

EE/CprE/SE 491 SDMAY-19

Weekly Report 8

11/15/2018 – 11/21/2018

Group number: 5

Project title: *Cyber Network Capture Generator*

Client : *Argonne National Laboratory*

Advisor : *Benjamin Blakely*

Team Members:

Jacob Perin - *Scribe*

Luke Tang - *Meeting Facilitator*

Collin McElvain - *Chief Architect*

Abdelrahman Baz - *Chief Architect*

Hazem Abdeltawab - *Test Manager*

Bernard Ang - *Report Manager*

Weekly Summary

This week, we did not have any meetings but we assigned tasks and made sure we have running progress on the project for the Thanksgiving week. For the front end team, we decided to take the time to build the new interface as drawn in the wireframe diagram and run more tests with Apache and Django

Past week accomplishments

The team did not meet this week as we worked on our own specific tasks . The tasks and outcome is shown as below :

- ❖ • Bernard :
 - Tried to build and modify the new interface in accordance with the changes made in our wireframe diagram
 - Had trouble with dynamic addition of elements into the list used.
- ❖ • Jacob :
 - Rescoping problem. Taking a greater effort to broaden search into automated

deployment. Client had made mention that perhaps our goal for a all-initialization-in-one option may be to narrow.

- Research into Xen Supported Technologies (posted in wiki) that allow more for more support to third library architectures
 - OpenStack (hopeful possibilities) : <https://wiki.xenproject.org/wiki/Category:OpenStack>
 - OpenStack is meant to be a simple series of services. Xen has well documented support for it. In fact, it is even tested against the CI Loop and is not going to be dropped from OpenStack anytime soon. This seems like a good direction.
 - Goal: Leverage Ubuntu Framework with proper well supported technologies.
- ❖ • Collin :
 - Began to create wireframes for Hazem over the frontend. Found issues with the Scenario creation page.
 - Chef server and client may not be the way to go. This requires weird scripting to complete.
 - ❖ • Lucas:
 - Research and implementation of OpenWRT as a “gateway” router device solution, this looks much more promising than any other previous solutions as there is direct documentation on implementation as such, and run as a DomU guest in Xen
 - ❖ • Abdelrahman:
 - Found that Apache and Ngnix are the favorites and less complicated to be run in conjunction with Django
 - Started on researching which one of the two server options would work with our project
 - ❖ • Hazem :
 - Several templates have been developed to ensure the Apache adherence to the Django framework specifics. Templates were successful and fully functional under many circumstances. This approach will be used for the final design of the project.

Individual contributions

Team member	Contribution	Weekly Hours	Cumulative Hours
Bernard Ang	Build the new interface according to wireframe diagram	7	47 + 7 = 54

Collin Mcelvain	Wireframe creation and chef solo possibly	6	42+6=48
Jacob Perin	Research technologies to use with Xen for Automated Deployment	8	52 + 8 = 60
Lucas Tang	Implement OpenWRT	8	47 + 8 = 55
Abdelrahman Baz	Django app Server option selection	7	47 + 7 = 54
Hazem Abdeltawab	Templates development	9	58 + 9 = 67

Plan to accomplish for the next week

- ❖ Bernard
 - Complete the web interface with proper dynamic programming
- ❖ • Jacob :
 - Continue research into OpenStack. This seems like a hopefully way to allow Xen to connect with modern technologies that will allow for automated deployment.
- ❖ • Collin :
 - Finishing up some wireframes.
 - Communicating with Jake on next steps.
- ❖ • Lucas:
 - Look into further network features, such as: Wireshark, PeStudio, RegShot, TotalCommander, ProcessExplorer, ProcessMonitor, Fakenet, ApadeDNS, Hexinator, Resource Hacker as tools to provide more insight beyond raw PCAP data.
- ❖ •Abdelrahman:
 - Find out which production server to use (Apache is more likely)
 - Follow some tutorials on how to connect a production server to Django app
- ❖ • Hazem :
 - Develop more tests just to be safe when making the final connection between the front-end development and back-end

