### Cross-Community
Good discussions on how to build a trusting community. Targeted at the CNTT/OPNFV Meld activities, but applies across the LFN and Open Source communities.

### ONAP
**Session on E2E Network Slicing - Honolulu release Scope and Future Roadmap** (Presenters: LIN MENG, Swaminathan Seetharaman, Milind Jalwadi, Henry Yu)

This session covered what functionality has been realized in Guilin, and the proposal for Honolulu and beyond for each of the following tracks of the E2E Network Slicing use case:

- Enhancements in CSMF and NSMF for E2E Network Slice allocation, standards alignment, operator intervention, etc.
- RAN, Core and Transport Slicing related aspects, including alignment with O-RAN (RAN) and ETSI ZSM & IETF (Transport)
- KPI Monitoring, Closed Loop Control & Intelligent Slicing

Feedback from the ONAP community was sought on topics such as Network Slicing in roaming scenarios (i.e., true e2e slicing), interaction of slice management & orchestration functions (NxMF) with the Core NFs such as NSSF and NWDAF, collaboration with C&PS project, etc.

Presentation Slides are available [here](#).
ONAP Demo of O-RAN-SC O1 interface simulator configuration via CDS

CDS-ORAN-NETCO...lator-Demo.pdf

ONAP Control Loop in TOSCA PoC and Rel H evolution

Deployment of Control Loops in Long Term

ONAP Orchestration of Free 5G Core CNFs using ONAP4KSs (EMCO)

Free5GC CNF On...ONAP Preso.pdf
OPNFV TSC Meeting

- Jerma M2 scheduled for Oct 20
  - Functional freeze - Readiness Review
  - Document significant accomplishments
  - Release Management Tasks sent to M2
- Goal for Documentation outline in Jerma Release - Agreed
- Revisions to RELREQ-13 on Storage testing requirements and clarifications - Agreed
- OPNFV Input to LFN Governing Board meeting on Project’s Priority Activities - Agreed

- Meld Meeting
  - Meld work continues to make great progress. All three workstreams have actions and activities working towards a January 1 transition.
  - Likely that new TSC will be interim to align with the election processes of OPNFV and get the Meld org in sync with rest of LFN
14 Oct 2020

### Key Points

#### Cross-Community
- Multiple engaging discussions on EUAG
  - Exploration of how to expand the scope of EUAG to better address the community needs
  - Telcom operators discussing how to bring a joint operator/vendor perspective.

#### ONAP
- ONAP Requirements Subcommittee - new requirements for Honolulu
  - #1 ONAP ETSI-Alignment (SOL004, SOL005 v3.3.1)
  - #2 E2E Network Slicing use case

- **Summary of Honolulu Requirements**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide a full E2E Slicing solution involving Core, RAN &amp; Transport NSMF</td>
<td>1. Enhancements in the E2E Slice allocation &amp; stitching together all subnets 2. Slice selection taking into account capacity, resource occupancy levels, etc. 3. TMF 641 API support for slice LCM operations (stretch goal)</td>
</tr>
<tr>
<td>RAN Slicing enhancements</td>
<td>1. Instantiation of RAN NFs and initial configuration (RAN service) (O2 – stretch goal) 2. Enhancements in interactions with NSMF (endpoints, slice profile) and TN NSMF 3. Mapping Slice Profile to each Neigh RT RIC 4. Use of A1 interface for Closed Loop and A1/ML 5. RAN (re) configuration enhancements</td>
</tr>
<tr>
<td>Core Slicing enhancements</td>
<td>1. Configurations of Core Slice Subnet 2. Placement of Core NFs (stretch goal)</td>
</tr>
<tr>
<td>Transport Slicing enhancements</td>
<td>1. Enable reuse of existing TN NSI (consider also endpoints) 2. Resource occupancy levels of TN NSI 3. Standard interfaces and Info model enhancements 4. Support MP2MP connectivity (stretch goal)</td>
</tr>
<tr>
<td>Modeling (indicated as a separate track but many aspects are linked with other tracks)</td>
<td>1. Service and Slice Profile, endpoints related enhancements 2. RAN slice sub-net modeling enhancements (including front-haul and mid-haul) 3. NST not containing NSSI list, but only sub-net list (stretch goal)</td>
</tr>
<tr>
<td>KPI Monitoring, Closed Loop and use of A1/ML</td>
<td>1. PM data collection and KPI computation (GuiLin carry-over) 2. Closed Loop and A1/ML at e2e slice and slice subnet level for RAN &amp; Core 3. TMF 628 for PM data collection – first steps (stretch goal)</td>
</tr>
</tbody>
</table>

