sddec18-07: Software-Defined Moving Target Defense

Week 7 Report March 26 – March 30

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

Switched to using Floodlight OpenFlow Controller instead of OpenDaylight. Successfully added flows to the controller and working to create more that achieve our goals. Spent time reading documentation to understand the depth of Floodlight: how to add flows via command line, understanding the manager/tables, and looking into the included firewall.

Summary of Weekly Client/Advisor Meeting

Went over updated project plan, went over the design/components of our project (Snort, etc. vs custom detection), maybe using compliance matrix as we do documentation.

Pending Issues

- Determining overall setup of network
- Work on overall design of project (FloodLight, Snort, Bro, Linode, etc.)

Plans for Upcoming Week

- Improve project plan and design doc with client and advisor reviews and more precise deliverables
- Test more with Floodlight (plus documentation)

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Andrew Thai	Created floodlight virtual machine and learned the structure for creating flow rules.	5	40
Connor Ruggles	Worked with Floodlight and read documentation about configuration.	3	35
Emily Anderson	Experimented with Floodlight to learn the structure of it and how to create flow rules	3	35
Ryan Lawrence	Worked with new Floodlight manager to understand the setup and get flows to add correctly.	4	37