## ONAP Daily Summaries

LFN Event Survey:  [https://www.surveymonkey.com/r/7NZWS73](https://www.surveymonkey.com/r/7NZWS73)

### Day 1 - April 21, 2020

<table>
<thead>
<tr>
<th>Track</th>
<th>Key Points</th>
<th>Challenges</th>
</tr>
</thead>
</table>
| Guilin Planning - Requirements Moderator: Alla Goldner | Reviewed the following requirements:  
1. NFV Testing Automatic Platform Requirements.pptx  
2. E2E Network Slicing-Requirement SubC session V1.0.pptx  
3. ONAP rel. G TIM requirements.pptx  
5. 5G Svc CPS POB CMPv2  
6. Support xNF Software Upgrade in association to schema updates  
7. Harmonization | Input from EUAG on Guilin priorities is needed |


| Guest Planning - Architecture | Great collaboration between the Subcommittees! OOM Daily gating: https://gating-results.onap.eu/results/ Wiki link | Wiki, RTD, ONAPDocs - a lot of information |
ETSI /CNF - Container Modeling

Moderators: Andy Mayer, Hui Deng

#1 ETSI NFV Container Architecture and Modeling
Ulrich Kleber

VNF can use VM-s or containers.

CNF is a _Cloud Native_ NF what is a VNF built with the Cloud Native principles in mind

ETSI-based CNF support is compliant to IFA029&IFA040 (publication expected in May)

Additional information shared by Thinh Nguyenphu : ONAP-ETSI Alignment Workshop (IFA040)

#2 CNTT RA2 Tom Kivlin, Gergely Csatari

Possibility to run NF on top of what it is defined in RA2 / K8S

No conflict/overlap between what ETSI CNF defined and CNTT RA2 (K8S)

#3 CNCF TUG (Lei Wang)

- Cloud Native Thinking for Telecommunications
- Deploying Cloud Native Network Functions in a telecom service provider ecosystem
- Cloud Native Principles github
- CNF Conformance (github)
- Conformance Test Categories Documentation
- CNF Conformance (deck)
- Platform Conformance Test in alignment with CNTT RA2

#4 How can we stay align between ETSI, CNTT, ONAP, CNCF, OVP PH2, etc?

Day 2 - April 22, 2020

<table>
<thead>
<tr>
<th>Track</th>
<th>Key Points</th>
<th>Challenges</th>
<th>Next Steps / AIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guilin Planning</td>
<td>Reviewed and discussed requirements for Control loop in G release : Control Loop Sub Committee Guilin Release Planning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guilin Planning - Control loop sub committee - Guilin requirements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderator: Pamela Dragosh</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
#1 Latest ETSI NFV modelling and API progress Thinh Nguyenphu
- SOL OpenAPI Representations
- Deployment Templates and Packaging specifications
- Release 2 maintenance ed2.81, SOL specifications are scheduled for release June 2020
- Currently ONAP is using SOL001 ed2.5.1 is supported as part of Frankfurt release. When ONAP is planning migrate to SOL001 ed2.7.1?

#2 ETSI NFV model impact on R7 Xu Yang
- Review of ONAP Guillin Modelin HL Requirements

ETSI/CNF - CNF Orchestratio n over StarlingX 3.0 Demo

Moderator: Catherine Leleve

Speaker: Bin Yang

- cFW - POC in progress based on ONAP MultiCloud project - Source code available [here](#)
- What API is used in VID? VNF API or GR API? Does it make any difference? What about that override.yaml - is there an example available? VNF/VF API to instantiate the deployment?
- No development yet related to fault and performance monitoring of the CNFs. Targeted for Guillin.
- Dummy heat template is temporary for now as we did not want to make any major changes to SDC and SO. In R7, we intend to make Helm as first class citizen. Until R6, Helm charts are hidden as artifacts under Dummy HEAT template.

