

OPEN. FOR BUSINESS.

Networking Interoperability Testing Convergence

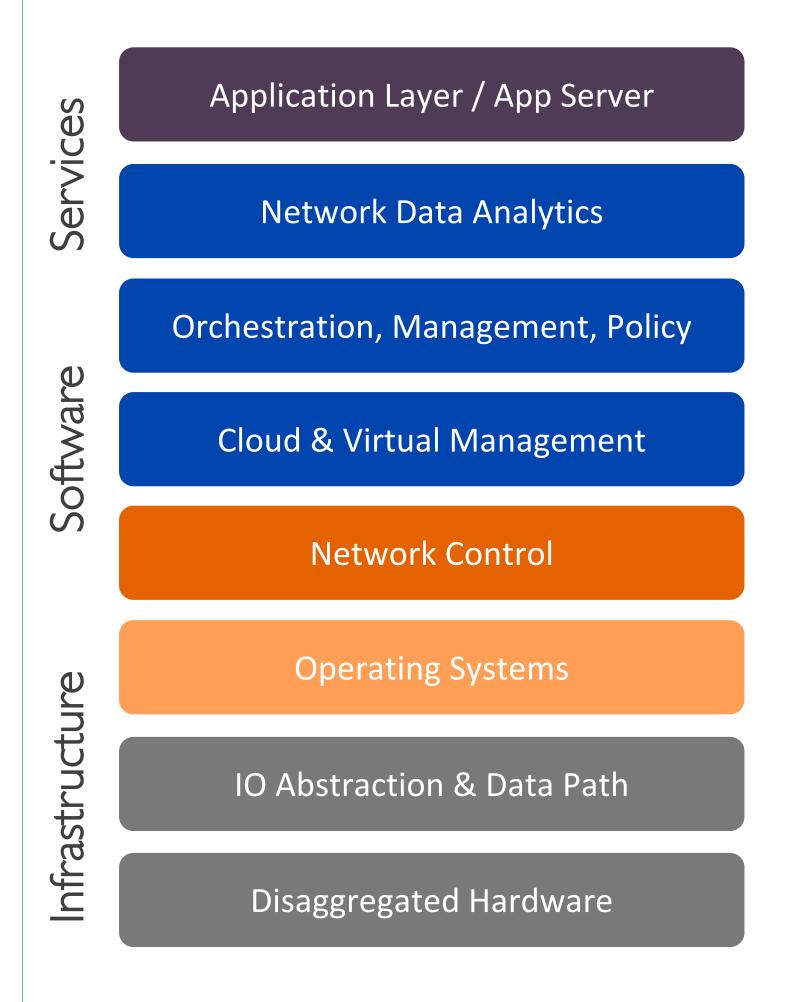
Ray Paik
Operations Manager
Linux Foundation

