

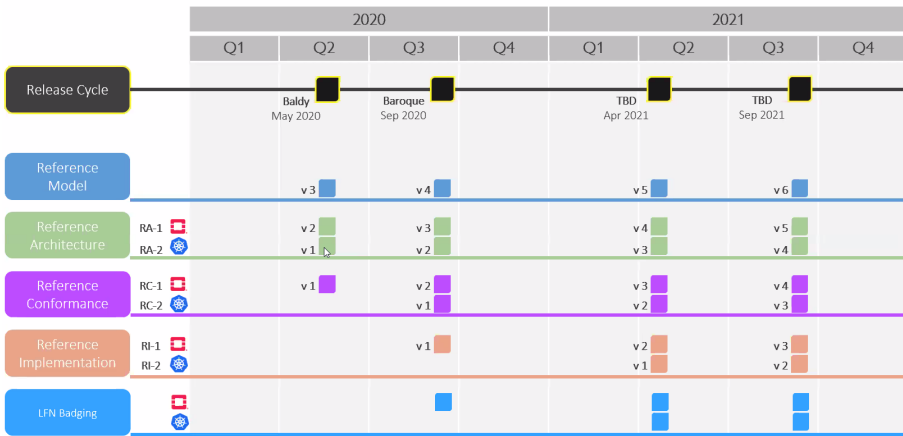
ONAP Daily Summaries

LFN Event Survey: <https://www.surveymonkey.com/r/7NZWS73>

Day 1 - April 21, 2020

Track	Key Points	Challenges
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 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 needed

Guilin Planning - Architect ure Moderat or: Chak er Al- Hakim	Great collaboration between the Subcommittees ! OOM Daily gating: https://gating-results.onap.eu/results/ Wiki link	• Wiki, RTD, ONAPDocs - a lot of inform
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ETSI /CNF - Container Modeling	#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) CNTT Roadmap	#1 ETSI approach seems to generalize the c full capabilities of Kubernetes - no recommen #2 How to refer CNI in the descriptor? Normally no need to have CNI reference in t solution. #3 Different approaches for CNF Modeling -																		
	WHEN Roadmap (combined)  #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	Current Approach <table border="1"> <thead> <tr> <th>#</th><th>CNF Modeling Approach</th><th>Reference Implementation</th></tr> </thead> <tbody> <tr> <td>1</td><td>Heat + Helm + TOSCA</td><td>ONAP K8s Clk Regions (Reference : link)</td></tr> <tr> <td>2</td><td>Extended TOSCA Types</td><td>Cloudify (Reference: link)</td></tr> <tr> <td>3</td><td>TOSCA Kubernetes profile</td><td>Puccini (Reference : link)</td></tr> <tr> <td>4</td><td>TOSCA + Helm chart as artifact</td><td>NA, See Note 1, No</td></tr> <tr> <td>5</td><td>Extended TOSCA types+ K8s Custom Resources/Operators</td><td>ONAP K8s Net CRDs (Referen link)</td></tr> </tbody> </table> • Note 1: IFA011 Support for Pods Contribution (link) , VDU extens #4 How can we stay align between ETSI, CN	#	CNF Modeling Approach	Reference Implementation	1	Heat + Helm + TOSCA	ONAP K8s Clk Regions (Reference : link)	2	Extended TOSCA Types	Cloudify (Reference: link)	3	TOSCA Kubernetes profile	Puccini (Reference : link)	4	TOSCA + Helm chart as artifact	NA, See Note 1, No	5	Extended TOSCA types+ K8s Custom Resources/Operators	ONAP K8s Net CRDs (Referen link)
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Day 2 - April 22, 2020

