

Accelerating Business with OpenStack and OPNFV

What is NFV?

Network Functions Virtualization (NFV) is an evolving transformation of global network architecture. Moving away from single-function hardware, NFV helps telecoms and enterprises move toward an elastic, cloud, software-based network that offers streamlined service provisioning, lowered CapEx and OpEx, and significant agility. NFV enables you to meet skyrocketing network demands while accelerating new service offerings.

OPNFV and OpenStack

OPNFV: Accelerating NFV

Open Platform for NFV™ (OPNFV™) is a carrier-grade, integrated, open source platform that facilitates the introduction of new NFV products and services. OPNFV, built on widespread collaboration across many telecommunications providers and enterprises, integrates the work of standards bodies, open source communities and commercial suppliers to deliver a functional, standard NFV platform. OPNFV offers users selectable integrated components and system-level functionality, as well as automated testing and deployment. OPNFV is using OpenStack® today as the Virtualized Infrastructure Manager (VIM) solution.

OpenStack: The Foundation for NFV

NFV is essentially a fit-for-purpose cloud used for deploying, orchestrating and managing virtual network functions. OpenStack provides the foundation for the NFV Infrastructure (NFVI) and Management and Orchestration (MANO) components of the ETSI NFV specification, offering management from a single pane of glass and common security, identity services, APIs, policies and user interfaces. NFV-required features are continuously incorporated into existing and new OpenStack projects.

OpenStack and OPNFV: Ground breaking innovation

Open source projects such as OpenStack and OPNFV are proven to facilitate innovation. Though OpenStack and OPNFV are broader in scope than one another, the large intersection of both projects is working to accelerate open source NFV. The developer communities share many members and work across projects using similar processes, meet specific user requirements and advocate new NFV features. The combination of OpenStack and OPNFV allows you to tap into the most comprehensive set of NFV capabilities available today. You'll also be on the leading edge of network development and innovation — giving your organization the flexibility it needs as NFV evolves.

"86% of respondents agree that 'OPNFV will accelerate the adoption of NFV'. The majority cited open source project OpenStack as very important to the project's success." – Heavy Reading¹

Key benefits

OPNFV with OpenStack helps organizations like yours move away from proprietary networking. The benefits include:

- ✓ Reduced capital expenditures
- ✓ Accelerated deployment
- ✓ Network agility
- ✓ Programmatic operations
- ✓ Open standards
- ✓ Proven innovation
- ✓ Vendor support

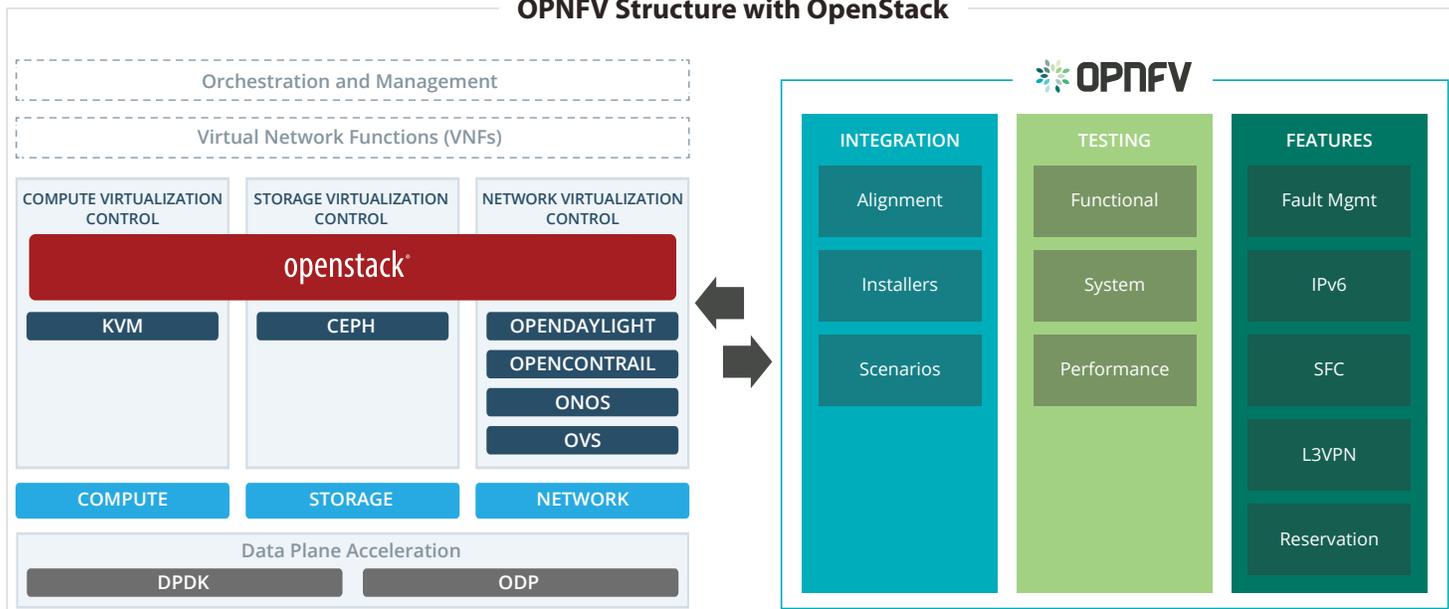
Global telecoms bet on OPNFV and OpenStack

