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### **Publishing Information**



### The newsletter of

Melbourne PC User Group

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

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

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

Online membership form

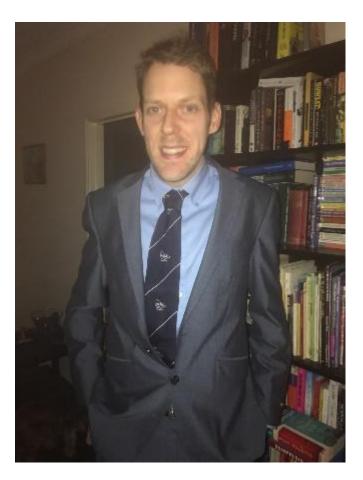
Responsibility for content in this newsletter lies with individually named authors

Monthly Meeting Live Stream from 7.00pm on Wednesday 4<sup>th</sup> March 2020 at http://tv.melbpc.org.au

Please remember to always bring your membership card to meetings

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

### **Editorial March 2020**



**Hugh Macdonald** 

Hello and welcome to the March 2020 edition of PC Update. I hope you enjoy the mix of articles on computer related advice and developments in technology and science.

February was a busy one in the life of Melbourne PC User Group. You'll find out more about what the club has been up to in David Stonier-Gibson's President's Report and Club News. And this is not a one off. There are going to be many exciting events happening at the club this year, so if you haven't visited for a while, one of these might be a good opportunity to.

Thank you to all our regular contributors, and a special thank you to Graham Swanston who returned with some more Member Tips and Tricks this month.

Do enjoy PC Update, and if you have any feedback content wise, or production wise, don't hesitate to let me know via email or on Yammer.

### From The President March 2020

**David Stonier-Gibson** 

### President's special raffle

At the monthly meeting this week, everyone who registers with their membership card and wears a name tag (your card or anything else) will receive a ticket to my Special Raffle. I'm not sure what the prize will be, but I'll think of something of immense value and collectability.

### iHelp

I keep on hearing stories of members shelling out money to *commercial* computer help services and winding up feeling disappointed. Maybe they are not aware that one of the most valuable services Melb PC provides members is iHelp, our own computer assistance provided by a band of dedicated volunteers. iHelp processes approximately 900 cases per year, and is *free* to members. There are many ways to access iHelp – details at <a href="https://www.melbpc.org.au/ihelp">https://www.melbpc.org.au/ihelp</a>

### Perth PCUG

Sad to say, Perth PC User Groups has shut down after 35 years of existence. With an ageing membership and no fixed abode, as SIG leaders withdrew their SIGs were closing down. Their committee had been pretty much the same people for many years. Very sad to see. According to their rules (we have a similar rule) any money they had left had to be given to a like-minded organisation. PPCUG had to seek permission from their state government, but eventually we "inherited" just over \$5,000 from them. In recognition we are attempting to extend some privileges to their last remaining members, such as access to iHelp and online access to PC Update.

The lesson in this for us seems clear: We do own our own premises, we do have money in the bank. The club has the resources, and the committee has the will, to adapt to changing times and exploit that huge asset. Hence all the activities and events the committee is initiating, hence the changes to the club rooms, hence transforming the club into something relevant to the 2020s.

### **Maker Room**

We intend to rename the training room to Maker Room, and we continue working on the transformation.

Work has slowed down because people are back to normal daily lives after the Christmas slowdown. Also, the Maker room work is being done by pretty much the same people who are running the Coder DoJo, many of whom are still non-retired. A prototype workbench has been completed, and you will be able to see it next time you are in Moorabbin.

Thinking may have changed a bit regarding furnishing the Maker Room. I am now in favour of concentrating on modifying the existing computer desks so everything comes off the desk surface and frees them up as general purpose work spaces.

### Coder Dojo

Coder Dojo is a movement that introduces kids 7-17 to computer programming and related STEM (Science, Technology, Engineering, and Mathematics) topics in a fun environment. I attended on Saturday 29<sup>th</sup> January with my grandson. It was fantastic to see young parents and kids enjoying and learning. One 8-year old was especially impressive. This is an excellent forum to spruik the club to the attendees, who are largely non-members (aka potential members). Overall a great success and I know the team are

working to make it better.



Dylan, Jackson and Oliver at Coder Dojo

### 3D Printing workshop

As mentioned last month, on 22nd February we ran a "Getting started with 3D printing" workshop. The session was run by Dave Williams, one of our young committee members. Printers were provided by Fashion3d a local 3D printer importer/reseller, who also provided tech support on the day. The number of attendees was limited by the number of working training computers. We had 8 adults and 3 children. Two of the adults were non-members, one of whom is joining the club.

Several printers have been left set up in the Borret room, and will be available to club members to use.



Dylan, Jackson and Bernie at Introduction to 3D Printing

### Arduino Day, 21st March

Arduino is the tiny computer/controller board that many of us like to use in out technogeek projects. Arduino's 15<sup>th</sup> birthday is coming up, and will be marked by events all over the world. We have partnered with a local reseller, Pakronics, and with our 3D printing partners, Fashion3D, to run a "Build Your Own Robot" on that day.

The robot is "Otto DIY", a cute little open source humanoid robot with some cool dance moves. Pakronics will supply the electronics kits (which cost \$65 up, depending on how many fancy extras you want). Fashion3D will be helping out with case printing (we'll probably do some ourselves now we have functioning printers!)

# **Build your own robot**









Saturday 21st March 2020

### **Emergency Automatic Defibrillator (AED)**

Our AED has been delivered to Moorabbin, and is just awaiting a volunteer to mount it on the wall. It should be up by the March monthly meeting.

Computer Club

### Socialising at the monthly meeting

For the monthly meeting I had the kitchen volunteers set up the round pub tables with biscuits etc in the Maker Room, so people *had* to see the changes. It worked, with an unexpected consequence that the room buzzed. Putting the people together in a small room, standing around tables, really seemed to encourage socialising.

Of course one member accosted me and demanded to know where we will now hold our training courses. I pointed out that in my 5 years with the club there have been, AFAIK, one training course when we rented the room to an outside company.

### **Coffee cups**

An informal show of hands at the February monthly meeting was solidly in favour of no longer using disposable cups in the break. The kitchen volunteers are now onboard, and will use regular mugs.

It would be good if you could bring your own "Go Cup" to the monthly meeting, then we can see how it goes and find the best way forward.



### **Training computers**

The club has 12 ancient desktop computers for training. At present they have been moved out of the erstwhile training room into the Borret room. These are really old machines, not suitable for training on modern software that needs Real Grunt like PhotoShop, video editing, or Computer Aided Design for 3D printing. I think the last time the old boxes were used for training was when we hired out the training room to an outside company over a year ago. I am seriously considering our options and what is appropriate moving forward into the 2020s, when almost everyone owns a laptop. The computers are occupying desks that, if cleared, would provide work surfaces for the Maker Room.

I have started a discussion about this on Yammer/All Company. Please use your Melb PC login to access and join in. <a href="https://www.yammer.com/melbpc.org.au/threads/562945783898112">https://www.yammer.com/melbpc.org.au/threads/562945783898112</a>



### Video dropout

There was a dropout of the streaming video at the February monthly meeting. Needless to say this was unexpected. Monitoring software is being deployed to try and catch the cause of any future failures.

### **March 2020 Monthly Meeting**

The December Monthly Meeting will be held Wednesday March 4 at 7pm.

### **Guest Speakers: Dr Ken Harvey and Mal Vickers**

**Topic: Data Scraping and Snake Oil** 

Why do we receive so much junk advertising from pharmacies for what appear to be shonky medicines? Ear candles, turmeric, krill oil, green eat extract, dodgy weight loss pills, does any of this work? Do we need it? Professor Ken Harvey (Public Health) and his student Mal Vickers recently embarked on a research project to characterise the Australian therapeutic goods marketplace, where only certain goods may be advertised, typically complementary medicines and certain devices. Through website scraping techniques, they extracted the data relating to 2000 regulator determinations, these are the outcomes of complaints about the advertising of therapeutic goods. The findings are an eye-opening window into a world of self-regulation, ineffective products, breaches of the law, exaggerated claims and misleading advertising.

**Dr. Harvey** was awarded the Australian and New Zealand Association for the Advancement of Science (ANZAAS) Medal for, "the teaching of science throughout Australia and New Zealand and contributions to science which lie beyond normal professional activities" (2016). In 2017 he was made a Member (AM) in the General Division of the Order of Australia, "for significant service to community health and the pharmaceutical industry through roles in developing guidelines for the ethical use of antibiotics". Dr Harvey is currently President of Friends of Science in Medicine and an Associate Professor in the School of Public Health and Preventive Medicine, Monash University.

**Mal Vickers** is mature age postgraduate student studying Master of Public Health at Monash University. Mal was previously (prior to 2018) an electronics engineer working in medical technology and research laboratory equipment. He has worked in both industry and for universities. Mal has had a long association with the Australian Skeptics. He is also the complaints officer of the Friends of Science in Medicine.

### **In-house Speaker: Jim Duff**

Our member speaker is Jim Duff, who will be reminiscing on his career in computing.