Track	Key Points	Challenges	Next Steps / AIs
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	#1 Latest ETSI NFV modeling 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 Guilin Modelin HL Requirements												
ETSI/CNF - CNF Orchestration over StarlingX 3.0 Demo Moderator: Catherine Lefevre	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 Guilin. - 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 Mudiganti	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><tr><th>Dublin</th><th>El Alto</th><th>Frankfurt Support</th><th>Guilin Proposals</th><th>Future Topics</th></tr><tr><td> - ETSI SOL 2.5.1 support - SOL003 Adapter - Create VNF - Instantiate VNF - Terminate VNF - Delete VNF - Subscription - Notification - Granting - SO ETSI VNF BB Workflows - VNFM Simulator in the SO project - SDC SOL004 PNF onboarding </td><td> - ETSI SOL 2.5.1 support - CSIT (test automation) for SOL003 Adapter - SOL003 Adapter Bug fixes - Communication security between SOL003 Adapter and SVNFM - HTTPS support - SpringBoot-based authentication - VNFM Simulator migration to the Integration Test project - SDC SOL004 VNF and PNF onboarding </td><td> - ETSI SOL 2.5.1 support - SO & SOL003 Adapter enhancements - 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ONAP SO embedded NFVO for hierarchical orchestration, as one of the NFVO options – see the hierarchical orchestration section - Move package management, Granting, Software-Image handling from SOL003 Adapter to NFVO - NS LCM orchestration support - SOL002 Adapter enhancements - VNF LCM notification extensions </td><td> - ETSI-based VNF software upgrade - SOL011 Or-Or interface to support multi-domain orchestration - Policy-based Scaling (VNF-level and/or VF-Module-level) - SOL003 LCN and translation into DCAE events (FM/PM) - High Availability and Fault-Tolerant - CNF support - SOL005 Adapter enhancements - FM/PM </td></tr></table>	Dublin	El Alto	Frankfurt Support	Guilin Proposals	Future Topics	- ETSI SOL 2.5.1 support - SOL003 Adapter - Create VNF - Instantiate VNF - Terminate VNF - Delete VNF - Subscription - Notification - Granting - SO ETSI VNF BB Workflows - VNFM Simulator in the SO project - SDC SOL004 PNF onboarding	- ETSI SOL 2.5.1 support - CSIT (test automation) for SOL003 Adapter - 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Speaker: Srinivasa Addepalli

What is ONAP4K8S?

Is Multi Site Distributed App Orchestrator

Independently can be deployed or deployed with rest of ONAP

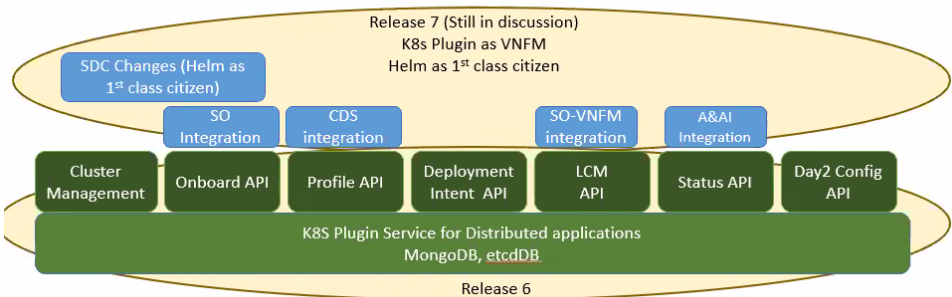
Supporting deployment of both applications and network functions

Supporting workload types - VMs, Containers, VNFs and CNFs

Lightweight & high performance

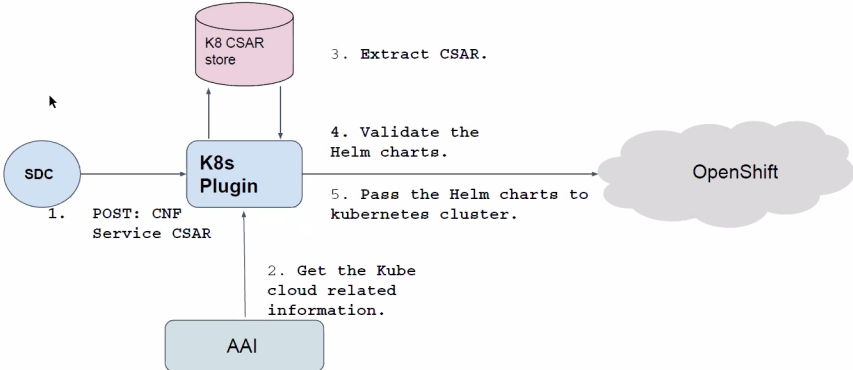
Micro-service based architecture
(Leverages ISTIO, AuthService & KeyCloak for IAM, Mutual TLS
FluentD for logging
Prometheus for metrics
Jaeger for distributed tracing.
No centralized configuration DB, One Document DB and One KV DB

R6 and R7 Plan (With rest of ONAP)



- 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)?

