OPNFV and Brahmaputra Release Update

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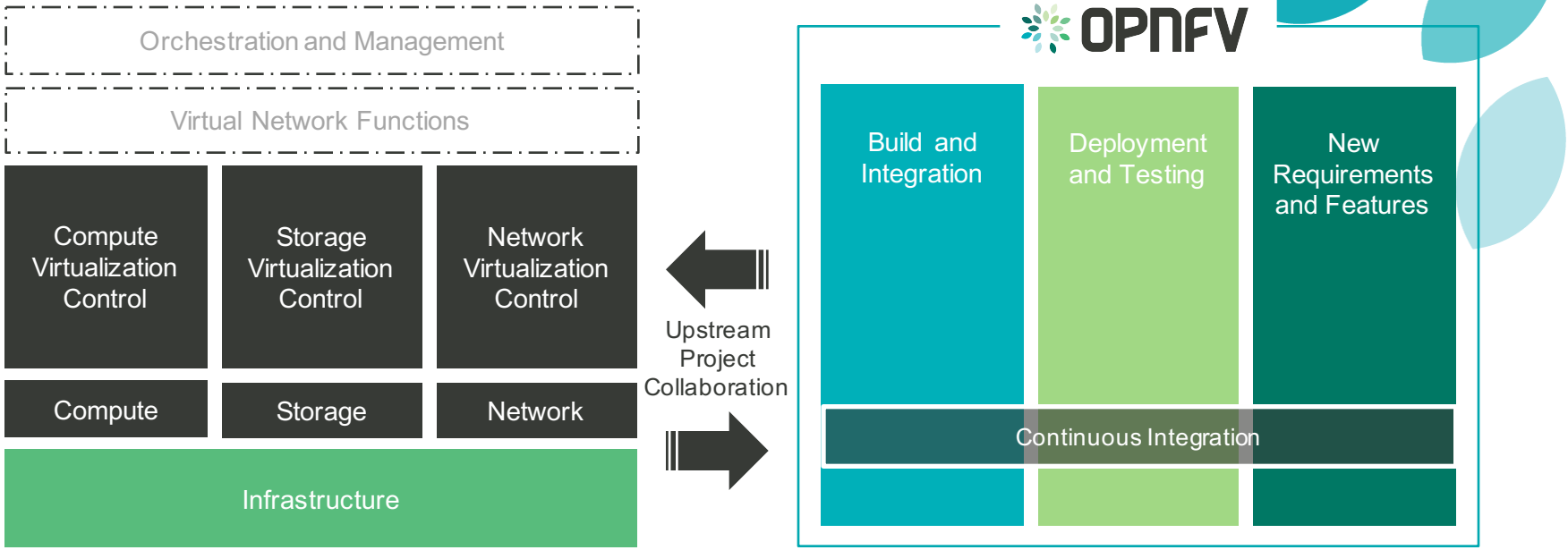
LINUX FOUNDATION
COLLABORATIVE PROJECTS

OPNFV is a carrier-grade, integrated, open source platform to accelerate the introduction of new NFV products and services.