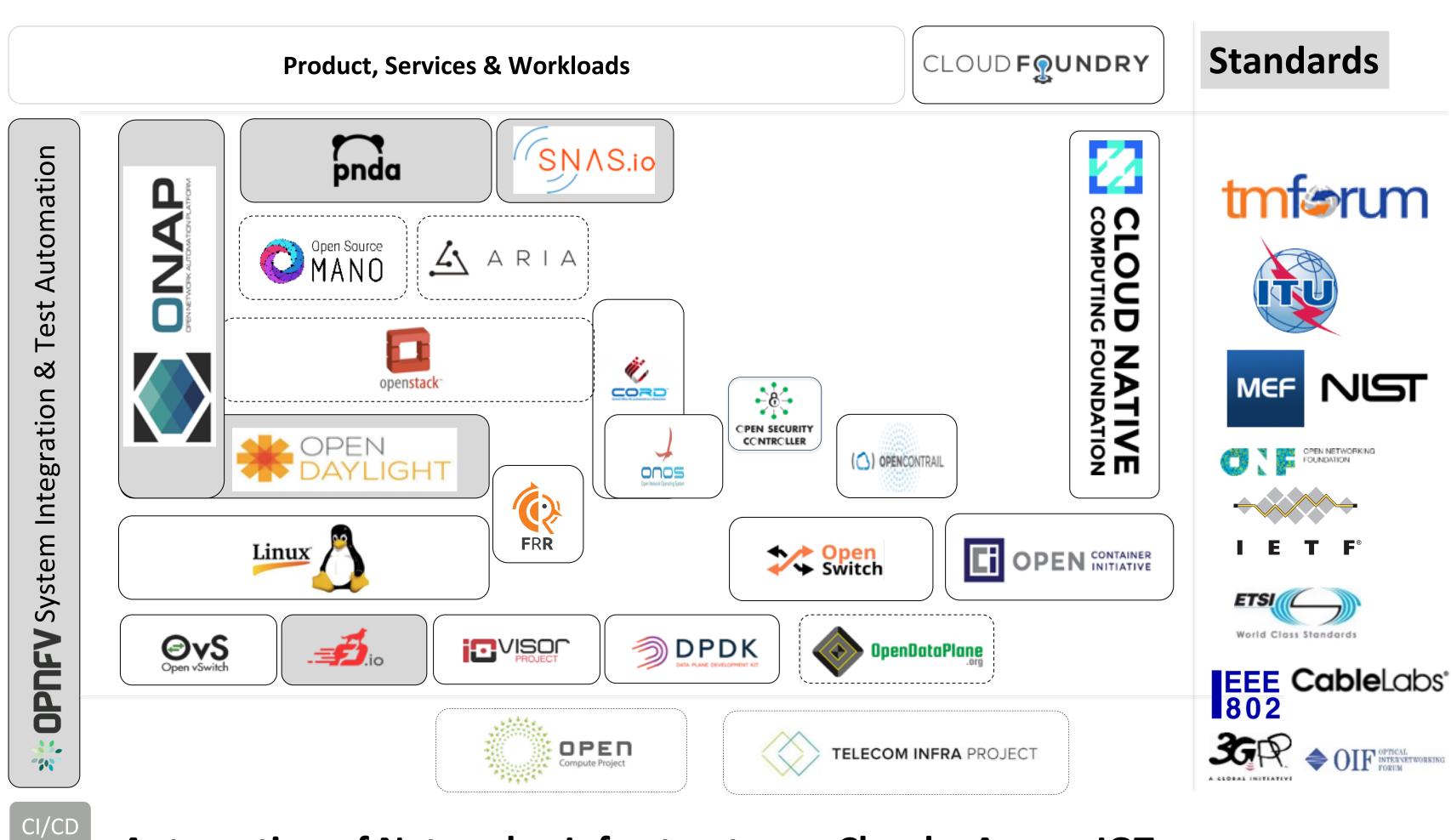


Agenda

- › Open Source Networking and OPNFV
- > What is OPNFV Plugfest?
- > OCP at OPNFV Plugfests
- > Future collaboration

