

OPNFV Infra-WG Update

Virtual LFN Developer & Testing Forum - June 2020

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

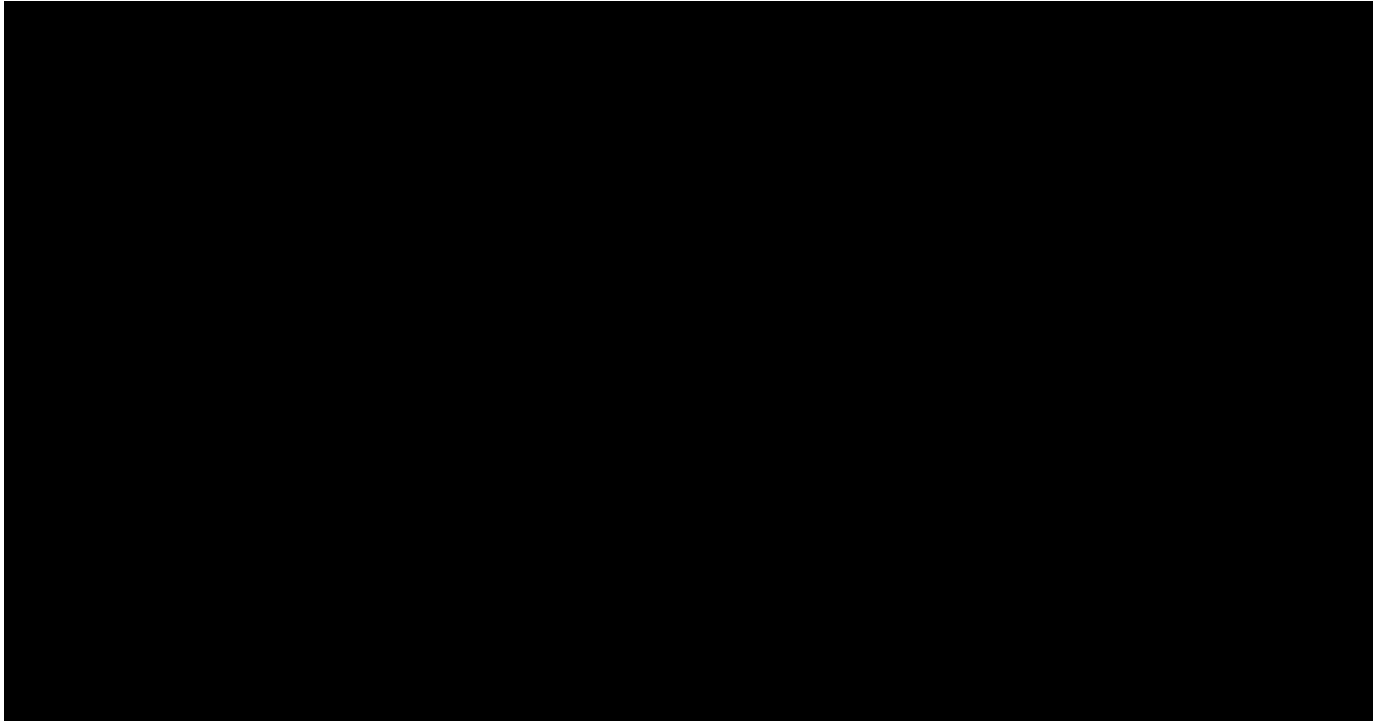
 - Setup replication from SCM to Alternate

