

# Operating System Diagnostics

Common OS Maintenance

ICTSAS308

# Contents

- *Review Operating Systems*
- *Examine why OS maintenance is important*
- *Identify common OS diagnostic tools used during maintenance*

# Operating Systems - Review

- An **Operating Systems** is *specialized software* that **manages a computer's hardware and resources** to run compatible software programs.
- Common examples:
  - MS Windows, Apple OS, Linux, Apple iOS, Android, FreeBSD, Orbis OS (PS4)



# Why is maintenance important?

- Without **regular maintenance**, equipment runs a higher **risk of failure**
- An organisation is then **unable to operate correctly** or at **optimal efficiency**
- And that's a **problem!**
- Problems usually create **financial pain** for organisations
  - So there's motivation to **minimise their effects**



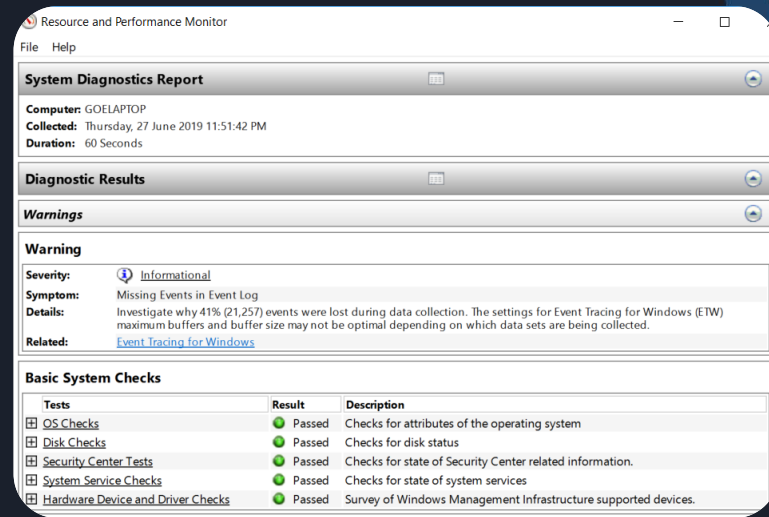
# Common OS Maintenance

- All **devices** have an **Operating System** requiring specialised **maintenance**
- **Desktop Computer:**
  - Updating the OS
  - Scheduling Backups
  - Maintaining Filesystem
  - Managing User Accounts



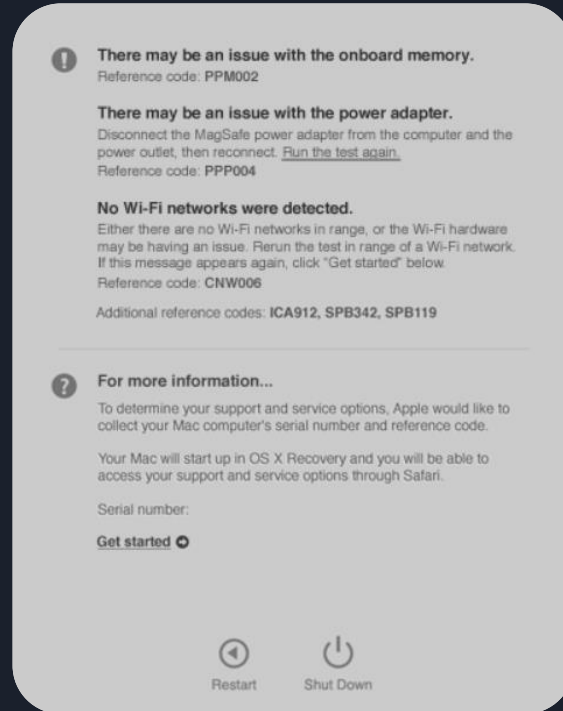
# Common OS Maintenance

- **Windows 10** includes a *System Diagnostic Tool* as part of the Performance & Monitoring tool
- **Report includes:**
  - Disk checks
  - Security checks
  - Hardware & Devices checks
  - Services
  - Network connections & data
  - And more...



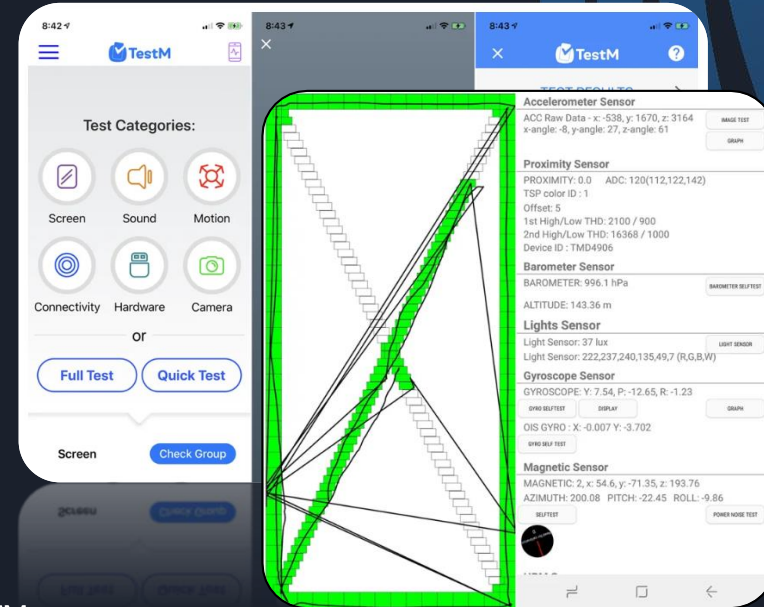
# Common OS diagnostic/maintenance tools

- **Mac OSX** includes the **Apple Diagnostic Tool** which can be started during boot up
- The test takes 2 or 3 minutes.
- If any issues are found, Apple Diagnostics *suggests solutions* and provides reference codes.



# Mobile Device Maintenance

- Mobile devices include:
  - Phones, tablets, smartwatches
  - And other devices... Can you think of any?
- Example maintenance:
  - Updating the OS
  - Clearing Storage cache
  - Removing unused apps
- Using In-built Diagnostic tools or third-party apps to check functionality of camera, screen, connectivity, sound, etc.





# Summary

- *Reviewed* **Operating Systems**
- *Examined* why **OS maintenance** is *important*
- *Identified* some common **OS diagnostic tools**

# References

- PCMag Australia. 2019. Run Diagnostics on your Phone. [ONLINE] Available at: <https://au.pcmag.com/gallery/61694/how-to-run-diagnostics-on-your-iphone-or-android-phone>. [Accessed 28 June 2019].
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