

# East SIG Report – March 2016

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The meeting started after a short delay while a missing projector was collected. **Paul Woolard** then welcomed everyone and the meeting commenced as usual with **George Skarbek** conducting Q&A.

Q: During some Windows 10 updates the fan on my PC increases to extra high speed which can last up to an hour. I suspect it may be caused by MS Defender. Is Defender worth it?

A: My guess is that it's not Defender causing this. I would open Task Manager and look at what is using most of the CPU and then open Resource Monitor to find out what's happening.

Alternatively something is furiously reading and writing to the hard disk. These are the two most likely reasons for the PC to slow down and the fan speeding up.

Comparison tests show that Defender has minimal resource impact and it's free. No anti-virus is 100% but Kasperski and Bit Defender were awarded equal top place when tested in 2015.

Defender came in about 4<sup>th</sup> and was better than a few commercial anti-virus programs. It's really up to you to decide whether it's worth the cost. I would recommend you buy Kasperski because of the number of awards its won.

I have Kasperski AV running on PCs for a U3A group. Rather than visiting the Kasperski website and paying full price, I purchased a 3 device 2 year licence for \$18 from the shopping website Saveonit.com.au. After purchasing from "Saveonit" you receive an email with a number and a link to the Kasperski website where you download the program. If you look around you can usually do much better than the price offered at the software manufacturer's website.

Q: My PC has another anti-virus program running in addition to Defender. Is this advisable?

A: In Windows 10 when Kasperski was loaded on my PC it disables Defender. When Windows Defender or Windows firewall sees another anti-virus program or firewall running, the Windows programs are automatically switched off.

Q: With Windows 10 now available I'm thinking of upgrading my 5 year old machine to a new desktop or notebook PC. What should I look for?

A: Whether you choose a notebook or desktop is up to you. If you don't need portability then a desktop will give you more bang for your buck. You probably won't need to buy a monitor if yours is okay and possibly your keyboard and mouse will still work. If in the future you want to upgrade, a desktop PC is also easier to upgrade or replace components. Upgrading a notebook, apart from adding more memory is a little more difficult. For the same amount of money you will get a faster desktop but it's not portable. You may wish to spend another \$100 for a UPS (Uninterruptable Power Supply). For performance you should have at least 4GB of RAM, while 8 GB will give you more speed. You won't see much improvement going to 16GB of RAM unless you are running something very large or have 15-20 programs open. For the processor I recommend an Intel i5 either 5<sup>th</sup> or 6<sup>th</sup> generation. A 6<sup>th</sup> generation i5 CPU will give better video and has lower power requirements. I recommend an Intel i5 as its better than AMD at the moment.

Our next presentation was by **Trevor Hudson** who showed another of his video tutorials, this one on "How to make and use a transparent picture". Trevor's video used the freeware program Paintdotnet to create a transparent image and then insert that image over an existing picture, again using Paintdotnet. To maintain the image as a transparency you need to save it as a .png (portable network graphics) file not as the original jpg. The transparent image is added to a new layer overlaying the background image. Trevor showed how to resized and move the transparent

image into position to create a title page which Trevor used for another of his videos. I think this was Trevor's best tutorial East SIG has seen and can be view by typing the above title into YouTube or Vimeo.

The final presentation before the break was by John Argall on "How to use Excel, to record solar power generation" John demonstrated how he uses an Excel spreadsheet to monitor his electricity use and generation from his rooftop solar panels. John enters data daily and has now created an extensive data set that he can analyse. John initially developed the spreadsheet to check whether his electricity supplier Origin Energy, was paying him the correctly for the amount for electricity he was returning to the grid. The spreadsheet showed he was correctly compensated.

With the extensive data set now available John used the spreadsheet to determine whether it was financially viable to add Tesla batteries to his system to store electricity generated during the day for night time use. The data showed that battery storage was not an economic option for Melbourne at present.

John has not yet calculated the money saved by installing solar panels as that was not the purpose of the spreadsheet. However with the data available he can do so if required.

John showed a short video on the effect of shading of a solar panel. For arrays connected to a single inverter, the video demonstrated that when a panel is in shade, the output of the whole array is reduced. If one panel is completely covered the array generates zero electricity even when the other panels are in full sunlight. John believes this issue is not well known to many.

After a short tea break Stuart Bedford gave a presentation on "Smart TVs and your home network". For his presentation Stuart used his Panasonic Smart TV to demonstrate features found on Smart TVs. The Panasonic Smart TV runs a Firefox Operating system and "MyhomeScreen2.0" software for video. In reality the Panasonic is really a TV and a computer connected to a home network.

Features found on most Smart TVs are:

- 3D both Passive (needing Red/Blue glasses) and Active (needing a bulky headset)
- Resolutions up to 4K (3840 x 2160) or 1080p (1920 x 1080)
- DLNA (Digital Living Network Alliance) so devices can talk to one another
- Voice control – Beware this feature remains on until the screen is changed so use it with care.
- TV anytime – the ability to watch TV from anywhere on your Smart phone when the TV is on or set to standby.
- Your Smart phone can act as a remote control using apps from Apple or Android
- Connection to the network can be wired or wireless and is via a router

In conclusion Stuart notes the simple life is gone forever. Life was much simpler when early devices such as analogue TVs and computers were all autonomist. Before you've worked out how to operate your Smart TV it's already out of date. After a successful setup Stuart now has a new world open to him.

Neil Muller