### **Meeting Agenda**

7.00pm sharp: Meeting opens. MC is Peter Bacon

Guest speaker: Dr Ken Harvey and Mal Vickers

President's Report: David Stonier-Gibson

Social break

Q and A with George Skarbek

In-house speaker: Jim Duff

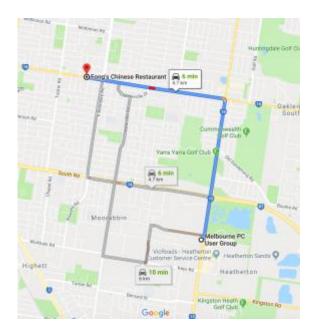
What's New? with George Skarbek

9.30pm: Close

Please remember your membership card or a photo of your QR code on your phone

The meeting is streamed live online at <a href="https://tv.melbpc.org.au">https://tv.melbpc.org.au</a>

Don't forget, directly after the meeting WAFFLE SIG at Fong's Chinese restaurant in Bentleigh. This is a totally social gathering where you can enjoy a snack, a full meal or just a cup of coffee. Sketch maps at the meeting or use <a href="Google Maps">Google Maps</a>



# MARCH RAFFLE 2020 TICKETS: 1 = \$2, 3 = \$5



Tickets are available for purchase at the Monthly Meeting in Moorabbin.

The draw will be during the meeting and winners must be present to collect, unless an arrangement is made.

# Induction Quadcopter



- USB chargeable in 40 minutes.
- Flight time 5-6 minutes on full charge .
- Infrared induction control, single handed induction can operate, interesting and fun.
- Easy to get started, just fling lightly, flying instantly.
- Soft fuselage, safety against collision.

# 3 Way Pillow Pad



- Tri-ledge design that gives you three perfect viewing angles, whether you're lying down, sitting up, or standing.
- Pillow Pad is made from a breakthrough cushioned foam that's ultra lightweight and super soft to comfortably rest in your lap.

## Wearable Sports Fan



- Hand free cooling fan with powerful airflow.
- Flexible arms allow you to choose the best wind direction.
- Has 3 adjustable speed level: low, medium and high.
- One full charge can work for 2-6 hours.

### Dial Help – A MelbPC Club Members Service



Need specialist advice? Try Dial Help. Volunteers with skills in hardware, software, video and much more are just a call away.

For the list of contacts, just go to the MelbPC Website | iHelp page and click on Dial-Help (https://www.melbpc.org.au/ihelp/dial-help).

You will need to be logged in as a member to reach this page.

Where iHelp has suggested a need for software vendor support and this has not resolved the problem or iHelp is unable to assist, there is an additional service for members. Dial Help is a second-level of help, on computer issues, of a more in-depth specialist nature. The service is for members, by telephone, provided by MelbPC specialist volunteer members. Please check your query with iHelp before contacting Dial Help.

Dial Help Volunteers offer detailed knowledge of particular Hardware or Software. If your problem relates to one of the Categories listed, *members only* may telephone the relevant Volunteer for specific advice. Where only an email address is provided, send your query with phone number to that address and the contact will ring you at a convenient time.

Calls can be made weekdays 9:00am to 5:00pm and 6.30pm to 9:00pm. Please be able to reproduce your problem, have your phone beside the computer, keep calls short particularly during business hours, and don't expect a volunteer to call you back on a mobile phone.

If you are willing to be included in this listing for support to other members, please Ph 03 9276 4088 or email ihelp@melbpc.org.au.

### Try one of these bootable PC rescue media

### Dick Maybach, Member, Brookdale Computer User Group, NJ

Modern personal computers are complex assemblies of hardware and software. A problem in a single component can disable the entire system, and sometimes the reason isn't evident. Often, you can boot the ailing PC from a rescue system on a bootable USB memory stick to find the problem. Such systems can run with only minimum hardware (typically the CPU, display, keyboard, and a portion of RAM). In particular, they don't use the disk, meaning they can look for software problems from outside. I recommend you experiment with such tools with a healthy PC. You will learn much about it as well as about the diagnostics. If you try them for the first time on a sick machine, you are likely to experience frustration and failure.

This article reviews three tools (Ultimate Boot CD, All in One System Rescue Toolkit, and System Rescue CD), all distributed as iso files (images of DVDs), which you burn to a DVD or copy to a USB memory stick. You can find DVD burning instructions at

http://www.system-rescue-cd.org/manual/Downloading\_and\_burning/. I use Unetbootin, https://unetbootin.github.io/, to write to memory sticks. Don't copy the iso file with your memory manager, as the resulting medium won't be bootable.

The Ultimate Boot CD (UBCD) is designed for less experienced users, in that it presents a series of menus to help select the proper tool. Figure 1 is the boot screen, from which you can select an area to investigate. The UBCD website, <a href="http://www.ultimatebootcd.com/">http://www.ultimatebootcd.com/</a>, has links to many of its utilities, but there is no organized manual. Those without PC repair experience will probably have to search for instructions, which means they will need a second PC and access to the Internet while they work.

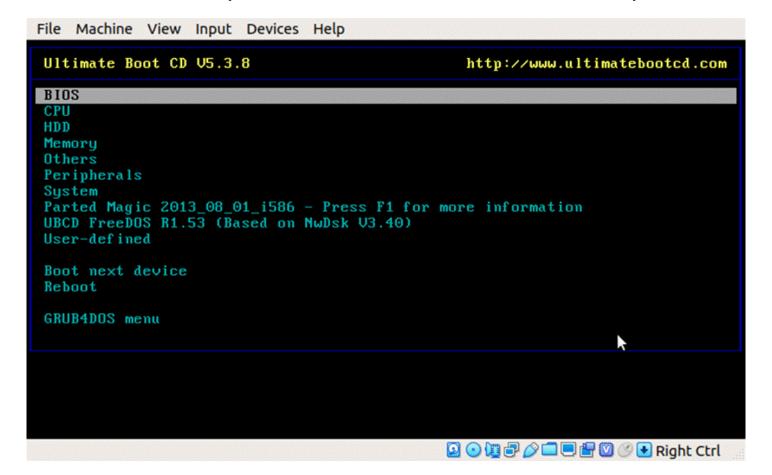


Figure 1. UBCD Boot Screen.

The included Parted Magic (shown in Figure 1) is an old version from 2013, and many UBCD menu items jump to Parted Magic and use a tool from it, which of course is old. UBCD is a low-level system, comparable to DOS, and many of its tools are stand-alone, meaning that once they are running, the only way to exit is to reboot. This really isn't a disadvantage as the system starts very quickly, as least if it's running from a USB memory stick. However, the interface may be confusing to those accustomed to a modern graphical screen.

Selecting System on the menu of Figure 1 and scrolling down produces Figure 2. Most menu items have associated help (here shown in green), which provides valuable aid in choosing an appropriate tool.

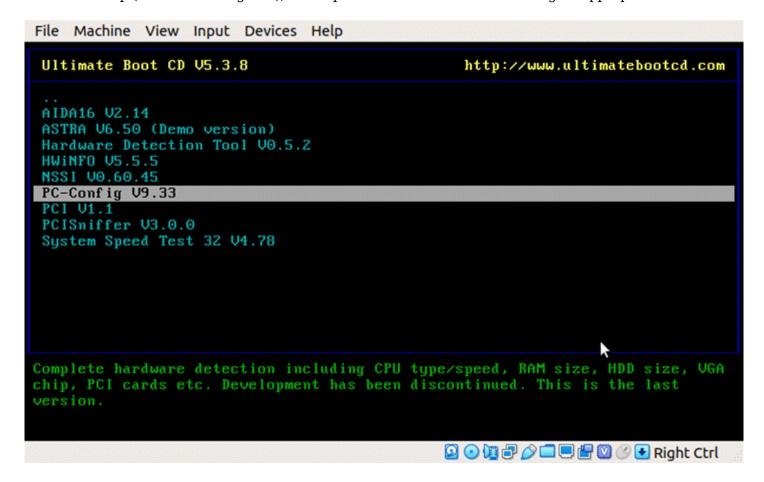


Figure 2. UBCD System Menu.

Figure 3 shows the display from the CPUinfo tool (on the CPU menu).

```
File Machine View Input Devices Help
processor
                  0
                  GenuineIntel
endor_id
cpu family
                 : 6
                 : 42
model
                 : Intel(R) Core(TM) i7-2600 CPU @ 3.40GHz
model name
                 : 7
stepping
cpu MHz
                 : 3392.302
                 : 8192 KB
cache size
physical id
                  0
siblings
                  4
                 : 0
core id
                 : 4
cpu cores
apicid
                 : 0
                  0
initial apicid
div_bug
                   no
00f_bug
                   no
coma_bug
                  no
                 : yes
pu
                 : yes
pu_exception
cpuid level
                 : 13
                 : yes
Jр
lags
                 : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov
pat pse36 clflush mmx fxsr sse sse2 ht syscall nx rdtscp lm constant_tsc xtopo
logy nonstop_tsc pni pclmulqdq ssse3 cx16 sse4_1 sse4_2 popcnt aes xsave avx hy
/proc/cpuinfo lines 1-24/129 19%
                                                 🖸 💿 🕼 🗗 🥟 🗀 🖲 🖶 🔯 🚫 💽 Right Ctrl
```

Figure 3. UBCD CPUinfo Output.

This is only the first portion of the output; several more screens follow. As you can see, much of the information is quite detailed. Similarly, Figure 4 shows the AT-Keyboard Tester (in the Peripherals menu). When you depress a key, the display indicates which keycode the PC received.

