



OPNFV Introduction

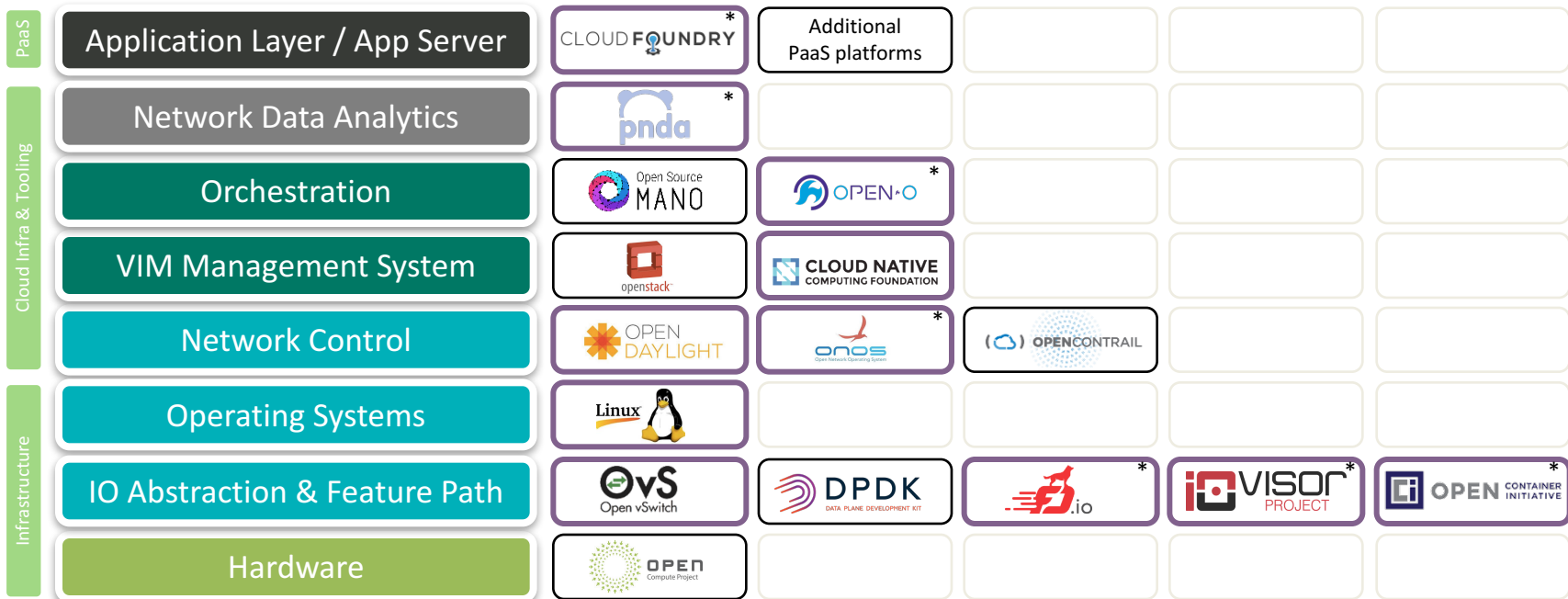
Heather Kirksey

Director, OPNFV

There are a large number of open source projects in the cloud, SDN, and NFV space.

