

Use Case Realization Call: September 25, 2019

Date

25 Sep 2019

Attendees

- Benjamin Cheung
- Chandra Cinthala
- Rebecca Lantz
- Tracy Van Brakle
- Giulio Graziani
- James Forsyth
- Joanne Liu Rudel
- Zu Qiang (Ericsson)
- Albino Pinho
- Gerard Hynes
- Chris Rapposelli-Manzo

DISCUSSION ITEMS LOG

Ct gry	Item	Who	Notes
Pltfm	PLATFORM TOPICS: Controller to NF Association	Benjamin Cheung	R5/R6 Topic See Slides Nov 6, 2018. Development of Controller to NF assignment association S/W. CDS, VF-C, APP-C, SDN-R, SDN-C; will the CCSDK "merging" of controllers happen in R6? USE CASE REALIZATION MEETING (Notes 2018-11-6) Ctrl-NF
Pltfm	PLATFORM TOPICS: Data Persistency, RunTime DB	N.K. Shankara narayanan Joanne Liu Rudel Benjamin Cheung	STATUS: Work for RunTime DB completed, not merged in R4 Dan Timoney moved to R5, one Jira for RunTime DB . One issue about merging. ONAP code added can take a test ONAP deployment to have the ConfigDB work. USE CASE REALIZATION MEETING (Notes 2019-01-30) U/C Cross-Interaction, Persistency
Pltfm	PLATFORM TOPICS: Controller LCM API Evolution	Oskar Malm	https://wiki.onap.org/download/attachments/50202249/2019-04-09%20ONAP_LCM_API_Evolution_El_Alto.pptx?api=v2 Goals (Architecture Evolution) • Target is common LCM API in CCSDK usable by different controller personas to simplify for both clients and controller implementations • Support PNFs for applicable LCM operations in a consistent way • Enable use of CDS blueprint processor to customize behavior of LCM operations in the 'self-service' category ◦ In ONAP R4, CDS can be used for pre/post-instantiation configuration. Generic and model-driven design should allow CDS usage to be extended for additional operations and use cases. • Evolution steps that preserve backwards compatibility for clients Present at the Arch S/C Apr 9 (Tue) second presentation.
Use Cases	USE CASE/5G: RAN (ORAN-3GPP) Standards harmonization with ONAP	Marge Hillis Vimal Begwani Fred Feisullin	• Orchestration at the Edge. • A1/O1/E2 communications. Edge to ENBs, Telemetry. • E2 will not have this info. O1 is I/F for PM counts. Not a management I/F. • WG3 (ORAN) is defining this. • ONAP w/ O1. Changes w/ O1 interface. • How to satisfy A1/O1 and in what time-frame. • U/C ORAN - ONAP harmonization. 3GPP ORAN ONAP. • Starting a new U/C in 5G. Marge, Vimal, Fred Feisullin • Edge inventory & topology. Transport BH consideration w/ real-time near-RT aspects • Akraino. MEC. Edge automation (Ramki). Use Case WIKI: MOBILITY STANDARDS HARMONIZATION WITH ONAP
Use Cases	USE CASE/5G: Licensing Management	Timo Perala Samuli Kuusela	New U/C added to the 5G Use Cases for Licensing Management Use case Wiki: LICENSING MANAGEMENT

