**sddec18-07: Software-Defined Moving Target Defense**
Week 3 Report
February 12 - February 16

**Clients:** Dr. Benjamin Blakely and Joshua Lyle (Argonne National Laboratory)
**Faculty Advisor:** Dr. Hongwei Zhang

**Team Members**
Andrew Thai — *Project Manager*
Connor Ruggles — *Quality Assurance*
Emily Anderson — *Delivery Manager*
Ryan Lawrence — *Communication Manager*

## Weekly Summary and Accomplishments

We accomplished creating a XenServer hypervisor in our test environment. Did testing of adding new machines to network. Created a Kali machine to allow us to run nmap scans to analyze what types of packets are being transferred from machines.

## Summary of Weekly Client/Advisor Meeting

We had a brief meeting with our client this week to update them on our progress and project plan. We ensured that we are moving in the right direction with our current setup and plan. One main point we discussed was the architecture of our system and whether we are going to keep logic centralized within our controller or use an external source. We decided it would be best to keep as much as possible inside our controller, for security's sake.

## Pending Issues

We do not have a solid understanding of how a controller works, so we need to play around with one. Also set up more machines on the network to test with a larger network.

Our project is still very open ended, which makes it somewhat difficult to write our project plan and design processes since we still don't have an exact end goal.

## Plans for Upcoming Week

Our biggest goal for the coming week is to find a way to use the information we get from running nmap scans. We also need to then figure out how to integrate that information into the SDN.

## Individual Contributions

| Team Member | Contribution | Weekly Hours | Total Hours |
|---|---|---|---|
| Andrew Thai | Set up the network, created Kali machine within the network. Ran nmap scans on the network. Created GitLab issues to keep track of overall progress | 10 | 22 |
| Connor Ruggles | Played with machines on the network to determine the overall topology needed for our current setup | 8 | 20 |
| Emily Anderson | Worked on project plan and overall status of the project with a timeline of what needs to be done | 9 | 21 |
| Ryan Lawrence | Added test machines to network and started wireshark capture of packets from the nmap scans to be analyzed. | 11 | 23 |