# **ONAP Daily Summaries**

LFN Event Survey: <a href="https://www.surveymonkey.com/r/7NZWS73">https://www.surveymonkey.com/r/7NZWS73</a>

Day 1 - April 21, 2020

Track	Key Points	Challenges
Guilin Planning - Require ments Moderat or: 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  4. Guilin ETSI-Alignmentv1.pdf  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 need:

Guilin Planning	Great collaboration between the Subcommittees!	
-	OOM Daily gating: https://gating-results.onap.eu/results/	Wiki, RTD, ONAPDocs - a lot of inform
Architect ure	Wiki link	
Moderat or: Chak er Al- Hakim		

ETSI #1 ETSI NFV Container Architecture and ModelingUlrich Kleber #1 ETSI approach seems to generalize the c /CNF full capabilities of Kubernetes - no recommer VNF can use VM-s or containers. Contain Modeling CNF is a \_Cloud Native\_ NF what is a VNF built with the Cloud Native principles in mind #2 How to refer CNI in the descriptor? ETSI-based CNF support is compliant to IFA029&IFA040 (publication expected in May) Moderat Normally no need to have CNI reference in t Additional information shared by Thinh Nguyenphu: ONAP-ETSI Alignment Workshop (IFA040) y Mayer, Hui solution. #2 CNTT RA2 Tom Kivlin , Gergely Csatari Deng Possibility to run NF on top of what it is defined in RA2 / K8S #3 Different approaches for CNF Modeling -No conflict/overlap between what ETSI CNF defined and CNTT RA2 (K8S) **Current Approac** CNTT Roadmap WHEN | Roadmap (combined) Heat + Helm + TOSCA ONAP K8s Cle Regions (Reference : Q3 Extended TOSCA Types Cloudify (Reference: link Baldy TBD TBD TOSCA Kubernetes profile TOSCA + Helm chart as NA, See Note 1, No v 3 v 4 v 5 v 6 artifact RA-1 v 2 v 4 v 5 RA-2 Extended TOSCA types+ K8s Custom Resources/Operators CRDs (Referen RC-1 📮 v 1 link) RC-2 v 3 v 2 v 1 RI-1 Note 1: IFA011 Support for Pods Contribution (link), VDU exten RI-2 🛞 v 2 #4 How can we stay align between ETSI, CN #3 CNCF TUG (Lei Wang) Cloud Native Thinking for Telecommunications Deploying Cloud Native Network Functions in a telecom service provider ecosystem Cloud Native Principles gitbook CNF Conformance (github) Conformance Test Categories Documentation CNF Conformance (deck) Platform Conformance Test in alignment with CNTT RA2

## Day 2 - April 22, 2020

Track	Key Points	Challenges	Next Steps / Als
Guilin Planning			
Guilin Planning - Control loop sub committee - Guilin requirements	Reviewed and discussed requirements for Control loop in G release :  Control Loop Sub Committee Guilin Release Planning		
Moderator: Pamela			
Dragosh Security			