Use Cases	USE CASE/5G: OOF / SON	N.K. Shankara narayanan	PoC U/C will happen in WinLab. To meet time lines do those parts in Windriver focusing on DCAE, Policy and OOF. Jira SDN-C (Dan Timoney) pushed El Alto (the Maintenance Release).
Use Cases	USE CASES: BBS U/C Evolution	David Perez Caparros Tim Carey Chaker Al-Hakim	BBS Evolution - Slide set linked in R6 proposed U/C. List of proposals & functional requirements. 1. Change Service - want to use ONAP platform. 2. Full Closed Loop for Fault Management - CLAMP. 3. Service Update API (SO) - will be developed https://wiki.onap.org/download/attachments/60887504/BBS_R5_v1.pptx?version=1&modificationDate=1554180715000&api=v2
Use Cases	USE CASES/5G: PM Dictionary/FM MD GUI	Marge Hillis	FM META DATA & PM DICTIONARY in R5
Use Cases	USE CASES/5G: PNF S/W Upgrade	Zu Qiang (Ericsson) yaoguang wang	PNF software upgrade in R6 Frankfurt
Use Cases	USE CASES/5G: Preonboarding /Onboarding	Benjamin Cheung Zu Qiang (Ericsson) Michela Bevilacqua	PNF PREONBOARDING / ONBOARDING in R5
Use Cases	USE CASES: IoT Service Creation	Atul Purohit	IoT Create Services on 5G 5G Use Cases in R6 Frankfurt June 19, 2019
Use Cases	USE CASES: Modeling gNB/5G RAN	Thinh Nguyenphu Benjamin Cheung Melanie Sater Tracy Van Brakle Martin Skorupski	Align, harmonize, reconcile various information models to ONAP model: Expand & verify model and harmonize with the ONAP internal information & data model: ETSI SOL001 ... 007 with ONAP internal Model PNFD modeling (Model S/C) 5G Model (3GPP , RAN) ORAN (WGs, RAN) Open ROADM (reconfig optical add/drop multiplexer, Optical) ONF (Optical) ISOMII (Optical) OTCC (Optical transport config & control) - Use Cases that need transport models need some model consistency. - Try a Use Case with extended ONAP model & real equipment.
Use Cases	5G NRM (Network Resource Model) Configuration	yaoguang wang	Presented at the 2019 June LFN DDF, titled as ' 5G Provisioning management service to NRM ' Presentation scheduled for Aug 8, 2019
Arch	Architecture S/C PNF POB/OB Flow	Benjamin Cheung	Arch S/C Information Flows: Draft ONAP Information Flows New Information flow for Preonboarding/Onboarding xNF packages/resources. ARCHCOM: InfoFlow - Onboard Resource into SDC Flow
Pltfm	A&AI	James Forsyth	A&AI updates
TSC	TSC: PoC Definition	Benjamin Cheung Alla Goldner	POC definition

TSC	TSC/USE CASES: Test Automation Progress	Benjamin Cheung Alla Goldner	Use Case Test Automation Action Items: Use case subcommittee to reach the Dublin use case owner to provide the following information. what's the current percentage of testing automation regarding your use case and functional requirements; what will be the plan to be 100% and constraints (resources availability etc.)
	R6 Frankfurt / M0		Use Case Tracking Template Need the U/C teams to fill out the Dev. Impacts. More Generalized Use Case Template (discussed w/ Model team): Use Case Tracking Template and Use Case Template
	VID: Service Models Browser Orchestration	James Forsyth user-063b3	VID: Service Models browser - display orchestration type (macro / a la carte) use-case. This use-case requires us to extend the AAI data-model, with an additional field, related to Service Model. This field will be used later on to indicate in VID the Service Model orchestration type. A&AI Epic 2594  AAI-2594 - AAI: Store orchestration-type parameter as part of model-ver:object CLOSED

A&AI USE CASE IMPACTS FOR R6

USE CASE	IMPACTS
PNF / Preonboarding Onboarding	No Impact
PNF / Plug and Play	Wiki Page: PNF PLUG and PLAY in R6 Frankfurt Modeling Impact with A&AI for Geo-Location modeling with RFC6225 Lat/Long/Alt into Complex Object. Discussion: Complex object has been deprecated, migration. Relationship from Complex to other objects. A lot of things already use the Complex object - so this would be a lot of impact. If you take the location bits of the Complex and then add a relationship to the PLACE object. In R6 only modeling work will be done. If the place becomes an object. ETSI LOCATION INFO. If it was additions to the Complex Object it would be ok. SUMMARY: No S/W A&AI Impact in R6
PNF / Software Upgrade	No Impact
PNF / Configuration with NetConf	No Impact
5G / 5G Service Modeling	Modeling a 5G Service may require expansion of A&AI fields for PNF. Benjamin Cheung looking at 3GPP TS28.540 and 3GPP TS28.541 model & network resource model (NRM) will analyze the model and present to Modeling Subcommittee & 5G U/C subcommittee ... possibly A&AI schema impacting? SUMMARY: No S/W A&AI impact in R6 only Modeling work in R6.
5G / Bulk PM	Wiki Page: 5G Bulk PM in Frankfurt/R6 Ensure A&AI can generate necessary events related to xNF instantiation and removal SUMMARY: Needs investigation. Mark Scott  AAI-2678 - 5G / Bulk PM CLOSED