Some of the world's largest global telecommunications companies are exploring and implementing OPNFV and OpenStack for their NFV implementations, including AT&T, China Mobile Ltd, NTT DOCOMO INC, Orange, SK Telecom, and Telecom Italia.

China Mobile, Ltd. is the leading mobile services provider in mainland China. The company is a founding member of OPNFV and an early sponsor of the Open-Orchestrator (OPEN-O) Project.²

“To keep up with the exponential usage growth of its network, AT&T is deeply committed to using open source networking technologies in our software-centric network. As we work to virtualize more of our network and implement a common infrastructure for VNFs, OpenStack and OPNFV will become important parts of our technology stack.” – Margaret Chiosi, Distinguished Technical Architect, AT&T

OPNFV Structure with OpenStack



Exploring the possibilities of OPNFV with OpenStack

Resources

Read white papers, review reference architectures and watch presentations at:

 <https://www.openstack.org/telecoms-and-nfv/>

 <https://www.opnfv.org/resources>

Engagement accelerates development

Telecommunications companies and large network operators realize the value delivered by the OPNFV project and OpenStack software as they look to implement next-generation networks that include support for 5G and the Internet of Things. Both open source projects value industry-leading companies to provide requirements, expertise and code.

Engagement helps accelerate the development of technology available to users and facilitates the widespread adoption of NFV.

Attend the summits from both projects to hear business cases and operational experience directly from users, learn the latest from project leaders and ecosystem members, and network with your peers.



Try it today

Get started today by downloading the software and joining our communities. A large ecosystem of providers is available to help.

 Download and install the OPNFV Brahmaputra release on your own hardware from <https://www.opnfv.org/software/download>

 Try an on demand demo environment at <https://github.com/opnfv/opnfv-ravello-demo>

 Visit the OpenStack Marketplace for providers at <http://www.openstack.org/marketplace/>

Join the movement

Both projects are governed and developed in the open and, depending on your interest, there are several ways to get involved.

 Become a part of the OpenStack community at openstack.org/join. Individual membership is free.

 Visit openstack.org/community to join mailing lists, attend local meetups and more.

 Read more about participation in OPNFV, including membership, at opnfv.org/developers/how-participate

¹ Heavy Reading survey of over 200 telecom and service provider professionals, November 2015. <http://www.lightreading.com/nfv/nfv-specs-open-source/opnfv-wins-hearts-but-faces-challenges/a/d-id/719249>

² <http://www.linuxfoundation.org/news-media/announcements/2016/02/linux-foundation-announces-intent-form-open-source-unified>

³ <https://www.opendaylight.org/news/user-story/2015/11/china-mobile-builds-next-generation-network-openshift>