ETSI/CNF - ETSI NFV modeling and API Moderator: Hui Deng	#2 E	SOL OpenAPI Deployment T Release 2 ma Currently ONA SOL001 ed2.7 TSI NFV mode	I Representations femplates and Paintenance ed2.81 AP is using SOL0 7.1?	ckaging specifications , SOL specifications a 01 ed2.5.1 is supporte	re scheduled for release June 2020 d as part of Frankfurt release. When ONAP is p	lanning migrate to	
ETSI/CNF - CNF Orchestratio n over StarlingX 3.0 Demo  Moderator: Catherine Lefevre		What API is us an example av No developme Dummy heat	sed in VID? VNF vailable? VNF/VF ent yet related to template is temp	API or GR API? Does API to instantiate the fault and performance orary for now as we did	project - Source code available here it make any difference? What about that overrid deploymen monitoring of the CNFs. Targeted for Guilin. If not want to make any major changes to SDC a lelm charts are hidden as artifacts under Dummy	and SO. In R7, we	
ETSI/CNF - ETSI alignment on the SOL004 and SOL007	•	Discussions h	O are coming from	eWoo Jun SDC for ETSI alignme m 3rd party vendors t Roadmaps	nt for the onboarding		
standard		Dublin ✓	El Alto ✓	Frankfurt Support ✓	Guilin Proposals	Future Topics	
Moderator: Seshu Kumar Mudiganti		ETSI SOL 2.5.1 support     SOL003 Adapter     Create VNF     Instantiate VNF     Terminate VNF     Delete VNF     Subscription     Notification     Granting     SO ETSI VNF BB     Workflows     VVFM Simulator in the SO project     SD CSI SUDOP PNF     onboarding	ETSI SOL 2.5.1 support     CSIT (test automation) for SOL003 Adapter     SOL003 Adapter Bug fixes     Communication security between SOL003 Adapter and SVMFM     HTTPS support     SpringBoot-based authentication     VMFM Similator migration to the integration Test project     SOL SOL004 VMF and PNF onboarding	ETSI SOL 2.5.1 support     SO & SOL003 Adapter enhancements     SO SOL004 and SOL001 package storage/retrieval support leveraging ETSI Catalog Manager     SOL003-based package management API support     SOL003 WHE LCM Operations ETSI Catalog Manager     Storing vendor ETSI packages     Providing ETSI packages     Providing ETSI packages     Providing ETSI packages     Solos ETSI pac	ETSI SOL 2.7.1 support  SDC enhancements  SOL007 NS package onboarding and design  SOL003 NSD package onboarding and design  SOL003 NSD and VNFO mapping to SDC AID DM  SOL003 Algabre enhancements and additional SOL003 operations support  SOL003 NSI enhancements for GNFC-ready  VNF Query  VNF Modify (ModifyVnfinfo)  VNF Head  Granting with HPA via OOF  OOF VNF-level Homing Request Support  NFVO SOL005 Northbound Interface support  SOL005 Adapter enhancements  ETSI Package Management  Additional NS LCM  Additional NS LCM  OAUTA-Based surhentication support between SOL002/SOL003/SOL005  Adapters and SNYM/NYPO  ONAP SO embedded RNFO for hierarchical orchestration, as one of the NFVO options—see the hierarchical orchestration, as one of the NFVO options—see the hierarchical orchestration section  Move pockage management, Granting, Software-Image handling from SOL003 Adapter to NFVO  • NS LCM orchestration support	ETSI-based VNF software upgrade volumerate to support multi-domain orchestration. Policy-based Scaling (VNF-level and/or VF-Module-level) SOL003 LCN and translation into DCAE events (FM/FW) of High Availability and Fault-Tolerant CNF support SOL005 Adapter enhancements FM/PM	

ETSI/CNF -CNF Task Force -Revi ew Multi Site Orchestratio n with ONAP4K8s (ONAP for K8s)

Moderators: Catherine Lefevre , Se shu Kumar Mudiganti

the current ONAP4K8S

Speaker: Srinivasa Addepalli How will the What is ONAP4K8S? plugin with its own **HPA** placeme nt logic interact with the rest of ONAP which also uses placeme nt Lightweight & high performance controller (OOF)? (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) Release 7 (Still in discussion) K8s Plugin as VNFM SDC Changes (Helm as 1<sup>st</sup> class citizen) Helm as 1<sup>st</sup> class citizen Day2 Config Deployment LCM Onboard API Status API Profile API Management Intent API K8S Plugin Service for Distributed applications Release 6 • How to handle different VNF types i.e. Openstack based, Helm Chart based, Heat based etc? It should work based on

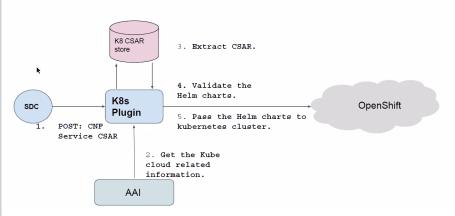
ETSI/CNF
- CNF
Deployment
on
OpenShift

Moderator: Catherine Lefevre Speakers: Sriram Rupanagunta, Sandeep Sharma

## **Prepare CNF Helm Chart**

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

## **CNF Deployment on Openshift**



Additional information: 5G Cloud Native Network + ONAP

Others - Le arnings from OVP VNF Validation

Moderator: Catherine Lefevre Speaker: Rajendra Mishra

## **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.

vnf folder
— /templates
base.env
incremental 0.yaml
incremental 0.env
i
— /preloads
☐ base preload.json
incremental 0 preload.json
L
└─ vnf-details.json

