RunTime Config DB Meeting notes Apr 10, 2020

Date

10 Apr 2020

Attendees

- Benjamin Cheung
- Joanne Liu Rudel
- Swaminathan Seetharaman
- Ted Johnson
- Yuriy Malakov
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ARCH WORK

ARCHITECTURE WORK	WIKI LINK
ARCHITECTURE FLOWS	ARCHCOM: InfoFlow - RunTime Config DB Information Flow
COMPONENT DESCRIPTION	ARC RunTime DB Component Description - R6 Frankfurt
PROJECT PROPOSAL	RunTime Config DB Project Proposal (Oct 25 2019)

DISCUSSION

Topic	Discussion
R6 **CCSDK -based Solution**	Project as part of CCSDK (Yuriy Malakov) ☐ **ACTION**: Sandeep Shah Presentation of new architecture with CCSDK (Yuriy Malakov). How much bandwidth/capacity does Sandeep Shah have. ☐ **ACTION**: Development demo & progress (1) ORAN Yang models & data schema not available yet (waiting) & 5G Service Modeling U/C: 3GPP TS28.541/TS28.540. maps to a data structure we want to support. (2) can proceed to Dockerize solution. R4 MariaDB solution. could extend the model. (3) Review work from Ted. waiting for project. ☐ **ACTION**: Give RC0 status - Sandeep Shah on RC0 status. Set up call with Sandeep Shah ☐ **ACTION**: Update ReadtheDocs https://git.onap.org/integration/tree/docs - Jira under Integration - invite team for review - invite PTL (Morgan R.) -Gerrit PTL submission +1 from reviewers. committer/Morgan +2 (someone in Integration project will do the Merge)
R7 **Project Proposal**	RunTime Config DB Project Proposal (Oct 25 2019) ☐ **ACTION**: **PERFORMANCE** - Open (#@#) open items to get ballpark figures for # API requests. ☐ **ACTION**: **LIFECYCLE** - find out the Lifecycle State "enumerations" - is "incubation" right? ☐ **ACTION**: **TSC Step #2** - Ben sent the TSC asking for slot. 26 Mar 2020 TSC. M4. RC0 bumped by a week. Q1 Who will be contributors. Joanne Catherine. ☐ **ACTION**: **Virtual Meeting** - What is our deadline? April 21-23. Subcommittee meeting (LA USA). planning virtual plannig / presentations. M0 wiki: https://wiki.lfnetworking.org/display/LN/2020+April+Virtual+Technical+Event ☐ **ACTION**: **Peer Review Process Step #1** - ONAP Projects ... Ready for PEER REVIEW? What is involved in that? What's the process? submit to the TSC? Ask Kenny what is PEER REVIEW? Presentation to ARCH S/C ☐ **ACTION**: **ID PTL/Contributors** - who will be contributors, who wants to be the PTL. Resources & Committers from Ericsson (Tony Finnerty), AT&T, IBM (Sandeep) commitment in R7.