5G / PM Dictionary	No Impact
5G / 5G Meta Data	No Impact
5G / OOF SON (PCI)	Wiki Page: OOF (SON) in R5 El Alto, OOF (SON) in R6 Frankfurt OOF/SON/PCI Enhancements. Models & relationship between Config, Operational DB & AAI (Spreadsheet/Use Case Team): Cell Addition Management. (Oct 10 2019 discussion): Cross dependency with RunTime DB Use Case. Add info into PNFFName & PNFID in A&AI. Will this just be "usage" of A&AI or will there be additional schema changes or A&AI code changes or is this just Test Only? Reuse of Existing Objects. New objects related automatically flow to A&AI event topic on DMaaP. Where is the topic & Payload. CONTACTS: N.K. Shankaranarayanan , Swaminathan Seetharaman SUMMARY: (Oct 10, 2019) No A&AI schema change or A&AI code change for R6. CLOSED  AAI-2670 - AAI changes in support of 5G/OOF SON (PCI) CLOSED
5G / E2E Network Slicing	Wiki Page: NETWORK SLICING PoC in R6 Frankfurt (Obsolete) Update A&AI schema with Network Slicing model. Merged proposal presentation (CMCC & AmDocs) have been given at Architecture S/C (29 Oct 2019) and at Alla's call 28 Oct 2019 UPDATE: 30 Oct 2019 : For the E2E Network Slicing use case for Frankfurt Release, we intend to leverage the nested service model work that has been going on since Dublin release. From A&AI perspective, we foresee that the schemas would have to be enhanced to cover network slicing models. We have considered A&AI to be a stretch goal for Frankfurt, though we are committing resources. So, we would like to start the discussion in the coming weeks, and subsequently implementation work to try our best to complete the implementation for Frankfurt. AAI-2600 has been created just to indicate the SDC impacts, we will update it with more details, and also join the A&AI weekly call during the next 1-2 weeks to discuss further. It is also noted in the release requirements page as A&AI: Code Change. Frankfurt Release Requirements SUMMARY: Tracked by A&AI 2600. Presentation: Use Case Realization Call: November 20, 2019  AAI-2600 - A&AI support of Network Slicing Demo in Frankfurt CLOSED
5G / RAN ORAN 3GPP Standards Harmonization	No Impact