Open Source Networking Landscape

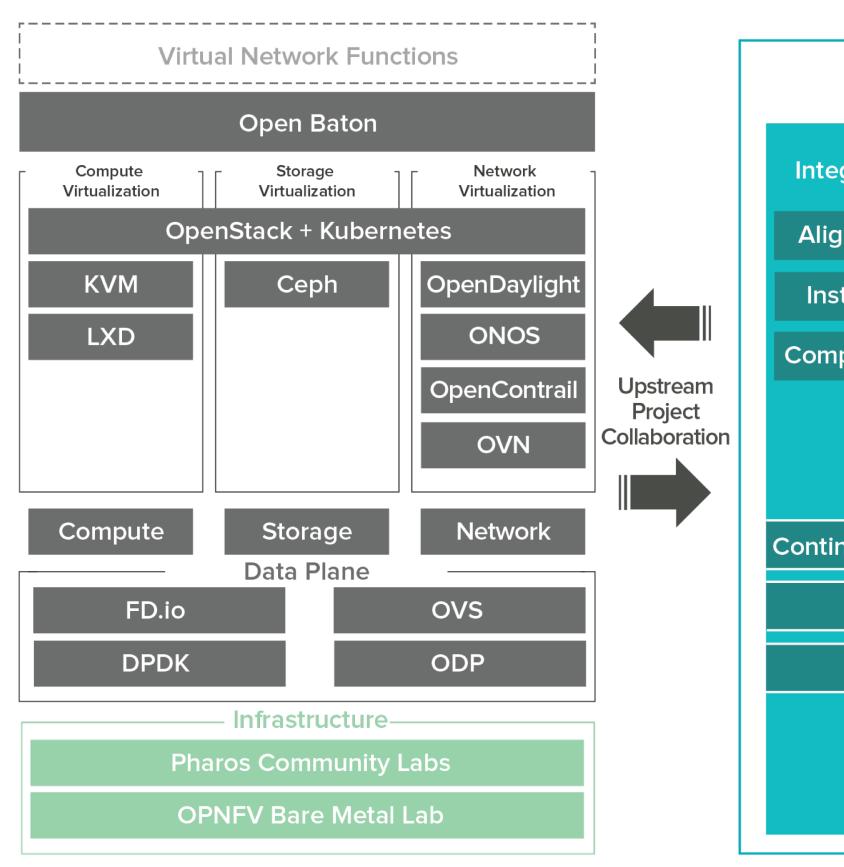


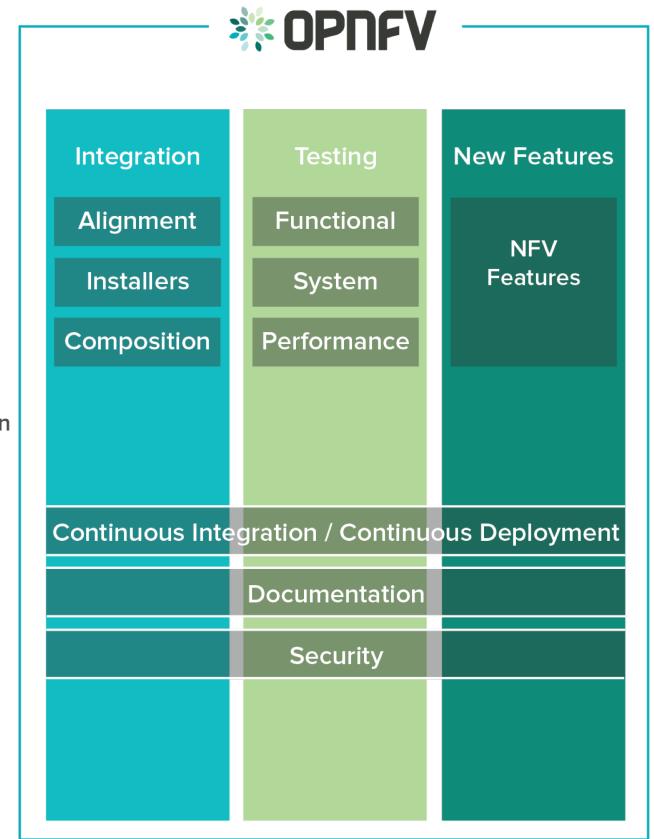


Automation of Network + Infrastructure + Cloud + Apps + IOT



What is OPNFV?







