

sddec18-07: Software-Defined Moving Target Defense

Week 01 Bi-Weekly Report

Aug 27 – Sept 10

Clients: Dr. Benjamin Blakely and Joshua Lyle (Argonne National Laboratory)**Faculty Advisor:** Dr. Hongwei Zhang**Team Members**Andrew Thai — *Project Manager*Connor Ruggles — *Usability Manager*Emily Anderson — *Delivery Manager*Ryan Lawrence — *Communication Manager*Corey Wright — *Quality Assurance Manager*

Weekly Summary and Accomplishments

During these past two weeks we regrouped and got our prototype back up and running to the state that it was in at the end of last semester. Our floodlight controller is fully functional with our network, so we have decided to split up work between team members and focus on the following subjects: load balancing, web interface for rules, scans, DDoS attacks, and spoofing attacks.

Summary of Weekly Client/Advisor Meeting

For the first meeting of the semester with our client and advisor, we mostly touched base with our client to make sure we were all on the same page in terms of deliverables. We discussed our plans for how work and testing is planned for the semester and agreed to bi-weekly meetings going forward.

Pending Issues

We are trying to figure out if we will be able to implement something in time to test our project in the November CDC, as it has proven to be more complicated than we expected.

Plans for Upcoming Week

The plan for the coming week is for each person to start researching and implementing their assigned topics:

Load balancing - Andrew Thai

Web Interface for Uploading/deleting rules - Connor Ruggles

- Post to create rules
- Have a table to list all current rules
- Planning on building an Angular app for this

Scans (Nmap) - Emily Anderson

DDoS - Corey Wright

Spoofing - Ryan Lawrence

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Andrew Thai	I worked on getting the network set back up from the previous state that it was in at the end of the last semester. I did some testing of add/deleting rules on the floodlight controller to determine that it was still functional as expected in the network. I started researching options for floodlight load balancing between machines.	12	74
Connor Ruggles	Research/starting tasks, designing the interface.	4	56
Emily Anderson	Started research on Nmap scans.	4	57
Ryan Lawrence	Helped with redeployment and did research into a floodlight plugin for eclipse. Got all communications up to date, sent in a request for CDC testing, and started research into spoof attacks and defense.	12	65
Corey Wright	Started Reading/Research to understand where the group is at with the project.	6	6