ETSI/CNF - ETSI alignment on the SOL004 and SOL007 standard

Moderator: Seshu Kumar M

Speaker: Fernando Oliveira, Byung-Woo Jun

- Discussions have started with SDC for ETSI alignment for the onboarding
- SVNFM/NFVO are coming from 3rd party vendors

## ETSI-Alignment Roadmaps

<table>
<thead>
<tr>
<th>Dublin</th>
<th>El Alto</th>
<th>Frankfurt Support</th>
<th>Guillin Proposals</th>
<th>Future Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>- UTC/MM 2.3.1 support</td>
<td>- UTC/MM 2.3.1 support</td>
<td>- UTC/MM 2.3.1 support</td>
<td>- UTC/MM 2.3.1 support</td>
<td>- ETSI-based VNFM software signaling</td>
</tr>
<tr>
<td>- SOL002 Adapter</td>
<td>- SOL002 Adapter</td>
<td>- SOL002 Adapter</td>
<td>- SOL002 Adapter</td>
<td>- SOL021 Dr-Or-Interface to support multitenant orchestration</td>
</tr>
<tr>
<td>- Create VNFM</td>
<td>- Create VNFM</td>
<td>- Create VNFM</td>
<td>- Create VNFM</td>
<td>- Policy-based scaling (VNFM- level and/or IP-Multitenant level)</td>
</tr>
<tr>
<td>- Import VNFM</td>
<td>- Import VNFM</td>
<td>- Import VNFM</td>
<td>- Import VNFM</td>
<td>- SOL023 LON and translation into IDAC events (PM/PM)</td>
</tr>
<tr>
<td>- Terminate VNFM</td>
<td>- Terminate VNFM</td>
<td>- Terminate VNFM</td>
<td>- Terminate VNFM</td>
<td>- High availability and Fault-tolerance</td>
</tr>
<tr>
<td>- Delete VNFM</td>
<td>- Delete VNFM</td>
<td>- Delete VNFM</td>
<td>- Delete VNFM</td>
<td>- CNF support</td>
</tr>
<tr>
<td>- Subscription Notification</td>
<td>- Subscription Notification</td>
<td>- Subscription Notification</td>
<td>- Subscription Notification</td>
<td>- SOL003 Adapter support</td>
</tr>
<tr>
<td>- Granting</td>
<td>- Granting</td>
<td>- Granting</td>
<td>- Granting</td>
<td>- SOL003 Adapter support</td>
</tr>
<tr>
<td>- SOL003 VNFM RB</td>
<td>- SOL003 VNFM RB</td>
<td>- SOL003 VNFM RB</td>
<td>- SOL003 VNFM RB</td>
<td>- SOL003 VNFM RB support</td>
</tr>
<tr>
<td>- VNFM/Simulator in the 3D project SDC SOL006 PM onboarding</td>
<td>- VNFM/Simulator in the 3D project SDC SOL006 PM onboarding</td>
<td>- VNFM/Simulator in the 3D project SDC SOL006 PM onboarding</td>
<td>- VNFM/Simulator in the 3D project SDC SOL006 PM onboarding</td>
<td>- SOL003 VNFM RB support</td>
</tr>
<tr>
<td>- SOL002 VNFM and PM onboarding</td>
<td>- SOL002 VNFM and PM onboarding</td>
<td>- SOL002 VNFM and PM onboarding</td>
<td>- SOL002 VNFM and PM onboarding</td>
<td>- SOL002 VNFM and PM onboarding</td>
</tr>
<tr>
<td>- ETSI SOA2.3.1 support</td>
<td>- ETSI SOA2.3.1 support</td>
<td>- ETSI SOA2.3.1 support</td>
<td>- ETSI SOA2.3.1 support</td>
<td>- SOL003 VNFM RB support</td>
</tr>
<tr>
<td>- EUR003 Adapter Bag</td>
<td>- EUR003 Adapter Bag</td>
<td>- EUR003 Adapter Bag</td>
<td>- EUR003 Adapter Bag</td>
<td>- SOL003 VNFM RB support</td>
</tr>
<tr>
<td>- EUR001 Adapter Bag</td>
<td>- EUR001 Adapter Bag</td>
<td>- EUR001 Adapter Bag</td>
<td>- EUR001 Adapter Bag</td>
<td>- SOL003 VNFM RB support</td>
</tr>
<tr>
<td>- EUR000 Adapter Bag</td>
<td>- EUR000 Adapter Bag</td>
<td>- EUR000 Adapter Bag</td>
<td>- EUR000 Adapter Bag</td>
<td>- SOL003 VNFM RB support</td>
</tr>
<tr>
<td>- EUR000 VNFM RB and PM onboarding</td>
<td>- EUR000 VNFM RB and PM onboarding</td>
<td>- EUR000 VNFM RB and PM onboarding</td>
<td>- EUR000 VNFM RB and PM onboarding</td>
<td>- EUR000 VNFM RB and PM onboarding</td>
</tr>
</tbody>
</table>
What is ONAP4K8S?