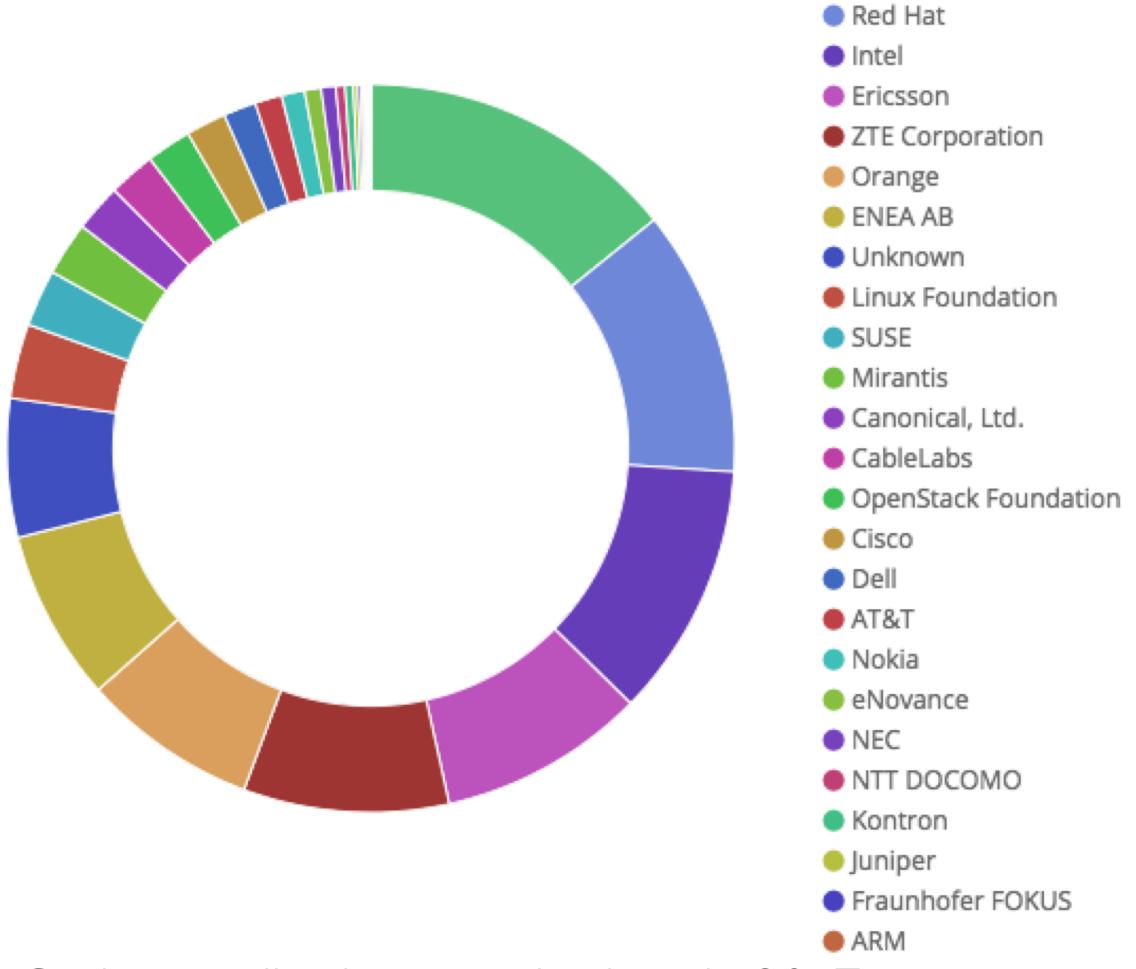




The Linux Foundation Internal Use Only

OPNFV Community

Creates a reference NFV platform through system level integration, deployment and testing.	
Project launched	September, 2014
Number of releases	5
Planned releases in 2018	Two release per year: Fraser (April) + Gambia (October)
Number of Projects	53



Code contributing organizations in 2017

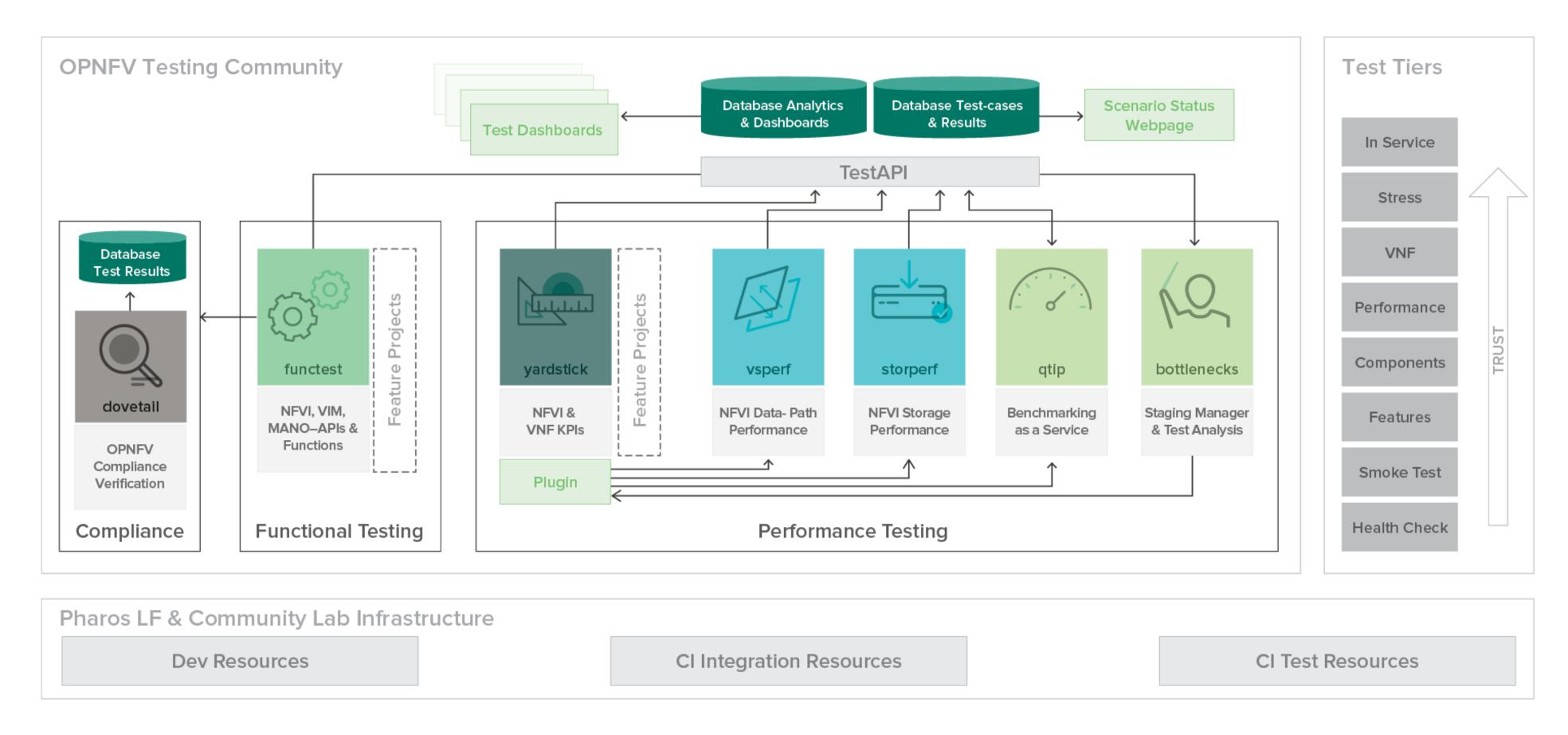
More details available at https://opnfv.biterg.io





