

2021 LFN Developer Event Topics June

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General Event Info

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Tips for creating pre-recorded sessions

Plenary Topics

- [2021-06-07 - Plenary: Anuket - XGVela Joint LFN PaaS Survey](#) — 60m [Seshu Kumar](#) [Mudiganti Pankaj Goyal](#)

This session is to introduce the survey drafted by LFN projects Anuket and XGVela together. Some of the key objectives of this Survey are:

1. To understand the state of the industry and trends.
2. Collect the organization's input to identify
3. Prioritize the Categories and the set of Platform Services that should be provided by the PaaS.
4. Understand the integration challenges
5. Collect inputs on the software tools, products and services that are used or intend to use for each of the Platform Services.

We would discuss the details of the topics and questioner and the next course of action.

<https://wiki.anuket.io/display/HOME/Draft+Pared+Down+--+LFN+PaaS+Survey>

- [2021-06-07 - Plenary: EUAG NFV Testing Next Steps](#) — 30m [Chuyi Guo](#) [Lei Huang](#) [Beth Cohen](#) [Yan Yang](#)

Follow up to NFV testing White Paper – What test suites are needed in the Lab and what other work needs to be done, which will include:

1. What are the common requirements/ information for doing Cross-organization automatic testing
2. What are the requirements for supporting NFs in the testing process considering 5G background
3. AI/ML testing platform

4. Other potential requirements

- [2021-06-07 - Plenary: Intelligent Networking - Next Steps](#) — 60m [Beth Cohen](#) [@Yuhan Zhang](#) [Lei Huang](#)

Working Session for the AI/ML White Paper – gather requirements from the community for targeting projects, include:

1. Requirements of application scenarios
2. Network intelligence R&D strategy
3. Ecology strategy
4. Challenges in intelligent network
5. Data/model sharing platform
6. AI/ML testing platform
7. Other potential requirements...

- [2021-06-07 - Plenary: Intro to Open Source and LFN](#) — 60 Mins [Heather Kirksey](#)

Overview of open source participation at a high level as well as an overview of LFN's structure. Much of the event will rightly be focused on deep dives and moving the ball forward on specific work items, but for new members, new folks at existing members, and interns, some background context and overall shaping of how progress occurs in such a large and diverse community can be quite useful.

- [2021-06-07 - Plenary: Welcome and Opening Comments](#) — 30 mins [Heather Kirksey](#)

Welcome and opening comments

- [2021-06-08 - Plenary: EUAG Bi-Weekly/Joint Anuket Meeting](#) — 60m [Lei Huang](#)

Regular EUAG Meeting – Needs to be scheduled Tuesday 10AM EST (the regular meeting time)

- [Plenary: Daily Summaries](#) — 30m

This page will be used to provide a brief summary of the daily topics, provide feedback to the LFN staff, and plan for the next day.

Meeting minutes and action items should be recorded on your Topic page

OpenDaylight Topics

- [2021-06-08 - ODL - Our Recent Testing with Container Deployment and Observations](#) — 60m, [Venkatrangan](#)

ODL - Our Recent Testing with Container Deployment and Observations

- Recently we tried some POC's with ODL deployed as micro service
- We are updating the observations.
- [2021-06-08 - ODL: Docker and Helm](#) — In this session we will review the plan and the work to get ODL docker images and Helm charts published.
- [2021-06-08 - ODL: Phosphorus MRI project update.](#) — 60m, [Robert Varga](#)

Overview of the changes delivered by the platform projects in the Phosphorus timeframe.

- [2021-06-08 - ODL: Release Notes Automation](#) — In this session, the process defined to automate ODL release notes publication will be reviewed.
- [2021-06-08 - ODL: Whither autorelease?](#) — 60m, [Robert Varga](#)

The Simultaneous Release is supported by the autorelease project, which now hosts only a few projects. This will be an open discussion as to what options we have and how can we evolve our tooling.

- [2021-06-09 - ODL: Open discussion forum](#) — 90m
This is a placeholder for open-mic discussion around topics which either cropped up during other sessions or did not fit in them.

