Introducing ONAP (Open Network Automation Platform)
(Open Source ECOMP + OPEN-O)

Executive Overview

June 2017

AUTOMATE | DESIGN | ORCHESTRATE | MANAGE SERVICES & VIRTUAL FUNCTIONS | ONAP.ORG
1. Quick Recap: Announcements and momentum
2. Drivers: Why is this so important for Networking Industry?
3. Why ONAP?
4. Path forward – Governance, Focus Areas
5. Architecture & Framework of how ONAP fits into the larger stack
6. Growing Ecosystem
The Linux Foundation Announces Merger of Open Source ECOMP™ and OPEN-O™ to Form New Open Network Automation Platform (ONAP™) Project

**Top Carriers and Vendors Back Groundbreaking Global Initiative Uniting Two Major Networking and Orchestration Projects**

SAN FRANCISCO, February 23, 2017 – The Linux Foundation, the nonprofit advancing professional open source management for mass collaboration, today announced the merger of open source ECOMP and Open Orchestration Project (OPEN-O) to create the new Open Network Automation Platform (ONAP) Project. ONAP will allow end users to automate, design, orchestrate, and manage services and virtual functions.

AT&T, China Mobile and the world’s leading operators are driving ONAP with a diverse group of

**ECOMP and OPEN-O merge to form open network automation platform**

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**THE WALL STREET JOURNAL**

Linux Foundation Creates New Platform for Network Automation

Telecom companies and their vendors support the open-source software initiative

**The Logical Happens: Open-O Merges with ECOMP**

**MANO Marriage: ECOMP, Open-O Converge as ONAP**

Largest network merger in open source history creates new ONAP Project

Linux Foundation combines open source ECOMP, Open-O into ONAP
Linux Foundation Creates New Platform for Network Automation

By Steve Rosenbush

The timing of the announcement is driven by two forces, including the rising potential for competition among telecom service providers and highly automated internet companies. It also is driven by expectations that faster mobile networks known as 5G will enter the market during the next three years or so, supporting a huge increase in the number of sensor-embedded and connected objects and machines.

BLOCKCHAIN

Northern Trust Deploys Blockchain for Private Equity

By Kin S. Nish

Northern Trust rolls out what it says is the first blockchain system for the private equity market, going live in Guernsey, a small British island.

CLOUD

For Those About to Rock, Ticketmaster Migrates Infrastructure to AWS

By Kin S. Nish

The impetus behind the Amazon cloud move is to better accommodate usage.

Latest Technology News

Boeing Looks to Build Satellites More Quickly, With Fewer Workers

Boeing is taking steps to build satellites more quickly through new production practices that will rely more on 3-D printing and involve fewer workers.

Uber to Investigate Sexism, Harassment Claims

Uber Technologies plans to investigate claims by a former engineer that the company failed to discipline a manager who mistreated female employees and ignored complaints of sexual harassment.

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ONAP is Open to the Community

Momentum continues with new members
New Reliance Jio joins as Platinum
Microsoft, CIENA, H3C as Silver

Executive Governing Board Positions Announced
Linux Foundation Framework, Governance, Control
Bringing the best of both worlds together

- 2+ years of Deployment Maturity at AT&T
- Comprehensive: Design +Orchestration + Control + Policy + Analytics
- Model-based design enabling self-serve capabilities for instantiation and closed loop automation

Based on extensions & integration with OpenDaylight & OPNFV

- Open TOSCA model
- Most Advanced Open Source Process & tool chain
- Architected for ease of VNF insertion (SDK)
Drivers for the Integrated Vision
ONAP is industry’s first harmonization initiative at a global level

1. Harmonized solution provides an opportunity to join forces and create a unified architecture and implementation to move the networking & orchestration industry forward, including open standards upstream focus

2. Collaboration across providers, vendors and ecosystem with a coherent framework for Automation - Design, Orchestration, Management & Policy

3. ONAP carves a path for improving existing OSS/BSS/FCAPS systems and MANO framework by utilizing the best architecture models from OPEN-O and ECOMP
ONAP: Architecture Value
Design, Execute and Operate – Network Automation

1. Active and Available Inventory
2. Application Controller
3. Data Collection, Analytics, and Events
4. Design Studio
5. Service Orchestrator
6. Network Controller
7. Policy Framework
8. Portal
9. Virtual Network Function SDK
10. Virtual Function Controller
11. Modeling
**End User Value**

1. Faster Services on Demand including 4G, 5G & Business/Enterprise solutions
2. Elimination of manual steps/errors/time
3. Design, Agility & Automation enabler for 5G

**Open Source Ecosystem Value**

1. Harmonized shared investment in technology across Major Carriers globally
2. Neutral platform that will foster innovation on top of SDN/NFV eg Services, Virtual Functions, 5G Apps, IOT ecosystem

At Inception, ONAP enables up to 38% of Global Subscribers.
### Why ONAP?

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<th>Unified Platform</th>
<th>VNF Onboarding</th>
<th>Fully Automated Platform</th>
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<tr>
<td>Industry convergence</td>
<td>Cut down the time and cost of getting VNFs into the network</td>
<td>Carriers step into cloud/SDN network commercial launch era to fast deployment, more efficient maintenance and short TTM</td>
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<td>Build a strong open ecosystem</td>
<td>Onboard vendor VNFs with standard processes, and operate these resources via vendor-agnostic controllers and standard management, security, and application interfaces</td>
<td>Self deployment</td>
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<td>Harmonize ecosystem</td>
<td>VNF shipping container</td>
<td>Self test</td>
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<td>Enable the community to take advantage of the best architectural components of both projects</td>
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<td>Self heal</td>
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<td>Drive NFV innovation in the marketplace</td>
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<td>Self optimization</td>
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<th>Agile Operation</th>
<th>Support 5G/IoT Evolution</th>
<th>Improve Customer Experience</th>
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<tr>
<td>Fast service deployment</td>
<td>Allow operators to enjoy 5G and IoT technologies</td>
<td>Allow end users to automate, design, orchestrate, and manage services and virtual functions</td>
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<td>Process automation</td>
<td>Automate massive number of connected devices</td>
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<td>Big data empowered solution</td>
<td>Automate differentiated service requirements</td>
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<td>DIY self service</td>
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<td>User lifecycle assurance</td>
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The Linux Foundation is creating the **greatest shared technology investment in history** by enabling open source collaboration across companies, developers, and users.

*We are the organization of choice to build ecosystems that accelerate open technology development and commercial adoption.*
A Growing Ecosystem – represents ~45% of Global Subs

AT&T
Bell
China Mobile
China Telecom
CISCO
Ericsson
Gigaspaces
Huawei
IBM
Intel
Jio
Nokia
Orange
Tech Mahindra
VMware
ZTE
ARM
BOCO Inter-Telecom
Canonical
China Unicom
Ciena
Accenture
CertusNet
Coriant
Juniper Networks
Cloudbase
Huawei
Microsoft
Metaswitch Networks
Raisecom
MAVENIR
Mirantis
PCCW Global
Windstream
THE LINUX FOUNDATION

NEW

June 2017
For General Information on the Project & Membership

www.onap.org

To Engage With The Development Community

Wiki.onap.org