The LFN Anuket Project Nile Release adds new functionality

Nile, the latest version of Anuket was released to the public on January 4, 2023, with add cloud native requirements and testing functionality!

Anuket Overview

Anuket is an LF Networking project occupies a unique position in the telecom industry incorporating both operator infrastructure specifications, implementations, and open source infrastructure test suite development, all under a single initiative. The community has subject matter expert representatives from telco operators and their technology suppliers, which means that it is well positioned to address the "real world" challenges of the telecommunications industry. If you or anyone you know would like to contribute to any of these important activities, the Anuket website is a great place to start.

Leadership

Anuket members, per its Charter, elected the 2023 Technology Steering Committee and Co-chairs: Scott Steele and Gergely Csatari. On behalf of outgoing 2022 TSC Co-chairs, Gergely and myself, we would like to thank all Anuket contributors for their fantastic efforts in 2022 and wish the new TSC and the new Co-chairs all the best in their 2023 work!

Anuket Nile Release

Numerous Anuket projects and work streams continued to strengthen container-based open infrastructure specifications and implementations – an area that is increasingly important to the telco industry. Some of the accomplishments include:

- ViNePerf The ViNePerf project continued development efforts to automate test setup and benchmarking of container networking with various CNI plug-ins (Multus, Cillium) and kernel acceleration (AF XDP, eBPF), with the help of a Student Volunteer and an Intern from the LFN program.
- Thoth The Thoth project continues to focus on implementing E2E AI for NFV use case scenarios. The newly established NICIP project is a jointly organized data generation competition with ITU. Thoth is also cooperating on AI frameworks such as Mindspore, and starting the R&D effort needed to create data anonymization tools to allow telecom companies to share without the fear of exposing actual customer data.

On the requirements side

- Reference Model (RM) changes (major):
- Infrastructure LCM Automation re-edited and updated to improve readability and to ensure alignment with multi-cloud models
- · Security sections updated to reflect (and refer to) evolving 5G security standards and best practices
- Added energy consumption metrics and related requirements
- Reference Architecture 1 (RA1) OpenStack changes:
- New chapter based on RC1 content integrates conformance and establishes the link between architecture requirements and tests, providing the mechanism to validate the cloud infrastructure against the set of defined requirements.
- Chapter 1 has been restructured with the addition of a bibliography and an abbreviations table.
- The whole document has been reviewed to ease the creation of version 2 of NG.133 GSMA document.
- 133 v2 has been officially published the 9th of December.
- Updates have been made for the support of containerized applications and Cyborg accelerators drivers.
- Reference Conformance 2 (RC2) has been updated to align with the latest versions of Kubernetes and Functest.
 - 1. Added specific test references supporting workloads by referencing the CNCF CNF testsuite.

In the coming releases, Hybrid, Multi-Cloud model and Al/ML utilisation, will be the focus of Anuket work in the upcoming releases, reflecting a growing global interest in more sophisticated operating models for telecommunication operators facing the challenges of real-life 5G/Edge/IoT implementations.