



# OPNFV

## OPNFV Introduction

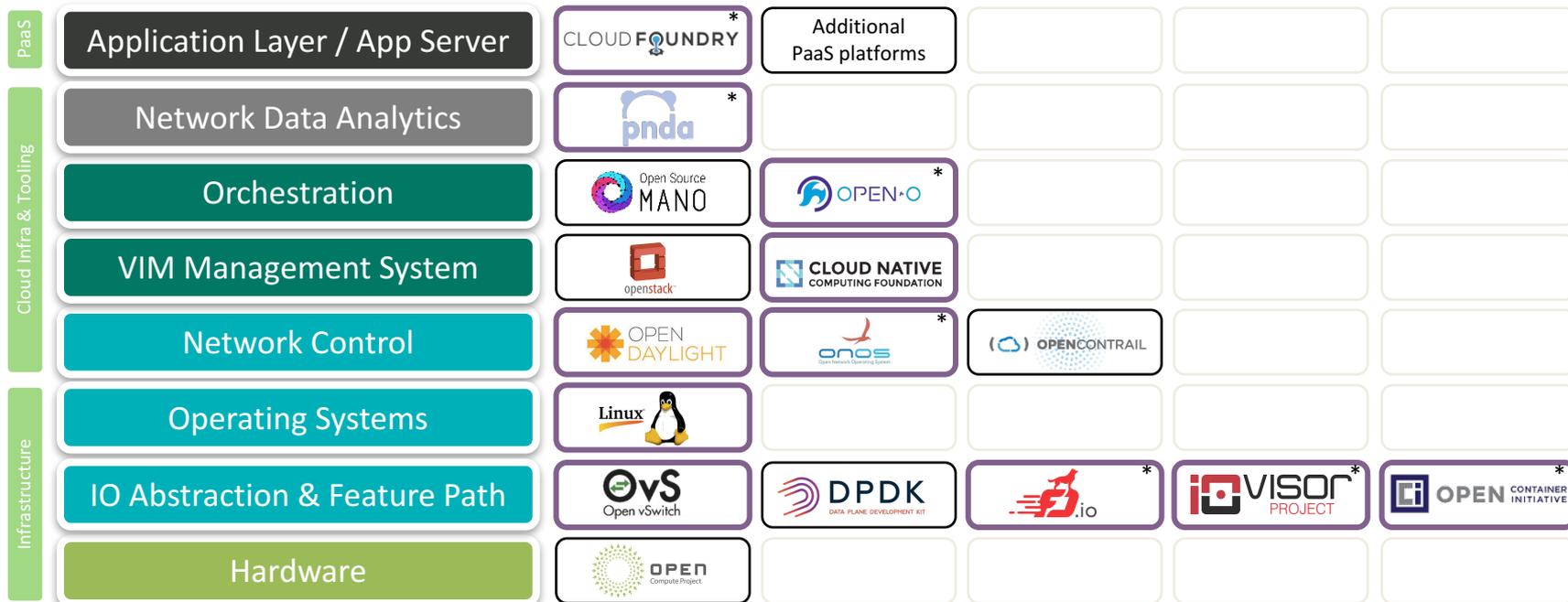
Heather Kirksey

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