#3 Smart Operator Intent -based Network & 5G Slicing Support

---

Comment: O-RAN a topics such as slicing
Comment: Clarify what exactly is meant by O-RAN alignment to avoid misinterpretation.

---
3. Overview of IBN in ONAP (reference)

The target architecture of the Intent-Based Network is divided into a Intent orchestration layer (hereinafter referred to as the Intent layer), a control layer and a network layer.

The Intent orchestration layer contains 4 key operational steps ("intention collection" – "intention conversion" – "intention and configuration verification" – "decision and optimization remediation"), cooperates with the configuration release of the control layer and network status collection to achieve a complete closed-loop operation process.

#4 5G OOF SON use case

SON use case: Roadmap

- **R6 Frankfurt**
  - CM-Notify handling
  - Control Loop Coordination (CLC) first steps
  - Introduced Adaptive SON functionality
  - Checked in RAN-Sim into ONAP repo

- **R7 Gullin**
  - ML-based SON – first steps (training done offline), additional input from ML model for PCI optimization (based on PM data)
  - Preparation work for 3GPP/ORAN yang model

- **R8 Honolulu**
  - O-RAN alignment (O1 for configuration and CM notification)
  - CL&CPS – RAN config data base (first steps), cell models, initial alignment with 3GPP NRM
  - SON coordination (preparation/initial steps)
  - CLC interaction (stretch)

- **R9 Istanbul & beyond**
  - O-RAN alignment (FM/PM over O1)
  - C&PS – Full-fledged RAN data base, full alignment with 3GPP NRM
  - Control Loop Coordination, SON function co-ordination
  - New SON use cases & interaction with Network Slicing
  - SON in context of LCM, SON function deployment

Honolulu Requirement Summary

<table>
<thead>
<tr>
<th>Category</th>
<th>Requirement</th>
<th>Content</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interoperability</td>
<td>O-RAN alignment</td>
<td>1. Receive Configuration Management (CM) notifications over O1S</td>
<td>HIGH</td>
</tr>
<tr>
<td></td>
<td>(O1, O1 interface)</td>
<td>2. Align with relevant aspects of O-RAN O1 interface</td>
<td></td>
</tr>
<tr>
<td>Functional</td>
<td>O-RAN database</td>
<td>1. Data models/DB schema &amp; APIs to be generated from yang models</td>
<td>HIGH</td>
</tr>
<tr>
<td></td>
<td>[CPS, [O1, including open RAN models]]</td>
<td>2. Details of cells to be stored with PM reference in AN</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Modeling of RAN functions and objects (align with NWI)</td>
<td></td>
</tr>
<tr>
<td>Functional</td>
<td>Control Loop Coordination (CLC) extensions</td>
<td>Collaborate on CLC extensions [queuing, priority, ...] (stretch goal)</td>
<td>HIGH</td>
</tr>
<tr>
<td>Functional</td>
<td>SON coordination</td>
<td>Co-ordination across SON functions – initial steps</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>Functional</td>
<td>SON function to evoke ONAP platform</td>
<td>1. (New) SON use case based on data/MI analysis</td>
<td>MEDIUM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Machine Learning (ML) SON aspects in DCAE (extension)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Interaction with Network Slicing (stretch goal)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. CLC interaction (stretch goal)</td>
<td></td>
</tr>
<tr>
<td>Functional</td>
<td>SON in the context of LCM</td>
<td>Role of SO (e.g., new cell discovery/addition) (beyond release)</td>
<td>LOW</td>
</tr>
<tr>
<td>Platform</td>
<td>SON function deployment</td>
<td>SOL &amp; COMP for SON service/feature deployment (beyond release)</td>
<td>LOW</td>
</tr>
<tr>
<td>Interoperability</td>
<td>real PIM interaction</td>
<td>Interaction with real eNodeB in lab (over O1 interface)</td>
<td>LOW</td>
</tr>
</tbody>
</table>
ONAP Impact of the current ONAP release- and branching strategy on documentation

