Week 6 Brief

10/19/21



Team Activities

- Participated in CDC
- Met with Doug Jacobson
- Created initial Design Document
- Researched bash scripting and possible initial setup steps for spinning up our VM

CDC summary

| ISL | J 1 2021 | | | | | |
|------|---------------------------|--------|-------|-----------|----------|-----------|
| lome | | | | | | |
| : | Scoreboard | | | | | |
| | Placement | Score | Flags | Usability | Services | Anomalies |
| 1 | Team 4: Internet of Thugs | 379.50 | 146 | 0 | 198 | 34 |
| 2 | Team 1: Cloud10 | 363.33 | 163 | 0 | 200 | 0 |
| 3 | Team 9: Club Penguin | 336.89 | 200 | 0 | 136 | 0 |

- Everyone attended
- Did some very basic firewall securing
 - Ufw firewall configuring
 - Denied all incoming besides SSH and HTTP
 - Denied all outgoing (reverse shell)
- Mostly worked on anomalies
- Overall a good experience

Doug Meeting Summary

- Virtual IoT device (VM)
 - Will be created directly in ISEAGE 2.0 environment
 - Directly involved with CDC scenario
 - Available in a month
- Physical IoT device
 - Use multiple raspberry pis(1 for each team)
 - Could potentially be used as an anomaly
- Physical Camera from last year's group
 - Try to get working or replace with raspberry pi

Current Physical IoT list

| Device | CVEs | Flashyness | Cost | CVSS Score | Hacking Difficulty | CDC Integration | Total Score |
|-----------------------------------|--------------------|------------|-----------------------|-----------------|-----------------------|---------------------------------|----------------|
| Jector Smart TV FM-K75 | CVE-2019-9871 | 5 | 0 (Very Expensive) | 9.8 (Critical) | 4.0 (Easy) | 3.0 (Somewhat Intregratable) | 21.8 |
| Yi Home Camera 27US | CVE-2018-3934 | | 5 (Cheap) | 9.0 (Critical) | 2 (Hard) | | |
| TP-Link Archer A7 AC1750 | CVE-2020- 10888 | | 5 (Cheap) | 9.8 (Critical) | 2 (Hard) | | |
| Eques Elf Smart Plug | CVE-2019- 15745 | 3 | 5 (Cheap) | 8.8 (High) | 3 (Medium) | 3 (Somewhat Intregratable) | 22.8 |
| XIAOMI XIAOAI speaker Pro LX06 | CVE-2020- 10263 | 3 | 5 (Cheap) | 6.8 (Medium) | | 2 (Barely Intregratable) | |
| Raspberry Pi 3 | Unlimited | Variable | 5 (Cheap) | Variable | Variable | 4 (Intregratable) | |

Prioritized Task: Virtual Machine

- Develop an IoT configuration script
 - Jake, Justin

- Develop a vulnerable web interface
 - Megan, Jacob

IoT VM initial setup (with script)

- Create a non-root user(with sudo permissions)
- SSH
 - Configure firewall to allow SSH
- Telnet
- ... more to come

Basic Configuration Script(will expand)

#!/bin/bash

echo "create user" useradd sdmay14 passwd sdmay14 #give initial user sudo privileges usermod -aG sudo sdmay14

echo "install updates" apt-get update

echo "install ssh" apt install openssh-server

echo "enable ssh" systemctl enable ssh systemctl start ssh

echo "install telnet" yum install telnet-server

echo "enable telnet" systemctl enable telnet.socket systemctl start telnet.socket

This week "To Do"

- Continue expanding and researching scripting
- Create services for VM (i.e. web server)
- Testing assignment and lightning talk