Huawei

OPNFV Testing Community



http://testresults.opnfv.org/reporting/index.html





OPNFV Verified Program

Infrastructure

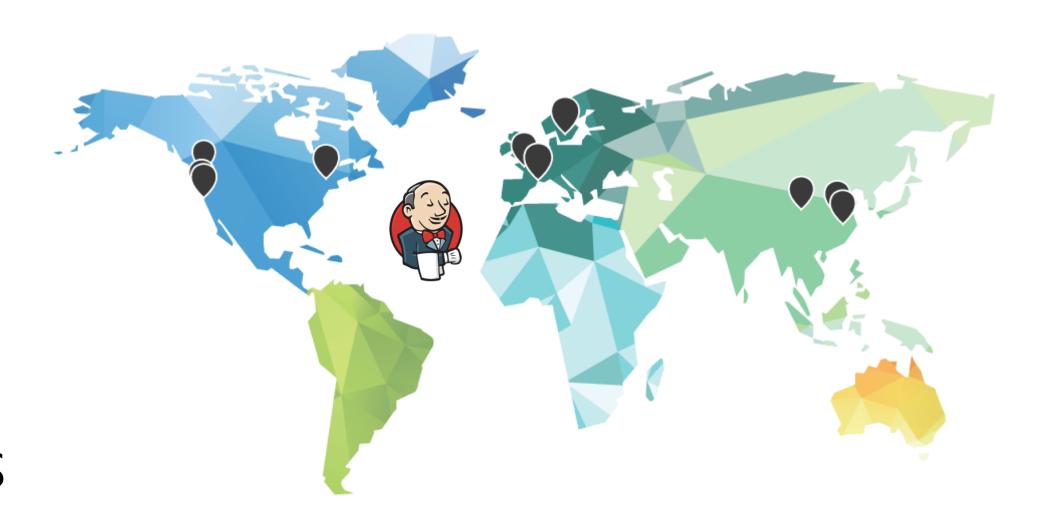
2018.01

- Announced Feb 6, 2018
- Demonstrates the readiness and availability of commercial products based on OPNFV
- Uses an open source platform as referent to measure compliance of commercial products—a new and innovative step for the industry
- Automated test suite developed by the OPNFV community
- Initial version tests infrastructure layer of the NFV stack
- Supports both self-testing and third-party lab testing
- Expands market for OPNFV-based infrastructure and applications
- More details at:
 - > Overview Page: https://www.opnfv.org/verified
 - > Portal: https://verified.opnfv.org



OPNFV Community Hardware Resources: Pharos project

- > Facilitate collaborative testing
- > Provide developers with substantial resources
- Ensure OPNFV applicability across architectures, environments and vendors
- Create more robust, interoperable releases
- It'd be great to welcome new Pharos labs with latest & greatest OCP servers...