- Is Multi Site Distributed App Orchestrator
- Independently can be deployed or deployed with rest of ONAP
- Supporting deployment of both applications and network functions
- Supporting workload types - VMs, Containers, VNFs and CNFs
- Lightweight & high performance
- Micro-service based architecture
  - Leverages ISTIO, AuthService & KeyCloak for IAM, Mutual TLS
  - Fluentd for logging
  - Prometheus for metrics
  - Jaeger for distributed tracing.
  - No centralized configuration DB, One Document DB and One KV DB

R6 and R7 Plan (With rest of ONAP)

- SDC Changes (Helm as 1st class citizen)
- K8s Plugin as VNFM
- Helm as 1st class citizen

- O&M Integration
- CI/CD Integration
- SO-VNFM Integration
- A&AI Integration

- Release 6
- Release 7 (Still in discussion)
- K8s Plugin as VNFM
- Helm as 1st class citizen

- K8s Plugin for Distributed applications
- MongoDB, etc DB

- How to handle different VNF types i.e. Openstack based, Helm Chart based, Heat based etc? It should work based on the current ONAP4K8S

- How will the plugin with its own HPA placement logic interact with the rest of ONAP which also uses placement controller (OOF)?
**Prepare CNF Helm Chart**

- CNF used: Open source vFW
  - Sink: Container
  - FW: VM
  - Packer generator: VM
- Helm Version: Helm3
- VM on Openshift
  - Kubervirt operator/CRD
  - oc apply -f kubervirt_operator.yaml
  - oc apply -f kubervirt_pod.yaml
  - Helm chart with heat template of VM
- Specify multiple network requirements by CNFs in Helm chart...

---

**CNF Deployment on OpenShift**

1. POST: CNF Service CSAR
2. Get the kube cloud related information.
3. Extract CSAR.
4. Validate the Helm charts.
5. Pass the Helm charts to kubernetes cluster.

---

**OVP : ONAP Validation program**

- OVP is the superset of VNF testing
- OVP is built using robot script
- The input is a DIR structure that should have
  - VNF HEAT template files
  - SDNC preload files (in json format)
  - Openstack access information like subscriber, tenant, region etc.
1. The overall requirements for E2E Network Slicing use case in Guilin release was presented. This covered:
   - New slice lifecycle operations to be supported. e.g. slice modification, slice termination
   - Expansion in scope of E2E network slice to include RAN and Transport
   - Realization of NSSMF (Core/RAN/Transport) within ONAP. ONAP should also support NF set up and NF configurations under this condition
   - ONAP as NSMF connecting to external RAN NSSMF and Core NSSMF
   - KPI Monitoring, Closed Loop and Intelligent Slicing
   - Improvements to Frankfurt content

2. User Operation Guidance for E2E Network Slicing Use case for Frankfurt release was presented. This covered:
   (a) ONAP components required for the use case, and the setup
   (b) How to create the associated design artifacts
   (c) UUI actions

3. Questions asked:
   - How is Core NSSMF intended to be realized within ONAP?
   - How will a service be orchestrated by ONAP wherein part of the service only is within ONAP scope, whereas NSSMF within ONAP may be controlling the associated slice sub-net.
   - Details of modeling aspects and enhancements.
   - Are external domain controllers foreseen to be used for the domain-level actions?