ONAP Topics

- [2021-06-08 - ONAP TSC Task Force: ONAP For Enterprise Business](#) — 10m, [Catherine Lefevre](#); 40m, [Byung-Woo Jun](#) [Prabhjot Singh Sethi](#) [Amar Kapadia](#); 10m, Q&A

A new [TSC Task Force](#) was created on January 20th, 2021 in order to define ONAP added-value for Enterprise Business.

This session will share the role of ONAP in the [5G Super Blueprint](#) and share how the ONAP Platform will interact with the [Magma](#) open source platform

- [2021-06-08 - ONAP TSC Taskforce: Cloud Native \(Demos\)](#) — 45m [Lukasz Rajewski](#), [Seshu Kumar Mudiganti](#), [Konrad Baka](#) ; 15m Q&A

During this session, semi-live demonstration of the latest capabilities introduced in Guilin (CNF Adapter and Helm type) and developed in Honolulu (CNF Day2 support) will be presented. The demonstration will show the CNF/Helm onboarding and deployment process of vFW CNF use case which since the Honolulu release is enriched with config-assign/deploy workflow that performs the CNF configuration process. Moreover, the demonstration will show how to track and validate the deployment status of CNF, and how to fetch information about the status of all resources deployed on the k8s cluster.

- [2021-06-08 - ONAP: CDS and Terraform for Multi-Domain Orchestration and Interconnection of Cloud and Edge](#) — 30m, [Vivekanandan Muthukrishnan](#)

Most practical deployments of edge infrastructure and applications are hybrid in nature, where an application deployed at the edge often needs to access services residing in the core cloud. In addition, there is a need for efficient and performant interconnection between edge and cloud as well as between the distributed edges proximal to end users. However, each individual service domain (e.g. edge, cloud, network fabric) often presents their own specific APIs and/or other provisioning methods (e.g. CLI), thus making end-to-end deployment challenging both in complexity and in time. Therefore a multi-domain orchestration solution is required to handle edge, cloud and interconnection in a uniform and consistent manner. Terraform is rapidly emerging as a common way to orchestrate and configure services rather than having to deal with APIs for each different domain: public or private cloud, edge and interconnection. In this presentation and hands-on demo, Equinix and Aarna Networks will show how an end-to-end application can be deployed, configured and interconnected between the edge and core clouds by using ONAP/CDS orchestration in combination with Terraform.

- [2021-06-08 - ONAP: CPS Developments in Istanbul](#) — 30m, [Bruno Sakoto](#)
- Istanbul CPS development updates for NCMP and Temporal
- [2021-06-08 - ONAP: E2E Network Slicing use case overview and Demo](#) — 60m, [Ahila P LIN MENG](#)

This session will provide a brief overview of E2E Network Slicing use case - what has been achieved so far and the road ahead. A Demo of a part of the functionality realized up to Honolulu will be given.

- [2021-06-08 - ONAP: Multi model support in SDC](#) — 30m, [Michael Morris](#), [André Schmid](#)

This session will describe the proposed new feature in SDC to support design/onboarding of services/resources natively in models other than SDC data model

- [2021-06-08 - ONAP: Next Generation Security and Logging Architecture, Design and Roadmap](#) — 60m, [Byung-Woo Jun](#) [Sylvain Desbureaux](#) [Krzysztof Opasiak](#)

Presentations on topics of next generation ONAP Security and Logging

- 1) Analysis between AAF and Service-Mesh Security
 - 2) Service-Mesh Security architecture, leveraging Istio, KeyCloak, CertManager, Ingress
 - 3) Design, implementation and roadmap
 - 4) Logging Architecture, leveraging open-source and standard technologies
- [2021-06-08 - ONAP: Policy Demos and Plans](#) — 90m, [Jim Hahn](#), [Sébastien Determe](#), [Gervais-Martial Ngueko](#) , [Kevin Timoney](#)

DB plans, Control Loops via TOSCA, Policy-clamp UI demo

- [2021-06-09 - ONAP TSC Taskforce: Cloud Native \(Roadmap\)](#) — 25m, [Fernando Oliveira](#) [Byung-Woo Jun](#), 25m [Lukasz Rajewski](#) [Seshu Kumar Mudiganti](#), [Konrad Baka](#) ; 10m Q&A

This session will present the features developed in Honolulu and will share the requirement candidates for the Istanbul release, followed by a proposal of "Simplified CNF modeling".