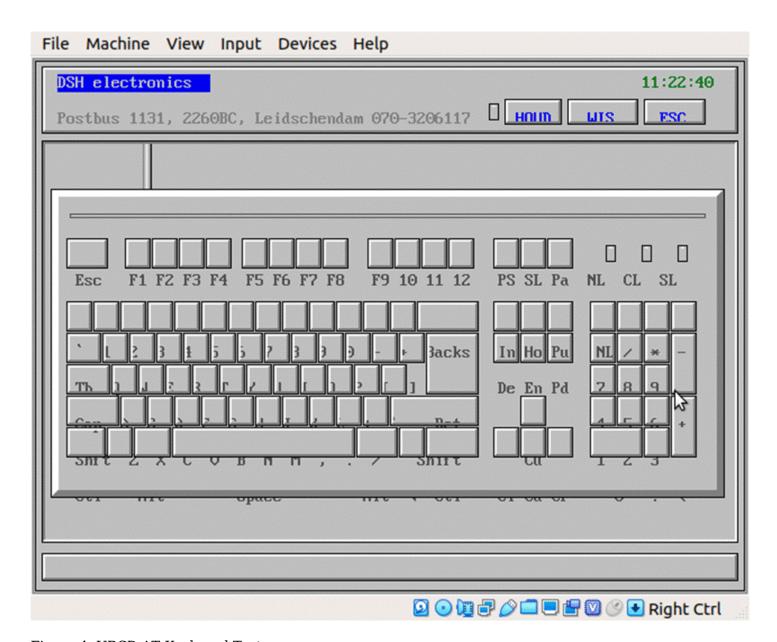


Figure 4. UBCD AT-Keyboard Tester.

Although the emphasis in UBCD is on hardware, there are applications on the HDD menu for file recovery, boot configuration, and partition management.

The All in One System Rescue Toolkit (AIO), <a href="https://paul.is-a-geek.org/aio-srt/">https://paul.is-a-geek.org/aio-srt/</a>, boots into a graphical user interface (Lubuntu Linux); see Figure 5. As you can see, there are tools to recover damaged and deleted files and partitions, edit partitions, repair boot sectors, reset Windows passwords, clone disks and the like. The web browser opens on the AIO home page, which has documentation on many of the tools. Using this mode, you hopefully can get Windows to boot, or at least you can save your data.

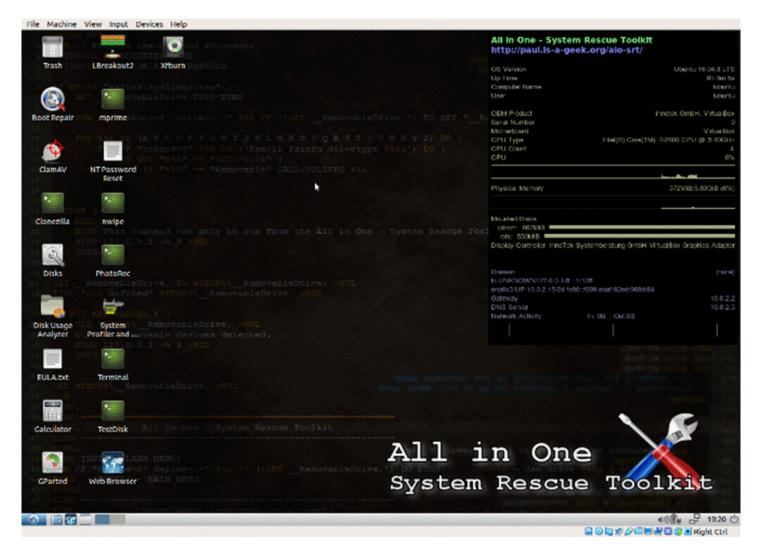


Figure 5. AIO Boot Screen.

The real strength of this tool is to repair problems in a working but damaged Windows system, and for this you boot Windows normally, then insert the live DVD or USB memory stick and run the program *AiO-SRT.exe* from it. (This of course is possible only if Windows is healthy enough to boot.) You will then see the screen of Figure 6. As in Figure 5, there is a system monitor on the right.

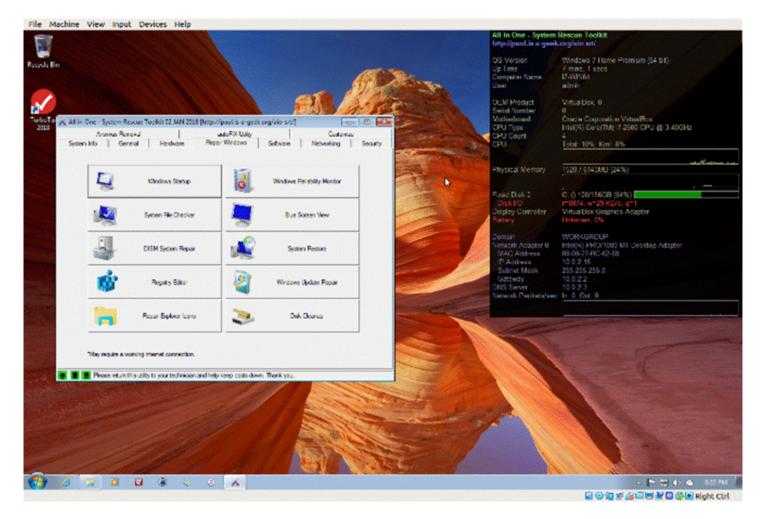


Figure 6. AIO Toolkit Run in Windows.

This figure shows the tools available under the Windows repair tab, few of which are present when AIO is booted as a live medium. More tools are available under the General, Other, Hardware, Software, Networking, Security, and Anti-Virus tabs. In particular, Figure 7 shows the Windows autoFIX utility, which attempts to correct problems with a single click.

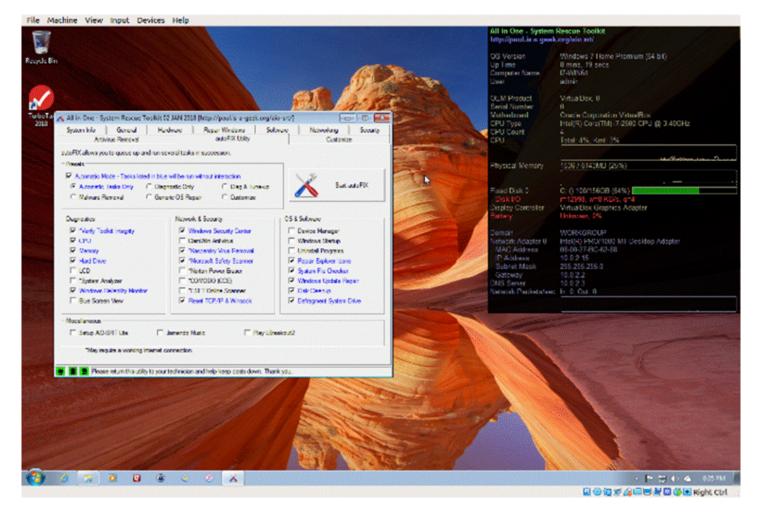


Figure 7. AIO Toolkit Windows autoFIX Utility.

Running in this mode, AIO provides far more Windows repair tools than any other system. Everyone who might have to repair a Windows system should have this on a USB memory stick.

Another tool set is the System Rescue CD (SRCD), <a href="http://www.system-rescue-cd.org/">http://www.system-rescue-cd.org/</a>. This boots into a terminal, but the command *startx* will drop you into a Linux graphical desktop, Figure 8.

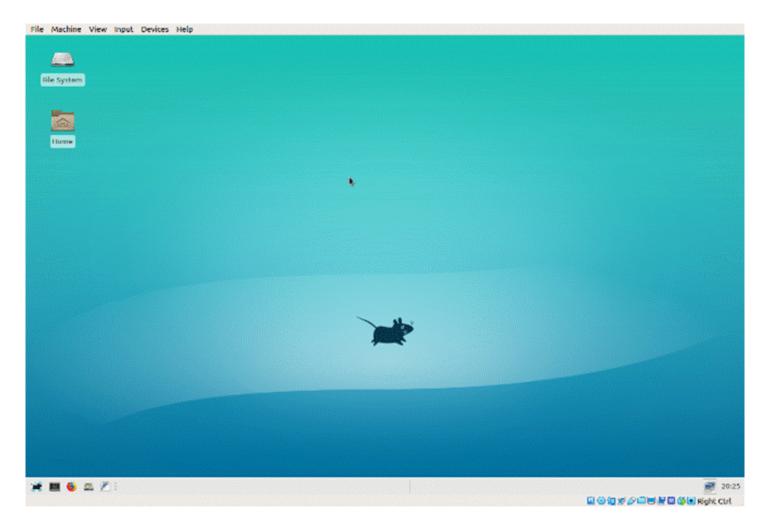


Figure 8. System Rescue CD Graphical Desktop.

You will see few repair tools, because most must be run from the command line, but selecting the Firefox icon at the lower left (assuming of course you have Internet connectivity) will take you to the project's home page, Figures 9 and 10, where you can find instructions.

