Csit VIRL
Overview
VIRL Architecture and Operations
VIRL System Architecture

Virtualized network platforms

- Generators
- Servers
- LXC
- Docker
- VNF
VIRL System Architecture (Virtualized)

- All VMware offerings, no support for VirtualBox

HyperVisor

Optional

Ubuntu

KVM
Built on OpenStack Mitaka

Shared Services

Dashboard (Horizon)
Compute (Nova)
Networking (Neutron)
Storage (Cinder)
Identity (Keystone)
Image (Glance)

RESTful APIs
VIRL Topologies

- Stored as XML
- Human readable
- Editable
- Automatable
- Shareable

- [https://git.fd.io/csit/tree/topologies/available/yaml](https://git.fd.io/csit/tree/topologies/available/yaml)
- [https://git.fd.io/csit/tree/resources/topology_schemas/3_node_topology.sch.yaml](https://git.fd.io/csit/tree/resources/topology_schemas/3_node_topology.sch.yaml)
- [https://git.fd.io/csit/tree/resources/topology_schemas/topology.sch.yaml](https://git.fd.io/csit/tree/resources/topology_schemas/topology.sch.yaml)
Csit VIRL Architecture and Operations
VIRL CSIT System Architecture

Three C-series UCS servers

- Vexxhost montreal colocation
- Openstack Mitaka
- Custom built test server images
  - Ubuntu 16.04
  - Centos
- Servers behind LF VPN
VIRL CSIT Builds

Each patch verified

- pkgs built on jenkins slave
- scp transfered to virl server
- Simulation launched
- NFS mounted on simulated servers
- pkgs loaded and tested in topology
- pybot driven tests
- results reported back to gerrit/jenkins
VIRL CSIT 3 node test topology

- Test set split into thirds
- Three simulations per patch
- 13 simulations per server
- Each simulation @45 min to execute
Questions?

Thanks!