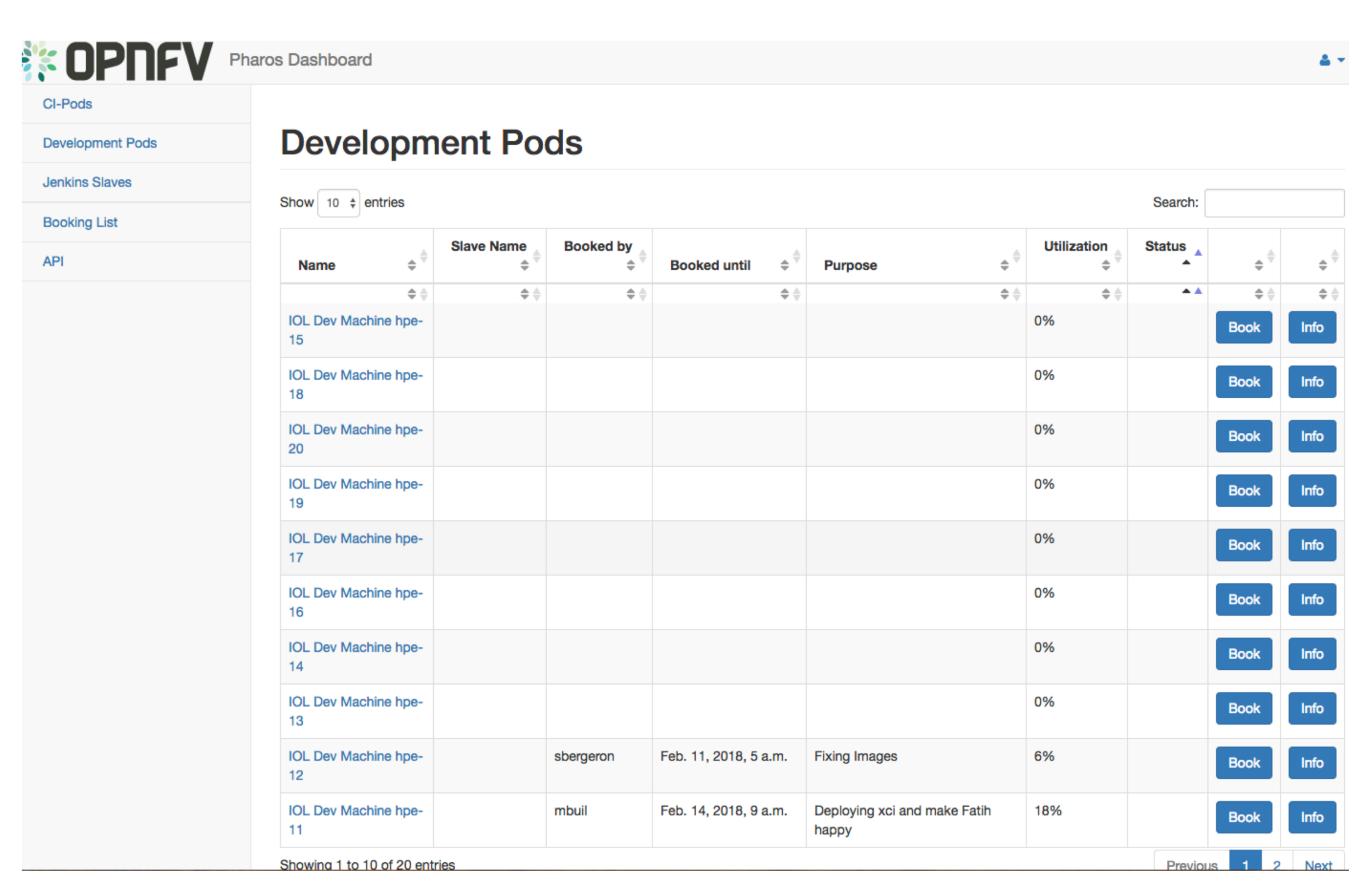


https://www.opnfv.org/developers/pharos
https://wiki.opnfv.org/display/pharos/Pharos+Home
https://wiki.opnfv.org/display/INF/Lab+as+a+Service