5G / Runtime Config DB	Wiki Page: CONFIGURATION PERSISTENCE SERVICE R6 Epic #1 Run Time DB introduction E1: INITIAL SETUP - A&AI Provides initial physical inventory info to RunTimeDB. Initial setup of physical inventory (PNFs) and initial configuration of RunTime DB should sync with A&AI. GetAllPNFs function from A&AI on startup. This function allows you to query for all of the elements currently in A&AI. This Get (all PNFs) API (Direct API call to A&AI). If there is a very large network, paging support (to get a set at a time). Produce an export of database (as a 1-time process). Epic #2 Run Time DB Sync E2: xNF OBJECT UPDATES - When a new xNF appears in the system, the RunTime DB needs to update its records to reflect the newly appearing or disappearing xNF. In theory A&AI posts a DMaAP notification that there is a change in xNF status and RunTime DB S/W subscribes to this topic and can update its records / database. Need to verify discuss with A&AI. Discussion: No A&AI Jira ticket needed. To use the system properly: get credentials for AAF. Maybe onboarding from SDC. When you onboard the config changes to allow for a certain MAC id. This is all in AAF. on AAI side include them in AAI roles / traversal & resources. Bootstrap data in AAF to be updated. necessary to interact with any component; getting credentials into AAF is for general use across the systems. SUMMARY: <u>No A&AI S/W Impact.</u> ☒ James Forsyth 09 Oct 2019 (CLOSED) Find some documentation on A&AI usage. 30 Oct 2019 Jimmy preparing the document. Met with the team: RunTime Config DB Meeting notes Nov 1, 2019 ☒ Joanne Liu Rudel 09 Oct 2019 ACTION: will call a meeting to discussion with A&AI team. Ben has setup regular "team" meetings for this U/C. Fridays at 9 AM https://zoom.us/j/230322363
5G / NRM CM w/ RESTful HTTPS	No Impact
5G / Licensing Management	No Impact. Modeling & architecture work for R6.
SERVICE RESOLVER	Frankfurt Release Requirements: Listed as A&AI TEST ONLY SUMMARY: A&AI Test only
SCALING	No Impact?? (Wiki lists nothing) SUMMARY: A&AI Test only
Mobile Service Chaining & Service Selection	No Impact?? (Wiki lists nothing)
BBS	PNF State Transition management for BBS, description: https://wiki.onap.org/download/attachments/60887504/BBS_R5_v1.pptx?version=1&modificationDate=1554180715000&api=v2 State Transition Diagram (Working Draft) (Spreadsheet/Use Case Team): Indicates impact Update 30 Oct 2019 Did not foresee requirement, but needs to review first. We are currently reviewing the list of items we found in the BBWF BBS testing and once we sort through them we will communicate the results back to ONAP community. Regarding AAI specifically, we do not foresee any new requirements for Frankfurt, but we would like to conclude the review first before jumping to final conclusions. Stavros Kanarakis SUMMARY: Needs investigation (See update)  AAI-2671 - AAI changes in support of BBS CLOSED

CCVPN	A&AI Schema changes - For "network-resource", add string "network-type" attribute. - Has enumerated values e.g. ETH topology or OTN topology. - For "pnf", add boolean "is-abstract" attribute. - Has "false" value by default. - Set to "true" value to represent abstract node, i.e. group of PNFs abstracted and presented as a single node by domain controller. - For "logical-link", new enumerated values for "link-type" attribute, e.g. intra optical domain, inter optical domain, or inter operator domain. - For "p-interface", add integer "inter-domain-plug-id" attributes. - Has discovered values based on IETF specifications, for correlation between related objects in ETH topology and OTN topology. - For "p-interface", new enumerated values for "interface-type" attribute, e.g. "Tunnel Termination Point". - Add new resource "uni". - Has termination point and cvlan attributes. - Add EdgeRule to represent uni to p-interface relationship. - Add new resource "label-restriction". - Has discovered values for label restriction attributes e.g. priority, range type, label start, label end. - Add EdgeRule to represent te-link-attributes to label-restriction relationship. - Add new resource "te-link-attributes" - Has discovered values for te link attributes, e.g. isAbstract, link protection type, access type. - Add EdgeRule to represent logical link to te-link-attributes relationship. - For "pnf", add new attribute "supporting-node" attribute. - Has discovered value based on ETH topology and OTN topology - Add EdgeRule to represent pnf to pnf relationship described by "supporting-node" attribute. - Add new resource "tunnel-termination-point" - Has discovered values for TTP attributes, e.g. TTP-id, admin-status, oper-status, protection-type, inter-layer-lock-id. - Add EdgeRule to represent tunnel-termination-point to p-interface relationship. CCVPN Use Case in Frankfurt Release SUMMARY: Needs Investigate (Huawei)  AAI-2593 - Support CCVPN use case SOTN NNI Proposal in AAI CLOSED
Control Loop	No Impact
Multi Domain Optical Service L0/L1 Orchestration	Have done some prototyping in to ingest topology from external controllers and show them in A&AI. Will need more work to act on notifications from controllers and keep the topology in sync. Wiki: Multi-domain Optical Network Services (Spreadsheet/Use Case Team): Indicates impact SUMMARY: Needs investigation of AAI-2623 (Epic). Resource models changing. It will be A&AI schema changes only, no A&AI S/W impact.  AAI-2693 - AAI Change to Support L1/L0 Resource Modeling CLOSED (Epic);  AAI-2623 - CCVPN: MDONS Use Case in Frankfurt CLOSED (Modeling change) ; According to Srinivasan Ramanathan he will be contributing a new custom query and schema changes
CHANGE MANAGEMENT	No Impact (Confirmed) Wiki: Change Management Frankfurt Extensions (Spreadsheet/Use Case Team): Indicates impact; CHANGED to No Impact Chris Rapposelli-Manzo SUMMARY: No A&AI Impact
HPA	Extending HPA for K8S, Wiki Page: Continuation of HPA Base line: NFD (Node feature discovery) from K8S CNCF project. Discovery of hardware features, creation of profiles and populating in A&AI of compute flavors. From the Frankfurt Release Requirements page it lists as Test-Only and supported (tested) by Intel. SUMMARY: Needs investigation. (No responses as of Oct 30). ☐ 04 Nov 2019 Ben will mention on Alla's Monday call. Alla's call resuming Mid-December  AAI-2672 - AAI changes in support of HPA Continuation CLOSED

