

Plenary: Daily Summaries

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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

- [07 Jun 2021](#)
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07 Jun 2021

Track w/Link	1-2 Key Points	Challenges
2021-06-07 - Plenary: Welcome and Opening Comments	Event Logistics	
2021-06-07 - Plenary: Intro to Open Source and LFN	A great presentation by Heather Kirksey targeted for new members of the community, but also a good refresher for existing community members.	
2021-06-07 - Plenary: Anuket - XGVela Joint LFN PaaS Survey		
2021-06-07 - Plenary: EUAG NFV Testing Next Steps	<ul style="list-style-type: none">• ETSI and 3GPP Testing framework development in progress• Looking for more use cases and requirements for supporting VNF testing, for example 5G frameworks• Vendors are encouraged to participate in this work.	Can we agree on the testing requirements? Need to determine the scope of the interaction between other platforms. See slides for details.
2021-06-07 - Plenary: Intelligent Networking - Next Steps	WP: where is this headed (1-3 years, 3+years), Use cases (now and in pipeline), Interested in 1-3 year focus for use cases. Looking at short term use cases – practical next steps. Possible use case: AI/ML assisted Closed Loop Automation (for QoS, ...)	What is the definition of intelligent network here? I guess it is different from 3G IN. What do you mean on unified platform? How can we agree on a common data set for testing, development and validation.

08 Jun 2021

Project	Track w/Link	1-2 Key Points	Challenges
ONAP 9 sessions today !	ONAP: E2E Network Slicing use case overview and Demo	<ul style="list-style-type: none">• Current Status of ONAP E2E Network Slicing with RAN, CORE and TN NSSMFs + Outstanding "Live" demo !• Demo contains,<ul style="list-style-type: none">◦ E2E Network slice creation◦ Reuse of Network Slice◦ Closed Loop	

	ONAP TSC Taskforce: Cloud Native (Demos) -	<ul style="list-style-type: none"> • Presentation of our Native CNFO path • vFW CNF Use Case (deployment; configuration, instantiation, CNF health check, etc.) - Amazing "Live" demos ! 	
	ONAP TSC Task Force: ONAP For Enterprise Business	<ul style="list-style-type: none"> • What does ONAP bring to the "5G Open Source Stack" Initiative? • Our ONAP/Magma Integration principles • ONAP/Magma Deployment process flows • ONAP/Magma registration flows and details about how ONAP/Magma will be integrated together 	Current path is to deploy Magma CNF. Is there any value to deploy Magma VNF?
	ONAP: Next Generation Security and Logging Architecture, Design and Roadmap	<ul style="list-style-type: none"> • Leverage Istio, Keycloak, Cert-Mgr, Ingress, Egress as part of our ONAP Security Architecture 	
	ONAP: CDS and Terraform for Multi-Domain Orchestration and Interconnection of Cloud and Edge	<ul style="list-style-type: none"> • Problem Statement : Cloud environment to Edge are hybrid, requires a multi domain and interconnection orchestration solution • "Cool" Live Demo : using Terraform, EMCO 2.0 and CDS : interconnect Edge App with Azure 	
	ONAP: Policy Demos and Plans	<ul style="list-style-type: none"> • DB flexibility enhancements • Clamp functionalities merged into Policy framework - Great Demo ! • Policy Roadmap incl. additional DCAE integration • Control Loops via TOSCA - design- Cool Live Demo ! 	
Anuket 6 sessions today	Anuket: Cloud-Native Full Stack Conformance Validation Framework	<ul style="list-style-type: none"> • BluVal Extensible Test framework described for possible use in conformance testing • Currently used in edge project testing, • Demo included. 	Apparent overlap with existing Anuket tools (Functest), Next steps discussed include investigation of applicability in RC2 work.
	Antket TSC Meeting	<ul style="list-style-type: none"> • Amy Zwarico's Introduction and short presentation on SECCOM • Student volunteer contribution on AI/ML recognized. • Kali Release on schedule, M2 extension moved to June 8 approved 	Joint meeting with EUAG was slightly premature: most EUAG members need to do homework on Anuket to work topics like Anuket-Assured and Recruiting a with some background.
	Anuket leftover (actions) from the Merger	<ul style="list-style-type: none"> • good list of actions and solutions to issues identified • many namespace changes 	more to do...
	Anuket: Anuket assured hyperscalers or hyperscaler assured Anuket?	<ul style="list-style-type: none"> • Much discussion of hyperscaler integration point • The hyperscaler workload that can run on Anuket-size infra is a small overlap (with hyperscalars there are networking challenges). 	"We believe that there is not enough business in the telecom workloads for the hyperscalers to support these "difficult" workloads."
	Anuket: Cloud-Native (operations on) Openstack	<ul style="list-style-type: none"> • Openstack has +20M lines of code, distributed, but not CN • Proposal is to use "kopenstack" to deploy CN OS, uses OS Helm charts and kopenstack provides intelligence above. • There is a declarative intent passed to K8s, then kopenstack determines the best way to instantiate the intended desired use case. • kopenstack Demo 	Next steps: mapping OS to K8s funtions, and how this would work with installers like AIRSHIP.
OpenDaylight	Recent Testing with Container Deployment and Observations	Venkatrangan	

