-joining within 12 months of leaving Melb PC).



MELBOURNE PC USER GROUP INC.

MEMBERSHIP APPLICATION FORM

Title	First Name	Last Name
Business Name		
Address		
Suburb		Post Code
Phone		Mobile Number
DOB	Preferred Email Address	

SUMMARY		Additional Family Members or Corporate Representatives <small>(Maximum 2 named)</small>			
Individuals	\$95 <input type="checkbox"/>	Title	First Name	Last Name	Phone
Additional Family Members <small>(Spouse and children)</small>	\$25 <input type="checkbox"/>	Title	First Name	Last Name	Phone
Pensioners/ Adult students A (25+)*	\$80 <input type="checkbox"/>	Title	First Name	Last Name	Phone
Students B (14-25 yrs.)	\$35 <input type="checkbox"/>	Title	First Name	Last Name	Phone
Corporate <small>(One membership is two representatives)</small>	\$190 <input type="checkbox"/>	Please provide emergency contact details below.			
TOTAL: \$ <input type="text"/>		Full Name.			
		Phone no.			

Referred by member: _____ full name or membership number /SIG_____

Terms and conditions

- Adult students A must attach a photocopy of their student card or letter from their educational institution confirming full student status.
 - All student B members must have a Student Card and have evidence of their age at time of joining.
 - Pensioners must attach a photocopy showing both sides of their Centrelink Pension Concession Card. Change of family member(s) must be identified in writing to the club secretary.
- I hereby apply for membership of Melbourne PC Users Group Inc. (A000329V) and agree to abide by its rules while I remain a member.
- Signature _____ Date ____/____/____

Payment Details

Name on Card	Expiry Date
Credit Card Number <input type="text"/>	
Signature	Date ____/____/____

Email User Name Selection

List the user ("login") names you would like in order of preference. Write very clearly, to avoid our confusing certain letters. User names are expressed in lower case letters and must represent your real name in some recognisable way e.g. "John J. Jones" might request user names such as "john", "johnj", "jjones", etc. Any user name that is already allocated or deemed unsuitable in the opinion of the system administrators will not be allocated.

Choice 1. _____@melbpc.org.au

Choice 2. _____@melbpc.org.au



MELBOURNE PC USER GROUP INC.

ABN 43 196 519 351

(Victorian Association Registration No. A0003293V)

Unit 26, 479 Warrigal Road, Moorabbin Vic 3189 Australia

"Members helping Members" Telephone: (03) 9276 4000

OFFICE 365 PRO PLUS 1 Year Subscription



Word



Excel



PowerPoint



OneNote



Access



Publisher



Outlook

Microsoft Office 365 ProPlus for MelbPC Members

Subscriptions for Microsoft's desktop program suite Office 365 ProPlus are now available to Melbpc members at a reduced rate.

The programs included are; Word, Excel, OneNote, PowerPoint, Outlook, Publisher and Access. Members who take up this offer will be able to install the suite on up to fifteen different devices: 5 computers (PC or Mac), 5 tablets (iOS/Android/Windows) and 5 smartphones (iOS, Android, Windows). The new 2016 versions are available now.

Microsoft Office ProPlus is available to members for an annual subscription, set for the first year and payable by members in advance. (*) **Renewal for each year will reflect Microsoft's current price at the time of renewal.**

After payment members will be able to download the program suite onto their own computers using their Office 365 login details (the same as they already use for email and other cloud services). As long as the subscription is maintained, members will receive updates and upgrades to the latest version of Office.

Our existing Office 365 Enterprise service provides the 'cloud' versions of some Office applications: Word, Excel, PowerPoint and OneNote. These can be used during a login to Office 365 via the web. They do not include all of the features available on the desktop versions. Office 365 ProPlus provides the full versions of those applications, and others not available at in the cloud at all: Outlook, Publisher and Access. (Publisher and Access are not available in the Mac OS X version.) The ProPlus programs can be used when the computer is offline and not connected to the internet, as they are installed directly on the computer (or tablet/ smartphone).



Skype for
Business



InfoPath



OneDrive
for Business

Casey SIGs Major Location & Date-Time changes

These changes will affect the following SIGS:

- Casey Main SIG
- Casey Workshop SIG

BOTH Casey SIGs move from Narre Warren to Beaconsfield, beginning 14 August 2017

The new address is:

**Beaconsfield Neighbourhood Centre, 8 O'Neil Road
Beaconsfield Melway: 214.A1**

Time changes

- Both groups will begin at 1pm and finish by 3.30pm until further notice. Due to school pickups in the area, we are going to trial these times and find out how well they meet member needs in terms of congestion.
- Same regular dates as previously:
 - Second Fri of the month – Casey Main SIG
 - Fourth Fri of the month – Casey Workshop SIG

Plenty of parking!