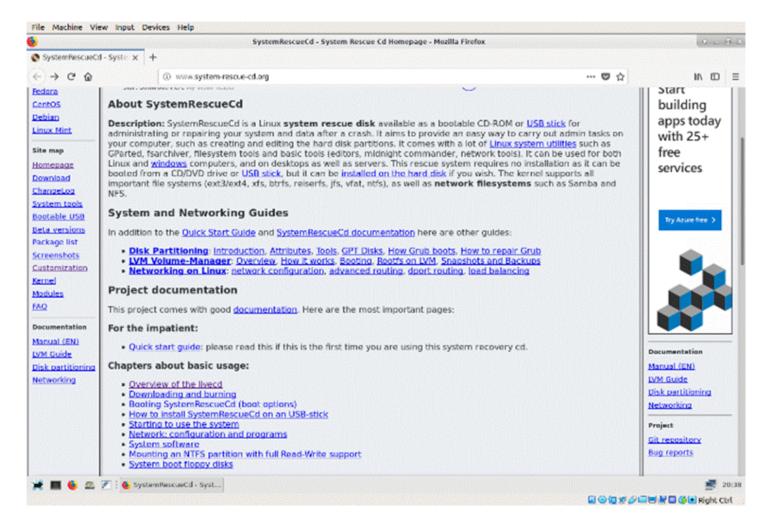


Figure 9. Top Portion of System Rescue CD Home Page.

Of the three systems we've looked at, this one has by far the most complete documentation. Figure 10 Shows the home page bottom portion, which lists the available tools. Being able to access the documentation on one site makes this tool a good one for the home user.

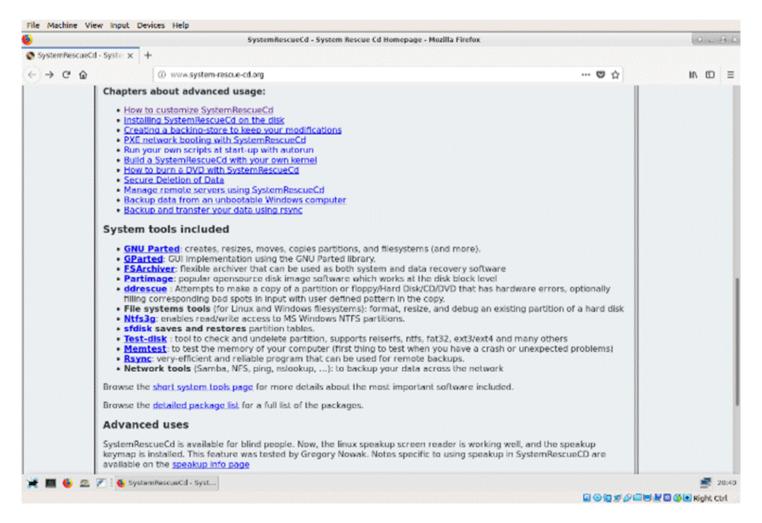


Figure 10. Bottom Portion of System Rescue CD Home Page.

### Which of these three should you choose?

- The Ultimate Boot CD, although it has a relatively primitive interface, makes it is fairly easy to choose the right tool. Most users will need an Internet connection (using another PC) while they work, because while the menu system does provide guidance in choosing tools, there is little help on using them. Many of the tools date from 2013, although most are still effective.
- The All in One Toolkit provides by far the most complete tool set to repair Windows, making it indispensable for most users, although learning the tools may require some digging. A unique feature of AIO is that it can work in two different modes, as a bootable live medium and as a Windows utility.
- The System Rescue CD makes available ample (online) documentation so that even a relative novice can make effective repairs. That all the guidance is online, makes an Internet connection vital, unless you have considerable PC repair experience.

You can use them all to explore your computer when it's healthy, which will teach you a lot and allow you to use the tools effectively when it needs repairs.

Of course there are others. For years, I've used Parted Magic, <a href="http://partedmagic.com/">http://partedmagic.com/</a>, which of the above three most closely resembles System Rescue CD. It has the advantage of making the command-line tools available in menus, but the disadvantage of costing \$11. Over the years, I've written several articles on PC repair, and all are available in the Newsletter section of the Brookdale Computer Users Group website, <a href="http://www.bcug.com/index.html">http://www.bcug.com/index.html</a>. See the April, June, July, and August 2012, June 2013, September 2014, May and June 2015, and February 2017 issues.

Even if you never have problems, if you are reading this, you're regarded as a PC expert by your friends and relatives, who will (if they haven't already) ask you for help. Having one, or better yet, all of these tools available, may then be invaluable.

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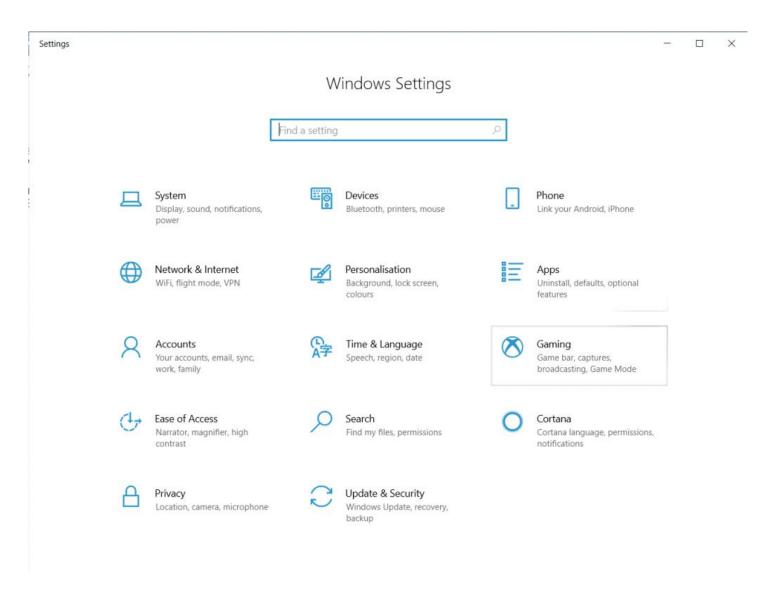
### **Settings - What happened to Control Panel?**

### Phil Sorrentino, Contributing Writer, The Computer Club, Florida

Way back in the days of Windows 7, the Control Panel was the way we adjusted the operation of certain parts of the Operating System. Control Panel was easily found because it was in a short list of options when you clicked the Start button. When you clicked "Control Panel," you were presented with a set of Apps (originally called Applets), that would allow you to change the way certain features operated. (To get this list you had to choose "View by Icons" rather than "View by Categories.") The list of Apps included, Display, Keyboard, Mouse, System, Default Programs, Power Options, Programs and features, Folder Options, Network and Sharing, Device manager, just about all the features that you can adjust. Maybe the statement at the top of the set of Apps was prophetic in its language. The Apps were introduced by a text line that said, "Adjust your computer's settings." And maybe the thought of Settings was carried over from the Smartphone world, (i.e. Apple's iOS and Google's Android) just about when Windows 10 was being developed. No matter how it evolved, Settings seems to be the preferred term for the place to go to change the way the device operates.

"Settings" has become a common feature on many computing devices. It even shows up on other things like electric ovens, exercise machines, thermostats, and kitchen appliances. So now Settings is the place to set many of the features of Windows 10. Yes, Control Panel still exists, but it is not as apparent, or easy to find. It seems like it has been moved to different places in different Windows 10 editions. But, fortunately, you can always find it just by clicking the "Type here to Search" circle next to the Start button, and then typing "Control" into the Search bar.

You may not even have to go to Control Panel for most of the things you may want to change, because clicking Settings will more than likely get you there. And, Settings is very easy to find; just click the Start button and the Settings icon, which looks like a gear, appears right above the Power icon. Click the icon and you will be shown all the Settings categories. Just to add a little confusion, these new categories are not the same categories that are used in Control Panel, although some of the titles will be familiar. The Settings screen on one of my machines is as shown here:



Notice that they are not in alphabetical order. Note too, that System is the first category, so Microsoft must consider these to be important settings. Here are the items in the System category:

**Display.** Here you will find Display-related information and settings. The first setting is "Night light," which allows you to set a schedule for the Night Light and set the "Color temperature at night." The introduction explains that "Screens emit blue light, which can keep you up at night." So, by using warmer colors, there may be less interference with your sleep. (I'm only the messenger.) Here is where you can "Change the size of text, apps, and other items," if so desired. The Resolution of the display is another setting that can be changed. (Keep in mind that if you choose a higher resolution, the text and pictures on the screen will be smaller, so if you want larger items on the screen, you will have to lower the Resolution. I know that sounds counter-intuitive.)

**Sound** is where you choose your output or input devices, volume, manage your sound devices and troubleshoot those devices.

**Notifications & actions** is where you set up the Quick Actions, the icons you see when you click the Action Center icon at the right-hand end of the taskbar. (Clicking the Action Center icon also shows you any notifications that are available.) This is also where you get to determine the notifications you can receive, and who can send you notifications.

**Focus Assist** is where you can choose which notification you'd like to see and hear so you can stay focused. The rest will go straight to the action center where you can see them any time.

**Power & sleep**. You can customize how long the screen will stay on after the last keystroke, and when the computer will go into the sleep mode. If you have a laptop, these settings are made for both "On battery

power" and "When plugged in."

**Battery**. Here you will see a battery charged percentage indication and if you click "Battery usage by app," you will see how the battery is being used by various Apps. Battery saving options are also shown here.