ETSI/CNF - CNF Deployment on OpenShift Moderator: Catherine Lefevre	Speakers: Sriram Rupanagunta , Sandeep Sharma 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 kubevirt_crd.yaml ◦ Helm chart with heat template of VM • Specify multiple network requirements by CNFs in Helm chart... CNF Deployment on Openshift  <pre> graph LR SDC((SDC)) -- "1. POST: CNF Service CSAR" --> K8s[K8s Plugin] AAI[AAI] -- "2. Get the Kube cloud related information." --> K8s K8s -- "3. Extract CSAR." --> K8sStore[(K8 CSAR store)] K8sStore -- "4. Validate the Helm charts." --> K8s K8s -- "5. Pass the Helm charts to kubernetes cluster." --> OS((OpenShift)) </pre> Additional information: 5G Cloud Native Network + ONAP	#1 Uploa d Sandee p Sharma presentat ion
Others - Learnings 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. <pre> vnf_folder ├── /templates │ ├── base.yaml │ ├── base.env │ ├── incremental_0.yaml │ ├── incremental_0.env │ ├── ... │ └── /preloads │ ├── base_preload.json │ ├── incremental_0_preload.json │ ├── ... │ └── vnf-details.json </pre>	#1 Uploa d Sandee p Sharma presentat ion

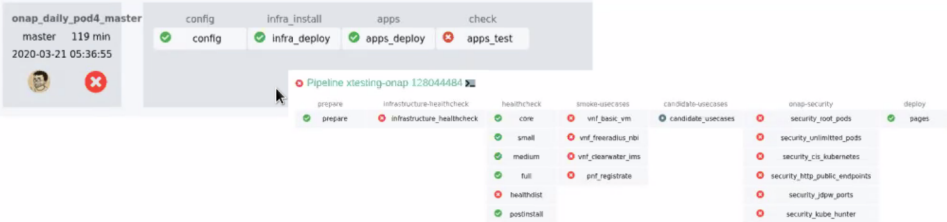
E2E Network Slicing-Session 1 Moderators: LIN MENG Swaminathan Seetharaman	1. The overall requirements for E2E Network Slicing use case in Guilin release was presented. This covered: • New slice lifecycle operations to be supported. eg: slice modification, slice termination • Expansion in scope of E2E 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?		Action Items 1. Elaborate the modeling requirements and take it to the Modeling Sub-committee. 2. Prepare further details, and illustrative flows showing interactions & APIs, including interaction with external domain controllers
Joint Session			
Others			

Day 3 - April 23, 2020

Track	Key Points	Challenges	Next Steps / AIs

Policy Framework 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 framework components 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	• 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 Moderator: 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 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

Security - Third party dependency upgrade strategy Moderators: Krzysztof Opasiak, Paweł 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 - 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 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! MTTU: Median Time to Upgrade Guilin Package Updates per component 20_04_23_ONAPPackageUpgradeStrategyGuilin_V2.pptx	Project team resource constraints	Work with integration team to investigate the inclusion of container scan results such as database versions.
Guilin Planning - OOM Proposal Moderator: Eric Debeau	Speaker: Sylvain Desbureaux Review of OOM Guilin Release proposal - 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 mods)?	

Guilinn Planning - Integration 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 Guilinn 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 supervision 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 Modify CSIT tests #2 Provide use-case overrides #3 Include new Gating for additional components: SO ? Requre more resources	#1 What will be the oParent requirements for Guilinn? Pawlak , Amy Zwarico
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E2E Network Slicing-Session 2 Moderators: Swamina than SeetharamanLIN MENG	1. "RAN and Transport Slicing" proposal and scope for Guilin release was presented. This covered: • Overview of RAN Slicing, scope and assumptions for Guilin release • RAN NSSMF within ONAP, as well ONAP acting as NSSMF interacting with an external RAN NSSMF • Overview of Transport Slicing, based on TSCi (IETF), scope for Guilin • TSCi information modelz • Interaction between RAN and Transport Slicing, different deployment scenarios 2. "KPI Monitoring, Intelligent Slicing and Closed loop" proposal and scope for Guilin release was presented. This covered: • KPI monitoring by slice tenant/operator (via portal) • Three SON scenarios for Closed Loop Automation and Intelligent Slicing namely: 1. Slice resource optimization: Guilin: simple close loop for single NSI scenario; Beyond Guilin: Cross- Slice Scenario 2. KPI adherence optimization (KPI Guarantee): (Guilin: simple close loop by introducing AI model. Beyond Guilin: cross- interaction with (1) also) 3. Service experience optimization (SLA Guarantee, QoE based) (Beyond Guilin) 3. Questions asked: • Are the data models taken from IETF drafts? (<i>Data model details are work-in-progress in IETF, we are closely tracking the developments</i>) • Will a new SO adaptor be developed for connecting to external TN NSSMF in future, or can existing adaptor be extended? (<i>Intention is to reuse existing one, however, it is under discussion</i>) • Are we aligning to O-RAN? (<i>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</i>). • Are we considering data from all network segments? (<i>Under discussion</i>)	1. Elaborate the details of Guilin scope with respect to the modeling and interface aspects. 2. Prepare flows for RAN <-> Transport interaction, and details of alignment with O-RAN. 3. Elaborate details of data collection and analysis to be done.
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