OPNFV

OPNFV Platform Overview



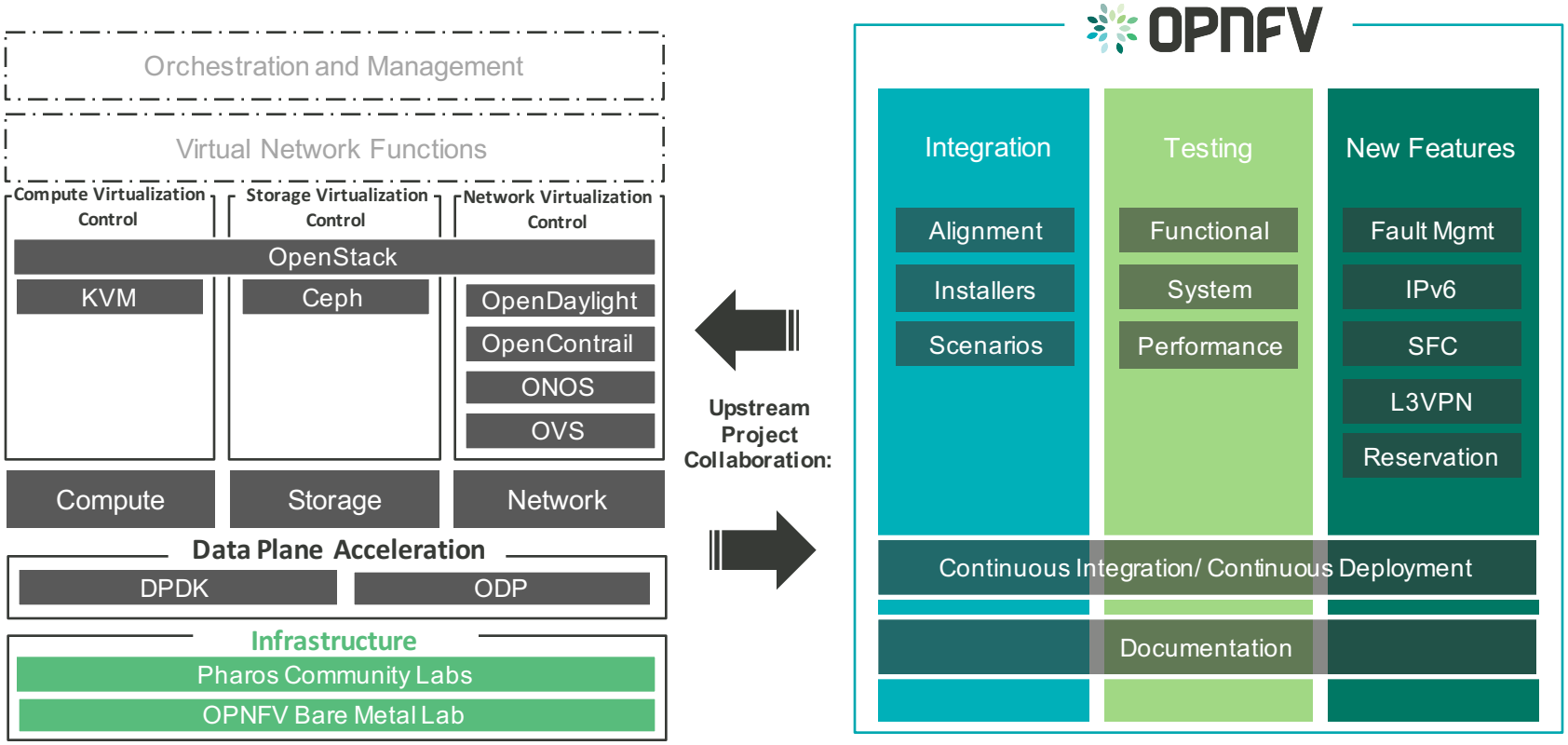
OPNFV

OPNFV
BRAHMAPUTRA

Brahmaputra – Marching toward Maturity

- Massively Parallel Simultaneous Release Process
  - 35 projects, 140+ developers
  - End-to-end feature realization
  - Incremental monthly release drops
- Scenarios
  - Significant increase in components tested and component and features combinations

OPNFV Brahmaputra Overview

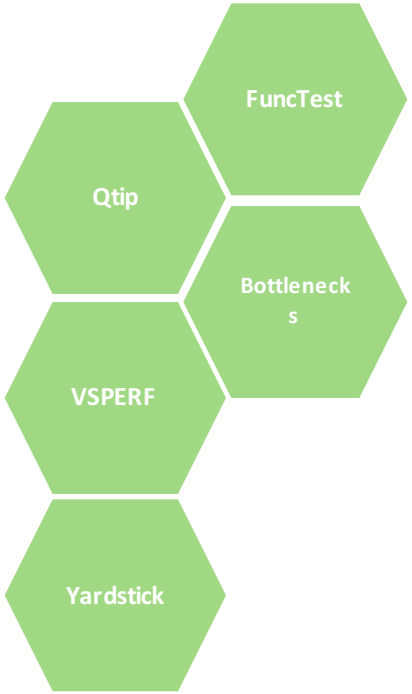


Collaborative Development Working Upstream

- OPNFV Requirements Gathering and Gap Analysis
- Upstream and/or OPNFV Code Development
- New releases of Upstream Components Available
- OPNFV Integration, Validation, and Automation work
  - Install/Deploy
  - CI/CD and scenario definitions
  - Testing (Functional, System, Performance)

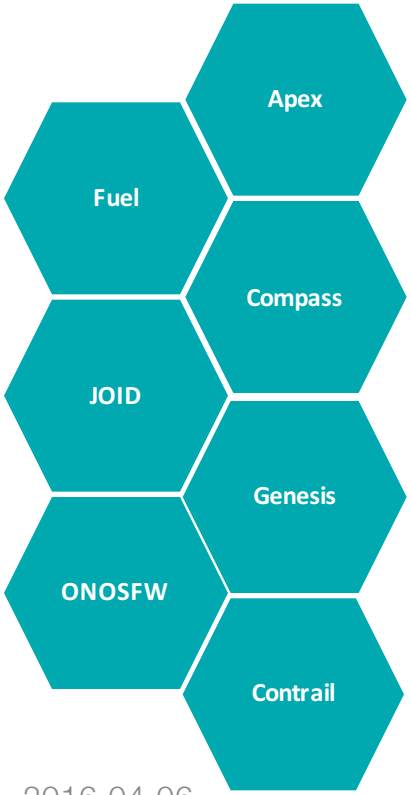
OPNFV

Testing Enhancements



- Fivefold increase in testing projects
- Functest: component testing, increase in number and types of tests
- Yardstick: System level testing based on ETSI TST 001 spec
- VSPerf: virtual switch characterization
- Qtip: Bottom-up system characterization
- Bottlenecks: bottleneck focused platform testing framework

