

Internet Security

Security Tools

All Programs are required to be downloaded and installed

VPN (*virtual private network*)

Firefox Browser (with security extensions/plugins)

DuckDuckGo Search Engine

Tor Browser (built-in VPN)

ProtonMail (secure encrypted e-mails)

Security Tools

There are tools available to protect your computer when connected to the internet or you have the option to just protect your online activity such as browsing the web and conducting searches with your internet browser and chosen secure search engine.

VPN The best description of the use of a VPN program is like in the early days of the telephone your telephone number, name and address was available in a Directory for your City and was publicly available. You could go Ex-Directory making your phone number and details private. VPN is a modern version of Ex-Directory on the internet with bonus of having an “alias” location for your computer.

3 Levels of Internet Security

- **Minimum (Basic but secure: *most users in group*)**
Secure online browsing with no tracking of websites or harvesting of your data.
- **Medium** (users who are always on the internet)
High level of security whilst online optional VPN & the option of sending and receiving encrypted e-mails.
- **Maximum (only for high risk users)**
Total computer security all the tools used above.

Level of Security

The level of internet security depends on your personal use of the internet to help decide which is appropriate for use you will need to do your own "Risk Assessment" by reviewing your use of the internet and matching it with the 3 levels I have produced and how much you wish to "Lock down" your computer when online. You could mix & match tools from any of the levels

The minimum or basic level is a good level to start for any user who just uses their computer to go online to browse the internet for interests or to further their knowledge on the vast amount of educational subjects including the use of your computer.

Minimum (Basic)

- **Firefox Browser (set as Windows default browser in settings)**
- **DuckDuckgo Search Engine**

This will give you secure online use of the Internet using Firefox browser and the use DuckDuckgo as your non tracking search engine with no adverts in your search results. Also these two together stop any harvesting of personal data or your online searches normally used by Google to target you with adverts harvested from your searches.

Every U3A Computer user should use the above instead of Google Chrome and Google.

This is the personal recommendation for all the U3A Computer Group and should be the basic level for any U3A members who use a computer online.

The additional option of making Firefox the default browser within the Windows Setting for default apps and programs will ensure that when a hyperlink is click on from an email or text it will open the secure Firefox and load the webpage associated with the hyperlink still keeping your internet usage private and away from harvesting done by Google the normal default or Microsoft Edge another harvesting company!!!

Please follow the Procedures for installing Firefox and DuckDuckGo and the defaults options found on the Computer groups Tony's Tec News

Medium

- Firefox Browser
<https://www.mozilla.org/en-GB/firefox/new/>
- DuckDuckgo Search Engine
<https://duckduckgo.com/>
- Tor Browser (built-in VPN)
<https://www.torproject.org/index.html.en>
- ProTonMail (secure encrypted e-mails)
<https://protonmail.com/>

The medium level can be used as a step-up from the Minimum as it includes the use of the **Tor** browser and the option the encrypted email **ProTonMail**. Remember you can use DuckDuckGo in the **Tor** browser a combination of VPN and the non tracking of DuckDuckGo would give you a very secure method of using the internet.

As I said earlier all levels can be adjusted to your own level based on your risk and usage.

I personally would choose this combination as I use the internet for my interests and hobbies and I am a higher user than many in the U3A Computer Group. This level also allows me to only use the VPN when I do not wish my location identified.

Maximum

- VPN (*virtual private network*) <https://protonvpn.com/> (Free)
- Firefox Browser (with security extensions/plugins)
<https://www.mozilla.org/en-GB/firefox/new/>
- DuckDuckgo Search Engine <https://duckduckgo.com/>
- Tor Browser (built-in VPN)<https://www.torproject.org/>
- ProTonMail (secure encrypted e-mails)<https://protonmail.com/>

This level of security will cause some reduction in your normal online use for example Facebook and other social media websites will not allow you to login because of their security protocols.

Maximum

If you require the maximum level of internet protection ***not many users will*** you will be totally hiding your computer any time it is connected to your Wi-Fi also by using the Firefox browser and search engine DuckDuckgo all your online activity will be hidden. You also would have the option to install the secure browser called **Tor** based on the Firefox browser but with its own VPN when included with the VPN on the computer it doubles your ability to become invisible on the internet.

To add this level of security to your e-mails and have them encrypted you can create an account with **ProtonMail** which would make them totally secure.

This maximum level of internet security cannot be used with Facebook!!!!!!