**10/06/2024**

**Project Goal:** Create a secure and efficient home network that allows devices to communicate safely with each other and the internet.

**Network Information:**

* **Internet Service Provider (ISP):** [Communityfibre10b]
* **Broadband Connection Type:** Fibre Optic

**Network Devices:**

* List all devices that will be connected to your network, including:
  + Computers: MacBook Pro 2012, Lenovo laptop, Thinkpad
  + Smartphones: Samsung S24 ultra, Google pixel 6 and 8, Samsung S22 Ultra, Redmi note 12 and 10 pro, Samsung A90 and Huawei P30 Pro
  + Tablets: NA
  + Smart TVs: Samsung Smart Tv 2016
  + Gaming Consoles: PS4 Slim
  + Other Devices: Samsung Galaxy watch 2

**Network Planning:**

* **Wired Connections:** Indicate which devices will be connected using Ethernet cables for a more stable connection. PS4 slim
* **Wireless Coverage:** Layout = 3 bedrooms, one attic, one living room, one front room lounge and one backroom
* **Router Placement:** The front room near the main door would be where the main router is, add boosters in the living room (next to the smart TV) and upstairs in the bedrooms

**Network Security:**

* **Wireless Encryption:** WPA3
* **Network Name (SSID):** Communityfibre10b\_AEBB9.
* **Default Password Change:** Yes change the default password to a custom password
* **Firewall:** Yes  
  Anti – Virus : YES

**Device Security:**

* **Software Updates:** Ensure that I run a vulnerability scans on all of my devices to check for any weaknesses and to check if any updates or patches are required and if they are then I will update the devices
* **Strong Passwords:** Create long passwords (greater than 10 characters) with a combination of numbers and special characters
* **Security Awareness: Educate myself and others on what phishing is and how it occurs, give them signs of a phishing scam**, ensure everyone has 2FA and strong passwords also lead by example   
  Safe browsing practices: not clicking on random links, verify any information they receive, ensure 2FA is used, create strong passwords, beware of urgent requests

**Network Monitoring:**

* **Connected Devices:** I would download the app associated with my router and home network that way I can keep an eye on what devices are doing and prevent any potential danger
* **Security Breach Awareness:** Unusual increased internet usage, slow performance, random pop up ads, random login requests

**Next Steps:**

* Additional steps I plan to take to enhance my home network security. This includes:
  + Enabling guest Wi-Fi with limited access.
  + Enabling parental controls on certain devices.
  + Investing in a VPN service for additional online privacy.

**Resources:**

* Google Cybersecurity certificate
* Cisco Introduction to Cyber security course
* Cisco Introduction to Networking .  
  Cyber Dojo basics of cyber security