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ONAP – the Next 5 Years

Transforming ONAP

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Background & Analysis

ONAP was created 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

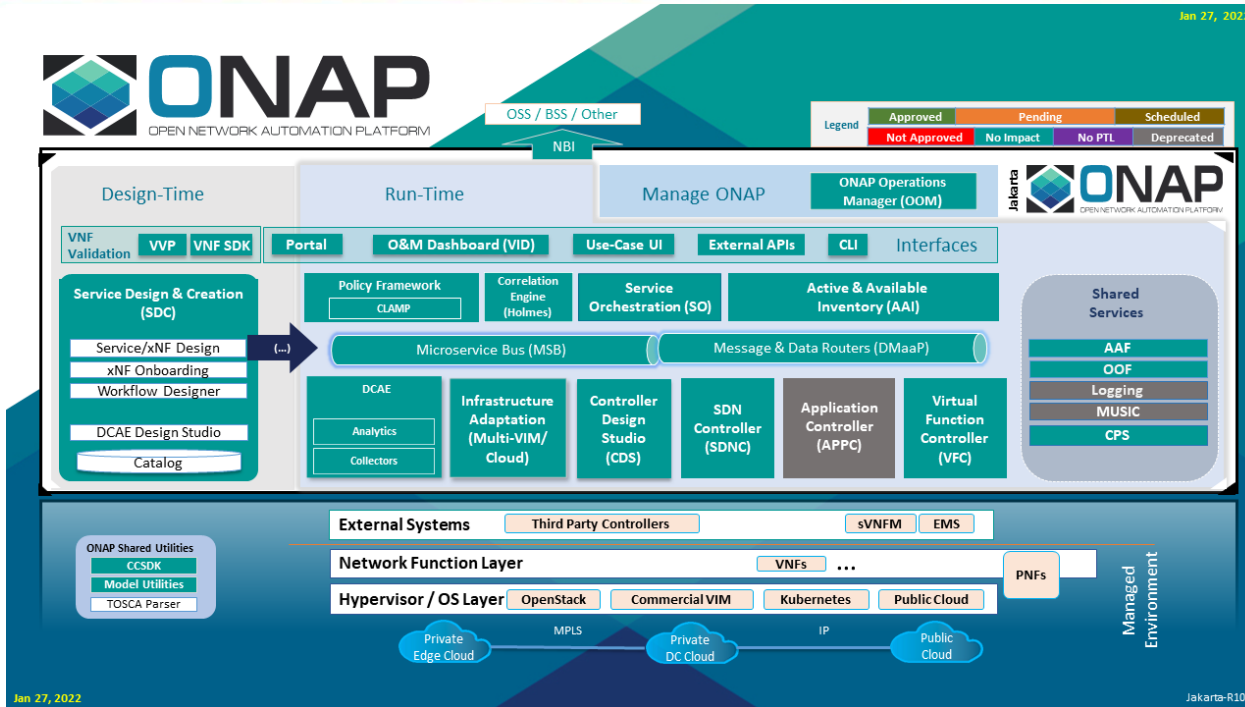
ONAP Overview – Three Aspects

Functional Architecture

Overall Automation Platform architecture

Expectations of functional and non-functional scope

Can be viewed as requirements



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

Technology Source/Realization

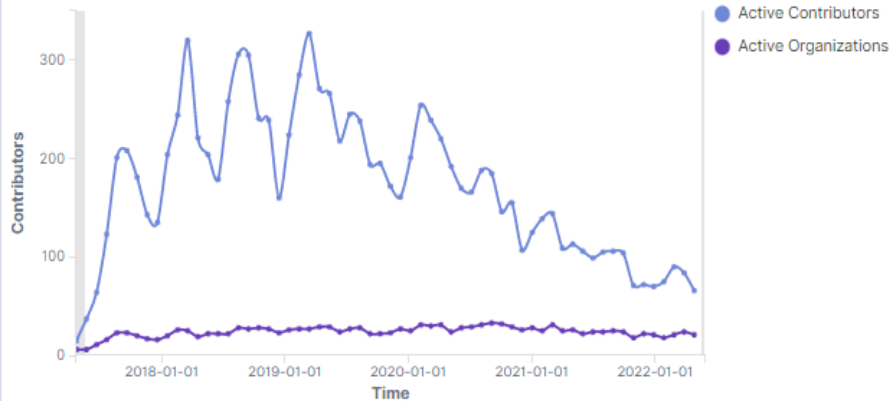
Open-source code

Environment for Use Case collaboration

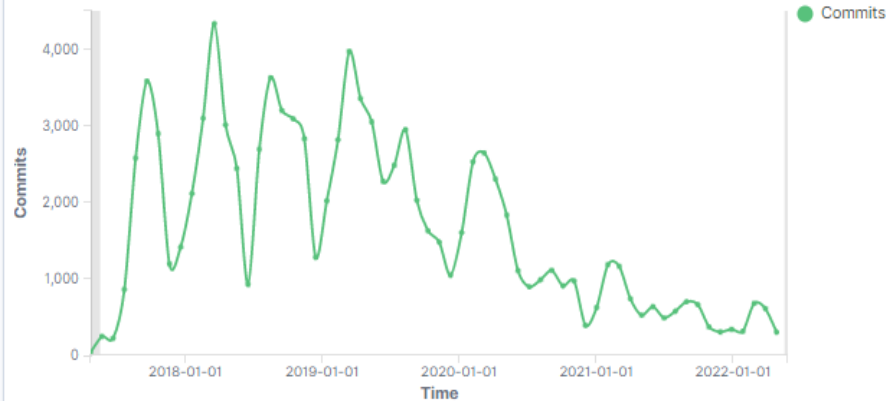