- [2021-06-09 - ONAP: CDS to Manage OLT Configuration](#) — 30m, [Vivekanandan Muthukrishnan](#)

With FTTx rollouts progressing, there is an increasing need to manage 10s or 100s of thousands of OLT switches. CDS provides an elegant solution to manage the configuration of these OLT switches. In this talk and hands-on demo we will discuss the CDS Blueprint Archive we developed to solve this issue. After watching this presentation, you will be able to understand how to use CDS to configure PNFs using Telnet.

- [2021-06-09 - ONAP: DCAE Transformation](#) — 45m, [Vijay Venkatesh Kumar](#)

Share Transformation updates from Honolulu release and review planned scope for Istanbul.

- [2021-06-09 - ONAP: Network Management Community Coordination](#) — 60m - [Magnus Buhgard](#)

Presentations on topics of common interest between ONAP and SDOs

1) Hot topics on automation in 3GPP SA5

- [Thomas Tovingier](#), 3GPP SA5 Chair
- [Zou Lan](#), 3GPP SA5 Vice-chair

2) Closed Control Loop Automation - ETSI ZSM, IRTF, ONAP

- [Pedro Henrique Gomes](#), ETSI ZSM
- [Laurent Ciavaglia](#), IRTF NMRG
- [Liam Fallon](#), ONAP

- [2021-06-09 - ONAP: SECCOM activities for Istanbul release](#) — Review of security activities in Istanbul release with special focus on global requirements. 30min
- [2021-06-09 - ONAP: SO Custom Workflow Onboarding and Orchestration](#) — 45m, [Seshu Kumar Mudiganti Byung-Woo Jun](#)

Presentations on topics of SO Custom Workflow Onboarding and Orchestration

1) SO Custom Workflow Architecture, Design and Implementation plan for Istanbul +

2) Scenarios that allow the user to add custom workflows to ONAP SO

3) Custom Workflow package and version control

- [2021-06-09 - ONAP: Usecases supported by Intent-based Networks \(E2E Slicing & CCVPN\)](#) — 45m, [Dong Wang](#)

Intent-based network is developed to support the smart applications of usecases in ONAP.

First part of the topic gives the progress of R8 intent translation and the proposal of R9 intent instance are introduced to support E2E Slicing and CCVPN usecases.

Second part of the topic introduces the proposal of closed-looped CCVPN intent guarantee.

- [2021-06-10 - ONAP TSC Task Force: Cloud Native \(Ask Us Anything\)](#) — 30m(-60m)
This session is an open forum to collect feedback, raise any question and provide suggestions from the people who are attending the DDF event to the ONAP "Cloud Native" TSC Task Force.
- [2021-06-10 - ONAP: Ask Anything to the ONAP TSC](#) — 30m, [Catherine Lefevre](#)

This session is an open forum to collect feedback, raise any question and provide suggestions from the people who are attending the DDF event to the ONAP TSC.

- [2021-06-10 - ONAP: CCSDK/SDNC - ODL Decoupling](#) — 30m, [Dan Timoney](#)

In this session, we will discuss work under way within the ONAP CCSDK and SDNC projects to "decouple" our code from OpenDaylight. The goal is to allow ONAP users the flexibility to deploy CCSDK/SDNC with a newer (or older) OpenDaylight release than the release used during ONAP release development.

- [2021-06-10 - ONAP: Honolulu Release Retrospective](#) — 60m, [David McBride](#) (shortened to 30m and moved from Wednesday to Thursday due to scheduling conflict)

Review Honolulu lessons learned and determine recommendations for disposition.

- [2021-06-10 - ONAP: Network Slicing using ONAP and a commercial 5G Core](#) — 30m, [Sriram Rupanagunta](#)

In this session, we will show how to integrate ONAP network slicing with a commercial 5G core. We present the options that are available in ONAP for such an integration, and show a demo of the feature, by creating network slicing templates from ONAP SDC, create a core network slice, activating it (from ONAP UUI), and running a test using a commercial UE/gNB simulator. We also present the future roadmap, and what other possible integration options are available with ONAP Network slicing.