Discussed the possible solutions for branching documentation and project / Cross release issues.

Proposal for Improvement

- Create and maintain a full list of (sub)components and provided documentation as part of an ONAP release
  - Work started, clarification with PTLs ongoing (See Jira and List)
  - Includes functional and non-functional components (e.g. Architecture, Security, Modelling, VNF Requirements, Use Cases).
  - List should be part of the Release Lifecycle process

- Release Process improvements
  - All (sub)components that are part of a release must create a release branch (see Branching Strategy)
  - All documentation content must be validated (and changed if required) to ensure that it fits to the release. A note about this validation (or update) must be made in the (sub)project release note. (also for not changed components)
  - The availability of the described information and the execution of described tasks must be ensured by corresponding milestones of the Release Lifecycle process

Several projects have deprecated repos
- Documentation update tracking should be part of release process
- Should documentation be in a single repo?

ONAP Security Subcommittee Kanban

Review Helm, OS, Python/java updates

Update Vulnerable direct dependencies (tracking through wiki)

- M1 (TBD) commit resources
- M4 (TBD) complete upgrades

Guilin seccom retrospective: lots of improvements in this release

Guilin SECCOM retrospective 1/2

- Upgrade of the logger, java from 1.8 -> 11 (19Q2-13) and Python 3.7 -> 3.9 (19Q2-12) Actual status based on the current git and wiki documents.
- Update all directly dependent external components (19Q2-11)
- Automated security testing - containers not running as root (19Q2-10)
- Increase the number of CI/CD docker branches checks in the Integration Health检查 (19Q2-9)

Guilin SECCOM retrospective 2/2

- Secrets management
  - No need access for admin (19Q2-9)
  - All config files inside the main container should be versioned (19Q2-8)

Reviewed H release priorities

- SIEM integrate
  - Logs from
  - CII Badges
  - Crypto
  - Implemen
  - HELMv3

- Fixing of FT
  - Trigger R LFN
  - Create FI
  - DOC upd
  - Guilin imprv
    - Complete
    - Creation
    - Creation
    - Update o
The Release Theme for Guilin was “API Documentation”) New

- Swagger.json
- Focused on the Modeling subcommittee recommendations on best practices for the API swagger files
- API Spec are Referenced the updated links to the API Specs in the Component Architecture Template

Future Releases Proposed Themes:
- Honolulu (R8) - Information and Data Models
- Istanbul (R9) - Flows
- Koyoto (R10) - Modularity

ONAP TCC Network Management

- ETSI
  - ETSI NFV update – Thinh Nguyenphu
  - ONAP Conformance to ETSI – Byung-Woo Jun
- 3GPP
  - RAN Slicing: 5G NR Resource Configuration Management – Kamel Idir
- TM Forum
  - Digital Transformation World – Magnus Buhrgard
  - Catalysts, rapid-fire proof-of-concept projects – Magnus Buhrgard

TCC Generic Ne...Management.pdf

LFNTECH_ETSI_NF...2020_final1.pdf

ONAP Honolulu - CNF Task Force Requirements
Presentation of REQ-334 (ETSI Alignment-CNF Support) - SOL004, SOL005 v3.3.1

REQ-334: Fernando

REQ-341: Lukasz R.