OPNFV Community Hardware Resources: LaaS

- A new infrastructure with readily installed scenarios for testing, development, etc.
- Mix of Intel (38) and ARM (14) based servers + switches
 - > Note: No OCP HW yet
- More info at
 https://wiki.opnfv.org/display/INF/
 Lab+as+a+Service



https://labs.opnfv.org/



OPNFV Plugfest

- A weeklong event where participants work on the interoperability of OPNFV platform such as deployment/test, network integration, VNF applications, etc.
- > This is a public event and is free of charge
 - > Participation from non-members and service providers in all our Plugfests
 - > Participants are required to sign the Rules of Engagement
- > Plugfest is held following each major OPNFV release
 - > Brahmaputra Plugfest: Hosted by CableLabs in Loiusville, CO
 - Colorado Plugfest: Hosted by University of New Hampshire-InterOperability Lab in Durham, NH
 - Danube Plugfest: Hosted by Orange in Chatillon, France
 - > Euphrates Plugfest: Hosted by Intel in Hillsboro, OR



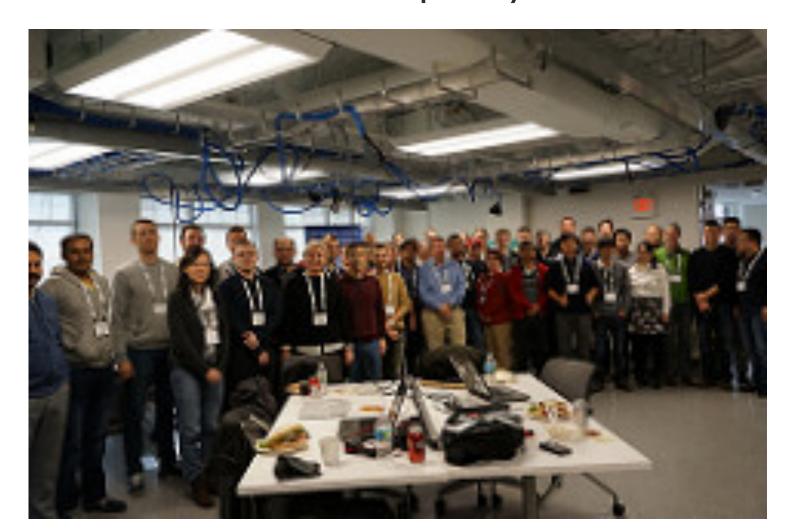
Brahmaputra Plugfest



- Deployment/Testing of OPNFV on different hardware/installer combinations
- > SDN controller integration with different installers
- > VNF applications running on OPNFV Brahmaputra

Colorado Plugfest

- Open Compute Project(OCP) based hardware
 - Lenovo OP@L + Nokia
 Airframe
- MANO (Open-O) integration with OPNFV
- > Multi-site deployment



Danube Plugfest



- Continued multi-site testing with an "Edge" server
- > MANO & Full stack testing
- Stress testing with commercial load/traffic generators

Euphrates Plugfest

- Container orchestration
- > VNF onboarding
- > Cross Community CI (XCI)
- Installer teams' hands-on sessions