**Storage** is where you can see the size of each local storage device (drive) and how much is being used. There are also a few storage related items here such as "Change how we free up space," and "Manage Storage Spaces." You will probably want to customize these options. You will also find "Change where new content is stored," which determines where various file types, like documents, music, and pictures will be stored.

**Tablet mode** optimizes your device for a touch screen so you don't have to use a keyboard and mouse.

**Multitasking** gives you control of the "Snap" feature, that is the ability to snap windows into half the overall screen. This can be useful if you want to Copy & Paste between two documents.

**Projecting to this PC** gives you the ability to wirelessly project some Windows and Android devices to your device. If you give presentations, turn on "This PC can be discovered for projection only when it's plugged in."

**Shared experiences** lets Apps on other devices open and message apps on your device, and vice versa. This feature improves the ability to share documents and apps among all of your devices and may or may not be useful to you.

**Clipboard**. You can save multiple items to the clipboard to use later as well as sync them across devices, pin frequently used items, and clear the clipboard data.

**Remote Desktop** lets you connect and control your PC from a remote device by using a remote desktop client. **Note:** You never want to enable this unless you completely trust the person who wants to take over control of your PC. You might do this if someone you know and trust is trying to help you with something and they are at a remote location.

**About** contains a lot of device specification information. This is where you will find hardware information such as Device name (with the ability to change the name), Processor type, Amount of memory, and the system type, 64bit or 32 bit. Here you will also find Software information such as the Windows 10 edition, like Windows Home or Pro, and the version number.

"Settings" is a very important and comprehensive part of Windows 10. In this article, we have only reviewed the first category, System; there are 12 more categories full of various types of settings. Stay tuned.

This article originally appeared in The Journal of The Sun City Computer Club. Reproduced with permission.

# Curious Kids: why do we have a QWERTY keyboard instead of putting the letters in alphabetical order?

### Geoff Cumming, La Trobe University



Many other key arrangements have been tried. Some are claimed to be easier to learn or faster to use than QWERTY. But none has proved good enough to beat QWERTY. Flickr/Jeff Eaton, CC BY-SA

<u>Curious Kids</u> is a series for children. If you have a question you'd like an expert to answer, send it to curiouskids@theconversation.edu.au You might also like the podcast <u>Imagine This</u>, a co-production between ABC KIDS listen and The Conversation, based on Curious Kids.

Why are the letters on the keyboard not in alphabetical order?? - Baker, age 9, Arrowtown, New Zealand.

Great question! That question really puzzled me when I was a kid. And so as a grown-up, I decided to research it and write a <u>paper</u> about it.

Let's turn the clock back. About 150 years ago, all letters and business papers were written by hand. Most likely they were written using a pen that had to be dipped in ink every word or two. Writing was slow and messy.

Then some clever inventors built a machine for typing. The first typewriters were big heavy metal machines that worked a bit like a piano.

Have you ever seen the inside of a real piano? You press a key and some clever levers make a felt hammer hit just the right piano string to make.

Early typewriters were similar. They had all these levers with a metal alphabet letter at the end of it. You had to press a letter key quite hard to make the metal lever fly across and hit the paper. Hit the A key and the A lever would hit the paper and type A. The paper then shifted a bit to the left, so the next key would hit in just the right place next to the A. Press more keys and you could type a word, or even a whole book.

The first machine had the letter keys in alphabetical order. The trouble was that if you hit two keys quickly the levers would jam. Jams were most likely when the two keys were close together on the keyboard. Rearranging the letters could reduce jams.

<u>Christopher Sholes</u> was an American inventor who was most successful in reducing jams. He tried various arrangements, always trying to reduce the need to type two keys that were close together. The best arrangement he could find was similar to the QWERTY keyboard we all use today. (Look at the top row of a keyboard to see why it's called QWERTY.)

He sold his invention to the Remington Company in the United States. In the 1870s, that company built and sold the first commercially successful typewriters. They used the QWERTY keyboard.

For 100 years or so after the Remington typewriter arrived, vast numbers of people all over the world trained to become touch typists (meaning they could type even without looking much at the keyboard). They were employed to type letters and all other kinds of things for business and government. Because so many people became so skilled at using QWERTY, it became very difficult to get everyone to change to any other key arrangement.

Many other key arrangements have been tried. Some are claimed to be easier to learn or faster to use than QWERTY. But none has proved good enough to beat QWERTY. It seems that we are stuck with this layout, even if jams are no longer a problem.

QWERTY was developed for the English language. Some other languages use variations. For example, AZERTY is commonly used for French, QWERTZ for German, and QZERTY for Italian. Perhaps you can find someone from India, Thailand, Japan, Korea, or China. Ask them to show you the keyboard they use in their language.



Here's an AZERTY keyboard, commonly used in France. Nemossos, CC BY

### You'll never regret being able to touch type

Now, on any keyboard, feel the F and J keys carefully and find some tiny bumps. Place your first fingers on those keys, and your other fingers along the same row. Your left fingers should be on ASDF and your right on JKL;. These are called the "home keys".

Keep your fingers resting lightly on the home keys. Type other letters by moving just one finger up or down and perhaps a little sideways. Learn how to do that quickly, without watching your fingers, and you can touch type!

When I was a teenager, I owned a typewriter. I made a cardboard shield to stop me seeing my fingers as I typed. I used clothes pegs to fix it to the typewriter. Then I found a touch-typing book and started to practise, making sure that I kept my fingers on the home keys and always used the correct finger to type each letter. After lots of practice, I could touch type. I love being able to touch type. It has helped me all my life, first as a student, then in everything I have done since.

Now with computers it's easier than ever to learn to touch type, even if QWERTY at first seems strange. There's lots of good software to help (your school may have some), some of it feeling like a game.

Find software that you like, and put in some practice. It may seem hard at first, but persist and you will soon get good at it. Find a friend or two and do it together. Perhaps make it a competition. You'll never regret being able to touch type.

Hello, curious kids! Have you got a question you'd like an expert to answer? Ask an adult to send your question to curiouskids@theconversation.edu.au

Please tell us your name, age and which city you live in. We won't be able to answer every question but we will do our best.

Geoff Cumming, Emeritus Professor, La Trobe University

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# I made bushfire maps from satellite data, and found a glaring gap in the preparedness of Australia

### Wallace Boone Law, University of Adelaide

On the night of January 9 2020, my wife and I secured our Kangaroo Island home and anxiously monitored the South Australian Country Fire Service (CFS) website for bushfire advice.

After many horrific weeks of bushfires, the winds had again shifted, and the fire front began a slow, nightmarish march eastward into the island's central farmlands. Official warnings advised that the entire island was potentially under threat.



Landsat-8 false colour image of southwest Kangaroo Island, showing active bushfires on January 9, 2020. Landsat-8, Author provided

As my good neighbours and volunteer firefighters headed off to battle the flames elsewhere on the island, I desperately wanted to find a way to help. With no firefighting training, I felt I physically had little to offer. But I reasoned that my skills and training in remote sensing and spatial science could potentially turn satellite information into useful maps to track the fires, in more detail than those provided by the Country Fire Service and Geoscience Australia.

While I was ultimately successful, it wasn't quite as straightforward as I thought. And what I learned about access to good-quality and up-to-date satellite bushfire information surprised me.

### Free satellite imagery is abundant; useful information is not

In principle, there are many good sources of free satellite imagery. But selecting, sourcing, understanding

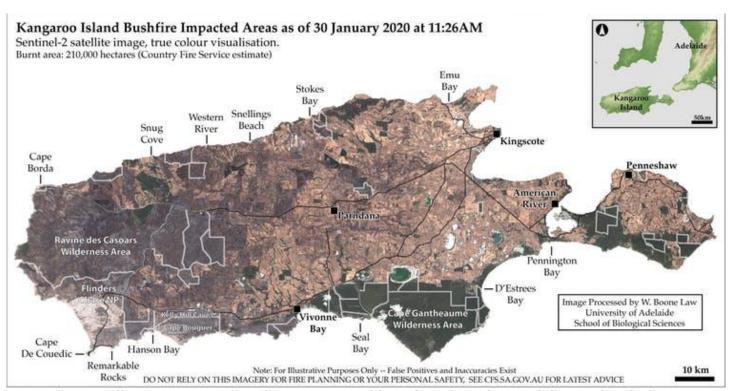
and processing a multilayered satellite image into an accurate burnt area map takes technical know-how that is beyond the reach of the people who need it the most.

We are fortunate to live in a time where satellite images are constantly uploaded to the web, often within hours of acquisition. There are many reputable sources for this information, including <u>NASA Worldview</u>, <u>USGS Earth Explorer</u>, <u>USGS LandLook Viewer</u>, and the <u>Sentinel EO Browser</u>.

These websites are gateways to the world of "big satellite data", and I quickly found myself on a steep learning curve to efficiently navigate them and find recent imagery.

Once downloaded, the next hurdle I faced was how to process a data-rich satellite image into a meaningful and accurate map of the bushfire area. I scoured the internet for "how to" blogs, academic articles, spatial algorithms, and processing codes; these too are the products of much intellectual investment by global scientists, openly and freely available.

As a spatial scientist, I naturally found all this fascinating. But as a resident of an island under assault from bushfires, I also found it frustratingly time-consuming. I crashed my computer testing algorithms. I maxed out my hard drive. I spent hours on possibilities that turned out to be dead ends.



