POWER8 Continuous Integration Fall Progress Report

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Project Goals

- The goal of this project is to create a continuous integration system for IBM's POWER8 architecture.

Continuous Integration

- Continuous Integration allows developers to validate their software after each change in the code.
- Our system will build their software automatically for each of their commit and will display if their build passed or failed.

Continuous Integration cont.

- Continuous Integration is NOT new.
- There are systems that have continuous integration, but not for the POWER8 architecture.
- We intend to use existing technologies to build our solution.

Why do people need this?

- This tool is really useful, especially for software design teams because it can automatically build their projects.
- It can detect problems in the code.

Purpose

- The purpose of this project is to provide a Continuous Integration service to Open Source software developers who uses a POWER8 architecture, so they can validate their code.

OpenStack

- Hosted at Open Source Lab
- Persistent VMs
- Ephemeral VMs/Containers

Jenkins

- OpenStack Integration
- GitHub Integration
- Trigger Builds/Tests

Configuration

- Pre-built VMs/Containers
- Per project YAML files

Status

- Build/Test status page
- GitHub badge

Build Artifacts

- Download Binaries

Ansible

- Configure
- Deploy

What went right

- Support from IBM
- Communication between team members
- Getting the required documents completed

What didn’t go so right

- Clarity of design elements
- Lack of coordination between team members while writing documents
- Rushing of certain assignments
- Not making full use of client’s availability

What to change for next term

- Share and request feedback between team members earlier
- Start work earlier and keep each other informed of progress made
- Ask for help and feedback from client on a more regular basis

Objectives for Winter term

- Revise the design document to better reflect the client's needs
- Start working on getting the basic system running