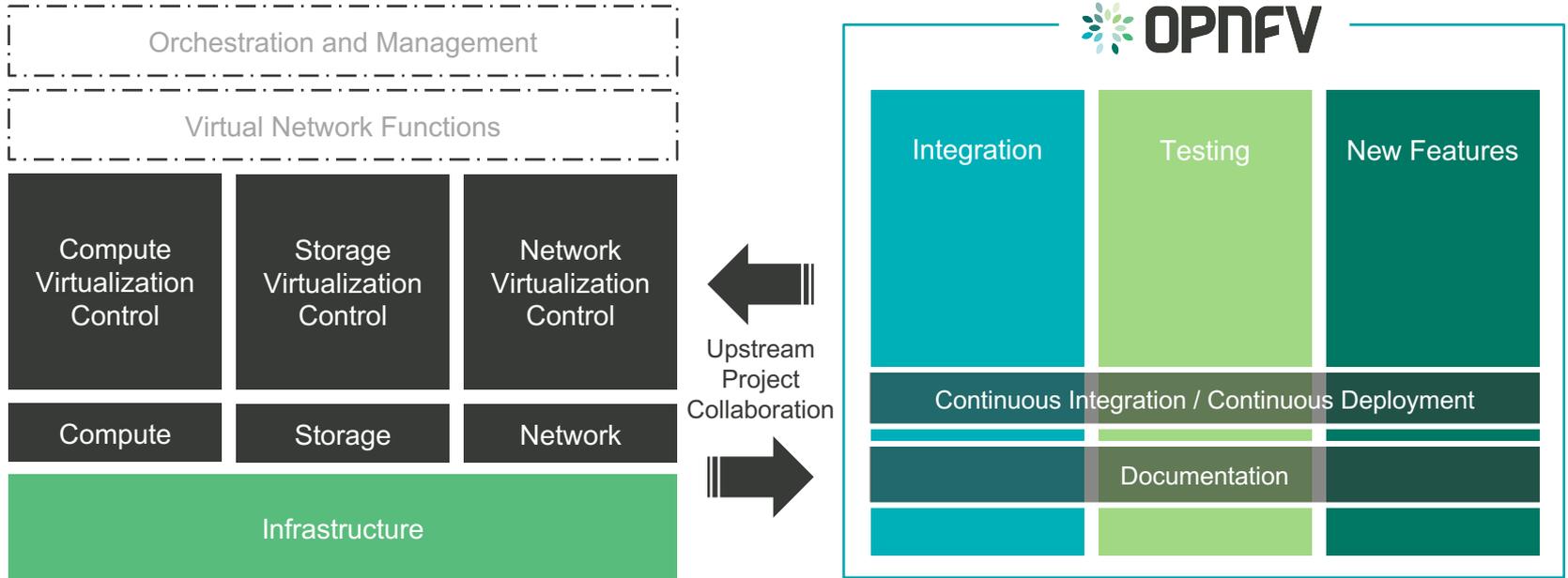


\*New to Linux Foundation in 2015/2016

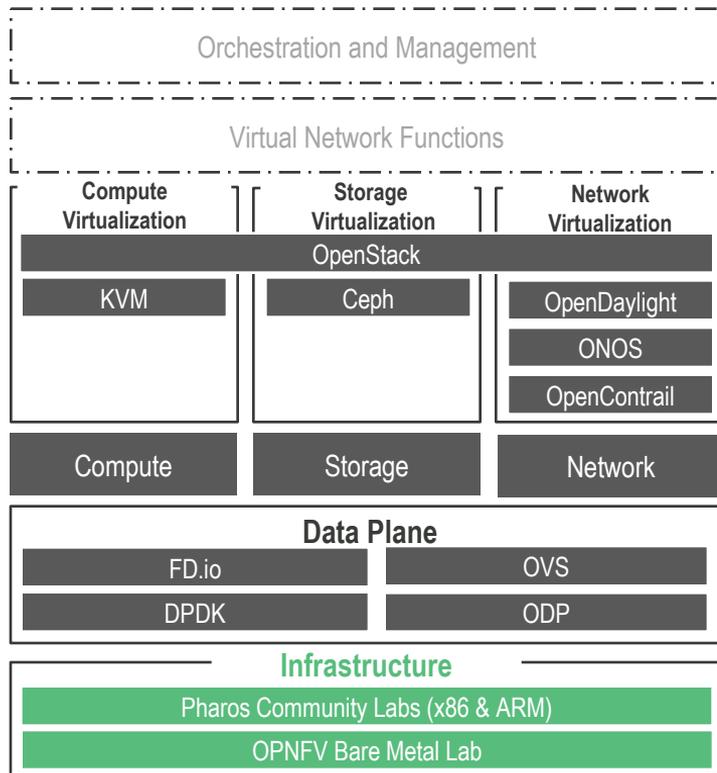


“Systems integration as an  
open community effort.”