August Calendar

V2 – updated 24-Jul-2017



SIG & Other Meetings — Aug-2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
Legend SIG meeting at Melb PC HQ, Moorabbin. Non-Moorabbin meeting. Cancelled Meeting Changed Meeting To be confirmed	Changes Please advise changes to: calendar-admin@melbpc.org.au	1	2 North East Genealogy SIG Heidelberg 10am - 12noon MONTHLY MEETING Melb PC HQ, Moorabbin 7pm – 9:30pm then Supper (WAFFLE) at Fong's 9:35pm	3 Sunbury Daytime SIG New Users 9:30am - 12noon	4 Essendon SIG Main meeting Avondale Heights 9:30am - 12noon Multimedia Home Entertainment SIG Mount Waverley 10am - 12noon	5
6	7	8 Investment Tools - WASINT SIG Moorabbin 10:30am - 12:30pm	9 Video Production – Sony SIG Moorabbin 10am - 12noon North East Daytime & Photography SIG Heidelberg **10am - 12noon** Communications SIG Moorabbin 7pm – 9:30pm Microcontroller SIG Moorabbin 7pm – 9:30pm	10 Sunbury Daytime SIG Advanced 9:30am - 12noon East SIG Blackburn South 7:30pm - 9:30pm	11 Essendon SIG Open Forum Avondale Heights 9:30am - 12noon Hardware SIG Mount Waverley 10am - 12noon Casey SIG **Beaconsfield** **1pm - 3:30pm**	12 Linux Workshop – Moorabbin SIG 10:30am - 1:30pm Microcontroller Workshop SIG Moorabbin 12noon - 5pm Raspberry Pi – Moorabbin SIG 2pm - 4pm
13 East Workshop & 3D Printing SIG Mount Waverley 10am - 2pm	14 Access (database) and Excel SIG Moorabbin 6:30pm – 8:30pm Video Inner East SIG Ashburton 7:30pm - 9:30pm Wyndham-SIG General **Moved to third Tue of the month**	15 Wyndham PC Users/Multimedia Hoppers Crossing 7:30pm – 9:30pm	16 North East Android SIG Heidelberg 10am – 12noon	17 Sunbury Daytime SIG Main Meeting 9:30am - 12noon Bayside SIG Brighton 10am - 12noon Music SIG Moorabbin 7:30pm – 9:30pm	18 Essendon SIG Varies. Avondale Heights 9:30am – 12noon Digital Images SIG Including Photoshop Mount Waverley 10am - 12noon Melb PC Committee 1pm, Mt Waverley	19 Windows Plus SIG Moorabbin 10am - 12noon
20 Beginners East (BEAST) SIG 10am - 12:30pm MACE (Atari Computers) SIG Moorabbin 10am - 2pm Genealogy East SIG Vermont South 1pm - 3:30pm	21 Mornington Peninsula SIG General inc Q&A Mornington 9:30am - 12noon Family History Mornington 1:30pm - 4:30pm Northern Suburbs Linux SIG Watsonia 7:30pm – 9:30pm	22 Yarra Ranges SIG Kilsyth 9:15am - 12:30pm	23 Video Production – Pinnacle SIG Moorabbin 10:00am – 12:30pm Programming SIG Moorabbin 6:30pm - 9:30pm	24 Sunbury Daytime SIG Maintenance & Linux 9:30am - 12noon	25 Raspberry Pi - Mt Waverley SIG 10am - 12noon Casey Workshop SIG **Beaconsfield** **1pm - 3:30pm** PC Update – Articles Deadline	26 Microcontroller Workshop SIG Moorabbin 12noon - 5pm
27 Everything Apple SIG Moorabbin 2pm - 4pm Website Design SIG Tutorials Moorabbin 2pm - 4pm Troubleshooting Moorabbin 4pm - 6pm	28	29	30 Mornington Peninsula SIG **Family History – Advanced DNA** Mornington. **NEW** 2pm - 4pm *Last Wed of month* PC Update – Reports Deadline	31 Sunbury Daytime SIG Maintenance & Linux 9:30am - 12noon *Extra meeting - fifth Thu of month*	Other SIG (Special Interest Group) information: http://www.melbpc.org.au/interest-groups/ Recent Changes: http://www.melbpc.org.au/interest-groups-resources/sig-changes/	Have A Question Post it on Yammer Yammer: http://yammer.com/melbpc.org.au/