Meeting Notes 2/5/2025 – All Members

How we can take good governance practices and automatically apply them out of the box instead of relying on user knowledge. – What gaps exist, how to you fix the gaps

Data Governance for home networks - Ryans Idea

vLans for network to segment

Restrict router to IPs, ports, services

Tech – Data science gathering from CVE databases (does this TP router vulnerability also exist on this switch) or penetration testing?

Assign for milestone 1

***Deadline Feb 12***

* [Executive Project Summary](https://github.com/MLHale/CYBR4580-8950/blob/master/projects/milestone1.md#executive-project-summary) - What are you doing and why? – Alexandria Simonson
  + Goals and Objectives
  + Merit of the Project
* [Proposed project timeline](https://github.com/MLHale/CYBR4580-8950/blob/master/projects/milestone1.md#proposed-project-timeline) - When will you do it? - Ryan
  + Define the tasks and expected time to completion
  + Create and submit a gantt chart or other planning chart
* [Project-oriented risk list.](https://github.com/MLHale/CYBR4580-8950/blob/master/projects/milestone1.md#risk-list) - What could go wrong in the project and why? - Ryan
* [Project Methodology.](https://github.com/MLHale/CYBR4580-8950/blob/master/projects/milestone1.md#project-methodology) - What has been done in the literature and what is your technical plan?
  + Lit - Sreean
  + Tech - Corey
* [Resources/Technology needed](https://github.com/MLHale/CYBR4580-8950/blob/master/projects/milestone1.md#resources-needed) - What do you need to be successful? - Corey
* [First Sprint Plan.](https://github.com/MLHale/CYBR4580-8950/blob/master/projects/milestone1.md#first-sprint-plan) - Create the first plan on GitHub Kanban - Sreean
* Presentation – ***Deadline February 14***
  + Slides – Alexandria PowerPoint
  + Video/Speaker - Corey Speaker

Research more new cutting edge tech

* 5g, 6g
* Something that would be more beneficial for the future of the consumers
  + Newer routers/switches
* Wifi Mesh routers
* Research portion applicable to all routers, switches, whichever is the scope
  + Tech more focused on a certain device
    - Most found vulnerabilities already have patches, what benefit does it bring to pen test this

Research question

1. How we can take good governance practices and automatically apply them out of the box instead of relying on user knowledge. – What gaps exist, how to you fix the gaps
   1. Research paper – Gaps in consumer routers - consumer networking lifecycle (patching, cox technician doesn’t know what he’s doing, etc.)
   2. Guidance for the user on onboarding, this is your secure network, only connect the items you want to protect, this is your guest network, etc.
   3. Technical – Looking at a specific device and seeing how we can reconfigure it to be more secure.
      1. Waterfall effect of more security – cost goes up, more configs the less user friendly.
      2. Maybe warnings/high recommendations in configuration settings, defaults set to more secure settings.
      3. Onboarding process for router – How to make something user friendly, secure, and pass good data governance
      4. ISPs impact???
      5. How to secure
      6. What data is stored in the router, is it encrypted, if it’s thrown away what can someone get from it?
         1. Firmware updates – a way to automate this instead of manual process?
         2. Default credentials
         3. Disable unused services
         4. Set secure wireless
         5. Segment of network for IoT and normal