East SIG Report – November 2017

The November meeting opened with **Paul Woolard** welcoming members followed by Q&A conducted by **George Skarbek**.

Q: I have a small HP B&W laser printer that is still giving good quality prints after many years. As I don't print that often, I turn the printer on when I print and off when I've finished printing. However the on/off button is becoming very un-responsive and I have to jab it up to 10 times to get it to turn on or off. How safe is it to leave the printer on continually in standby mode?

A: Laser printers on standby don't use much power. One option depending where the printer is located, is to turn it on and off at the power point. This will save a small amount of power over the course of a year. If it adheres to the CU standard it will use under a watt in standby. It's up to you, but it shouldn't hurt to leave the printer on standby.
Laser printers use power to heat up a very fine black powder onto a drum, which is transferred to the paper and is then fused to the paper at high temperatures. That last step uses about a kilowatt while the paper is going through. For that reason you should never have a laser printer attached to a UPS.

Q: Is there a free and secure VPN that you would recommend?

A: I haven't used a free VPN for a while and it's very difficult to find how secure a VPN is. To intercept data from a VPN, you need specialist equipment, not only to intercept the data packets going through the internet but once you intercept them to break the code.
Can anyone here recommend a good free VPN?
David King – There are websites that give you the top ten free VPNs. A Google search should find them. PureVPN is a well rated VPN but it is not free.
Paul Woolard – If you are looking for a VPN to use in your browser, Opera has a built in VPN and is activated in settings. Another audience member thought the VPN in Opera needs to be installed as an add-on.
Dave Botherway – About a year ago Stuart Bedford gave a presentation at East SIG and recommended TunnelBear and NordVPN. The latter is not free but depending on the time of year can be found for $35 per year. NordVPN would be very secure as Nord is a very large organisation and NordVPN normally rates at 1 or 2.

Q: My wife and I do a lot of travelling and while away need to do internet banking. Hotel Wi-Fi is terribly insecure so I'm looking at a VPN as a way to improve security.

A: If you're doing banking, security isn't that much of a problem which may surprise many people. For the crooks to break the code they will need to capture a lot of data packets to do any analysis. I recommend when connecting to your VPN, go straight to your bank, do what you have to do and log straight out. There would be very little exposure as in that time the crooks would have to intercept your IP address from the Wi-Fi. It would then take 20 to 30 minutes with a very fast computer to crack your password and then they have to crack the VPN. In that time you will have logged out of your bank. Security in a hotel would be much more secure than Wi-Fi in say a food court.

Member Comment

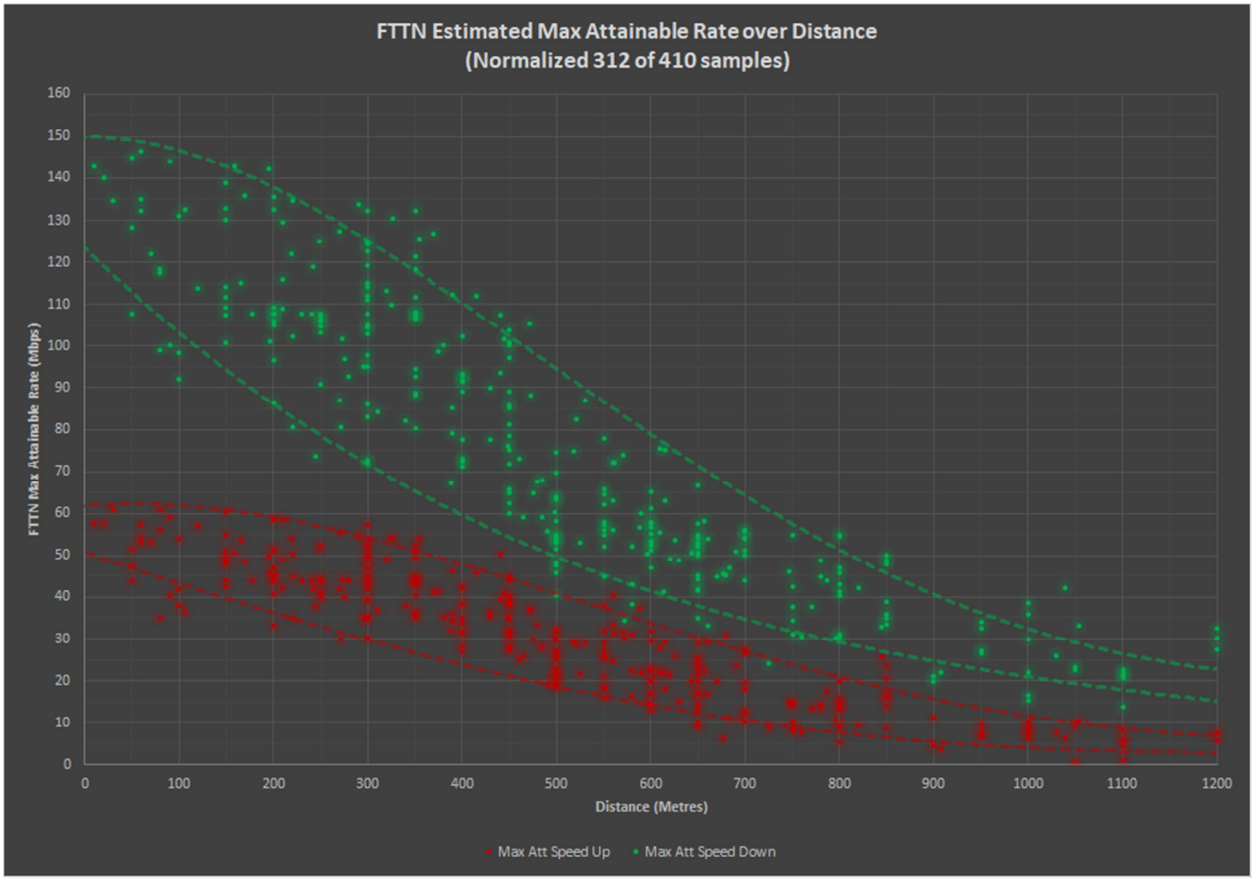
The Wi-Fi we get when travelling is often free so we use Kaspersky as a live checker. Kaspersky will check if the free Wi-Fi sites are unsecure and recommend not using them if they are. However when you're in a hotel or McDonalds there's no other alternative. Kaspersky internet security has a feature called Safe Money that we use when banking while travelling. When making payments on the internet, Kaspersky Safe Money checks whether