Call for Developers!

If any interest please contact

REQ-341 (CNF Orchestrator)

- SDC Enhancements
  - Continuation of native Helm support changes
  - Helm validation [stretch]

- AAI model changes
  - K8s resource type created from helm package -> similar role to vserver object
  - Snapshot of Status API result in AAI

- AAI API - Exposure of Status API result with conversion to JSON

- SO Changes
  - SO E2E API Improvements
  - SO CNF Adapter
  - Status API in CNF Adapter
  - AAI synchronization after each change -> Notification based
  - SO Integration ETSI Flow. We need to make sure the flow will coexist with REQ-334
- Integration of K8s API v2 -> Investment for the future development
  - Configuration API for v2
  - v2 in OOM = adaptation of existing helm charts for NFR
  - SO CNF adapter must be changed in SO
  - ArtifexBroker must be modified for v2 or replaced by CNF adapter distribution
  - Native Profile Handler in CDS must be switched into v2
  - v2 in ONAP python-sdk?

- CSDK/CDS
  - Native Configuration API Handler for v1 or v2
  - Native Status API Handler for v1 or v2

- Dedicated CNF Health Check Workflow in SO
  - Status Check -> Status API result verification
  - CNF Health Check with Dedicated Health Check Job Execution

- We may want to switch to another pure CNF use case
  - CNF use case CBA + integration scripts
  - Reference Health Check Job Implementation for selected CNF use case
  - Prometheus for collection of metrics
ONAP

**ONAP: Hands-on session on ONAP Optimization Framework (OOF)**

This session provided an overview of OOF, its modular architecture, capabilities and ease of reuse w.r.t. onboarding a new use case or requirement that needs some sort of optimization functionality. It also described the typical realization steps to follow for any use case or requirement needing optimization (provided by OOF). It was followed by a guided walk-through with an example of how the E2E Network Slicing use case realized the optimization needs easily through a lot of reuse of existing functionality with some enhancements.

Comment: Policy team highly appreciated the work done by OOF team for effective usage of the new Policy framework.

Query: A query on how subnet instance’s resource occupancy levels and capability of an existing instance to cater to a new request are considered by OOF.

Response: This isn’t yet considered by OOF, however, it is proposed to be realized in Honolulu release, with OOF getting the required info on available resources and capacity through an “inventory provider” which for example could be AAI or DCAE, which leverages existing OOF capabilities to a large extent.

Presentation slides are available [here](#).

CNTT /OPNFV

Field trial by Orange reviewed

Next OVP revision documentation update planning

Very engaged conversation on Telemetry and Observability

HA requirements got into the obligation of defining the test approach vs. implementation.

ODIM Project gave an overview of the project, with the CNTT RM team describing how the Hardware Interface Manager (HIM) concept can be addressed by ODIM. Several key areas were identified for collaboration. The ODIM team will continue the dialog in RM meetings and RA meetings afterwards, at the appropriate time.
This session presented an architecture for the Telemetry/Observability of VNFs and Cloud Infrastructure (NFVI) to achieve full automation leading to zero touch operation.

This architecture is based on a central telemetry data BUS on which are connected Providers, Consumers, and Subscribers of telemetry data.