OpenSource Building Blocks

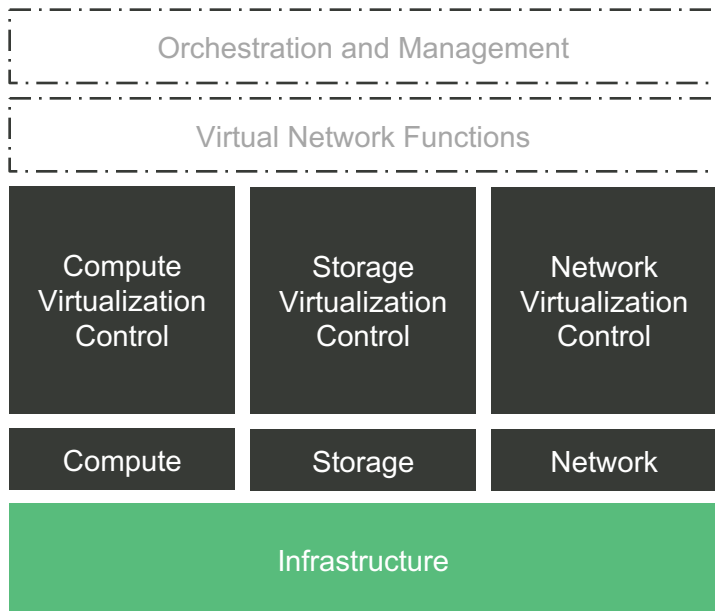
2015 – 2016: Several New LF Projects



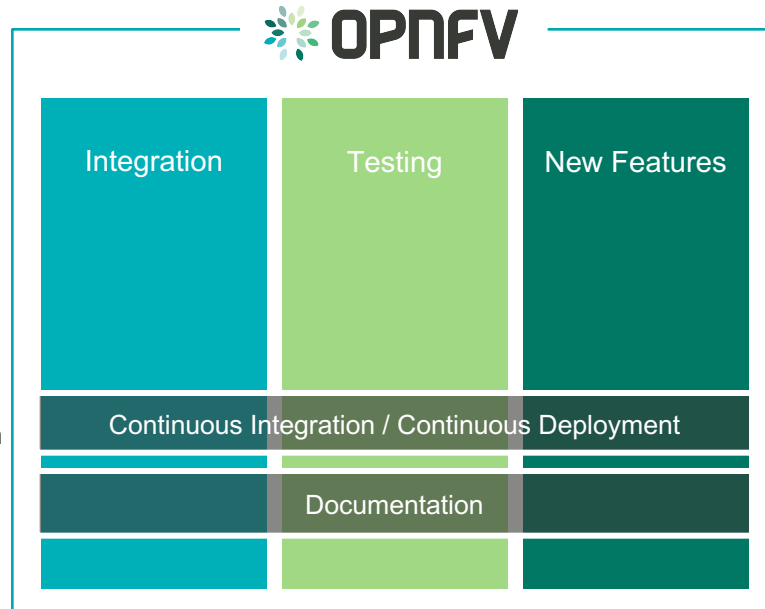
*New to LinuxFoundation in 2015/2016

“Systems integration as an
open community effort.”