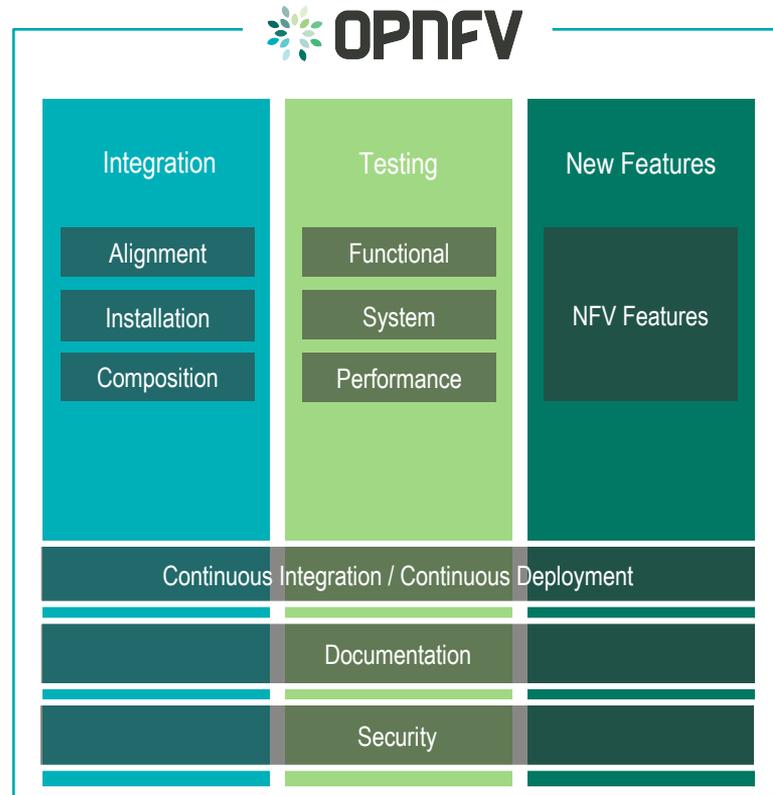
# OPNFV Platform Overview



# OPNFV Colorado Overview



Upstream Project Collaboration:



# OPNFV Composes Scenarios



Scenario:

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

> Compose. Deploy. Test. Iterate.



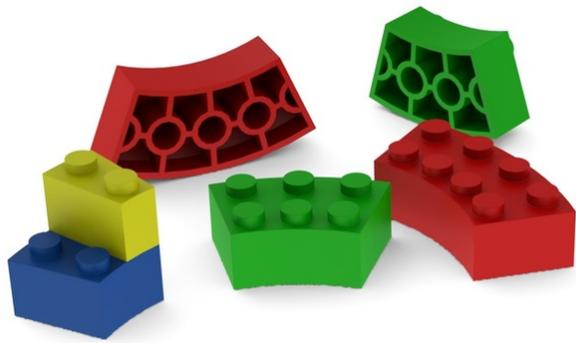
A scenario is a system of multiple upstream components.

> Compose. Deploy.



A scenario is a system.  
Does it work?

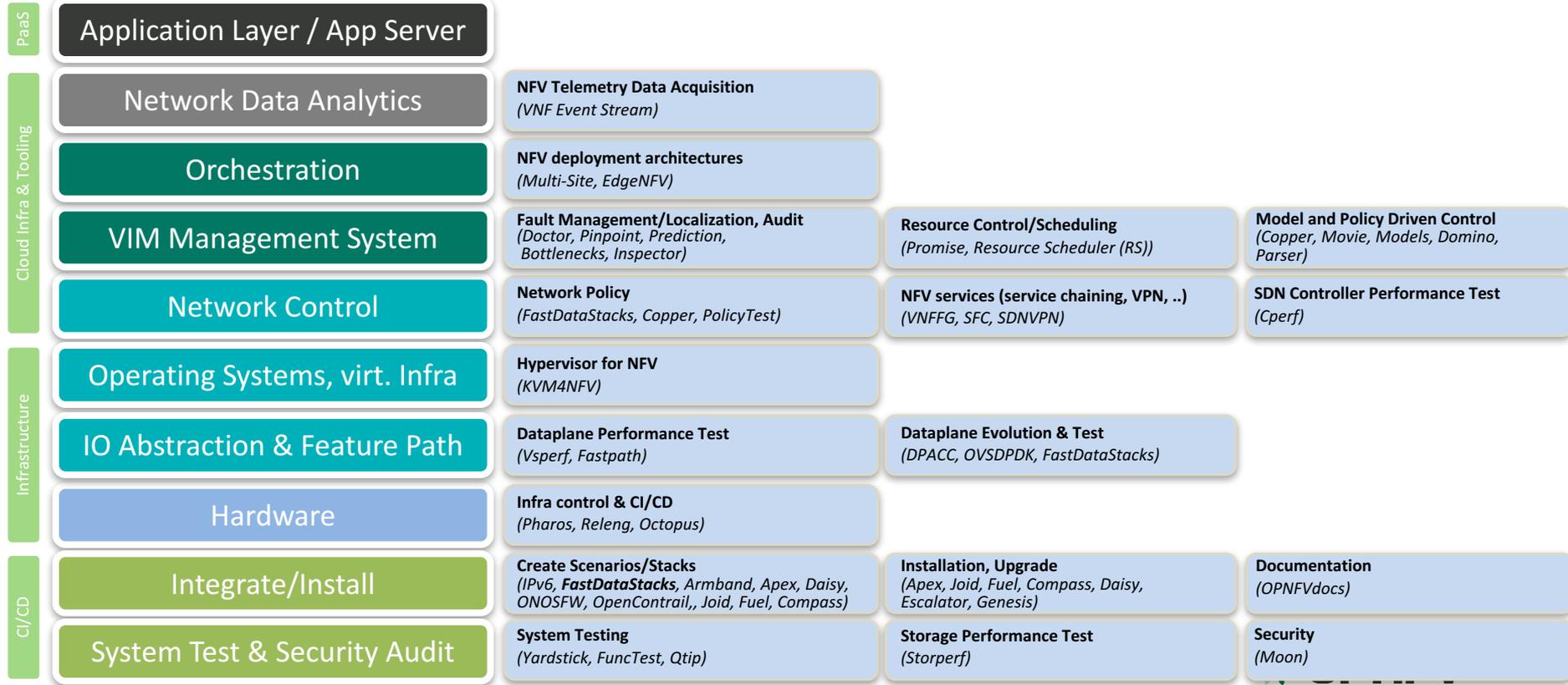
> Test.