- [2021-06-10 - ONAP: ONAP Requirements for Istanbul Release](#) — Short overview of the requirements planned for implementation in Istanbul Release
- [2021-06-10 - ONAP: OOF SON use case roadmap and RAN considerations](#) — 45m, [N.K. Shankaranarayanan](#)

This session shall provide a brief overview of what has been realized in the SON use case so far. It will then discuss the road ahead for the use case, and the considerations w.r.to (O) RAN from a broader ONAP perspective.

- [2021-06-10 - ONAP: OOM Honolulu retrospective](#) — 30m, [Sylvain Desbureaux](#)

Presentation of what has been done in OOM for H release

- [2021-06-10 - ONAP: OOM Plans for Istanbul and after](#) — 60m, [Sylvain Desbureaux](#)

Plans for OOM in Istanbul release and after

- [2021-06-DD - ONAP: Short overview of Istanbul Release requirements](#) — 60 min Overview of requirements developed for Istanbul

Anuket Topics

- [2021-06-08 - Anuket: Cloud-Native Full Stack Conformance Validation Framework](#) — 60 minutes, [Deepak Kataria](#)

BluVal (**Blueprint Validation**) Framework is a cloud native full stack test automation tool based on a disaggregated and layered approach for test and validation of implementations to ensure conformance. BluVal disaggregates the implementation and associated manifests into their layers and provides automated validation framework to test each layer one by one to achieve end-to-end validation of the implementation. All results are standardized by using Robot Framework which creates an html file of test results that is easy to read and interpret. By virtue of its modular design, the BluVal framework is extensible and provides a simple, declarative test harness for authoring and executing test suites. New functional tests can be written up from scratch in Robot, with simple human-readable commands, or existing upstream tests can be quickly integrated with a few lines of template code that can call any other testing or scripting tool. BluVal framework also provides a portal (User Interface) for viewing executed test result.

- [2021-06-08 - Anuket: Cloud-Native Openstack](#) — 30m [Parth Yadav](#)

Overview of an academic study/experiment done around OpenStack management and operations. Openstack is a fairly complex open-source cloud software with many loosely coupled components. This presentation covers topics around OpenStack architectural design and cloud-native values that can be built into OpenStack. A cloud-native OpenStack model can decrease the management and operations requirements of OpenStack, make things easy to operate and automate.

- [2021-06-08 - Anuket: Leftovers of the merger](#) — 45 min | [Gergely Csatai](#) | EET

There are several leftovers from the CNTT - OPNFV merger what we should work on. In this session I would like to collect these items and propose resolution if we can.

Leftovers from CNTT what I can remember:

- CNTT GitHub org
 - CNTT GitHub project
 - <https://cintt-n.github.io/CNTT/>
 - cintt.readthedocs.io/
 - <http://opnfv.readthedocs.io/>
 - CNTT Governance docs
 - <https://www.opnfv.org/>
- [2021-06-08 - Anuket: TSC Regular Open Meeting](#) — 60 Minutes on 8 June at 0600 PDT, using the usual [Zoom](#)

This is the regular meeting of the Anuket TSC, where much of the June 8 agenda will likely be dedicated to the impending Kali Release decisions.

- [2021-06-09 - Anuket: Cloud Infrastructure Security](#) — 60 min [Karine Sevilla](#) , [Walter Kozlowski](#) (Europe & APAC leaders)

Security is key within a virtualized environment, it's an important topic for Anuket which aims to specify a trusted Cloud Infrastructure for workloads.

During this session, we will discuss the updates made to the Reference Model for Kali release: open source software security, automation security challenges...

- [2021-06-09 - Anuket: Containerizing Traffic and Load Generators for K8S Performance Testing - Opportunities and Challenges](#) — 30m, [Sridhar Rao](#)

Traffic generators and load generators are critical for different performance testing. In this talk we present the opportunities and challenges of containerizing these generators for Kubernetes performance testing.

- [2021-06-09 - Anuket: Multi/Hybrid Cloud](#) — 60m [Ildiko Vancsa](#) (incl. APAC Topic Leader)

Discussing multi- and hybrid cloud requirements and choices as it is driven by edge and other use cases.