**IMPLEMENTATION AT DEUTSCHE TELEKOM**

**THE SUMMARY**

- Juniper and DT jointly put together this architecture
- The joint solution is implemented and deployed in production
- All Telcos need this in their desire to “zero touch” operations

- CNTT RM should adopt this architecture
  - Win for Telcos
  - Win for Vendors
    - VNF/CNF and NFVI vendors support this model/API
    - True multi-vendor solution
    - Simplifies VNF/NFVI integration
  - No more silo’d solutions

---

**xGVela**

Tungsten Fabric

Unified Life Cycle Management using TF Operator - integration with Airship

Discussed approach on unification of life cycle management of Tungsten Fabric using Tungsten Fabric operator and provided reference implementation of an integration with Airship

Unified Li...erator.pdf

---

**Tungsten Fabric**

Transparency of TF Community

Shared details around documentation, governance, release management and related topics, community has made significant progress in recent days. Looking forward to take it further as a collaborative effort. Callout for new contributors and participants for Tungsten Fabric community
<table>
<thead>
<tr>
<th>Tungsten Fabric</th>
<th>TF Feature Development Roadmap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussed details on the 2020/2021 roadmap items with focus around cloud-native, dpdk, datapath and some other areas</td>
<td></td>
</tr>
<tr>
<td>Prabhjot Singh Sethi discussions around 1 native effort</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tungsten Fabric</th>
<th>TF vRouter - New debug and troubleshooting tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presented a session on new debug and troubleshooting tools inducted for datapath</td>
<td></td>
</tr>
<tr>
<td>Prabhjot Singh</td>
<td>consider further sesi</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tungsten Fabric</th>
<th>TF Cloud Native Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion around cloud native work happening in tungsten fabric. Also presented a demo on Tungsten Fabric integration with envoy proxy</td>
<td></td>
</tr>
<tr>
<td>Kiran KN</td>
<td>need</td>
</tr>
</tbody>
</table>

15 Oct 2020

<table>
<thead>
<tr>
<th>Track</th>
<th>Key Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-Community</td>
<td>PLEASE FILL OUT THE EVENT SURVEY: <a href="https://www.surveymonkey.com/r/LFNTech">https://www.surveymonkey.com/r/LFNTech</a></td>
</tr>
<tr>
<td></td>
<td>PLEASE REGISTER IF YOU HAVE NOT: <a href="https://www.cvent.com/d/k7q1mh/4W?ct=50221cf5-5496-4c34-9ec0-3b52b1b12046&amp;gas=2.21073848.2005020062.1597615801-222812119.1571605958&amp;g_ac=1.250299970.1597348253.EAatQobChMjuJ29vmY6wIH67h3_KAp5EAAYASAEgLU1fD_BwE">https://www.cvent.com/d/k7q1mh/4W?ct=50221cf5-5496-4c34-9ec0-3b52b1b12046&amp;gas=2.21073848.2005020062.1597615801-222812119.1571605958&amp;g_ac=1.250299970.1597348253.EAatQobChMjuJ29vmY6wIH67h3_KAp5EAAYASAEgLU1fD_BwE</a></td>
</tr>
</tbody>
</table>
| ONAP | • Policy Framework Guilin key updates.  
• Detailed working session & demo of Xacml-PDP engine.  
• Detailed working session & demo of Apex-PDP.  
• Detailed working session & demo of Drools-PDP engine.  
• Plans for Honolulu release |
| | All the details (slides, postman collection etc) are available here - https://wiki.onap.org/display/DW/2020-10-15+October+LFN+Virtual+Technical+Meetings |
ETSI ZSM - ONAP architecture collaboration

External interface of TSC (NBI) still need to be implemented
Otherwise the TN NSSMF is part of the Guilin Release
Call for Developers to implement Closed-Loop Automation as part of Honolulu and upcoming releases

ZSM collaboration and alignment with other SDOs

ZSM stiches related work from different SDOs (e.g., TMF, 3GPP, IETF, BBF, etc.) and provides a federated solution.
In other words, ZSM is a platform which integrates different standards and produces a unified and implementable solution, from which the ONAP network slicing use case may benefit.

Illustration of the relation between the scopes of ZSM and other groups (source: ZSM 003)
ONAP Collaboration and Alignment

Presentation slides are available [here](#).