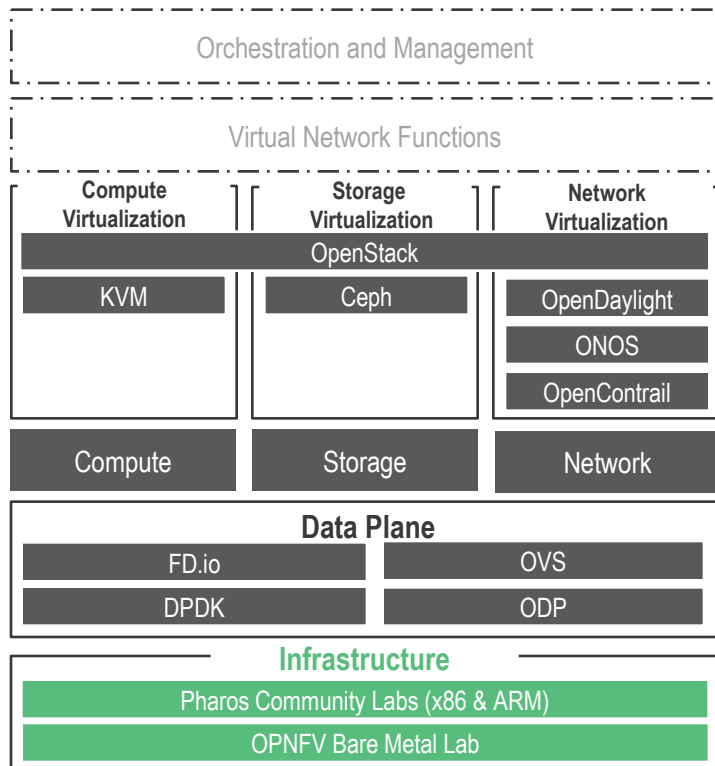
OPNFV Platform Overview



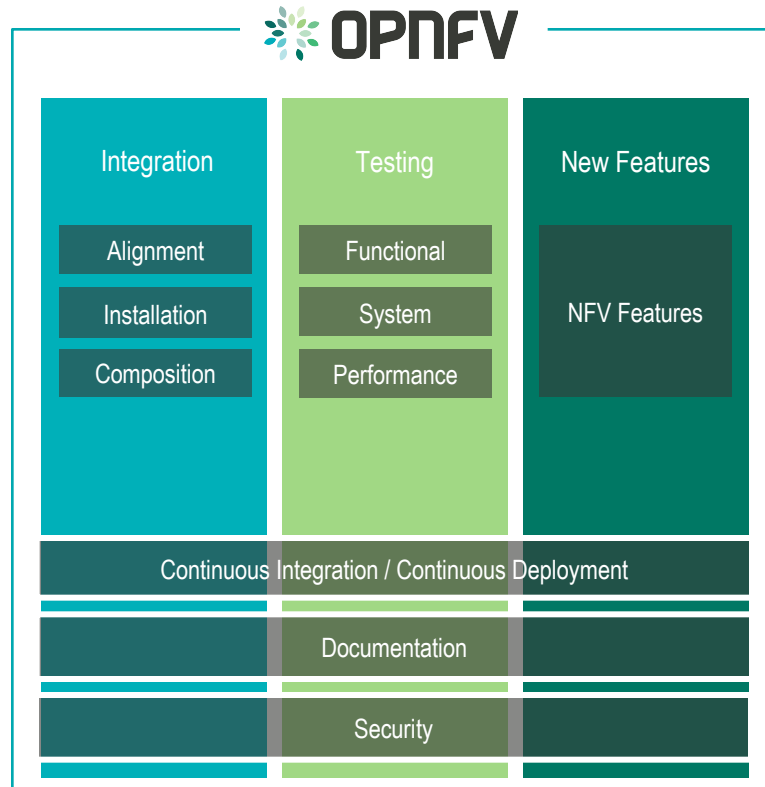
Upstream
Project
Collaboration



OPNFV Colorado Overview



Upstream Project Collaboration:



OPNFV Composes Scenarios



Scenario:

*“Deployment of a set of components
and their configuration”*

> Compose. Deploy. Test. Iterate.



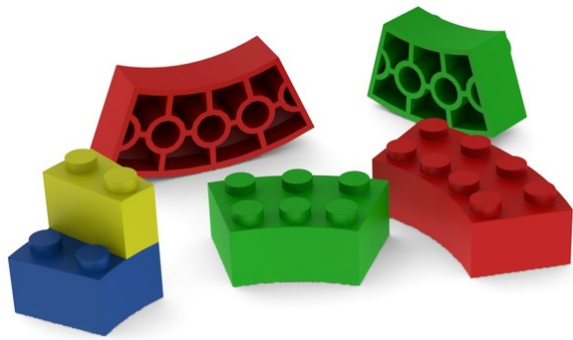
A scenario is a system of multiple upstream components.

> Compose. Deploy.



A scenario is a system.
Does it work?

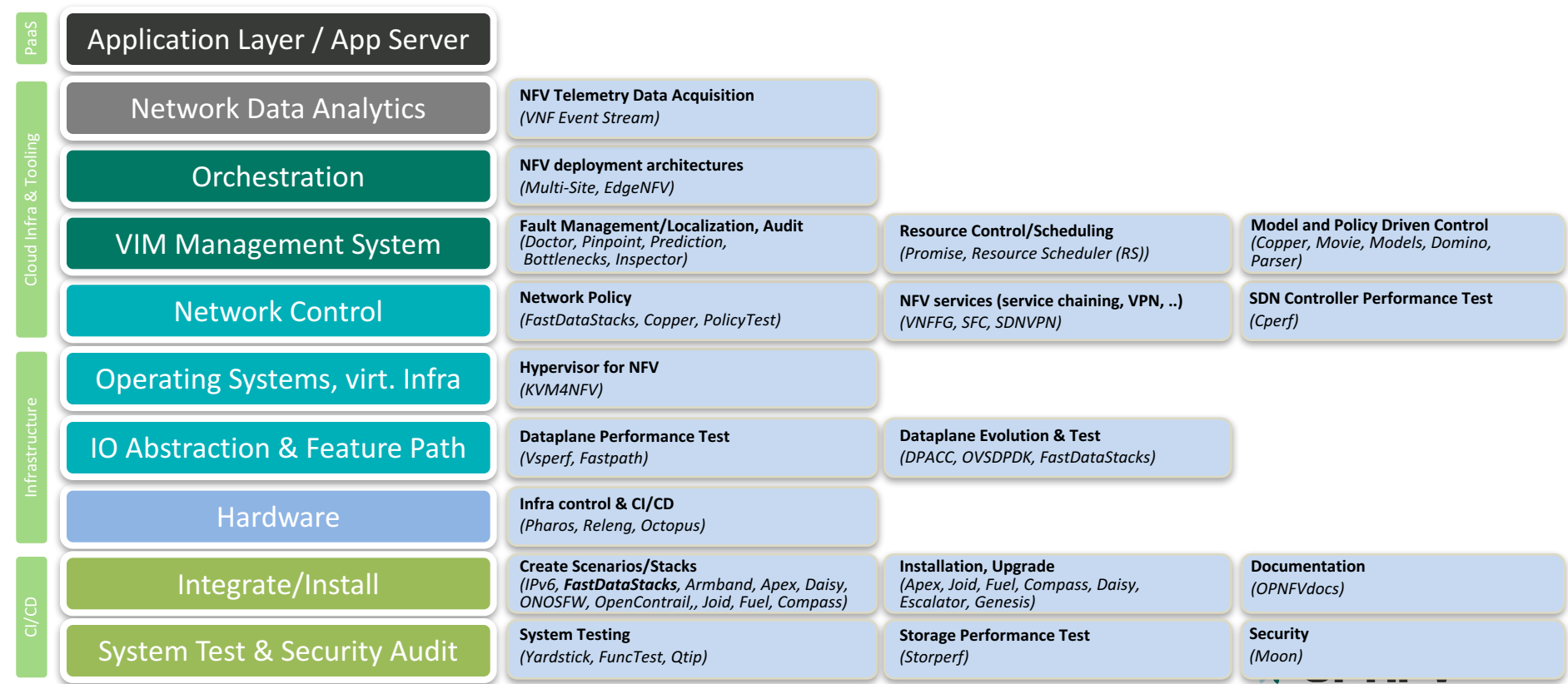
> Test.