The session is a continuation of the similar discussion at the recent PTG: <https://etherpad.opendev.org/p/ecg-ptg-april-2021>

Recording of the PTG discussion: https://zoom.us/rec/share/yMN8QANWzI7FJ_Hh-ys166_sECX2XgSgX-B_jKnnlYh4UjCAv9S32s-9U4mzjUGf.HZIErIBO6LOImrJz

Relevant RM sections:

- RM 3.5.2 Network Layering and Concepts https://github.com/cintt-n/CNTT/blob/master/doc/ref_model/chapters/chapter03.md#3.5.2
- RM 3.6 Storage https://github.com/cintt-n/CNTT/blob/master/doc/ref_model/chapters/chapter03.md#3.6
- RM 3.8 Hardware Acceleration Abstraction https://github.com/cintt-n/CNTT/blob/master/doc/ref_model/chapters/chapter03.md#3.8
- RM 3.8.3 Workload Placement https://github.com/cintt-n/CNTT/blob/master/doc/ref_model/chapters/chapter03.md#3.8.3
- RM Ch 8 Hybrid Multi-Cloud: Data Center to Edge https://github.com/cintt-n/CNTT/blob/master/doc/ref_model/chapters/chapter08.md

Relevant RA sections:

- RA1 3.5 Cloud Topology https://github.com/cintt-n/CNTT/blob/master/doc/ref_arch/openstack/chapters/chapter03.md#3.5
- RA1 4.5 Cloud Topology and Control Plane Scenarios https://github.com/cintt-n/CNTT/blob/master/doc/ref_arch/openstack/chapters/chapter04.md#4.5
- [2021-06-09 - Anuket: OpenStack Release Selection](#) — 30 min [Pankaj Goyal](#) [Karine Sevilla](#)

Which OpenStack release to select as a baseline for the next RA1 release?

Following RM's developments on acceleration, RA1 must evolve to integrate these new requirements.

- [2021-06-09 - Anuket: Profiles and Flavours](#) — 60 minutes [Riccardo Gasparetto Stori](#) (incl. APAC Topic Leader)

Workloads expect certain capabilities and performance from the resources that they will execute on. Creating workload specific configurations becomes not only unmanageable but may render the resources un-shareable. A *profile* is a set of resource configurations that meet needs of a family of workloads. Profiles partition the infrastructure resources and, thus, the number of profiles affects resource utilisation. Newer workloads, such as for 5G or O-RAN, leads to demand for new profiles or profile extensions. In Anuket, we recently decided on the concept of profile extensions. With the new definition of two high level profile abstractions and associated profile extensions, flavours have also been redefined. This session will seek a discussion on the efficacy of the adopted approach, alternatives, definition of additional profile extensions, and workload flavours.

- [2021-06-10 - Anuket: Hardware Acceleration Abstraction](#) — 60m, [arkady kanevsky](#)

Anuket is promote HW independent RM, RAs and RC. For accelerators for RAN workload oRAN Alliance is defining Acceleration Abstraction Layer and APIs - <https://oranalliance.atlassian.net/wiki/download/attachments/872841331/O-RAN.WG6.AAL-GANP-v01.00.pdf?api=v2>.

However Kubernetes currently does not have an abstraction for accelerators and each accelerator is handled and need to be programmed to independently. This session will discuss current state of affairs and what can be done to remedy it.

- [2021-06-10 - Anuket: RA2 status and next steps](#) — 45 min | [Gergely Csatari](#) [Riccardo Gasparetto Stori](#) | CET, EET

Let's review where are with RA2 and what will be our targets for Lakelse release.

- [2021-06-10 - Anuket: Release Process Review & Discussion](#) — 60m, [David McBride](#)

Review and discuss newly developed Anuket release process. If time permits, we will also look at the schedule for the Lakelse release.

- [2021-06-10 - Anuket: RI2 Status and Next Steps](#) — 45m, [Rihab Banday](#) [James Gu](#)

In this session we will review the current status of the RI2 Kuberef and Airship projects and plan the next steps forward. A special focus will be on the requirements, gaps and conformance and how we can best work together.