#1 Uploa d Sandee p Sharma

presentat ion

#1 Uploa

d Sandee

. Sharma

presentat

(a (b	How to create the associated design artifacts	ng require nts and tak e it to the Mo deli ng Sub - co mm itte e. 2. Pre par e furt her det ails, and illus trati ve flows sho win g inte ract ions & API s, incl udi ng inte ract ion with ext ern all do mai n con troll ers
Others		

# Day 3 - April 23, 2020

Track	Key Points	Challenges	Next Steps / Als	
			/ AIS	

Policy Framew ork Frankfurt features and demos	https://wiki.onap.org/display/DW/2020-04-23+LF+Virtual+Technical+Event+-+Policy+Framework+Overview		Now that we have most of the framewor k compone nts built and stable. We are going to schedule couple of demo sessions per area to deep dive, describe the features & how to use them . Probably an hour every Friday for couple of weeks. Will be sending the invite soon.
Joint Session - Cloud Native OVP	<ul> <li>Introduction about OVP PH2</li> <li>Project Mapping &amp; Relationship</li> <li>Discussion about Badging level</li> </ul>		#1 Finalize OVP PH2 Roadmap by end of May 2020
Require ments subcom mittee meeting continuat ion  Moderat or: Alla Goldner	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	The presente d requirem ents are already endorsed by the Requirem ents subcomm ittee We will review the remaining endorsed ones on Thursday and review new ones during our next meeting on Monday, April 27th

Security
- Third
party
depende
ncy
upgrade
strategy

Moderat ors: Krzy sztof Opasiak, Pawel Pawlak Speaker: Amy Zwarico

### 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 Sonatype) in the outdated package
  - No transitive packages in the upgrade list
  - See Guilin Package Updates
- Create1 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 continuance (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!

B

with integration team to to investigate the inclusion of container scan results such as database versions.

Work

Project

team

resource

constraints

#### MTTU: Median Time to Upgrade

- Guilin Package Updates per component
- 20\_04\_23\_ONAPPackageUpgradeStrategyGuilin\_V2.pptx

Guilin Planning - OOM Proposal

Moderat

or: Eric

Debeau

Speaker: Sylvain Desbureaux

#### Review of OOM Guilin Release proposal

- · Continue the removal of harcoded 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 Integrati on priorities Moderat or: 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 realease 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 jave/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

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

#### CI/CD

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

#1 Modify CSIT tests

#2 Provide usecase overrides

#3 Include new Gating for additional components: SO ? Requrse more resources

#1 What will be the oParent requirem ents for Guilin? P awel Pawlak, Amy Zwarico

E2E Network 1. "RAN and Transport Slicing" proposal and scope for Guilin release was presented. This covered: 1. Ela bor Slicing-Overview of RAN Slicing, scope and assumptions for Guilin release Session ate RAN NSSMF within ONAP, as well ONAP acting as NSSMF interacting with an external RAN NSSMF the Overview of Transport Slicing, based on TSCi (IETF), scope for Guilin deta Moderat TSCi information modelz ils Interaction between RAN and Transport Slicing, different deployment scenarios of ors: Guil 2. "KPI Monitoring, Intelligent Slicing and Closed loop" proposal and scope for Guilin release was presented. This covered: Swamina in than sco Seethara • KPI monitoring by slice tenant/operator (via portal) ре Three SON scenarios for Closed Loop Automation and Intelligent Slicing namely: manLIN MENG with resp 1. Slice resource optimization: Guillin: simple close loop for single NSI scenario; Beyond Guillin: Cross- Slice Scenario ect 2. KPI adherence optimization (KPI Guarantee): (Guillin: simple close loop by introducing Al model. Beyond Guillin: crossto interaction with (1) also) the 3. Service experience optimization (SLA Guarantee, QoE based) (Beyond Guilin) mod elin and 3. Questions asked: inter face · Are the data models taken from IETF drafts? (Data model details are work-in-progress in IETF, we are closely tracking asp the developments) ects. Will a new SO adaptor be developed for connecting to external TN NSSMF in future, or can existing adaptor be 2. Pre extended? (Intention is to reuse existing one, however, it is under discussion) par Are we aligning to O-RAN? (Yes, we are having regular interactions with the O-RAN team, intention is to align with O-RAN as much as possible, starting with Guillin release itself).

Are we considering data from all network segments? (Under discussion) flow s for RA N <-Tra nsp ort inter acti and deta ils of alig nme nt with O-RΑ N. 3 Fla bor ate deta ils of data coll

> ecti on and anal ysis to be don e.