OPNFV PDX Lab Migration
OPNFV PDX Lab Migration: Resources

UCS
- 16 Blade Chassis + 2 Switches
- Used by Functest, Fuel, Apex, and hosts lf-build1/2

LF POD4/5 + 3 Intel Servers
- Used by Functest, Pharos, XCI
Migration Roadmap: UCS

UCS

- Offload usage to LaaS
- Purchase replacement hardware and host at UNH-IOL
  - Add resources to LaaS
- Find build servers replacement (investigating):
  - Reserved LaaS machine
  - Intel Lab POD16
  - Cloud VMs
- Decommission, Derack, Donate/Surplus, etc.

Status

Waiting on Quote from UNH-IOL, Working with users to migrate to LaaS, Investigating build server options
Migration Roadmap: LF POD 4 & 5

LF POD 4/5 + 3 Intel machines:
- Offload usage to LaaS
- Physically move to OSUOSL (Portland, OR to Corvallis, OR)
- Configure as second Lab reservable through LaaS dashboard
  - Intel machines potentially repurposed for LaaS backend

Status
Waiting on Quote from OSUOSL, Working with users to migrate to LaaS, Investigating enrolling new Lab in LaaS
Status Overview

- Coordinating with PTLs/Projects to migrate usage to LaaS
- Waiting on quotes from UNH-IOL & OSUOSL
- Investigation:
  - Setting up second Lab for LaaS
  - Finding replacement for build servers
  - Reserving/Connecting LaaS resources for CI
CI/CD Transformation
Overview

Why are we talking about transforming CI/CD?

[LFN Infra-WG Recommendation]
Benefits & Drawbacks

How do we get there?
What things look like today
Why: Benefits & Drawbacks

Reasons to move
  - Steep learning curve to current CI/CD - highly abstract
  - Cost in time to run and maintain
  - Centralized configuration

Benefits
  - Hosted packages and Docker registry
  - Integrated static code, dependency, and license scanning
  - CI coupled with code

Drawbacks
  - Requires moving off Gerrit
  - Less flexibility and integrations
  - Project focused on CI for and not development to transition
  - Time for generating training resources and education
What: Current Environment

Code: Gerrit
CI: Jenkins
Builders: Community Labs + LF
Artifacts: Google Storage
Distribution: DockerHub, PyPI
How: Migration Plan

Create proof-of-concept (PoC) to match current CI workflows
Discovery / scoping on governance & management jobs
Run PoC work in parallel with Jenkins
  Setup repository replication to SCM/CI Platform
  Scope resource usage (Need more than given size?)
  Utilize LaaS resources
Determine cutover time & date once PoC complete (per-repo)
  Enroll and configure hardware resources
  Ensure all Gerrit changes are closed
  Disable replication on Gerrit
  Setup replication from SCM to Alternate
Spin down PoC resources
Lab-as-a-Service (LaaS) Updates and Roadmap
New Features in LaaS

- Pod Design Improvements
  - PTLs can now completely define hardware, software, and network topology for a pod in one workflow
  - PODs can be modified after creation to have new network topology or have additional resources added
New Features in LaaS

- Pod Design Improvements
  - PTLs can now completely define hardware, software, and network topology for a pod in one workflow
  - PODs can be modified after creation to have new network topology or have additional resources added

- Quick Booking Improvements
  - PODs bookable through quick booking menu
  - Live Resource Availability
New Features in LaaS

● Pod Design Improvements
  ○ PTLs can now completely define hardware, software, and network topology for a pod in one workflow
  ○ PODs can be modified after creation to have new network topology or have additional resources added
● Quick Booking Improvements
  ○ PODs bookable through quick booking menu
  ○ Live Resource Availability
● Migration from Jira to LFID Login
● CNTT Readiness
Roadmap for LaaS

- Migration to New Features
  - Still working to transfer bookings
  - Expecting to add changes early/mid July
- Analytics Dashboard
  - Plan to track and display various booking statistics to see how users interact with LaaS
  - Plan to use statistics to influence decisions for what features need to be added to LaaS
- Jenkins Integration