Whither autorelease?	Robert Varga	
Release Notes Automation	Guillaume Lambert Navid Ghazisaidi Luis Gomez	
Docker and Helm	Anil Belur Luis Gomez Manoj Chokka Venkatrang an	
ODL Phosphorus MRI project update.	Robert Varga	

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Project	Topic	1-2 Key Points	Challenges / Requests
OpenDaylight	Open discussion forum	<ul style="list-style-type: none"> General open discussion 	Currently migrating relevant data from old sources to a single source of truth and improving the overall documentation.
Tungsten Fabric	Bite Sized Lab Environments	Nick Davey	
	5G Private TF/Akrino Blueprint Demo & Build	<ul style="list-style-type: none"> Alignment between Akrino 5G BP and LFN Super 5G BP Tungsten Fabric support for multiple networks require manual configuration. TF community should automate it. 	
	Release Process and Planning	<ul style="list-style-type: none"> Straightforward session that went well, covering the release process and planning as well as an overview of features in the upcoming release and the Q4 release for which we are at the head end of the process now 	No questions from the few non-community members that joined.
Anuket 5 sessions today	Anuket: Cloud Infrastructure Security	<ul style="list-style-type: none"> Many updates and new subsections will appear in the Reference Model Kali release (Chapter 7). Many new requirements on OS SW in RM Ch 7.9, need review and refinement. Security by Design and NIST Zero Trust Architecture introduced. 	<p>Security risks of Open Source SW listed, and there are new requirements in the RM, but not yet fully addressed in development or testing (use of trivy and linters now).</p> <ul style="list-style-type: none"> Looking for feedback on Security test tools: OWASP, Clair (gitlab), Trivy, Falco(CNCF). Add kube-monkey.
	Anuket: Multi/Hybrid Cloud	<ul style="list-style-type: none"> Discussing multi- and hybrid cloud requirements and choices as it is driven by edge and other use cases. Many Network customers are requiring use of public clouds - brings many issues. <ul style="list-style-type: none"> Who owns and who controls what in the arch. What Open-APIs would help? The current public suppliers /hyperscalers have limited interest. 5G is a use case "we" own. Work to reflect this probably first in an update of RM Ch06, RM Ch08, and the topic requires architecture requirements as well. 	<p>For Public clouds:</p> <ul style="list-style-type: none"> Controller suites for Network Services distributed across private and public clouds <ul style="list-style-type: none"> Challenges: Security, QoS, SLA formulation Multi-cloud considerations <ul style="list-style-type: none"> Operational Model Deployment Model (it can facilitate on how the workloads are distributed and configured) Proposals for multi-cloud support (SDO related)
	Anuket: OpenStack Release Selection	<ul style="list-style-type: none"> Need to choose an OS Release for Lakelse (end of 2021) - Train Wallaby has many attractive features, and is a long-term support release. Decisions: Several votes for Wallaby in the Lakelse release. RC-1 can track this decision, and follow RA-1 as much as possible. 	Many factors in this decision.
	Anuket: Containerizing Traffic and Load Generators for K8S Performance Testing - Opportunities and Challenges	<ul style="list-style-type: none"> Many issues with K8s e2e tests and public tools they use. CNCF has mostly workload tests a few perf tests. CNCF R*2 not much in this area. There are four major areas where OS traffic generator/tester capabilities need improvement (slides). Comment: testing on public cloud/hyperscaler infrastructure has many unique issues, starting with uncontrolled factors (where the test system is viewed as workload). Common Theme: many customers are asking for deployment in these environments - therefore importance this work is emphasized. 	Need Open Source Traffic Generators with sufficient capabilities and ability to test at the top-end of HW/Infrastructure, for use in conformance and assurance.

