OPEN-O Update

Open Source Leadership Summit
February 16, 2017

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Agenda

• Why Open Orchestration?

• Introduction to OPEN-O

• OPEN-O Status
SDN/NFV = Unprecedented Transformation

Transformation

- Business
- Technology
- Operations
- Organization

Agility
Differentiation
Flexibility and Choice
Revenues

Design Time
Operational Expenses
Development Costs
Open Source: Moving up the stack

Reference Architecture

Service

Control

Infrastructure

2013

2014

2015

2016
OPEN-O Overview
End-to-End Service Orchestration over NFV, SDN, and Legacy Networks

By the Numbers

- Email Lists: 100s
- Developers: >125
- Members: 15

OPEN-O Developers
- NFV-O
- SDN-O
- GS-O
- Other

Liaisons

- Mercury Rel. (2.0)
- OPNFV Integr.

Announced
- Sun Rel. (1.0)

Formation
- 1Q-2016
- 2Q-2016
- 4Q-2016
- 1Q-2017
- 2Q-2017
OPEN-O Members (January, 2017)

- **Premier Members**
  - China Mobile
  - China Telecom
  - Ericsson
  - GigaSpaces
  - Hong Kong Telecom (HKT)
  - Huawei
  - Intel
  - VMware
  - ZTE

- **General Members**
  - BOCO
  - Canonical
  - Cloudbase Solutions
  - InfoBlox
  - Raisecom
  - RedHat
More than MANO is needed. . .

- **OSS/BSS**
- **Virtualized Network Functions (VNFs)**
- **NFV Infrastructure (NFVI)**
- **NFV MANO**:
  - NFV Orchestrator
  - VNF Manager (VNFM)
  - Virtualization Infrastructure Mgr. (VIM)
- **Legacy Networks**
- **SDN Infrastructure**

**Design- Time Environment**:
- GUI
- Modeling
- Catalogues
OPEN-O Architecture

Portals
- Operator GUI
- BSS
- End-User Portals

Orchestration Services
- OSS
- GS-O
- SDN-O
- NFV-O

Infrastructure
- Legacy Networks
- SDN Networks
- NFVI

TOSCA
Common Services

Yang

Integration & Tools
OPEN-O Value Proposition

It’s about the services
- End-to-end
- Model-driven

Support for brownfields
- Connectivity services

Tailored to the operator
- Modular framework

Any Service over Any Network
OPEN-O 2.0 Use Case: vCPE & VoLTE
## OPEN-O thrives as a Global Project

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Best Practices</th>
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<tbody>
<tr>
<td>Timezone</td>
<td>Address 16 hour span North America W to Japan</td>
</tr>
<tr>
<td></td>
<td>Minimal conference calls</td>
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<td></td>
<td>Global window: 14:30 UTC</td>
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<tr>
<td>Communications</td>
<td>English is a second language for many</td>
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<td>Challenging security policies per region</td>
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<td>Leverage Wiki and write everything down</td>
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<td>Experiment with a range of collaboration tools</td>
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<tr>
<td>Multi-Cultural</td>
<td>Significant cultural differences around the globe</td>
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<td>Frequent face-to-face meetings to build trust and relationships</td>
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<td>Social events to expose everyone to local culture</td>
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<tr>
<td>Process</td>
<td>Risk for ambiguity and misinterpretation</td>
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<td></td>
<td>Email voting</td>
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<td>Require: 1) Post all proposals on Wiki</td>
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<td>2) 48 hour voting period (minimum)</td>
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Evolving the methodology...

Reach
- Regional
- Global

Scope
- Code
- Use Cases

Integration
- Standalone
- Collaborations

Influencers
- Vendors
- Operators

Openess
- Multi-Vendor
- Vendor-Neutral

Time Zone, Communications, Culture, Temperature, etc.

Architecture Committee, GB

Project Diversity
The Role of the Linux Foundation

- Neutrality
- Best Practices
- Infrastructure
- Community Building
- Promotion

“creating the greatest shared technology investment in history by enabling open source collaboration across companies, developers, and users”

Jim Zemlin, Executive Director, The Linux Foundation
Thank You

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