RUN TIME SECURITY	No Impact?? (Wiki lists nothing)
K8S Based Cloud Region Support	Wiki Page: K8S based Cloud region support (Continue from R4) Does this impact A&AI? Continuous monitoring (using Kubernetes APIs) and updating the DB with latest status and resources allocated. (Spreadsheet/Use Case Team): Indicates impact SUMMARY: TEST ONLY (Confirmed). Assessment - Likely to use A&AI API not a code change. No Impact to A&AI discussed 06 Nov 2019 Jira Ticket AAI-2673 will be closed.  AAI-2673 - AAI changes in support of K8S Based Cloud Region Support CLOSED (Closed)
DAaaS	No Impact?? (Wiki lists nothing)
3rd Party Operational Domain Manager	A&AI Impact analysis underway via PoC see Wiki Page: Third-party Operational Domain Manager Gets CFS instance from SO and RFS instance update from 3rd party. (Spreadsheet/Use Case Team): Indicates Test only impact SUMMARY: Confirm Test Only. Atif Husain no A&AI impact. Storing service instance details, reuse service instance object. No Schema change. CLOSE AAI-2674  AAI-2674 - AAI Changes for 3rd Party Operational Domain Manager CLOSED

KEY PRESENTATIONS & OVERVIEWS & RECORDINGS

DATE	TOPIC	PRESENTER	DESCRIPTION
Apr 10, 2019	Controller LCM API Evolution	Oskar Malm	- Target is common LCM API in CCSDK usable by different controller personas to simplify for both clients and controller implementations - Support PNFs for applicable LCM operations in a consistent way - Enable use of CDS blueprint processor to customize behavior of LCM operations in the 'self-service' category - In ONAP R4, CDS can be used for pre/post-instantiation configuration. Generic and model-driven design should allow CDS usage to be extended for additional operations and use cases. - Evolution steps that preserve backwards compatibility for clients https://wiki.onap.org/download/attachments/50202249/2019-04-09%20ONAP_LCM_API_Evolution_EI_Alto.pptx?api=v2
May 1, 2019	A&AI GraphGraph Visualizer	Pavel Paroulek	Visualizer for A&AI Model Layout Use Case Realization Call: May 1, 2019
May 8, 2019	A&AI Model Browser, Sparky	James Forsyth	A&AI developer Model Browser to navigate and viewing attributes, object types & edge view Recording & Slides: Use Case Realization Call: May 8, 2019
May 15, 2019	A&AI Run Time Browser (Sparky)	Giulio Graziani	A&AI Run-Time Browser
May 22, 2019	Edge Automation Overview & Discussion	ramki krishnan	Central & Distributed Edge ONAP configuration. Topics include: Onboarding, Instantiation, Edge Orchestration, A&AI, Architecture, Work-flows, Multi-Tenancy Use Case Realization Call: May 22, 2019
May 29, 2019	Modeling S/C , Use Case Project Teams, Architecture S/C Way of Working	Benjamin Cheung	Model S/C (Sub committee) contributions page: Modeling sub-committee Contributions https://wiki.onap.org/display/DW/Proposed+ONAP+Release+Process+Updates+for+Information+and+Data+Modeling
Jun 5, 2019	Use Case slides for Dev. Forum	Benjamin Cheung	Use Case Realization Call: June 5, 2019