	Anuket: Profiles and Flavors (and proposal for Extensions)	<ul style="list-style-type: none"> Workloads expect certain capabilities and performance from the resources that they will execute on. Workload specific configurations are unmanageable make the resources non-shareable. A <i>profile</i> is a set of resource configurations that meet needs of a family of workloads (Basic/High-performance), and trying to avoid proliferation of profiles. Proposal for Extensions within Profiles allows labeling (geo, low-latency, etc.), but the needs seem to be unclear when combined with the author's use-case of "testing to be sure it works" <<< why not just use Basic profile for a limited case like this? 	
ONAP	2021-06-09 - ONAP: SO Custom Workflow Onboarding and Orchestration	<ul style="list-style-type: none"> Live demo of current POC allowing the user to add custom workflows to ONAP SO 	
	2021-06-09 - ONAP: Network Management Community Coordination	<ul style="list-style-type: none"> Latest updated about automation in 3GPP SA5 Closed Control Loop Automation - ETSI ZSM (Zero-touch network and Service Management), IRTF (Internet Research Task Force), ONAP High Level IBN Principles TOSCA Control Loop 	<p>Parallel work going on in standards, research and open source bodies.</p> <p>Opportunities to learn from each other.</p> <p>Proposal for a more in-depth cross-organization technical session on closed loops (Action Item for Magnus)</p> <p>Request ONAP E2E Network Slicing use-case team to review and analyze the impact of 3GPP SA5 Rel 17 (TS 28.541 NRM) new updates introduced for ServiceProfile and SliceProfile and see if they can be used in ONAP future release.</p>
	2021-06-09 - ONAP TSC Taskforce: Cloud Native (Roadmap)	<ul style="list-style-type: none"> Presentation of CNF Model & Package proposals in alignment with ETSI SOL001, SOL004 including ASD (Application Service Descriptor) Rationale and objective Native CNF Orchestrator Roadmap CNF Modeling & Orchestration proposal <ul style="list-style-type: none"> ASD Walk-through - introduction of the terms such as DeploymentItem and ClusterCapability ETSI aligned modeling changes - updates to VNFD Plans for Istanbul and beyond: <ul style="list-style-type: none"> Merging the paths of the Native Helm and ETSI flows ASD evolution further, to be able to design services with CNFs Runtime model evolution based upon the standard ...and more 	<p>Call to CNF vendor to work with the ONAP Community to onboard, instantiate and orchestrate their CNF.</p> <p>Call for developers to implement in Jakarta new features:</p> <ul style="list-style-type: none"> CNF Control Loop Integration with XGVela Merging Native Helm/ETSI flows Enterprise use cases etc
	2021-06-09 - ONAP: DCAE Transformation	<ul style="list-style-type: none"> Highlight from Honolulu DCAE transformation Reviewed Istanbul scope and design updates on config management and helm templating Future roadmap includes MOD helm support and closer alignment with other ONAP projects (CLAMP/POLICY, OOM) and deprecating Cloudify components 	<ul style="list-style-type: none"> Integration with Prometheus (Istanbul) - enabling certain mS to report metrics - This is being worked at OOM platform level; certain DCAE MS (ves) are being piloted for integration for Istanbul <p>Challenges: Istanbul scope is relatively big - need active community support to close on the targetted items.</p>
	2021-06-09 - ONAP: SECCOM activities for Istanbul release	<ul style="list-style-type: none"> Global Requirements and Best practices review for Istanbul Reviewed overall improvements in the Honolulu release for both Global Requirements (Python & Java upgrades) and Best Practices (vulnerable package upgrades, CII badging, logging to STDOUT). Security logging and access management requirements details 	<p>Projects have NEW Global Requirements in Istanbul (vulnerable package upgrades & CII badging improvement)</p> <p>Outlined SECCOM and PTL responsibilities for each of the Istanbul Global Requirements. Note that Python upgrade support is available.</p> <p>Future releases will be affected by the Istanbul design and architecture work to migrate logging, access and identity management to service mesh and open standards.</p>
	2021-06-09 - ONAP: Usecases supported by Intent-based Networks (E2E Slicing & CCVPN)	<ul style="list-style-type: none"> Intent-based networks - what has been developed in Honolulu and what is planned for Istanbul to support E2E Slicing and CCVPN usecases 	

