# IJLF NETWORKING

LFN Developer & Testing Forum



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## **ONAP – the Next 5 Years**

#### **Transforming ONAP**

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## **Background & Analysis**



ONAP was create over 5 years ago, with a very ambitious vision to create a commonly acknowledged open-source automation platform for the telecom community

- Initiated and endorsed by many CSPs
- Gained rapid support from vendors

Although not realizing the full vision, ONAP has accomplished a lot:

- First open-source community in Telecom Management
- Operators and Vendors working together
- Delivering valuable software to the community
- Providing an environment for collaboration on use cases
- Establishing a reference architecture for modern management systems and providing a vocabulary for such systems

However, we believe that ONAP is not adopting rapidly enough to changing circumstances

## **ONAP Overview - Three Aspects**



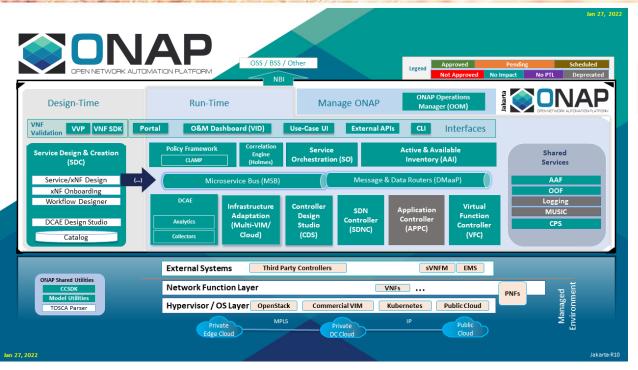
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#### Functional Architecture

Overall Automation Platform architecture

Expectations of functional and non-functional scope

Can be viewed as requirements



Technology Source/Realization

Open-source code

Environment for Use Case collaboration

Component & Interface Definition

Defines the components in terms of interfaces and capabilities (capabilities often expressed in code).

Component implementation may or may not use the opensource technology

### **ONAP Challenges**



- The value is in the components that ONAP produces, not so much in the "Platform"
  - Most users take components from ONAP and integrate it with their own platform
  - The new Nephio project seems to continue this component trend
- ONAP is structured to deliver a platform
  - Puts a heavy burden on the community and require wide involvement from LF staff
  - Results in complex/sizeable project management and long lead-times and a perception of a heavy monolith
  - Cost of engagement is high, both regarding membership fee and own work
- ONAP contributions have become skewed
  - Code contribution has decreased and effort is in a small number of projects
  - Several projects are dormant or unsupported
  - Getting volunteers for some key positions is proving increasingly difficult
- Focus in ONAP is moving away from where the real value is
- Successful open-source projects tend to focus on a limited set of specific use cases. ONAP is too multi-faceted
- In contrast O&M open-source in general is popular, flourishing, and heavily used and new initiatives popular
  - Nephio, Camara

## Proposed work for a release, trend

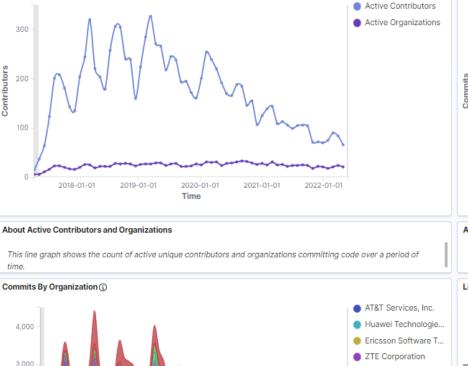


	UC	Feat	Spec	REQ	NFR	ВР	GR	Total
Frankfurt	6			57				6
Guilin	4			18	16			3
Honolulu	3	8	4			2		6 2
Istanbul	3	4	7			4		5 2
Jakarta	2	4	7			4		2
Kohn	2	2	2			4		6 1

## Requirements Reviews



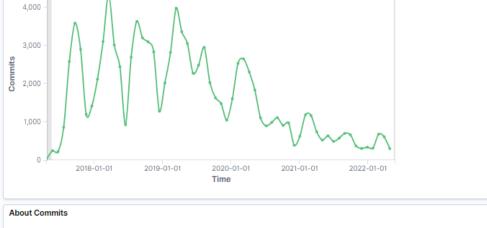
- Since ~Honolulu:
- Most use cases/features presented are continuation -> the scope of the proposed work is fairly well known and little (if any) cross-uc alignment required
- Low attendance to reviews; usually REQ officer(s), the involved community members, the ones waiting to present their uc/feature on the same call
- For continuation use cases the more relevant questions tend to be on archeitecture implications -> ARC review
- ➤ A question to the community: could we consider streamlining our release proposed work review?



Active Contributors and Organizations (i)

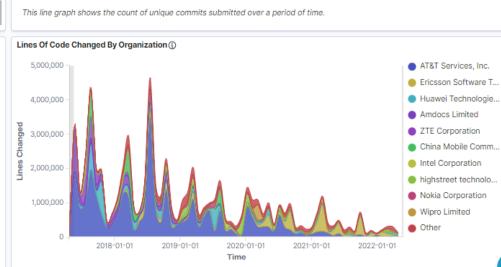
2018-01-01

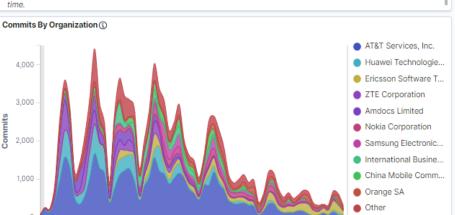
2019-01-01



Commits

Commits ①





2021-01-01

2022-01-01

2020-01-01

Time

### **Opportunities for ONAP**



- Expands on its position as the reference platform architecture for Network Automation systems
  - Increased alignment with SDOs and other open-source projects
  - Certification
- Provides reference implementations for the application of technologies that standards organizations are not suited to describe
- Delivers valuable components for the reference architecture to the Telecom Management and wider community
- Supplies an ecosystem that allows the community to trial Network Automation applications for their domains
- Provides common support for component development and community trials
  - Build environment
  - Guidelines on security, APIs, logging, metrics that components can use
  - Support for trial environments based on community needs

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