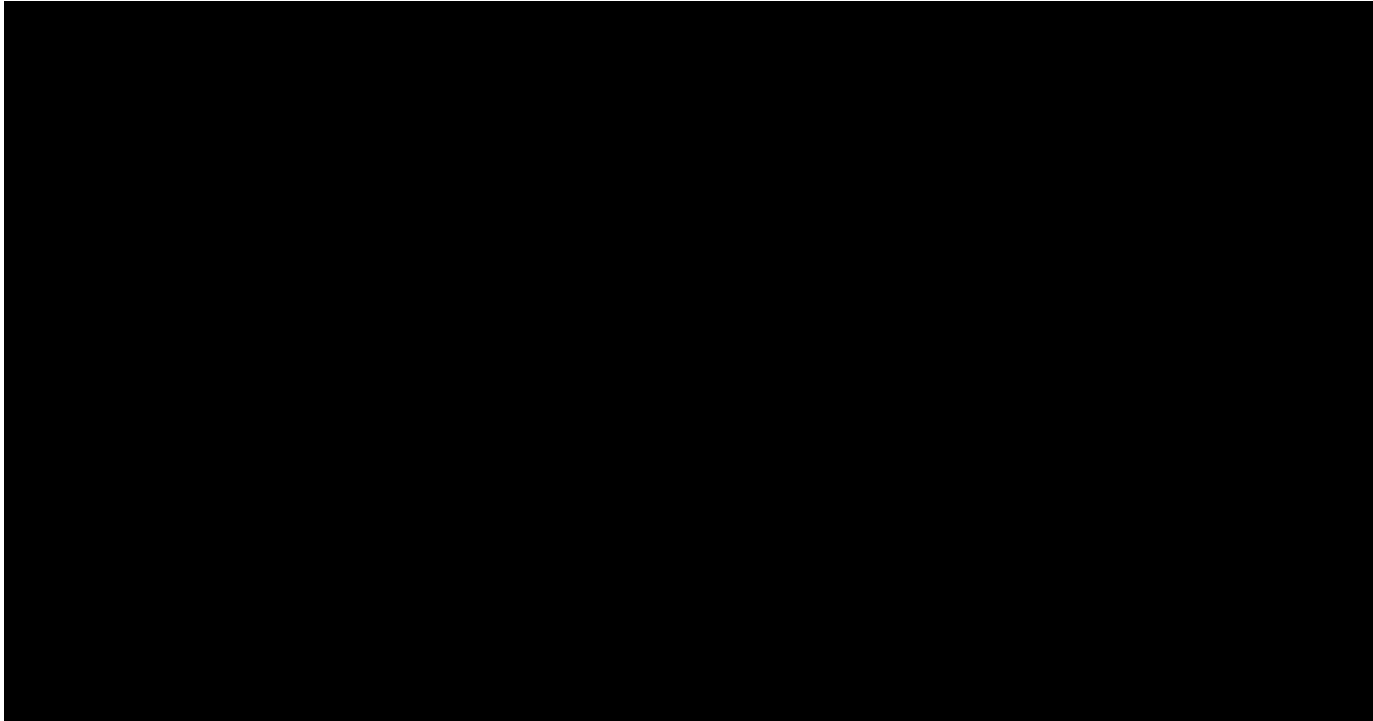
- Spin down PoC resources

Lab-as-a-Service (LaaS) Updates and Roadmap

New Features in LaaS

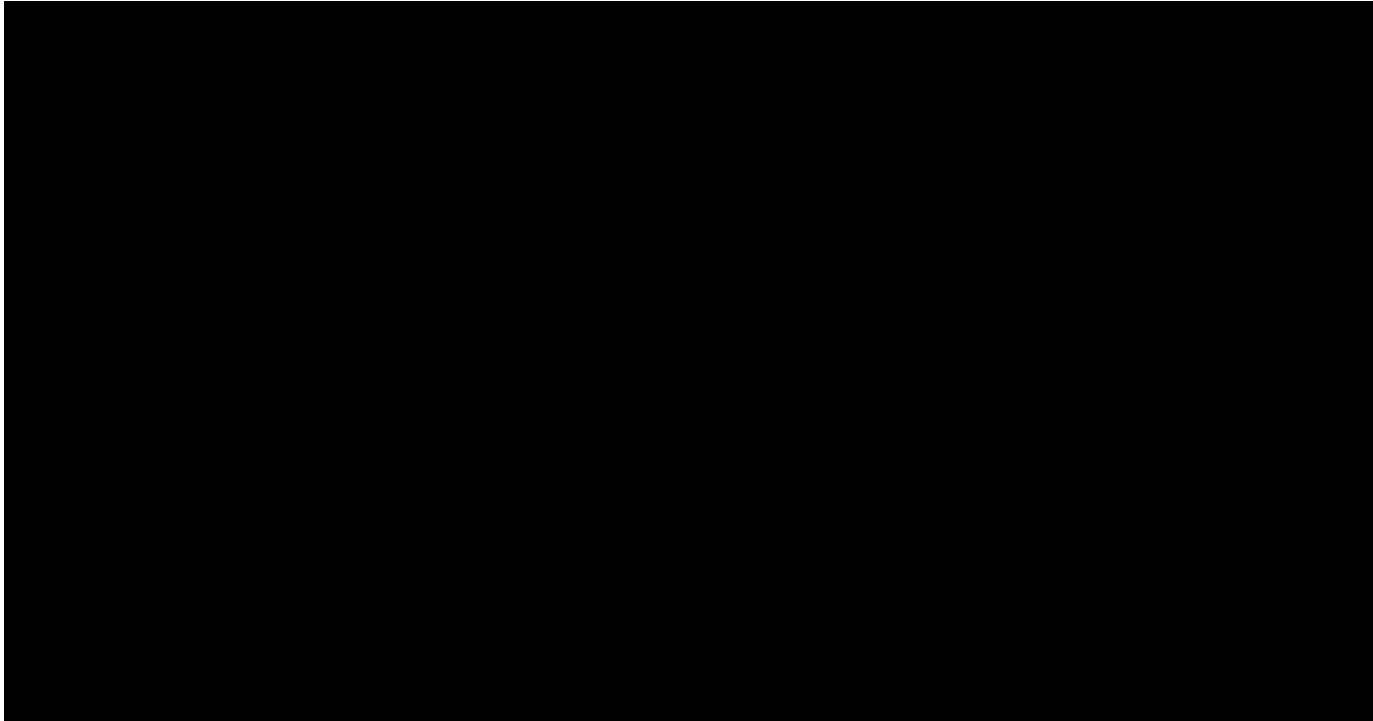
- Pod Design Improvements
 - PTLs can now completely define hardware, software, and network topology for a pod in one workflow
 - PODs can be modified after creation to have new network topology or have additional resources added





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- Quick Booking Improvements
 - PODs bookable through quick booking menu
 - Live Resource Availability



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- 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