



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

Executive Overview

June 2017

AUTOMATE | DESIGN | ORCHESTRATE | MANAGE SERVICES & VIRTUAL FUNCTIONS |  
ONAP.ORG

# Topics

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 Announcement @ MWC Feb 2017 & Coverage

## 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 Orchestrator 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**

**SDTimes**

**THE WALL STREET JOURNAL**

CIO 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

LightReading

## Largest network merger in open source history creates new ONAP Project



Linux Foundation combines open source ECOMP, Open-O into ONAP

**RCRWirelessNews**  
INTELLIGENCE ON ALL THINGS WIRELESS

# Open Networking Summit 2017 Coverage

THE WALL STREET JOURNAL

BUSINESS

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## CIO JOURNAL.

### 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. **32 minutes ago**



#### BLOCKCHAIN

### Northern Trust Deploys Blockchain for Private Equity

By Kim S. Nash

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. **12 minutes ago**



#### CLOUD

### For Those About to Rock, Ticketmaster Migrates Infrastructure to AWS

By Kim S. Nash

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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#### CONTENT

Business-led, written a

### CIOs Continue Business N Expectatio

CIO pattern typ change instiga —are flexible a remain effectiv patterns as bu: Businesses nee when cost, effi reliability, and priorities, whil undergoing lar, business trans by change inst prioritize perfo cost can benef creators.

2017 Aeros

# The ONS Announcement, April 5, 2017

**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

- Open TOSCA model
- Most Advanced Open Source Process & tool chain
- Architected for ease of VNF insertion (SDK)

**Based on extensions & integration with OpenDaylight & OPNFV**

# Drivers for the Integrated Vision

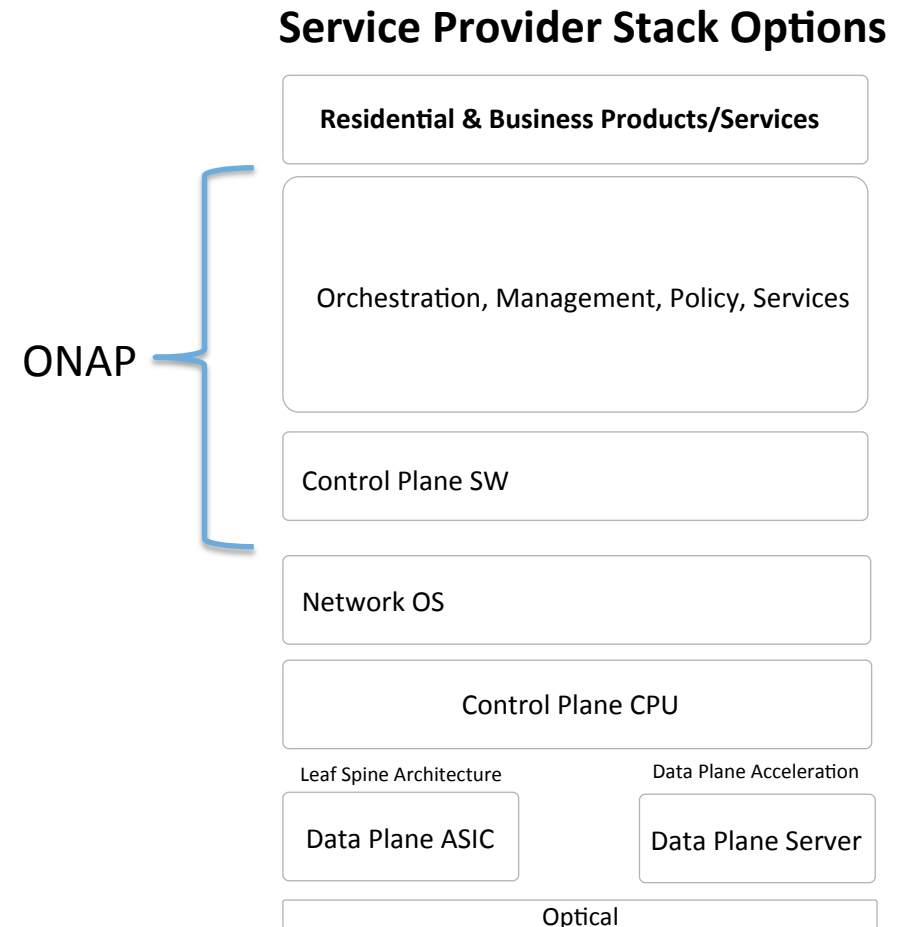
ONAP is industry's first harmonization initiative at a global level