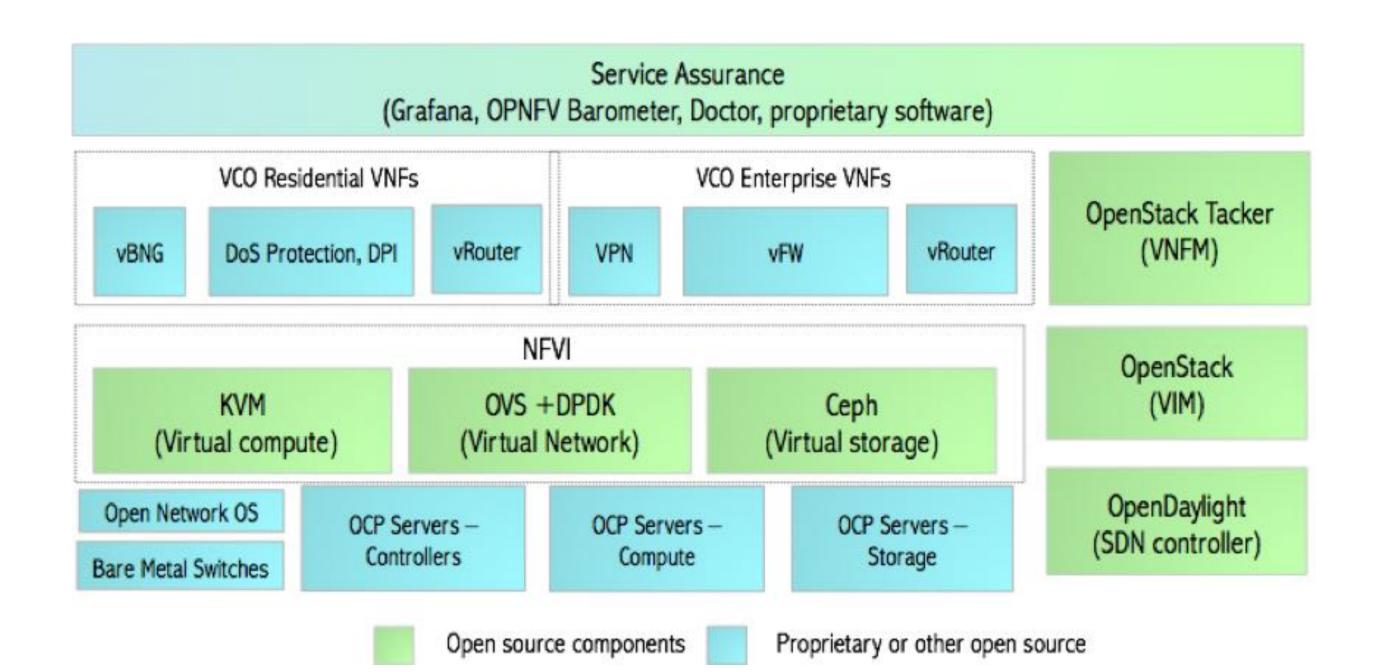
Future Collaboration

- > Fraser Plugfest: A co-located OPNFV Plugfest/ETSI PlugTest on June 4 8, 2018 in Sofia Antipolis, France (ETSI campus)
 - > Event info:
 - > Event wiki page: https://wiki.opnfv.org/display/EVNT/Plugfest+-+Fraser+Release
 - > Will include details on bi-weekly planning calls, registration info, etc.
 - > Testing the latest OPNFV Fraser release
 - > Contributing new test cases for ETSI
 - > Evolution of XCI, testing projects, etc.
 - We'd like to work with more OCP community members and OCP networking products at future Plugfests
 - > OCP products in past events were limited to servers
 - > Equipment can either be on-site or remote



Another Collaboration Opportunity

- > Virtual Central Office (VCO) demo
 - > OPNFV brought Network Functions Virtualization (NFV) and software defined networking (SDN) technologies to the Central Office (CO) with OpenDaylight for residential and enterprise services
 - > Whitepaper, brief, videos from the first demo available here: https://www.opnfv.org/resources/virtual-central-office
 - > VCO demo 2.0 w/ mobile in progress: https://wiki.opnfv.org/display/OSDD/VCO+Demo+2.0+Home
 - > Exploring options for connecting with and/or replicating on all-OCP lab



KEY OPEN SOURCE PROJECTS:

- Open Compute Platform (OCP)
- OpenDaylight
- OPNFV
- OpenStack

RAPID DELIVERY OF DEMO:

- 28 volunteers
- 10 companies
- 3 weeks

DEMOS CREATED:

- Residential VCO
- Enterprise VCO

SHOWN AT OPNFV SUMMIT:

- Keynote stage Demo
- Booth Demo

Resources

- > Plugfest wiki page: https://wiki.opnfv.org/display/EVNT/Plugfest
- > Plufest reports:
 - https://www.opnfv.org/wpcontent/uploads/sites/12/2016/11/inaugural_opnfv_plugfest_report.pdf
 - https://www.opnfv.org/wpcontent/uploads/sites/12/2017/02/OPNFV_Plugfest_II_Report_FINAL.pdf
 - > https://www.opnfv.org/wp-content/uploads/sites/12/2016/11/OPNFV_Plugfest_III_FINAL.pdf
 - https://www.opnfv.org/wpcontent/uploads/sites/12/2018/02/OPNFV_Plugfest_December2017_FINAL.pdf
- > Plugfest Rules of Engagement: https://wiki.opnfv.org/download/attachments/2925678/plugfest_opnfv_plugfest_rules_of_engagement_02-23-2016.pdf?version=1&modificationDate=1458848730000&api=v2