Missing  
Features/Components?

> Create

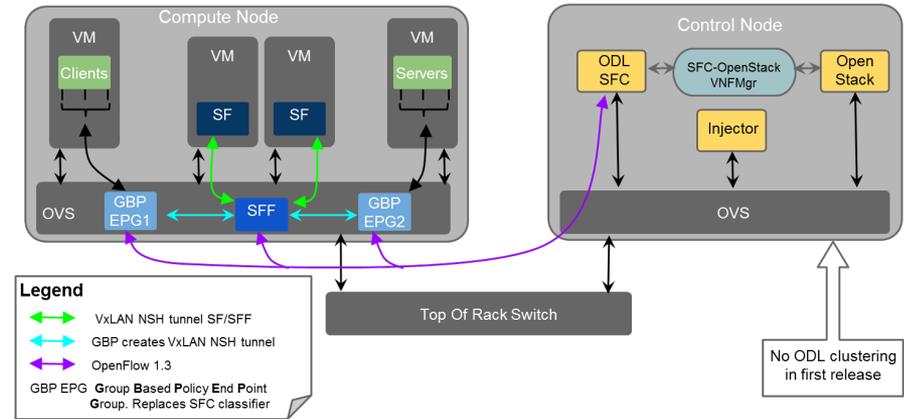
# Integrate and Evolve Upstream in lock-step



What are some of the projects that might interest routing area?

# OPNFV SFC Project

- Objective: Verify ODL SFC in system level deployments
- Brahmputra 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

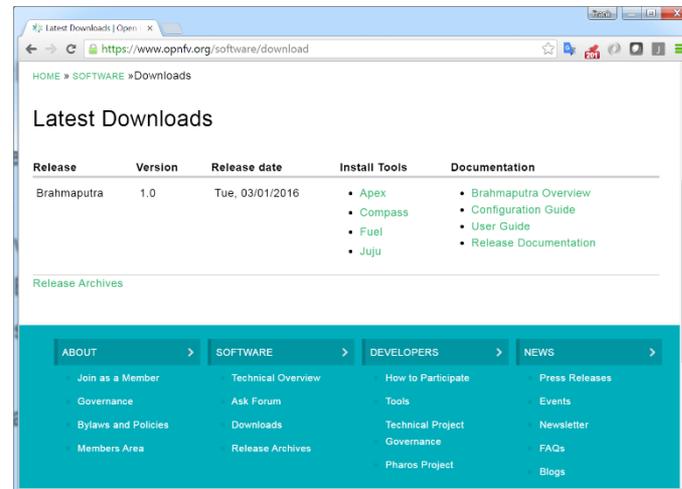
- Bramaputra release – Basic Layer 3 VPN support via Open Daylight SDN VPN project support
- Colorado Updates
  - Full Layer 2 and 3 VPN support
  - BGP-based peering
  - Quagga BGP router integration

# OPNFV Projects, continued

- Fast Data Stacks – VPP Integration
- Models – Model-Driven NFV
  - Currently developing use cases, test blueprints, focus on VNF onboarding
  - 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](mailto:opnfv-tech-discuss@lists.opnfv.org)
  - [opnfv-users@lists.opnfv.org](mailto:opnfv-users@lists.opnfv.org)





How can we work better together across open source projects and internet standards?