ONAP Challenges

- 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 pop up
 - Nephio, Camara

Active Contributors and Organizations ①



Commits ①



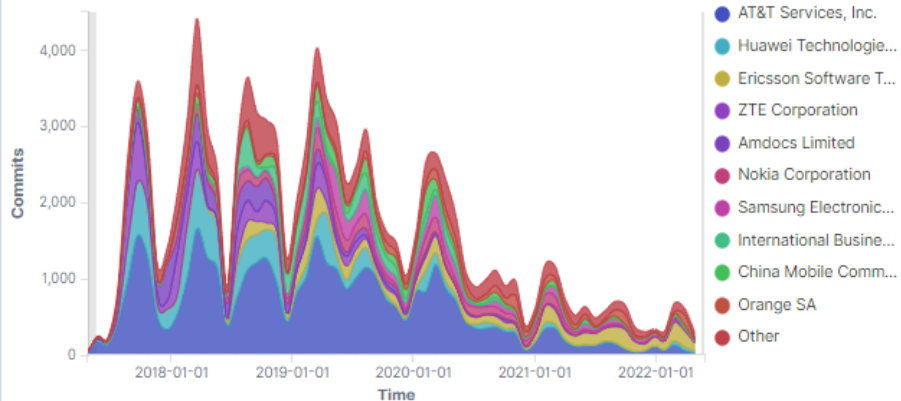
About Active Contributors and Organizations

This line graph shows the count of active unique contributors and organizations committing code over a period of time.

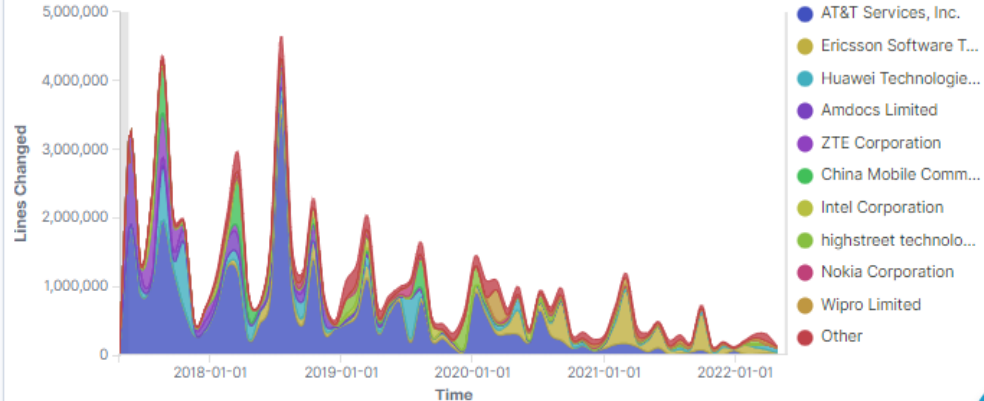
About Commits

This line graph shows the count of unique commits submitted over a period of time.

Commits By Organization ①



Lines Of Code Changed By Organization ①



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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