Winter Term 2017
Midterm
Progress Report

By: Leon Leighton, Derek Wong, Thomas Olson

Project Purpose

- Our purpose is to create a continuous integration system for IBM's POWER8 architecture hosted on the OSU OSL's OpenStack cluster. This system will allow people to submit their projects and have them automatically built and tested so that they may verify that their software works on POWER8.

Why This Is Needed

- Most developers don't have access to a POWER8 server, precluding them from testing their software on POWER8.

- Lack of access and testing prevents them from being able to release verified software that is known to run properly on POWER8.

- It also discourages development due to the increased difficulty lack of access causes.

Project Goals and Requirements

- This system will utilize containers and virtual machines to provide isolation and consistent environments for builds.

- It will be deployed via an Ansible playbook, allowing other groups to host their own continuous integration systems based off our work.

- It will run on the OSL's POWER8 OpenStack Cluster.

Term Recap

- Last term we focused on establishing the requirements for the project and writing up documents planning out the design of the project.

- This term we're focusing on fleshing out the finer details of the project and working towards an implementation.

Project Status

- Basic Jenkins installed through Ansible
- It has the ability to:
  - Register Projects/Create Jobs
  - Manually Build Project
  - Run Automated Builds

Demo

Problems

- Communication with our client
- Configuration Issues
  - GitHub Oath Plugin
  - Not fully in Ansible

Future

- Weekly email with client discussing our plans for the week. Continue biweekly conference call.

- Resolve Oauth Plugin authorization issues.

- Put configuration fully into Ansible

Future

- VMs and Containers
  - Jenkins/OpenStack Integration
  - Pre-build images

Future

- Domain Name
- SSL/TLS certificate
- Travis yaml file compatibility