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

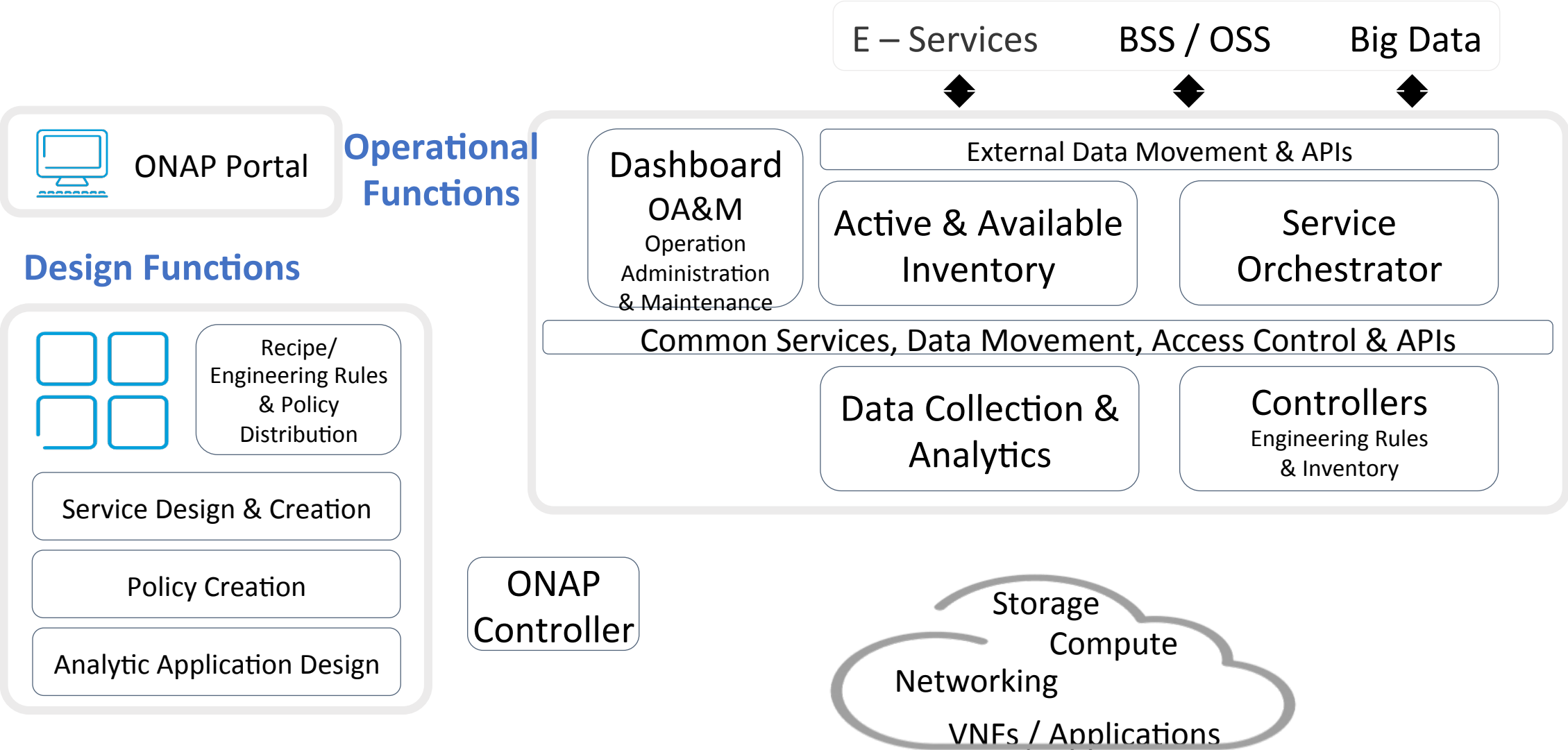
## Design, Execute and Operate – Network Automation

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





# ONAP Architecture



# ONAP: The Business Value

Accelerate Services with Network Automation

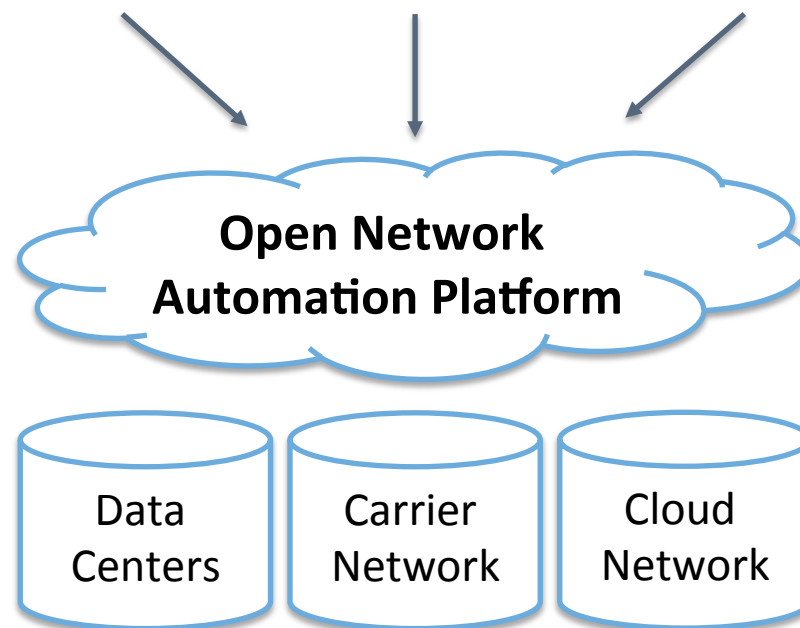
## End User Value

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

Residential Services    Enterprise Services    Cloud Services



At Inception, ONAP enables up to 38% of Global Subscribers

# Why ONAP?

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

# LF Governance, Process & Organization

- **Governing Board**
  - Responsible for budget, trademark/legal, marketing, compliance & overall direction
- **Technical Steering Committee**
  - Fair Technical Board starting with commitment to project success and transitioning to merit based over time
- **Process & Governance**
  - LF based consistent process & governance

*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



# More Details

For General Information on the Project & Membershp

[www.onap.org](http://www.onap.org)

To Engage With The Development Community

[Wiki.onap.org](http://Wiki.onap.org)



# ONAP

OPEN NETWORK AUTOMATION PLATFORM