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Project	Topic	1-2 Key Points	Challenges
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Tungsten Fabric	Multicluster Application Aware Security	<ul style="list-style-type: none"> Demonstrated the capabilities with TF to create overlays between multiple clusters to create seamless overlay networks between sites and clusters. Spoke to the upcoming capabilities in the 21.12 release to share security tags/labels between clusters to create multisite policies with distributed enforcement. 	
	Transition to the Cloud Native Telco Cloud	<ul style="list-style-type: none"> Showcased the Telco centric use-cases and capabilities of TF in a Kubernetes-native environment Highlighted the BGP/Service Chaining/Multi-interface networking capabilities of TF in K8s. 	
	Managing Kube-Sprawl with TF	<ul style="list-style-type: none"> Covered the default networking capabilities of TF, and how Kubernetes cluster networking is augmented by TF. Showed how TF extends those default capabilities of Kubernetes, and allows for powerful custom networking between clusters. Spoke to the multicluster and multitenant capabilities of TF allowing Kubernetes clusters to share a centralized SDN. 	
ONAP 9 Sessions today!	2021-06-10 - ONAP TSC Task Force: Cloud Native (Ask Us Anything)	<p>Q&A Session</p> <ul style="list-style-type: none"> The role of ONAP was explained and how it provides value on top of K8S Pointers to the documentation were provided Clarifications were given about what is available today and what is on the roadmap 	We need to have more real-life CNFs onboarded both by vendors and operators, so they can provide feedback to the CNF Taskforce about the usability of the CNF orchestration.
	2021-06-10 - ONAP: OOF SON use case roadmap and RAN considerations	<ul style="list-style-type: none"> Great cross-organization (11) collaboration since Frankfurt release Re-use of ONAP components (OOF, SDNR, DCAE, Policy, DMaaP, CPS) to support O-RAN in alignment with 3GPP, O-RAN Alliance. Use of primary and secondary Yang models for Radio Access Network (RAN). Primary model is aligned to ORAN/3GPP and vendor models. Secondary model augments the Primary model to include information for the application, use case and operator needs. Presentation has detail on Yang models, TBDMT (CPS API Mapper) and FM message 	Concerns expressed a couple of times regarding licensing issues which prevent members of the ONAP community from actually seeing the ORAN specs that we are supposed to be coding for.
	2021-06-10 - ONAP: Network Slicing using ONAP and a commercial 5G Core	<ul style="list-style-type: none"> Recorded demo showing how to orchestrate commercial 5GC onto OpenShift cluster then create, order and activate a slice + data connection using UE/gNB simulator, and show the logs 	
	2021-06-10 - ONAP: OOM Honolulu retrospective	<ul style="list-style-type: none"> Latest OOM enhancements including "Pick and Choose" (, supporting MariaDB 10.5.8/Helm 3.0/Dual stack support (IPv6/IPv4) enabled k8S, AAI chart cleanup, Certificate Retrieval Automation, etc. - continuously add more cloud native and modular capabilities. 	Need to certify officially upgrade from one release to another one
	2021-06-10 - ONAP: Ask Anything to the ONAP TSC	<ul style="list-style-type: none"> Review of 2021 TSC priorities Q&A 	<p>Call for ONAP Integration PTL</p> <p>ONAP in 2025 - Where will we be?</p>
	2021-06-10 - ONAP: OOM Plans for Istanbul and after	<ul style="list-style-type: none"> New expected capabilities: Istanbul intents i.e. ONAP registry solution, Service Mesh, version bumps 	
	2021-06-10 - ONAP: ONAP Requirements for Istanbul Release	<p>We heard short presentations of four requirements:</p> <ul style="list-style-type: none"> Smart Intent Guarantee based on IBN - R9 Intent Instance CCVPN Usecase Requirements Summary for Istanbul E2E Network Slicing use case Multi-model support in SDC <p>And the slide deck contains also one pager of SECCOM Istanbul requirements</p> <p>All Istanbul Requirements can be found at: Istanbul Release Requirements</p>	