True colour satellite imagery is often the most accessible and easily understood, but it often lacks sufficient detail to clearly identify burnt areas. In this Sentinel-2 true colour image, approximately 210,000 hectares are burnt, but bushfire-impacted areas are barely visible without advanced image processing.

Sentinel-2, Author provided

### Maps help to fight fires and recover from them

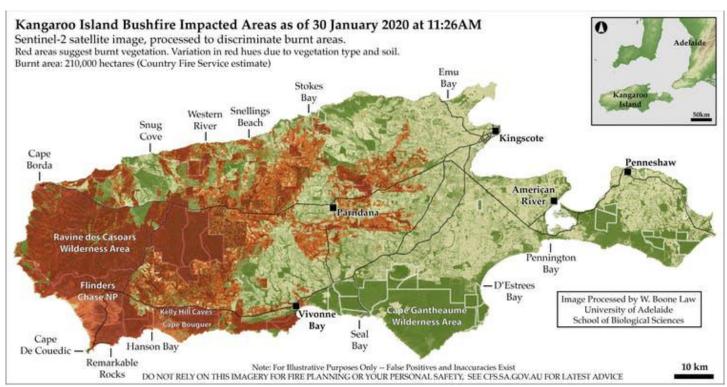
In the end, I produced <u>burnt area maps</u> from Sentinel and Landsat satellite images captured during the fires. I learned that this kind of information can indeed help firefighting and ecological recovery efforts, both during and after bushfires.

Initially I gave the maps to a group of farming friends who had been fighting fires around their properties for weeks. They told me the maps helped save time in assessing which areas had already burned, allowing them to focus on defending unburnt areas, and to make decisions on where to move livestock and install firebreaks.

The positive feedback inspired me to customise my processing techniques, so I could provide updates more quickly when new satellite images became available.

I embedded appropriate safety disclaimers into the maps and released them on Twitter and <u>Spatial Points</u>, a blog site managed by my research group at the University of Adelaide.

Within hours, I received messages that the maps were being used for ecological recovery efforts. The maps successfully highlighted remaining patches of habitat where endangered and vulnerable species had found refuge. Several government agencies even contacted me for burnt area information, which I'm told was used to assess infrastructure damage and habitat loss.



Processed Sentinel-2 satellite image. Red areas suggest burnt vegetation. Variation in red hues are caused by dominant vegetation type and soils.

Sentinel-2/W. Boone Law, Author provided

### National knowledge gap

My experience shows there is a swag of free and regularly updated satellite imagery available, which when interpreted and presented appropriately can potentially be hugely helpful to firefighting and recovery efforts.

However, I am concerned that neither the general public nor decision-makers seem fully aware of the range of satellite information on offer. Nor is there a good understanding of the advanced technical skills needed to access and process imagery into useful map data.

This leads me to wonder whether I have stumbled upon a glaring knowledge gap in Australia's bushfire preparedness.

How can we overcome this technological and information bottleneck? I don't propose to have all the answers, but I do believe it would be sensible for governments, industry and research agencies to invest in the kind of capabilities that I developed while trying to protect my own local community.

As Australia faces a future of more frequent and extreme bushfires, there will doubtless be many people who would be glad of this kind of information when they need it most.

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# <u>High-tech shortages loom as coronavirus</u> shutdowns hit manufacturers

John L Hopkins, Swinburne University of Technology

There are now more than 45,000 confirmed cases of the coronavirus dubbed COVID-19 by the World Health Organization (at February 13 2020), and the disease has caused at least 1,115 deaths. The impact of the virus is now reaching way beyond public health: China is at the heart of global manufacturing, and as supply chains suffer, panic is beginning to set in.

In many provinces across China the government has urged hundreds of millions of workers to <u>stay home</u> to help reduce the spread of the virus. As a result, many factories have stayed closed since the Lunar New Year holiday in late January, halting the production of products and parts destined for countries around the world, including Australia.

Apple is one of the most high-profile companies affected, with its <u>manufacturing partner Foxconn hitting a lengthy production delay</u>, but they are far from alone.

## Global supply chains, global problems

The sectors hit hardest appear to be high-tech electronics, pharmaceuticals and the automotive industry.

Globalised supply chains and just-in-time manufacturing mean many seemingly unrelated products are vulnerable to pauses in the flow of goods from China.

It only takes one small missing part to bring entire supply chains to a standstill. If a tyre manufacturer in the United States doesn't receive valves from a supplier in China, a car plant in Germany won't receive any tyres, and therefore can't ship finished cars to its customers.

Something similar happened to automotive giant Hyundai, which had to <u>suspend all operations</u> at its manufacturing plant in South Korea due to a lack of parts from China.

Even tech companies such as Samsung, Google and Sony, which have moved their factories out of China in recent years, are <u>being affected</u>. They still rely on China for many components such as sensors or smartphone screens.

It is not just large businesses that will feel these effects. Many small businesses around the world also source products and parts from China.

The supply of these is now uncertain, with no sign yet as to when normal service may resume. For products and parts that are still being manufactured in China, new enhanced screening measures at all Chinese border crossings are likely to cause further delays.

### How will Australia be affected?

The effects of the coronavirus are also being felt in Australia. China is our largest trading partner for both imports and exports. According to the United Nations Comtrade database, <u>Australian imports from China</u> were valued at A\$85.9 billion in 2018. The biggest product categories were electronics and electrical equipment, making up A\$19.8 billion, and machinery, which accounts for another A\$15.7 billion.

Moreover, 90% of all Australia's merchandise imports are from China, and half of those are engineering products such as office and telecommunications equipment.

Besides the well-publicised impact on airlines, universities and tourism, Australian construction companies are warning clients of upcoming project delays as a result of forecast disruptions in materials sourced from China. Aurizon, Australia's largest rail operator, has said the coronavirus will delay the arrival of 66 new rail wagons being made in Wuhan, the city at the epicentre of the outbreak.

### **Expect shortages of high-tech goods**

Product shortages could also soon be visible on retailers' shelves, with electronics stores such as JB Hi-Fi and Harvey Norman expected to experience <u>significant disruption</u> to their supply of computers, televisions and smartphones.

When shortages like this occur, customers will struggle to buy the products they want, when they want them. The only channels available might be third-party resellers offering highly inflated prices. In extreme cases, supply shortages like these can also lead to panic buying and stockpiling.

## More uncertainty ahead

It is commonly said that "when China sneezes, the world catches a cold". So what is the long-term diagnosis for the coronavirus breakout, and what will the economic symptoms be?

As so much is still unknown about COVID-19, with no vaccine or formal means of preventing it spreading having emerged yet, it's too early to predict what the full impact will be.

For many industries the next few months will bring high levels of uncertainty, with disruptions certain to continue, before recovery programs can start to gain traction.

This is obviously a worry for many organisations, but could also be a period of new opportunity for others, as the world comes to terms with this latest global health crisis. Supply chains that are agile enough to react quicker than their competitors', or those with more robust risk management plans, might find themselves gaining greater market share as a result of this crisis.

<u>John L Hopkins</u>, Theme Leader (Future Urban Mobility), Smart Cities Research Institute, <u>Swinburne</u> <u>University of Technology</u>

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# **Member Tips and Tricks**

**Graham Swanston** 

These procedures seem to work well on a 64 bit Windows 10 desktop.

**Do regular backups.** Disaster or an accident is always a possibility. Backup onto external drives, which are stored away from the computer. Little time is wasted even if planned to be done daily. There are several free backup programs such as Macrium Reflect but the best backup appears to be Acronis True Image which is initially by subscription. It incorporates a modest measure of compression. Use the program also to make a boot media such as a CD or a memory stick. You might need it sometime for recovery or transferring to another device. Select a custom full backup and not a scheduled or incremental version to keep things simple and less subject to error.

To avoid time and space backing up rubbish, use the free CCleaner. Click on the Custom Option, not the automatic option. Avoid wiping the registry (regedit) as the registry takes up little space and some files are shared.

**Only use only one antivirus program.** If there is more than one in use they can detect each other and cause interference. The most useful is Symantec Norton Antivirus. Do not purchase a 5 device subscription if you only want to service one or two devices. It has a firewall, a site checker, detection of malware, ransom ware and key loggers. A warning can pop up if a site contains malware. All of these functions are available, in mixed quality, from freeware sources. Update the program daily and run a quick scan. A full system scan is time consuming and has never found anything.

#### **Consider these free programs:**

- Drive Booster 7 to avoid problems with say peripherals.
- IObit software to check that all software is up to date.
- Teamviewer in case you need it with MelbPC iHelp.
- Internet Download Manager which greatly speeds up downloads using multiple servers.

For browsers it is suggested that you use Firefox and Google Chrome. The latter is quick and can provide bookmarks.

## **DOTW Winners February 2020**

**Roger Brown** 

DOTW (whatever that stands for) our weekly Yammer poll and light hearted review of the sillier events of the week, has returned for 2020. Thanks to those who vote and also to the odd member who might "feature" – all in fun of course.

Last month's "winners" were:

Bridget McKenzie for turning the awarding of sports grants into a political exercise whereby the most important factor was whether the applicant was from an LNP seat, and preferably a marginal one!

Boxer Anthony Mundine who has claimed the deadly coronavirus is a fake and a "ploy" to try and vaccinate the world.

