Configuration & Persistency Service Meeting notes Apr 29, 2020

Date

29 Apr 2020

Attendees

- Benjamin Cheung
- Tony Finnerty
- Michela Bevilacqua
- Mike Elliott
- Ciaran Johnston
- Bruno Sakoto
- Olivier Phénix
- Zu Qiang (Ericsson)
- Toine Siebelink
- --

DISCUSSED TSC PPT Questions

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)

R6 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

R7 DISCUSSION

Topic	Discussion
R6 / R7 ReadtheDocs	Read the Docs ☐ 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) ☐ New project Repo DOC directory (RST) in that Repo Andreas Geissler Signoff for R6 May 2020; M0 for R7. If we are approved by TSC as a new project create a new Repo

R7 TSC / Project Proposal

Configuration Persistence Service Project

- [ ] **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.
- [ ] **Race Condition Simultaneous requests to update the same info** - Config Controller Persona / writers update / APPC VFC SDNC / EMS does update / New yang model will change, SDNR change in network SDNR does go device gets new Yang model puts into the Database. incremental Yang model / PNF package yang model schema (1 time activity) DB configuration - when you get a config change notification you get all the information you need parameter:newvalue. / who is the MASTER of the data? the mediator / Mirror data - Use Case / the owner controller-persona to update / database update writer

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)

R7 Topic	Description & Links
Usage of CPS - OOF /SON /PCI (Cell info) E2E Network Slicing (Slicing info) Harmonization (Stnd-Def VES)	Virtual F2F mentioned the C&PS project. Those other use cases have dependency to Use cases. We need to attend U/C weekly meetings; sync Guilin (R7) - Use Cases (and Requirements in Use Cases) Guilin release - functional requirements proposed list
Interaction & Dependencies Use Case	Interaction spreadsheet Sync between these teams. Joint meeting - Invitee on a particular in the schedule
TSC Project Proposal	Configuration Persistence Service Project
Project Home Page	sample-landingpage Project Home Page
Project Repository	Create Repo: Resources and Repositories (Deprecated) Process to create Repo. Ticket
Architecture S/C	Architecture Proposal ONAP Architecture Review process:Project Architectural Review Requirements and Process (Draft) to M1 Project PTLs/Feature Sponsors request a review by email from the chair of the arch subcommittee. The chair of the arch subcommittee creates a JIRA issue for the review and emails a link to the project PTL. The project PTL/Feature Sponsor adds the JIRA issue link to the architecture review JIRA task in the M1 epic, as confirmation that a review has been requested.
R7 Wiki Page	Configuration & Persistency Service R7

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"

PROJECT NAME DISCUSSION

TOPIC	DESCRIPTION

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

SUPPORTING FILES

Description	File
TSC Presentation	

RECORDING

Recording	File
Zoom	zoom_0.mp4
Audio Only	audio_only.m4a
Chat	playback.m3u

Action items