IETF 91: Open Platform for NFV Collaboration with I2NSF

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OPNFV is a carrier-grade, integrated, open source reference platform for NFV

OPNFV Initial Scope

To provide NFV Infrastructure (NFVI), Virtualized Infrastructure Management (VIM), and APIs to other NFV elements, which together form the basic infrastructure required for Virtualized Network Functions (VNFs) and Management and Network Orchestration (MANO) components.
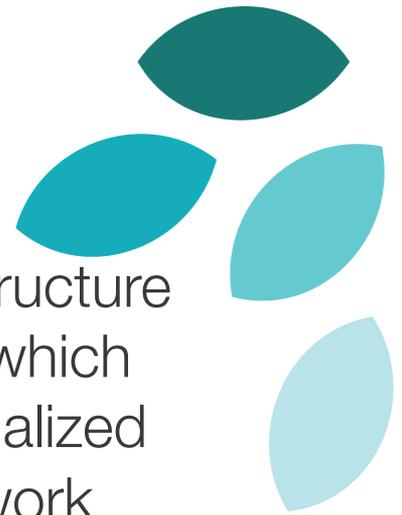
OPNFV Architecture Framework
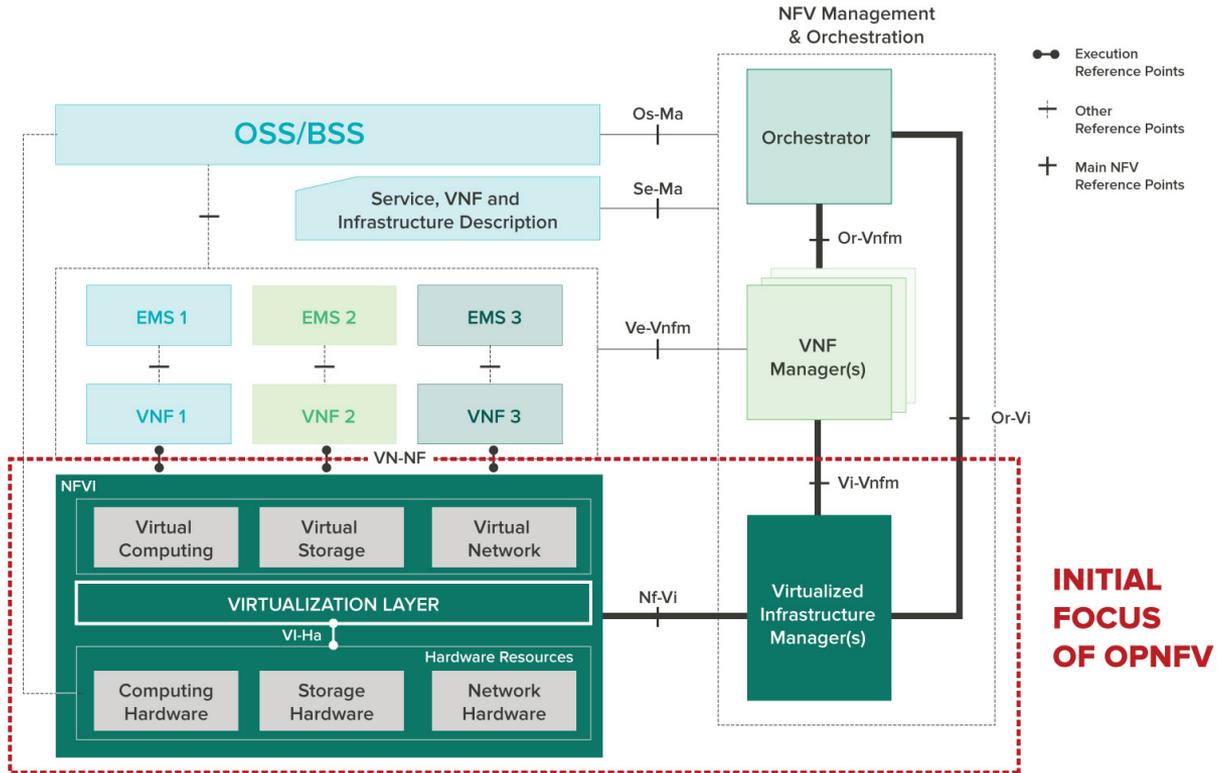
Why Open Source?

- The promise of open source is better quality, higher reliability, more flexibility, lower cost and the opportunity to drive open standards.

- Faster, lower cost and higher quality development through sharing of resources via collaboration.

- Community decisions about new features and roadmaps.

- A common environment for uses and App developers.

- Ability to focus resources on differentiating development.

Bottom Line: The open source model significantly accelerates consensus, delivering high performing, peer-reviewed code that forms a basis for an ecosystem of solutions.

OPNFV

Upstream OSS Projects Integration

- Work directly with upstream standards bodies (IETF, ETSI and others)

- Work directly with upstream open source projects (OpenDaylight, OpenStack, KVM and Xen, and many others)

- Leverage existing codebases

- Integrate existing open source components

- Identify gaps to create new code

- Provide a point of integration, testing and performance optimization

Result: Best reference platform for carrier-grade NFV implementations

Collaboration with I2NSF

- Key need is for information and data models (YANG) describing the network, security functions, etc.

  – Potentially a *client* for I2NSF work

- Speed is an issue

  – Expect OPNFV "running code" with security functions prior to RFC

  – OPNFV models -> possible *contribution* to I2NSF

- Value in published RFC(s) as complement to open source code

Questions?