Restaurant and Catering Industry Association chief executive Wes Lambert who apparently believes that the financial difficulties suffered by his members are due to the need to pay wages at the proper legal rate

The Rosanna bus driver who refused point blank to allow a regular blind passenger and her guide dog to travel on his bus despite longstanding legislation to the contrary.

# **East SIG Report February 2020**

**Neil Muller** 

The February meeting opened with **George Skarbek** conducting his usual Q&A segment.

#### Q: I've lost the Google Play icon on my Android phone. Is there any way to get it back?

A: I haven't tried this but I'd search Google Play Store and you'll get to it from there. I'm not sure how you would turn that into an icon on your phone.

[John Hall] On most phones you'll have a section called Apps and you should find the Play Store app there. [Reply] Its disappeared from Apps as well.

# Q: I have old DOS programs and I'm wondering whether they will run well under Windows 10 or do I need to run them in a DOS box?

A: If it's a DOS program it will in a DOS box. I use a DOS box on a daily basis to run various macros, shortcuts etc. On only one occasion has a DOS program failed to run in a DOS box and that was a 1991 program.

# Q: Recently Google has dropped the resolution of images in Google earth and I can no longer zoom in to see greater detail in an image. Do you know of any way you can go back to an earlier version of Google Earth?

A: I don't think Google has reduced the resolution of its Google Earth images.

[Audience member] I just installed Google Earth and I think the resolution is better. I can now see greater detail than I could before.

[Brian Heywood] The resolution is better in populated areas than other areas, so maybe that's what you're noticing.

#### Q: I tried to run Clipper in a DOS box in Windows 10 and it refused to run.

[Neil Muller] Clipper is a computer programing language (compiler) originally used to create DOS programs.

A: I last used Clipper a long time ago in a previous version of Windows. Try Windows compatibility mode to go back to an earlier version of Windows. I've previously run Clipper in a Windows DOS box in the earlier version of Windows so I think that may work.

There are two DOS boxes in Windows 10 so give both of those a try. If you type "cmd" a DOS box will come up. To reach the second type of DOS box from the cmd prompt type "command". A different DOS box will then appear which gives you all the ANSI (American standard numeric or alphabetic codes) characters and colours which a "cmd" DOS box won't.

# Q: We've just received notice that NBN is available in our area. Is it best to draw out the period before connecting and is it worth keeping a landline when it's now over the internet and subject to power outages?

A: You will lose your landline phone during blackouts as your NBN phone is over the internet. Most people have mobile phones which will give phone coverage in those situations, so blackouts are not a significant issue. For critical situations, you can purchase a UPS (Uninterruptible Power Supply) for \$100 or less. If you only connect the UPS to the modem and router, the UPS should keep your phone going for a number of days as both draw very little power. That assumes the battery in your phone lasts.

Should you delay connecting to the NBN? The answer to that varies depending on your situation. Your current download speed and cost are two factors to consider. When contacting the various RSPs (Retail

Service Providers) when deciding to move to the NBN, my advice is to haggle. Tell them you've got a better deal from another RSP and ask "what can you give to me". Things you could request are, a lower cost than their first quote, a free phone, no line rentals, free calls to anywhere in Australia and maybe overseas, then ask for better speed.

Following Q&A **Trevor Hudson** played a YouTube video he prepared titled "YouTube Handy Keyboard Shortcuts". In Trevor's video he details over 20 handy keyboard shortcuts for watching YouTube videos. Below I have featured what I believe are the most useful of those. I have not listed shortcuts relating to captions but these and all the shortcuts featured in the video are listed under the YouTube video. Unfortunately the shortcuts listed are not suited to smartphone use.

(Tech Ed: My opinion is absolutely not. To do so risks substantial delay and possible loss of connectivity. And members need to keep in mind that RSPs are limited in their ability to provide concessions by NBN's wholesale pricing which is high and inflexible due to government constraints.)

Key	Text
K	K to Pause or Play video
Space Bar	Pause or Play video
J	J goes Back 10 seconds
L	L goes Forward 10 seconds
Left Arrow	Left Arrow goes Back 5 seconds
Right Arrow	Right Arrow goes Forward 5 seconds
K + ,	K (Pause) and Comma to go back one frame at a time
K + .	K (Pause) and Full Stop to go forward one frame at a time
Shift &,	Shift plus Comma Slows video down to quarter normal speed
Shift & .	Shift plus Full Stop Speeds video up to 2 times normal speed
Home	Home key goes to Start of video (Number 0 does the same thing)
Number Key	Number 5 key goes to 50 percent of video. (10 to 90 percent etc.)
Т	T to watch in Theatre or Cinema size
I	I to watch the video in Miniplayer size
F	F to watch the video in Full screen size
ESC	Escape key returns to Normal size (or press F again)
Down arrow	Decreases Volume by 5 percent each press
Up arrow	Increases Volume by 5 percent each press
M	M to Mute or unmute sound

Following Trevor's presentation, **Paul Woolard** showed how you can still obtain a free upgrade from Windows 7 to Windows 10. The first step is to obtain an ISO file of Windows 10. The Gizmo Freeware website at <a href="https://www.techsupportalert.com/content/how-download-windows-10-iso-directly.htm">https://www.techsupportalert.com/content/how-download-windows-10-iso-directly.htm</a> shows how to do this. The process of installing Windows 10 is then described in a video and article by Ed Bott of ZDnet. (Reference

https://www.zdnet.com/article/hands-on-with-windows-10-upgrading-installing-and-activating-in-the-real-w orld/).

When installing Windows 10, 32GB is now required on your hard drive for the Windows OS and to allow space for future upgrades. There are 2 options to consider when installing Windows 10. If you are upgrading multiple computers then installing the ISO file on a bootable USB stick is the best option.

For a single computer double-clicking the ISO file is the easiest approach. The computer then assumes you're running the ISO from a separate hard drive. If you are upgrading a computer with an existing Windows version on it, you don't have to worry about the Windows product key, as the product key from your existing installation is used. If the installation is to a new hard drive you will need to enter a product key from a previous activated Windows OS.

After a refreshment break, Dave Botherway gave an informative presentation on "Data Security ...Password Managers". Dave showed examples of the most common passwords used in 2011 and today. People's choice of passwords has not changed much from 2011 to 2019, in fact, it is worse now than in 2011. People still use simple passwords and the same password across multiple sites.

To beat the hackers you need complex and separate passwords for each site requiring a password. The minimum for a complex password is 8 characters long, containing upper and lower case letters, numbers and special characters. As it is difficult to remember such passwords, a Password Manager is needed to generate and store passwords.

Dave then summarised the desirable functions a good Password Manager should have. In summary, these are:

- Import your passwords from your current browser
- Generate passwords
- Two-factor authorisation (email/phone)
- Offer browser extensions
- Record other details such as credit cards, bank accounts etc.
- Folder organisation for different categories
- Local storage of passwords for offline use
- Passwords that are accessible from multiple devices and operating systems
- Cloud storage for syncing multiple devices.

Dave then listed a number of Password Managers that offer most of the desired features mentioned. A Password Manager only requires you to remember a single master password, but that password needs to be very good and memorable.

- LastPass free & paid versions
- Dash Lane free up to 50 passwords
- KeePass Open source
- 1Password No free version
- Firefox Lochwise a new free open source browser addon. Firefox is now expanding functions within their browser with addons such as Sync (to sync Firefox across multiple devices), Monitor (to

lookout for your passwords), Send (to send files up to 1GB from any browser or 2.5 GB from Firefox, plus set the duration up to 1 week and how many times a file can be downloaded) and Lockwise (a Password Manager)

• Bitwarden - Open source free & paid versions. Premium version \$10/year

Recommendations from the website www.codeinwp at <a href="https://www.codeinwp.com/blog/best-password-manager/">https://www.codeinwp.com/blog/best-password-manager/</a> rates LastPass and Bitwarden as the best free Password Managers.

	LastPass	Dashlane	Bitwarden	1Password
Browser extensions?				
Mobile apps?				
wo-factor authentication?				
Family plans?		×		
Open source?	×	×		×
Free plan?		X.		×
Starting price for pro?	\$36 per year	\$40 per year	\$10 per year	\$36 per year

<sup>\*</sup> Technically it exists, but it's overly restrictive and not viable for most users.

Figure 2 - Password Manager comparison chart

#### In summary:

- For most people, there is a definite need to upgrade their password protection.
- Passwords must be complex and used only once.
- Use a management tool, anyone is better than none.

A demonstration of the free version of Bitwarden followed (download Bitwarden at https://bitwarden.com). Dave described how to add the Bitwarden extension to Chrome, how to create a Bitwarden vault and then how to generate a unique password. The Bitwarden vault is where passwords are stored requiring only a single password to open and view all stored passwords.

(Tech Ed: A recent incident documented in Yammer reinforces the need for members to be aware that **any** master password stored "in the cloud" can be hacked or revealed by lax security. Some would suggest that the only unhackable password manager is a notepad in the user's desk drawer.)

Following Dave's demonstration a YouTube video tutorial titled "How to easily manage your passwords online (Bitwarden)" was played. The video explained the use of Bitwarden from the first step to last and can be view at https://www.youtube.com/watch?v=oh7FtqCK5Z0

A question from the floor asked how secure passwords are when stored in the cloud, particularly when Bitwarden is open source. Anyone can look at the open source code for back doors, but Dave believes the pros far outweigh the cons.								