---

Day 3 - April 23, 2020

<table>
<thead>
<tr>
<th>Track</th>
<th>Key Points</th>
<th>Challenges</th>
<th>Next Steps / AIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Session</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polcy Framewor</td>
<td>Frankfurt features and demos</td>
<td>Now that we have most of the framework components built and stable. We are going to schedule a couple of demo sessions per area to deep dive, describe the features &amp; how to use them. Probably an hour every Friday for a couple of weeks. Will be sending the invite soon.</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| **Joint Session - Cloud Native OVP** | - Introduction about OVP PH2  
- Project Mapping & Relationship  
- Discussion about Badging level | #1 Finalize OVP PH2 Roadmap by end of May 2020 |
| **Requirements subcommittee meeting continuation** | We reviewed the following remained submitted Guilin proposed requirements:  
8. PM Control and A1 adapter extension  
9. OOF SON requirements  
10. ONAP - Multi-tenancy | Input from EUAG on Guilin priorities is needed |
| Moderator: Alla Goldner | | The presented requirements are already endorsed by the Requirements subcommittee. We will review the remaining endorsed ones on Thursday and review new ones during our next meeting on Monday, April 27th |
## Pivot to MTTU: Focus on dependency upgrades

### SECCOM Responsibility
- Define dependency upgrade priority
  - Priority 1: Direct dependency with Critical vuln
  - Priority 2: Direct dependency with Severe vuln
  - Priority 3: Direct dependency with Medium vuln
  - Priority 4: Direct dependency with no vuln
- Create prioritized list of recommended upgrades for all outdated direct dependencies per project per repo
  - Priority 1 and 2 only
  - Recommendations include list of vulnerabilities (CVE and Strontio) in the outdated package
  - No transitive packages in the upgrade list
  - See [Guilin Package Updates](#)
- Create 1 jira per project for the upgrade task
  - Ticket includes link to the recommended upgrade page on the Security Vulnerability wiki space

### Project Responsibility
- **M1:** Update all Priority 1 and 2 dependencies
  - Package updates is blocking at M1
  - SECCOM can recommend a continuation (complete by later milestone) or a waiver (defer to a later release) put reason in recommendation table
- Projects must track progress in the tables in the Security Vulnerability space
- Transitive dependencies out of scope
- Fewer Jira tickets, simplified tracking
- No vulnerability analysis required
- Never look at NexusIQ again!

### MTTU: Median Time to Upgrade
- [Guilin Package Updates per component](#)
- [20_04_23_ONAPPackageUpgradeStrategyGuilin_V2.pptx](#)

---

### Guilin Planning - OOM Proposal

**Speaker:** Sylvain Desbureaux

**Moderators:** Eric Debeau

- Continue the removal of hardcoded credential
- Upgrade of open source version recommended by SECCOM
- Allow the choice of subcomponents

Some proposals with help of projects:
- All logs to STDOUT
- Certificates
- Crash well when Issue (and not “wait for I don’t know” or exit with status 0)
- AAF integration must be settable to off
- MSB integration must be settable to off

**Tentative / PoC**
- Make Ingress default deployment
- Make Deployment with storage class default deployment
- check storage asked for PVC is consistent with actual deployments
- Service Mesh PoC continuation
- All pods have requests/limits
- request/limits bad values hunting: use only 10 vCPU while 92 vCPU are required, RAM may be divided by 3

---

### #1 Assess the impact of upgrading to the version suggested by SECCOM? Does it require any architecture change or is it transparent for the component (only Helm Chart modifs)?
Guilin Planning - Integration priorities Moderator: Eric Debeau

Speaker: Morgan Richomme

- ONAP cross-project system integration
- CI/CD

CIST run Daily

- End to End CI/CD through 2 types of chains
- CI Daily chains (Master and Stable): everyday we redeploy and test an ONAP solution based on OOM Master / last Stable
- Gating: deployment/test of a full ONAP solution on any OOM and SO patchset submission

Morgan Richomme also requesting PTL to release as soon as possible. Do not wait R4 to update OOM when new image is available

- Integration Guilin Release proposal

X-projects

- Maintain java11
- create python3.8 baseline image

Repositories

- Adopt the approach to create a repo for new use cases / simulators
- Add linters to all the new repositories
- Add new linters (tobot, bashate, rst)
- How to get a consistent view on all the repositories, shall we tag all the repositories...
- update xtesting repo and put in place the build chain in ONAP (move from gitlab.com to ONAP)
- update java/python3.8 in ONAP (move from gitlab.com to ONAP)