	2021-06-10 - ONAP: CCSDK /SDNC - ODL Decoupling	Decoupled CCSDK-Based Controller Architecture: <ul style="list-style-type: none"> • Separate pods for ONAP controller functions • Exposing components in ODL vs Springboot • Demo & Code Review • Shared POC findings 	POC finding: Porting Northbound ITFs is harder, especially CRUD (create, read, update, and delete) operations)
	2021-06-10 - ONAP: Honolulu Release Retrospective	<ul style="list-style-type: none"> • Review of Honolulu: Lessons Learned 	
XGVela	2021-06-10 - XGVela: Information Model and APIs	Technical deep dive into XGVela strategy for: <ul style="list-style-type: none"> • Metamodels in TM Forum Open APIs • Configuration Management • Topology and Inventory Management • Fault Management and Notifications • Performance Management 	
Anuket	2021-06-10 - Anuket: Hardware Acceleration Abstraction	<ul style="list-style-type: none"> • RM, RA2 covers HW acceleration • RA1, RI1, RI2, RC1, RC2 misses accelerators • AAL in O-RAN <ul style="list-style-type: none"> ◦ We need to follow the evolution of specs and align Anuket to O-RAN • Fragmentation of Device Plugins <ul style="list-style-type: none"> ◦ There is a need to harmonize the API-s to ensure portability, but there is no industry alignment at the moment ◦ One idea is to start a specification project in Anuket, we will discuss more in RA2 	It is difficult to collaborate with O-RAN
Anuket	2021-06-10 - Anuket: RA2 status and next steps	Backlog for Lakeside we built <ul style="list-style-type: none"> • Alignment with RM <ul style="list-style-type: none"> ◦ Edge Cloud ◦ SFC ◦ Security • Explicit list of supported API-s and Kubernetes objects • Multitenancy, workload isolation and Namespaces • Sync SIG Features tables with specs • How to manage the application dependency of different CNI multiplexers • CNF packaging • ServiceTypes/NodePorts/LoadBalancers • Chapter 6 	
Anuket	2021-06-10 - Anuket: Working towards a consolidated documentation	<ul style="list-style-type: none"> • We need to provide a consistent documentation • We will use an Anuket theme to generate both the former OPNFV and Nuket docs, and cross reference them 	