ONAP & O-RAN

- O-RAN yang models for O1 interface
- Yang models and interface to Near-RT RIC
- A1 enhancements and usage scenarios
- O2 interface specification (for RAN Slicing, and RAN “service”)
- Use cases and requirements in ONAP (SMO/Non-Realtime-RIC) involving RAN
- SON – functional split and interactions (including A1 enhancements)
- Closed Loop and ML-based scenarios for E2E Network Slicing (including A1 enhancements)
- Insights w.r.t RAN deployments, configuration & dependencies
- Inputs w.r.t O-RAN focus areas, new specifications & timelines

ONAP & O-RAN SC

- Synergy in development of simulators (O-RAN components)
- Collaboration for:
  - Identification of joint use cases
  - E2E use case realization and joint demos
  - Plugtests and LFN events
- Alignment w.r.t realization of SMO, Non-RT RIC and Near-RT RIC functionality

ONAP 5G & PNF use cases aligned with O-RAN & 3GPP

<table>
<thead>
<tr>
<th>USE CASE</th>
<th>DESCRIPTION</th>
<th>Req vs U/C</th>
<th>SG Specific</th>
</tr>
</thead>
<tbody>
<tr>
<td>E2E PM – PM control</td>
<td>PM data collection control provides a dynamic and efficient way to configure performance measurement collection on a selected subset of vNFs and complements the existing PM data collection and processing capabilities.</td>
<td>Requirements</td>
<td>General</td>
</tr>
<tr>
<td>ODF – SNN PCT SO</td>
<td>Optimization and SON functions for 5G RAN. Self-optimization, Self-healing, Self-configuration.</td>
<td>Requirements</td>
<td>5G</td>
</tr>
<tr>
<td>5G SERVICE MODELING &amp; DEFINITION (DSG)</td>
<td>Defining and modeling a 5G Service (Design Time) and associated Modeling (Platform Info &amp; Data Model).</td>
<td>Requirements</td>
<td>5G</td>
</tr>
<tr>
<td>CONFIGURATION &amp; PERSISTENCY SERVICE</td>
<td>Configuration Persistency Service using internal database for storing network related data for use in LCM, OSS, Network, Operational applications.</td>
<td>Requirements</td>
<td>General</td>
</tr>
<tr>
<td>VNF LICENSING MANAGEMENT</td>
<td>Continue VNF License Management U/C analysis for VNF onboarding, VNF introduction/ONAP PnP and VNF instantiation. Bring in new UCI like usage monitoring for the purpose of invoicing.</td>
<td>Requirements</td>
<td>General</td>
</tr>
<tr>
<td>ONAP/3GPP &amp; ORAN Alignment</td>
<td>Standards Defined Notifications over VES. Introducing the capability to receive, validate and process standards defined notifications encapsulated in VES events in ONAP. Also with A1 Adaptor extension.</td>
<td>Requirements</td>
<td>General</td>
</tr>
<tr>
<td>E2E NETWORK SLICING (DS Use Case)</td>
<td>Network slicing defines Slices for 5G RAN systems. Network slicing is a long-term (multi-release) development. [will be presented in its own lecture at the Virtual Face to Face]</td>
<td>E2E Use Case</td>
<td>5G</td>
</tr>
</tbody>
</table>
ONAP: A1 Policy enforcement with Non-RT RIC

What is Non-RT RIC:
- A new component in ONAP
- A part of O-RAN Architecture
- Added to ONAP in Guillin
- For non-real-time control of RAN infrastructure
- Optimization
- Performance monitoring and evaluation
- Provisioning of policies
- Training and provisioning of AI/ML models
- Control Loops > 1s

Non-RT RIC as a part of ONAP platform

In ONAP 03 release, only A1 Policy Management function is supported:

Components focus:
- A1 Policy Management Service: CCSDK micro service (community design)
- A1 Adapter: SDNC plugin (community design)
- R-APP: DCAS micro service (proposed option)

A1 policy: Declarative set of rules to address the near-RT RIC function, and hence the RAN, towards better fulfillment of the RAN operational or business goals.