Robot pod

- Adopt micro-service approach introduced by Daniel (propto in F)
- move the helm chart back to OOM

Use case support

- Write an documentation "Use case guideline"
- Test creation of an override.yaml per use case to be able to deploy adhoc environment in windriver

Tests

- update the tests
- harden the simulators/emulators (no more in xfail lists)
- clean? are all the tests still maintained?
- archive CIST? --> projects can bring back their tests in their repository but jenkins CSIT not needed anymore
- move some of the CIST tests in Daily CI
- introduction of python_sdk for new tests (deprecate onap-tests)
- improve security tests (Integration and Built Tests For Releases)
- How to measure the test coverage?
- How to get better healthcheck tests and "force" project to update them when they provide a new version of their code
- Support OOM on a use case for Core on F G migration

Labs

- include endpoint supervizion page? (cachet?)
- Ops guideline (Zabbix/Prometheus/...)?

CI/CD

- improve CI chains and CI testing gate
- new smoke use case
  - vFW CL
  - CDS
  - ...
- integration of Portal GUI tests
- finalize windriver/gitlab.com pipelines
- introduce a weekly CI chain including robustness tests

#1 What will be the oParent requirements for Guilin? Pawel Pawlak, Amy Zwarico
<table>
<thead>
<tr>
<th>E2E Network Slicing Session 2</th>
<th>1. &quot;RAN and Transport Slicing&quot; proposal and scope for Guilin release was presented. This covered:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Overview of RAN Slicing, scope and assumptions for Guilin release</td>
</tr>
<tr>
<td></td>
<td>• RAN NSSMF within ONAP, as well ONAP acting as NSSMF interacting with an external RAN NSSMF</td>
</tr>
<tr>
<td></td>
<td>• Overview of Transport Slicing, based on TSCI (IETF); scope for Guilin</td>
</tr>
<tr>
<td></td>
<td>• TSCI information modelz</td>
</tr>
<tr>
<td></td>
<td>• Interaction between RAN and Transport Slicing, different deployment scenarios</td>
</tr>
<tr>
<td>2. &quot;KPI Monitoring, Intelligent Slicing and Closed loop&quot; proposal and scope for Guilin release was presented. This covered:</td>
<td>1. Elaborate the details of Guilin scope with respect to the modeling and interface aspects.</td>
</tr>
<tr>
<td></td>
<td>• KPI monitoring by slice tenant/operator (via portal)</td>
</tr>
<tr>
<td></td>
<td>• Three SON scenarios for Closed Loop Automation and Intelligent Slicing namely:</td>
</tr>
<tr>
<td></td>
<td>1. Slice resource optimization: Guilin: simple close loop for single NSI scenario; Beyond Guilin: Cross-Slice Scenario</td>
</tr>
<tr>
<td></td>
<td>2. KPI adherence optimization (KPI Guarantee); (Guilin: simple close loop by introducing AI model. Beyond Guilin: cross-interaction with (1) also)</td>
</tr>
<tr>
<td></td>
<td>3. Service experience optimization (SLA Guarantee, QoE based) (Beyond Guilin)</td>
</tr>
<tr>
<td>3. Questions asked:</td>
<td>2. Prepare flow for RAN -&gt; Transport interaction, and details of alignment with O-RAN.</td>
</tr>
<tr>
<td></td>
<td>• Are the data models taken from IETF drafts? <em>(Data model details are work-in-progress in IETF, we are closely tracking the developments)</em></td>
</tr>
<tr>
<td></td>
<td>• Will a new SO adaptor be developed for connecting to external TN NSSMF in future, or can existing adaptor be extended? <em>(Intention is to reuse existing one, however, it is under discussion)</em></td>
</tr>
<tr>
<td></td>
<td>• Are we aligning to O-RAN? <em>(Yes, we are having regular interactions with the O-RAN team, intention is to align with O-RAN as much as possible, starting with Guilin release itself)</em></td>
</tr>
<tr>
<td></td>
<td>• Are we considering data from all network segments? <em>(Under discussion)</em></td>
</tr>
<tr>
<td></td>
<td>3. Elaborate details of data collection and analysis to be done.</td>
</tr>
</tbody>
</table>