the site is on a known safe list then launches a special protected browser that guarantees your financial operations.

After Q&A **Dave Botherway** gave a presentation titled "NBN Update". Dave connected to a number of websites to show tools available to everyone to check their current or proposed NBN connection. Dave highlighted two websites that he uses, the first the official NBN website (nbnco.com.au) and the second an unofficial privately run site.

On the NBN site, the rollout map at https://www.nbnco.com.au/learn-about-the-nbn/rollout-map.html shows information on the current availability of the NBN in your area. Purple areas indicate that NBN services are available and brown that building has commenced. Where no colour is shown the connection date is likely to be some time off. When you zoom in to property level you can "drop a pin" on your property to determine the type of connection and when it's likely to be available.

Many people with FTTN (Fibre to the Node) connections have been sold plans with speeds that are physically impossible to achieve. Telstra and Optus have recently been ordered to repay those people affected. The maximum speed of a FTTN connect depends on how far a property is from the node. At 1km, the maximum distance that NBNco recommends, the top speed likely is between 25 and 30 Mbps. Dave presented a graph (shown below) from the second website showing actual speeds achieved (y axis) against the distance from the node (x axis). The download speeds are shown in green and up load speeds in red.



The second website is an unofficial site showing technical information and speed estimates. It can be found at http://nbnmtm.australiaeast.cloudapp.azure.com/. Like the NBN Co website, this site opens with a map of Australia. By zooming down into the map, the download speed available in a given area is depicted by use of a coloured legend. Zooming down further to

property level you can click on an individual property to gain further information. This information comprises a property code, along with the type of connection and the likely down and upload speeds. In areas where the NBN is connected by FTTN, the map displays the location of the node and the route of the connection to the residence the user clicked on. This option does not appear to be available in Victoria yet.

After a break **Stuart Bedford** gave a presentation titled “My new $300 Laptop: The GOOD and the BAD”. The Laptop is a Lenovo V110 151AP with the following specifications: Celeron CPU, Integrated GPU, 4GB RAM, 15.6" Screen with HD 1366x768 resolution and a 500GB SATA HDD.

Although the Lenovo cost Stuart $340 plus $11 freight, Stuart suggested if the preloaded Windows 10 is excluded from the price, the cost would be under $300. Specifications for the Lenovo were not high end, but were thoroughly researched and met Stuart’s requirements for a backup laptop for his main desktop computer.

There were two features that let the Lenovo down. Firstly the stereo speakers were located underneath so the sound was muffled. Stuart believes headphones or Bluetooth speakers will solve that problem. The second weak area was the slow mechanical SATA hard drive. Stuart solved the latter by replacing the SATA drive with a smaller capacity SSD from the faulty laptop the Lenovo replaces. The remainder of Stuart’s presentation detailed how he cloned the operating systems from the Lenovo and another computer that had a smaller capacity drive. He then moved the SATA drive to that other computer and the SSD from his old faulty laptop to the Lenovo. Stuart described in detail how he opened the Lenovo to remove and replace the existing SATA drive. It was obvious from the technique described that it was not a task that Lenovo expected many to undertake.

In conclusion.
Pros: The Lenovo was an inexpensive full sized laptop with a good display and adequate performance for its intended use. It streams HD videos from YouTube well and plays HD video files without stuttering. It also has the ability of expanding the RAM if needed.
Cons: The mechanical hard drive was slow and speakers underneath the laptop could be better.
Overall Stuart is very pleased with his purchase of the Lenovo V110 151AP.

Neil Muller