Missing
Features/Components?

> Create

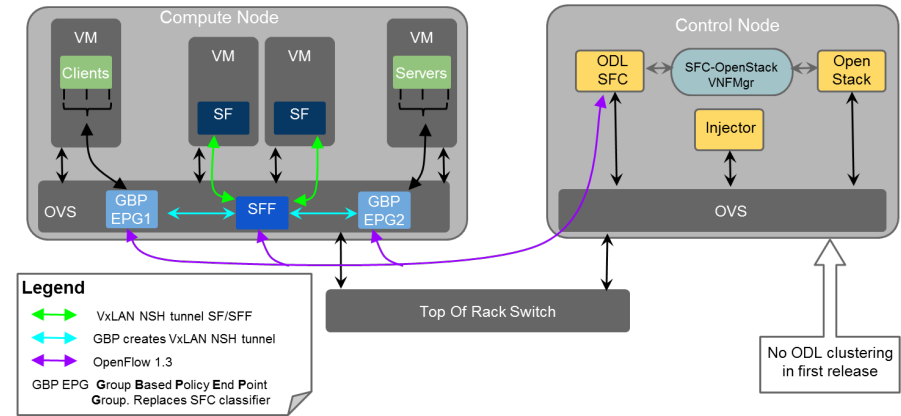
Integrate and Evolve Upstream in lock-step



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>

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

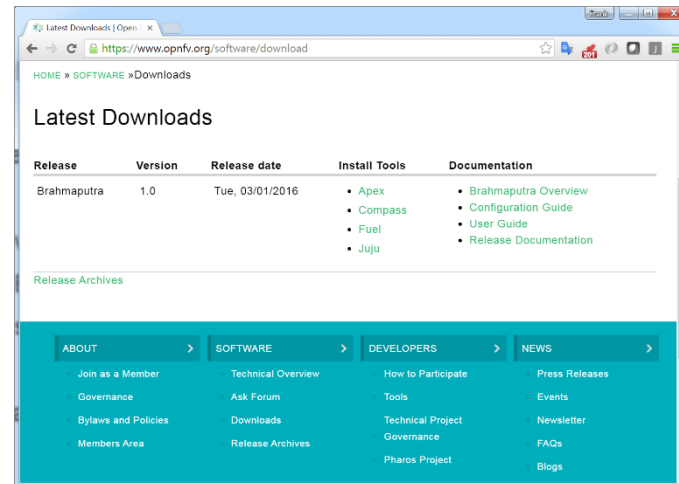
- Bramaputra release – Basic Layer 3 VPN support via Open Daylight SDN VPN project support
- Colorado Updates
 - Full Layer 2 and 3 VPN support
 - BGP-based peering
 - Quagga BGP router integration

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/>
- OPNFV wiki: <https://wiki.opnfv.org/>
- OPNFV Colorado release:
<https://www.opnfv.org/colorado>
- OPNFV stats:
<http://projects.bitergia.com/opnfv/browser/>
- 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?