R7 Separate Component	☐ **ACTION**: Find PTL who wants to lead the RTCfgDB Project as independent component. **Email from** Dan Timoney 14 Nov 2019 *My understanding from Sandeep was that this work was very much a stretch for Frankfurt. So, I'm okay with work starting in Frankfurt, as long as its structured so that it's a separable component (i.e. as long as, if it's not completed in Frankfurt, the platform is not fundamentally broken). I would NOT support creating a separate repository, since there is a fair amount of overhead involved in maintaining each repository on an ongoing basis – both machine and human resources. The Linux Foundation itself has been pushing back on the number of repositories the ONAP projects have and there is now a new approval process needed in order to add new ones. If a new repository is needed, then this team will need to convince me why no existing repository can be used AND will need to provide a resource who is willing to maintain that repository (i.e dealing with security vulnerabilities; policing code coverage ; doing release builds, etc).*
R7 Guilin Content / requirements	Requests for R7 Requirements are up. Guilin release - functional requirements proposed list Timeline - Sign-off for R6 is May 7. Historically M0 kickoff for R7 is May 7th **PROPOSALS FOR R7 GUILIN FOR WHAT WE PLAN TO BE DOING IN R7:** 1. R7 Project Proposal (identify PTL, Project proposal, setup repo) 2. =STEP 0= (Design time), (Setup DB) Yang Model development ORAN specification Yang Model in line with 3GPP. SQL structure. 3. =STEP 0= Schema design/setup & API 4. =STEP 1= CMnotify generated by RanSIM extended (final standard format). 5. =STEP 1= VES generation, Nokia Simulate DU simulate VES CMNotify message. 6. =STEP 1-6= CMNotify (Nokia) Integration Step 2,3,4 with SON work Step 1,5,6 7. =STEP 5/6= Mapping CMnotify contents into DB 8. =STEP 5a= New Development for Independent component to get VES off of DMaaP 9. =STEP 6= API Updates 10. =STEP 6= Interface to RTCDB (writing DB from SDN-R or RCDB-stand-alone-component) **SUMMARY OF THE STEPS FOR RTCDB "HOW IT OPERATES" (Reference)**: • **STEP 0:** Design time, Setup DB schema & API (Onboarding). • **STEP 1**: xNF (RAN Simulator) GENERATES a VES CMNotify - Wipro SON (R6 Done) • **STEP 1a**: Simulator of VES CMNotify/"Standardsdefined/CM" (Nokia) (R7) • **STEP 2**: DCAE VES Collector RECEIVES the CMNotify (VES) - Nokia (R7) • **STEP 3**: DCAE PROCESSES VES Event- Nokia (R7) • **STEP 4**: DCAE PUBLISHES onto DMaaP - Nokia (R7) • **STEP 5**: CCSDK (Controller) LISTENS to DMaaP - Sandeep Shah (R6 Done) (R7) • **STEP 5a**: RTCDB (stand-alone component) LISTENS to DMaaP (R7 new) • **STEP 6**: RTCfgDB UPDATES DB with info - Sandeep Shah / Techmahindra (R6 Done) (R7) **A&AI FLOWS**: **STEP 1...6**: Initial A&AI setup of DB (the setup of the DB with the initial set of all xNFs a "getall") **STEP 1...6**: A&AI Update (e.g. a new xNF is added or deleted)