# Northern Suburbs Linux SIG Report February 2020

**David Hatton** 

The evening started with Nick Vespo's traditional wide ranging Linux News.

Nick played a selection from the CES2020 keynote address by Ginni Rometty, president and CEO of IBM, which touched on the use of Deep Data with some interesting examples of developing technology.

Topics briefly covered were ..

- an AI sensor chip on your fingernail looking for early signs of Parkinsons Disease.
- A diabetes manager that forecasts sugar levels 4 hours in advance.
- Global and local weather forecasting with models and observations to give predictions every hour, using data from sensors on smartphones and aircraft and many other sources.

A quick internet search will locate the video of the keynote address – and although in typical CES fashion there is, shall we say, abundant enthusiasm for various companies represented on stage, the substance is none the less impressive.

The other presentation for the night was from David Hatton, and was a brief introductory foray into the world of bash shell scripting, with the aim of both writing a couple of very simple scripts and demonstrating that yes, you can have GUI interactions when using the command line.

But why a command line GUI? They can simplify your coding while adding convenient functionality – think selecting a file for further actions – or make running a command line utility by another user not familiar with such a task a simple "point and click" exercise.

David started with the traditional "Hello World!" minimal script, showed how to set the script to run, and demonstrated that it worked.

```
#!/bin/bash

# Hello World script for the bash shell.

# Authour: David Hatton Date: 15 Feb 2020

#______echo "Hello World!"
```

#### Screenshot of our "Hello World!" script

A brief introduction to dmidecode followed, which is a system utility designed to extract numerous details of hardware items on the currently running device. Selected dmidecode values were then used to construct another short script and the zenity utility was also added in to create a GUI display of that information. The script created is shown below ...

```
#!/bin/bash
#
# uses dmidecode to get specific bios info.
# Authour: David Hatton Date: 15 Feb 2020
#
MANUFACT=$(sudo dmidecode -t baseboard | grep Manufacturer: )
NAME=$(sudo dmidecode -t baseboard | grep "Product Name:" )
BIOSVERSION=$(sudo dmidecode -s bios-version)
BIOSRELDATE=$(sudo dmidecode -s bios-release-date )

zenity --info --text="Your Motherboard Details are ..\n\n $MANUFACT
\n\n $NAME \n\n Bios Version is $BIOSVERSION \n\n Bios Release date
is $BIOSRELDATE" --title="Hardware Report" --width=250 2>
/dev/null
```

When this script is run, the following display is shown on the desktop ...



David finished up by demonstrating how the script could be set up to be a menu choice in the start menu.

## **Yammer Highlights February 2020**

**Dennis Parsons** 

## **Computer Help**

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The following is a fantastic example of what Melb PC is all about - members helping each other solve problems, computer related or not, and demonstrates how useful Yammer is in facilitating this.

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Frank had an old Betamax tape he wished to convert to digital format, assuming it was still playable. Various solutions were suggested – finding a working player from somewhere and using a video grabber, approaching the Video Production SIG, engaging a commercial service (one charged \$65 per tape) and then someone suggested Roger Wragg might be able to help. Roger chipped in that he had a Betamax player and offered to copy the tape.

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The tape was duly dispatched and while it unfortunately turned out to not be in the best of condition, enough of the recording was recovered to make it worthwhile.

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A big thumbs up to Roger Wragg!

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https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=540748941828096

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## Security, Scams and Phishing

Bill sought help with a possible serious security breach – his wife received an e-mail that mentioned the password she uses for her password manager. They were demanding payment of \$850 in Bitcoin and claimed a remote access tool had been installed on the computer via an out of date browser.

Obviously the prospect of having your password manager compromised is quite a scary thing if genuine, as they effectively have the keys to the kingdom. And of course that's what the scammers are relying on, that you'll be scared enough cough up the money.

The computer had been displaying signs of a potential malware infection, becoming sluggish and difficult

to use, so clearly a real worry. Bill had thrown various anti-malware and anti-virus programs at it and was in the process of using a USB based bootable rescue disk to scan the system with Windows not running.

Fingers crossed it turns out to just be an attempted scam rather than an actual attack.

https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=565322143080448

### **NBN Questions and Comments**

A number of members are considering giving installing the NBN a miss and opting for a wireless broadband connection instead. Speeds considerably faster than the 100Mbps maximum currently offered by the NBN are possible now with 4G and with 5G starting to become available in some areas around Melbourne even higher speeds will be possible.

John was asking about 5G as he is lucky enough to be living in an area already covered by Optus, who are offering it with unlimited data for the same price as their NBN plan. They provide a phone app which gives an indication of likely 5G reception, noting it will be subject to the vagaries of attenuation by anything intruding on the line-of-sight to the tower.

And that's a very big consideration because the higher frequencies used are more readily absorbed by walls and vegetation than those for 4G - 5G has shorter range and is more subject to blocking by walls.

Several members posted their 4G connection speeds, as reported by the Netflix speed testing app – speeds ranged from an impressive 260Mbps down to a rather pedestrian 23Mbps, nicely demonstrating the problem presented for potential users of wireless broadband. It could be fantastic in the right situation but could also be quite unsuitable as a replacement for a wired connection.

https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=564494449688576

# **March Calendar**

SIG & Other Meetings — Mar-2020  Latest version of this Calendar is at: https://www.melbpc.org.au/ (see Quick Links)  SIG & Other Meetings — Mar-2020  This version is: V2.2-updated-29-feb-2020							
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
1 Science & Tech Projects Group Moorabbin HQ 4pm - 5pm Moved to: 8-Mar	2	3	4 North East Genealogy SIG 80 Hawdon Street Heidelberg 10am - 12noon MONTHLY MEETING Melb PC HQ, Moorabbin 7pm - 9:30pm then Supper (WAFFLE) at Fong's 9:35pm	5 Sunbury Daytime SIG New Users 9:30am - 12noon	6 Essendon SIG Main meeting Avondale Heights 9:30am - 12noon Multimedia Home Entertainment SIG Mount Waverley 10am - 12noon	7	
8 East Workshop SIG Mount Waverley 10am – 12noon Science & Tech Projects Group Moorabbin HQ 1pm - 5pm	9 PUBLIC HOLIDAY Access (database) and Excel SIG Moorabbin HQ 6:30pm – 8:30pm	10 Investment Tools - WASINT SIG Moorabbin HQ 10:30am - 12:30pm	11 Video Production – Sony SIG Moorabbin HQ 10am - 12noon North East Daytime & Photography SIG Heidelberg 10am - 12noon Communications SIG Moorabbin HQ 7pm – 9:30pm Microcontroller SIG Moorabbin 7pm – 9:30pm	12 Sunbury Daytime SIG Advanced 9:30am - 12noon East SIG Blackburn South 7:30pm - 9:30pm	Essendon SIG Open Forum Avondale Heights 9:30am - 12noon Hardware SIG Mount Waverley 10am - 12noon Casey SIG Beaconsfield 1pm - 3:30pm	14 Coder Dojo Moorabbin HQ (Borrett Room) 9am-11am https://melcc.org.au/co derdojo Microcontroller Workshop SIG Moorabbin HQ 12noon - 5pm Raspberry Pi – Moorabbin SIG 2pm - 4pm	
15 Beginners East (BEAST) SIG Vermont South 10am – 12noon MACE (Atari Computers) SIG Moorabbin HQ 10am - 2pm Genealogy East SIG Vermont South 12:30pm - 2:30pm Science & Tech Projects Group Moorabbin Moved to 22-Mar	16 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	Melb PC Committee Moorabbin HQ 7pm	18 North East Android SIG Heidelberg 10am – 12noon	Sunbury Daytime SIG Main Meeting 9:30am - 12noon Bayside SIG Brighton 10am - 12noon	20 Essendon SIG Various topics. Avondale Heights 9:30am - 12noon Digital Images SIG Including Photoshop Mount Waverley 10am - 12noon  PC Update - Articles Deadline	21 Windows Plus SIG Moorabbin HQ 10am - 12noon	
22 Website Design SIG Moved to fifth Sunday of month. Just for Mar-2020. Science & Tech Projects Group Moorabbin 1pm - 5pm	23	24	Video Production – Pinnacle SIG Moerabbin HQ 10:00am – 12:30pm In Recess – no meetings till further notice Mornington Peninsula SIG Family History – Advanced DNA (LAST Wed of month) Mornington 2pm - 4pm  PC Update – Reports deadline	26 Sunbury Daytime SIG Maintenance & Linux (Fourth & fifth Thu of month) 9:30am - 12noon	27 Video Production - Mt Waverley SIG Mount Waverley 10am - 12noon	28 Coder Dojo Moorabbin HQ (Borrett Room) 9am-11am https://melcc.org.au/co derdojo Microcontroller Workshop SIG Moorabbin HQ 12noon - 5pm	
29 Website Design SIG Tutorials Moorabbin 2pm - 4pm Troubleshooting Moorabbin HQ 4pm - 6pm Fifth Sunday of month. Just for Mar- 2020.	30	31	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	Other SIG (Special Interest Group) information: https://www.melbpc.org.aw/sigs/about/ Recent Changes: https://www.melbpc.org.aw/sigs/about/recent-changes/	Have A Question Post it on Yammer  Yammer: http://yammer.com/mel bpc.org.au/	