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There are a large number of open source projects in the cloud, SDN, and NFV space.
OpenSource Building Blocks
2015 – 2016: Several New LF Projects

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*New to Linux Foundation in 2015/2016*
“Systems integration as an open community effort.”
OPNFV Platform Overview

Orchestration and Management

Virtual Network Functions

Compute Virtualization Control  Storage Virtualization Control  Network Virtualization Control

Compute  Storage  Network

Integration  Testing  New Features

Continuous Integration / Continuous Deployment

Documentation
Scenario:
“Deployment of a set of components and their configuration”

A scenario is a system of multiple upstream components.

> Compose. Deploy.
A scenario is a system. Does it work?

> Test.
Missing Features/Components?

> Create
Integrate and Evolve Upstream in lock-step
What are some of the projects that might interest routing area?
OPNFV SFC Project

- **Objective:** Verify ODL SFC in system level deployments
- **Brahmaputra Yardstick tests:**
  - TC029: VM Creation
    - Verify that only 2 Service Function VMs are created for Service Chains Chain1 and Chain2
  - TC030: Block HTTP
    - Verify that Client1 can not do HTTP traffic, but can do SSH traffic
  - TC031: Block SSH
    - Verify that Client2 can not do SSH traffic, but can do HTTP traffic

See also: [https://wiki.opnfv.org/display/sfc](https://wiki.opnfv.org/display/sfc)
SFC Improvements in Colorado

- SFC enhancements via OpenDaylight Boron release
  - NSH support
  - Multiple Node Support
  - Service Function failover and load-balancing
  - Dynamic Service Chain modifications
Other OPNFV Projects

- IPv6 – Brahmaputra Release
  - Initial environment deployment and testing
  - Upstream IPv6 improvements in OpenStack and the Linux kernel
  - Workaround “helper functions” for OpenDaylight SDN controller gaps

- IPv6 – Colorado release
  - Upstream improvements in ODL
  - IPv6 only scenarios
  - Full overlay and underlay support
  - Additional install tool support
SDN VPN

• Bramaputra release – Basic Layer 3 VPN support via Open Daylight SDN VPN project support

• Colorado Updates
  – Full Layer 2 and 3 VPN support
  – BGP-based peering
  – Quagga BGP router integration
OPNFV Projects, continued

• Fast Data Stacks – VPP Integration
• Models – Model-Driven NFV
  – Currently developing use cases, test blueprints, focus on VNF on-boarding
  – Use standard models and model frameworks (Netconf/YANG and Tosca) for VNF configuration
  – Test models being defined in IETF, MEF, BBF, OMA, ETSI, 3GPP, and ETSI NFV in deployed NFV platform – agile and collaborative feedback based on implementation
  – Related projects: Parser (Yang/Tosca translation), SFC, Copper (policy mgmt using OpenStack Congress), Movie (Intent-based NBI)
Get Involved

- OPNFV: [https://www.opnfv.org/](https://www.opnfv.org/)
- OPNFV wiki: [https://wiki.opnfv.org/](https://wiki.opnfv.org/)
- OPNFV Colorado release: [https://www.opnfv.org/colorado](https://www.opnfv.org/colorado)
- Mailing lists:
  - opnfv-tech-discuss@lists.opnfv.org
  - opnfv-users@lists.opnfv.org
How can we work better together across open source projects and internet standards?