CMP124 MAIN Library Security Assessment

Student Name: **Arjun Anand**

Library Name and Location: **Jefferson Township Public Library, Jefferson Nj**

Date and Time Visited: **5:45pm, 11/1/21**

Contact Person: **Mr. Seth Stephens**

Library Location Website: **www.jeffersonlibrary.net**

Each library is aware that a student is visiting to gather information for this project. When you are at the library, let them know you are there. Someone will be available to meet with you. For each area listed below, provide observations, documentation, pictures so that you can develop a Security Assessment:

Network (Wired/Wireless) Security

Suggestions/Possible Questions:

- Is there a separate wireless network for employees and visitors?
  - **No**
- Are the wireless network(s) password protected?
  - **No**
- How are passwords, if any, distributed?
  - **N/A**
- Connect your laptop to the wireless network.
- Run an ipconfig /all and capture the results *
- Install nmap and perform a scan *
- Install Wireshark and capture a few minutes of traffic over your WiFi connection and save the output *

System (PC/Server/Device) Security

Suggestions/Possible Questions:

- Are PCs available for public use?
  - **Yes.**
- Are the PCs password protected?
  - **There is "Staff" for the staff and "Administrator" that the director only has access to; the guests have "Click ok to Begin" logins.**
  - **The director has his password under 'lock and key.'**
- What software are you able to use on the PCs?
  - **Publisher, Excel, hp scan twain, google chrome, word, powerpoint, and any software you bring in with a usb**
- Can you download software onto the PCs?
  - **Yes; the ports are open so guests can use the PC's with information they may have on them.**
    - **The director said that it is purposefully done this way so people can have ease of access when using the pc's.**

- Do they have printers available for public use?
  - **Yes**
  - **Ports on the printers can be accessed**
- Find the default gateway and dns server from your ipconfig:
  - **10.14.3.1**
  - Put the IP address into the browser. What can you see?
    - **The IP address refused to connect**

Physical Security

Suggestions/Possible Questions:

- Are the PCs guarded in any way? Locked door? Person?
  - **Lock and key.**
- Where are the servers, routers, and other equipment? **Routers and Switches are in a separate room.**
- Who has access to the equipment? **Only the director, for fixing MAIN office techs come in. They monitor the routers virtually. If someone try to breach through the firewall MAIN will know.**
- Take notes on the number of servers, routers, access points, etc so that we can create a network diagram

System DeepFreeze: Every time a computer is shut off, there is a disk image that stores the last stored image. Just one image is stored.
- Deepfreeze holds all of the applications and system storage.

Network Diagram:
Originally, all of the machines had a static IP addresses.
Giving each machine a dynamic address was a problem so they subnetted each IP address for the routers and switches.

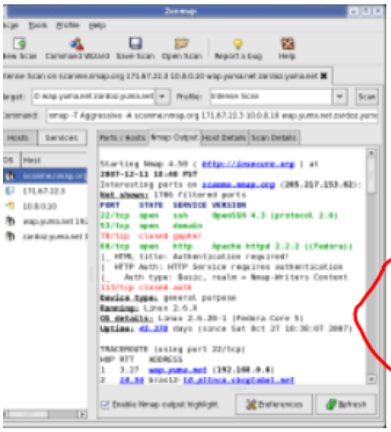
Battery Backups and a generator are on site to provide power in case of a blackout. There is a 30 second gap between the power going off and the generators turning on.
- The battery backups run in those 30 seconds.

WIFI:
- No security; open on purpose

Library Card numbers: Stored separately off of the network through a third party (Amazon). Amazon web services host the servers and security.

*To run an ipconfig /all, open a command prompt window and type ipconfig /all. Copy and paste the information to a text file.

Install nmap:



Microsoft Windows

Please read the Windows section of the Install Guide for limitations and install
(includes dependencies and also the Zenmap GUI) or the much smaller comma
2008 and newer. We also maintain a guide for users who must run Nmap on ea

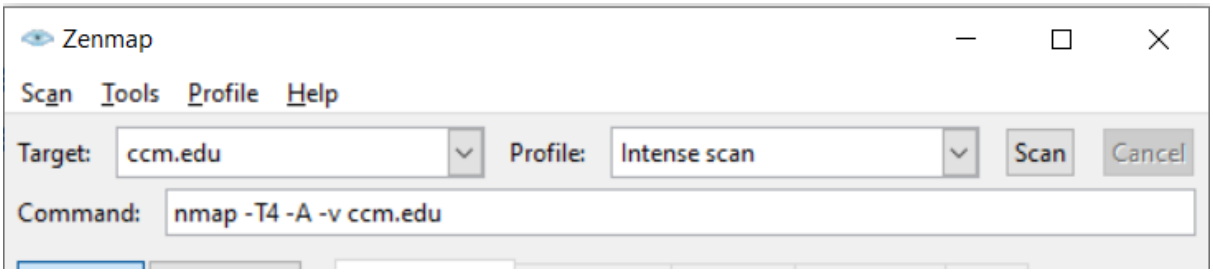
Note: The version of Npcap included in our installers may not always be the la
and install the latest Npcap release.

The Nmap **executable Windows installer** can handle Npcap installation, regis
location. It also includes the Zenmap graphical frontend. Skip all the complexi

Latest stable release self-installer: nmap-7.92-setup.exe
Latest Npcap release self-installer: npcap-1.55.exe

We have written post-install usage instructions. Please notify us if you encount

In the nmap application type the ip address of the library server in the Target and run an Intense Scan. If an Intense Scan doesn't work, try the other options in the dropdown. If there are multiple servers, use each ip address.



In Wireshark make sure to select the Wi-Fi and do not use a filter.