ONAP Honolulu - What Should We Improve?

In Progress:
- Promote "What we have done" – Thank you to all ONAP "Demo Makers"
- Deliver Guillin Release (November 2020)

Next:
- Implement the new Release Cadence Strategy with Honolulu
- Setup ONAP Project Maintenance Task Force

What Else?
- Review TSC Composition
- How can we manage multiple releases i.e. N-2 (E Alto, Dublin)
- Today we only support 1 (latest official release i.e. Frankfurt) and N-1 (release under development i.e. Guillin)?
- Document to describe "How to operate ONAP" beyond the use cases and functional requirements
- Sharing "Best Practices" about how to use ONAP (from an operational perspective) across companies
- Continue to promote "What we have done" (Webinars, Demos, ONAP Certifications)
- Increase Test Automation (including Regression of previous Use Cases) + Demos for Use Cases (Do not wait R7 to start)
- Learn from CNCF about how we could optimize our ONAP Deployment (K8s) and more
- Resume our E2E Load/Performance/Stretch Testing to help us to define capacity management and to identify potential bottlenecks in our E2E Architecture
ONAP: Guilin CNF improvements overview

Support for container repository in the proposed approach - integration with ETSI path

Long direction - service orchestration with TOSCA based composition where helm package can be replaced by TOSCA definition?

Instantiation of Helm Package with existing VNF model
Status and synchronization of instantiated k8s resources
  - Helm Resource Artifact in SD/IO
  - Update of AAI information by SD/IO module
SO Orchestrates Helm Package -> not Heat Template
K8s Plugin as a standalone MS
  - K8s Adapter in SO to interact directly with the K8s Plugin
  - Enhance it to support the functions like the monitoring resources and status update (stretch)
Improvements in Helm customization/enrichment
Backward compatibility with CNF Macro Instantiation Workflow (Frankfurt) -> cvFW Example
Validation through flows cvFW Use Case
ONAP: 5G OOF SON use case - Honolulu release requirements, dependencies and roadmap

Presentation slides are available here.
## ONAP / OPNFV

### What's New in ONAP Frankfurt

<table>
<thead>
<tr>
<th>CNTT / OPNFV</th>
<th>Edge Workstream</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Review of Edge Workstreams work on what profiles need to be addressed in the reference architectures and model. 2020-10-15 - CNTT Edge Workstream Working Session.</td>
</tr>
<tr>
<td></td>
<td>CNTT Edge - RA01 (OpenStack) Architecture - Scenario</td>
</tr>
</tbody>
</table>

**OVP 2.0**

Input on CNF Workload requirements - Requirements for the Infrastructure make sense and there should be a test on the infrastructure to ensure that the workload requirements are met. Requirements drive the tests that are developed. — having Workload requirements BEYOND the above is thought to be out of scope for CNTT & OPNFV. Several people agreed or seemed to agree on this.

**OPNFV Investigates CNTT Telemetry Req.**

- with AIRSHIP and Barometer Projects
- Study of current coverage with Prometheus and need for collectd support:
  - CNTT provides the Use Case for OpenStack dev that was missing before.
  - Reviewed status of collectd and Prometheus capabilities studies (RELREQ-18)
  - Discussed possibility of reviving collectd effort in OS Helm that was abandoned about 3 years ago for lack of a compelling use case
  - Emma / James to review code and scope the effort to get it running
- AI to request item on CNTT TSC agenda for next week to approach OS Helm about enabling collectd

**OPNFV Kuberef project review -**

- Relies on BMRA (new) installer for now, others welcome.
- Testing the new Gitlab CI/CD environment from a green-field point of view (new project).

### xGVela

### OpenDaylight

- ODL-Micro Aluminium updates
  - Meeting Notes
  - ODL-Micro VDF Slides