July 10, 2019	R6: PNF Software Upgrade Overview & Discussion	Zu Qiang (Ericsson) Ulas Kozak yaoguang wang	ONAP Read the Docs/R4 Announcements WIKI: PNF software upgrade in R6 Frankfurt Overview & Presentation
July 24, 2019	R6: OOF/SON PCI Use Case Demo, Overview & Discussion	N.K. Shankaran arayanan	OOF / PCI / SON Use Case Demo
Aug 7, 2019	5G NRM (Network Resource Model) Configuration U/C Overview	yaoguang wang	5G NRM (Network Resource Model) Configuration U/C Overview & Presentation
Aug 14, 2019	ORAN Standards Harmonization U /C Overview	Marge Hillis Vimal Begwani	ORAN Standards Harmonization U/C Overview & Presentation
Aug 21, 2019	Modeling Sub-Committee guidelines & Use Case Interactions	Andy Mayer Hui Deng	Modeling S/C Process Wiki: Proposed ONAP Release Process Updates for Information and Data Modeling Use Case Tracking Template and Use Case Template R6 Modeling High Level Requirements Planning Page: ONAP R6 Modeling High Level Requirements
Sept 4, 2019	Licensing Management Overview	Timo Perala Samuli Kuusela	Introduction of Licensing Management in R6
Sept 11, 2019	SDC & R6 Use Case Impacts Discussion	Ofir Sonsino	Discussion with SDC PTL Ofir w/ the Use Case Teams and SDC commitments. See the summary Table for SDC impacting Use Cases.
Sept 18, 2019	VID & R6 U/C Discuss Preparation for Technical Conference Antwerp	Ittay Stern Use Case Teams	Discussion with VID PTL (Ittay Stern) for R6 Use Case Impacts discussion and commitments for VID impacting Use Cases Preparing slides for Use Cases at the Technical Conference Antwerp (for 5G/PNF use cases)
Sept 25, 2019	A&AI & R6 Use Case Impacts Discussion	James Forsyth	Discussion with A&AI PTL (Jimmy Forsyth) and Chandra Cinthala for R6 A&AI Use Case Impacts discussion and commitments.
Oct 2, 2019	DCAE & R6 Use Case Impacts Discussion	Vijay Venkatesh Kumar	Discussion with DCAE PTL (Vijay Kumar) for R6 Use Case Impacts discussion and commitments for DCAE impacting Use Cases
Oct 9, 2019	M1 U/C discussion	Use Case Teams	M1 Deadline (Oct 10 2019)
x, 2019	SO & R6 Use Case Impacts Discussion	Seshu Kumar Mudiganti	Discussion with SO PTL (Seshu Kumar) for R6 Use Case Impacts discussion and commitments.
x, 2019	Release Manager Discussion	David McBride	Discussion with David McBride of the Linux Foundation, the R6 Release Manager regarding practices, wiki page updates, Jira dashboard and what is a use case?
x, 2019	RunTime DB Discussion	Joanne Liu Rudel Benjamin Cheung	Discussion of the RunTime DB Use Case in R6 Frankfurt which introduces a Common Service Data Layer for a data lake to store configuration and operational parameters.
x, 2019	PoC Planning & Discussion	Tracy Van Brakle	Combination Plugfest & PoC 1st week of December brining together subset of ONAP modules as SMO (svc mgmt orchestration) layer w/ other artifacts from ORAN S/W (LF). LF will publicize. Planned June 2020.

SUPPORTING DOCUMENTATION

Document	File
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Use Case Impacts Spreadsheet	 R6Frankfurt-Use...Sept2019v4.xlsx

RECORDING

Recording	FILE
Zoom Video & Audio (MP4)	 zoom_0.mp4
Audio Only (M4A)	 audio_only.m4a

Playback (M3U)



playback.m3u

Chat (Txt)



chat.txt



meeting_saved_chat.txt