**Security Focused Operating Systems**

**Security**

**QubesOS**

* Hard to get some hardware working with it (that’s just the nature of it though)
  + Librem laptop works well with it
  + Hardware compatibility list online

**SubgraphOS**

* Debian based
* Security hardening
* Runs many desktop applications in a sandbox
* Runs all traffic through a TOR network by default

**Trisquel**

**Hardened Gentoo Linux**

**PureOS**

* Made by the guys that make the Librem products

**Astra Linux**

* A version of linux optimised to be used by Russian armed forces and intelligence agencies

**SELinux (Security Enhanced)**

* Linux kernel module, not a separate distribution

**Anonymity**

**TailsOS**

* Preserve privacy and anonymity
* Bootable OS run by a usb or disc
* Hackers do not target TailsOS really
* Specifically resistant to local forensic examination
* Fast bug fixes
* Free and open-source
* Live OS
* Moving towards reproducible builds
* **Governments will definitely be targeting TailsOS, as it is the most used OS for anonymity**

**Whonix**

* Free open-source
* Focused on anonymity, security and privacy
* Uses TOR
* Debian Linux OS base
* Implements security through isolation
* Prevents leaks out of the TOR network
* **Does not mitigate local forensic activity though**
  + **Activity history is stored and can be found locally**

**These both can be combined to ensure security through compartmentalisation and isolation with the benefits of local forensic activity resistance**

**Penetration Testing**

**Kali Linux**

**Parrot GNU/Linux**

* Designed withIoT security in mind and **cloud pen testing**

BlackArch Linux

BackBox Linux

Pentoo

**Mobile OS**

iOS

* Closed system
* Restricted use
* Good for security

Android

* Open System
* Not the best for security

LineageOS

* Free open source
* Based on official android releases by google
* Syanogen

SailfishOS

* Uses Linux kernel

Replicant

* Open source based on android
* Free software for all propriety components

MicroG

* Reimplement the google play services with a FLOSS (open-source software)

PureOS

* Librem