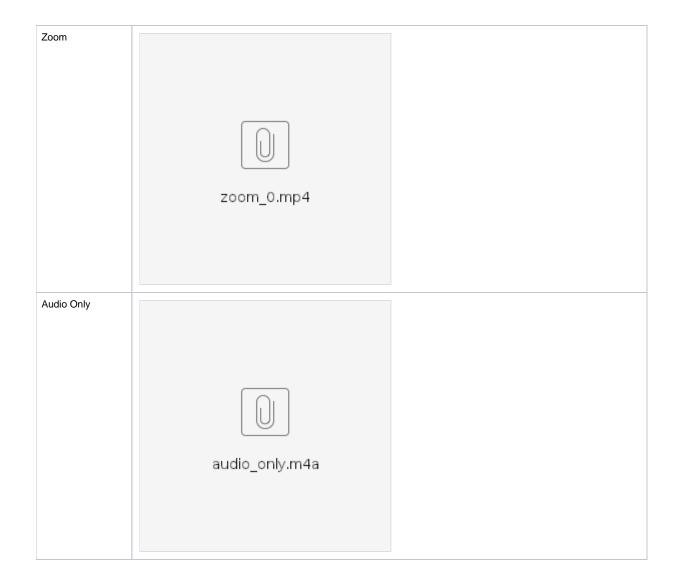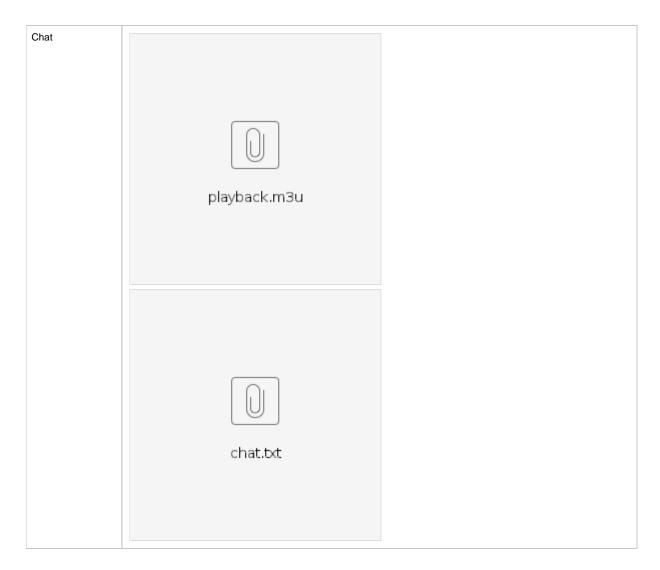| Renaming the Project	**RENAMING THE PROJECT ("Service" vs "Database")**
	Database
	#1 **HISTORICAL PRECEDENCE** - The original idea was a configuration database available at Runtime. Use cases to store. Historical been with the project since the beginning. *Name Inertia*. Operators will use. Historical precedence within AT&T. SON & Slicing depend on this project (scope)
	#2 **Contents that it holds** - Contents is configuration parameters from the network. Name reflects the initial content of database.
	Service
	Since working on project proposal, it has grown, the same argument works against use.
	#1 **QUALIFIERS** - A wide variety of qualifiers could be put there and it still won't cover. Would move to something more abstract. Abose and beyond a standard IT database. For example service information, policy information, CLAMP information, exo-inventory (information outside of A&AI), topology information, application information - it is conceivable that many other types of information could before. Config if someone wants to add additional information a place to hold information. e.g. in Bell Canada's case they store more than just configuration, the Operational Data & Current state of network. Collectors that gather metrics in VES consumed put in **state**DB. Tied to inventory objects in A&AI self-link from A&AI want to know about interface PNF trying to keep two together, the configuration & the metrics representative what is currently happening in the network. state of I/F being up-down that's more of a state vs a configuration. OpenDaylight Operational data store. Scalability. Collectors & StateDB is yang-driven if collector follows yang-model data store can hold-values. Monitoring interface track as state.
	#2 **Confederation of Databases -** Core/Edge/Far Edge - Historical DB - current DB
	#3 **MEANS VS ENDS** - Database is a "means" technology not an "end" goal
	An engine, hubcap is a part of a automobile that provides a service: vehicular motion. A database is a specific technology and implementation.
	Requirements around for current data & historical (temporal) careful not to talk about the technology. Potentially more than one database.
	Data Persistency Service "functional" / Zu Tony Ben
	Configuration & Persistency Service / Joanne Tony Ben
	Operational Persistency Service / Bruno Tony Ben
	Run-Time Configuration DataBase "technology"
	State (of Network) Database what is state of network (storing more than just config)
	Configuration Operations Database (C.Op.DB) / Swami
	Golden Configuration Database / Fred
	(RunTime)(Operational)(Persistency) Policy Topology State Network Configuration Service Exo-Inventory Database
R7 GuiLin Development	CMNotify specification
	☐ (**Watch for**): R6 VES 7.1.1 Baselined https://gerrit.onap.org/r/c/vnfrqts/requirements/+/100876 (VES Event Reg review) and https://gerrit.onap.org/r/c/vnfrqts/requirements/+/100867 (VES Event Listener review) R7 VES 7.2 review open new updates to the VES listener should include CM VES event. Participate review.
	☐ **ACTION**: R7 VES Common Header update to align with 3GPP SA5 (CR) Nokia/ ATT/ Orange/ Ericsson. Presentation for Monday 2PM UTC on Alla's Req S/C call. "ONAP-ORAN Harmonization". Vimal, Marge, Cormac, Damian. Domain "Standards-Defined" NameSpace "3GPP-CM-xxxx"

SUPPORTING FILES

Description	File

RECORDING

Recording	File

Zoom	zoom_0.mp4
Audio Only	audio_only.m4a

Chat	
	playback.m3u
	chat.txt

Action items

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