- [2021-06-10 - Anuket: Working towards a consolidated documentation](#) — 45 min | [Gergely Csatari](#) | EET

Documentation of Anuket is developed in different places and delivered to different places. I think we should keep the option to develop the documentation in different places, but we should deliver the documentation to a single place with similar look and feel. Let's discuss if this is an agreeable target and what are the alternatives to achieve it.

- [2021-06-DD - Anuket: Anuket assured hyperscalers or hyperscaler assured Anuket?](#) — 45 min | [Joao Rodrigues](#) , [Gergely Csatari](#) | CET, EET

Anuket RM and RA2 define the properties for Kubernetes based infrastructures to run CNF-s to ensure quick and easy integration of CNF-s and the infrastructure. With the the different public cloud providers offering CaaS services for telecom applications a new integration front is opened. Is it guaranteed that a CNF compliant with RC2 will run on the hyperscaler CaaS offerings? How well RM and RA2 models the infrastructure of hyperscalers and what is the best way to ensure interoperability between private and public CaaS offerings?

Tungsten Fabric Topics

- [2021-06-09 - TF: 5G Private TF/Akrino Blueprint Demo & Build](#) — 60m, [Sukhdev Kapur](#)

This session will cover working with the TF Build Environment, how to get started building TF from scratch, and how to produce kernel modules and other artifacts to add support for new distros and kernels to TF.

- [2021-06-09 - TF: Diving into TF - Bite Sized Lab Environments](#) — 60m, [Nick Davey](#) [Alexandre Levine](#)

Diving into Tungsten Fabric -Bite size environments for Kubernetes and OpenStack Labs.

This talk will cover the common installation options required to deploy OpenStack and Kubernetes environments for use with Tungsten Fabric. Using the tf-ansible-deployer and container-builder manifests we will explore the common deployment architectures of TF that can be used for lab/validation. We will also provide an overview of how these examples can be modified for use in higher scale/complexity labs and deployments.

- [2021-06-09 - TF: Release Process and Planning](#) — 40min, [Marek Chwal](#) [James Kelly](#)

This topic covers the updated Tungsten Fabric release process and plans for our releases in the upcoming 6 months.

- [2021-06-10 - TF: Managing Kube-Sprawl with TF](#) — 60m, [Sukhdev Kapur](#) [Nick Davey](#)

The trend in edge computing and Kubernetes is to deploy a large number of clusters across a wide area network, or across public clouds. This topic will focus on the capabilities of TF that can stitch together Kubernetes clusters and provide seamless networking across disparate clusters.

- [2021-06-10 - TF: Multicluster Application Aware Security](#) — 60m, [Prasad Miriyala](#)

This session will provide an overview of how scalable application centric policies can be used to deliver multi-cluster and multi-orchestrator security. An overview of multicluster overlay networking, and application security will be provided before diving into key enhancements in multicluster policy management.

- [2021-06-10 - TF: Transition to the Cloud Native Telco Cloud](#) — 60m, [Shean Leigon](#)

This topic will cover the features and enhancements in TF that are allowing Telco Cloud deployments to adopt modern Cloud Native practices. This will include an overview of dynamic data plane learning and aliveness validation, BGPaaS for containers, and policy aware routing for multi-interface containers. This session will also cover key advanced networking concepts required to deliver network slicing.

XGVela Topics

- [2021-06-08 - XGVela: Update & AMAAsk me Anything \(AMA\)](#) — 30 min

In this session, XGVela TSC will give update on project progress and answer community questions.

- [2021-06-09 - XGVela: Use Case Discussion](#) — 30min (checking, might need 60min)

In this session, Qihui and Saad will introduce several use cases about PaaS in operators' cloud to show where we need PaaS, what functionalities are required and how these requirements are aligned with XGVela seedcode functionalities.

- [2021-06-10 - XGVela: Information Model and APIs](#) — 60 min

In this session, Sandeep and Vance will introduce Information model and API approach for Telco-PaaS functionalities CMaaS, TMaaS, FMaaS and MMaaS.

ODIM Topics

- [2021-06-08 - ODIM: What's New & 5G Super Blueprint Considerations](#) — 30 min
What has the ODIM project been up to since last event? What is ODIM's role in the 5G Super Blueprint? What are the new services and features planned for
- [2021-06-10 - ODIM: BMC Emulator & Demo](#) —