Increased Breadth in Deployment and Integration



- Breadth of Open Source Innovation
- Additional install/deploy tools
- OpenStack
- Additional SDN Controllers + native Neutron networking
- 2 -> 20+ scenarios supported
  - Installer, SDN, bare metal vs. virtualized, features, HA, features, framework options

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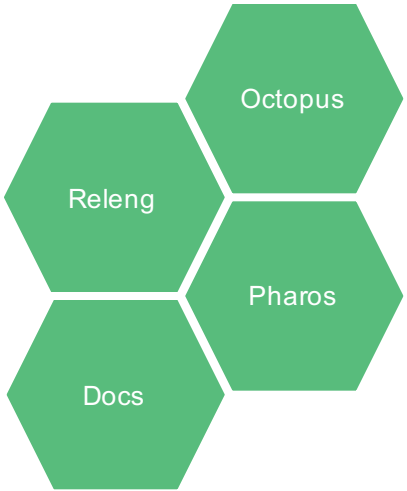
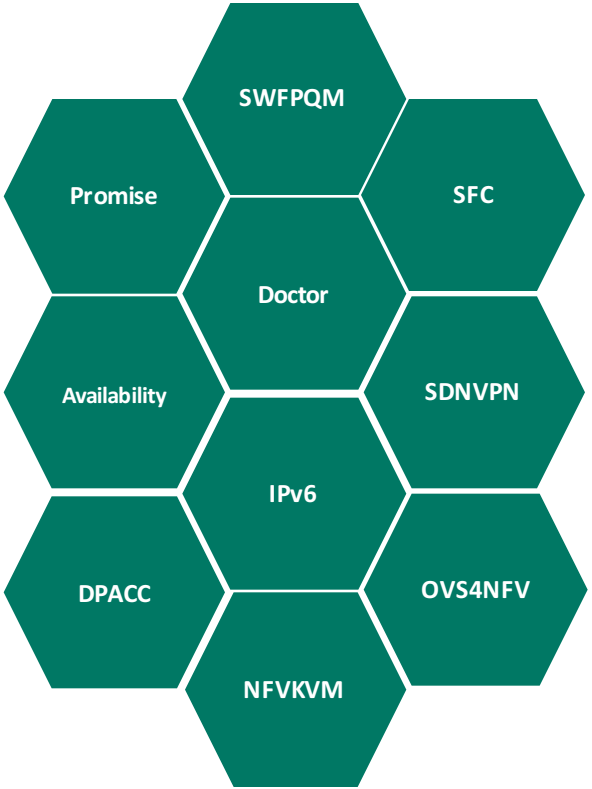
Infrastructure and Testing Environments



- Advances in Pharos governance and participation
  - Pharos labs participating in release activities + development
  - First Arm-based lab joined Pharos
- Significant automation work on Jenkins-based CI/CD toolchain
- Additional documentation and documentation automation

Carrier Grade Feature Enhancements



- Significant Upstream Collaboration
- Fault Management
- SFC
- L3VPN
- IPv6
- Resource Reservation
- Performance Enhancements throughout the platform (Data plane, KVM, OVS)

What's Next

- Much much much more of the same
- Plugfest!!
  - Join the Dovetail project and contribute
- Testing and Infra Improvements
  - SDN Controller & Storage Performance, Policy testing
- Full ARM Support
- Continued advances in carrier grade features, including L2VPN, Policy Mgmt, Security, Multisite, Upgrades, etc.
- Container Support
- MANO
- Forwarding and Data Plane Improvements

Now It's Time to Join the Party

Resources to help you get started

- Website: (https://www.opnfv.org)
- Wiki's: (https://wiki.opnfv.org/)
  - Developer on-boarding: https://wiki.opnfv.org/developer/on-boarding
  - Releases: https://wiki.opnfv.org/releases
  - Approved projects: https://wiki.opnfv.org/approved_projects
- Mailing lists: (lists.opnfv.org)
  - opnfv-marketing-committee@lists.opnfv.org: OPNFV Marketing Committee (Members Only)
  - opnfv-tech-discuss@lists.opnfv.org: general technical discussions
  - opnfv-tsc@lists.opnfv.org: discussions with the Technical Steering Committee (TSC)
  - opnfv-users@lists.opnfv.org: OPNFV community support

Questions?

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