2020-08-12 OAM report

Done

- Moving to next ODL version Sodium module testing ongoing
- Update to JAVA 11 module testing ongoing

Activities

- Analysis of the "Application LCM" use case
- Contributions by Samsung
 - comparison of App deployment by
 - ONAP SO/CDS CSAR (Cloud Service ARchive) packages
 - ONAP DCAE µServices
 - Current view
 - Enhancements of the DCAE app deployment seems fitting best
 - CSAR could be used as O2 pre-spec deployment option for O-RAN VNF/CNF (near-rt-ric, O-CU-UP, O-CU-CP, O-DU)
 - Open
 - resource allocation
- Updates of O1-TR069-Adapter
 - Modularization of the currently "monolithic" YANG module.
- Preparation of supporting gRPC for Transport (WG9)
 - no decision yet

Challenges

- No feedback from OTF team
- No feedback from RIC Dashboard team

O-RAN related open-source activities

- OAM project uses and contributes directly to
 - ONAP CCSDK, SDNC project based on OpenDaylight project, based on Apache Karaf
 - O1 NetConf termination of the SMO according to O-RAN-OAM Architecture and OAM interface specification and according to O-RAN FrontHaul m-Plane (WG4)
 - ONAP DCAE VES colletctor
 - O1 VES termination of the SMO according to O-RAN-OAM Architecture and OAM interface specification
 - ONAP DCAE File Collector
 - O1 FTPeS termination of the SMO according to O-RAN-OAM Architecture and OAM interface specification
 - ONAP DMaaP as communication channel between the different O1 termination functions based on Apache Kafka
 - ONAP LOG
 - Centralized logging service based on ElasticStack (ElasticSearch, Logstash und Kibana)
 - ONAP AAF
 - Certification for TLS
 - ONAP OOM
 - Deployment of the solution based on Docker, Kubernetes and Helm
 - ElasticSearch as local Cache/database.
 - Alpine Linux as operating system
 - JAVA, Node, TypeScript, Python, OpenStack, Eclipse, vsCode. Papyrus, MaterialUI and many, many more for Development

A few examples from ONAP wiki:

o REQ-327: Standards Defined Notifications over VES

Introducing the capability to receive, validate and process standards defined notifications encapsulated in VES events in ONAP. Components impacted: (DCAE; Modeling SC; VNF Reg)

o <u>REQ-352</u>: Enhancing the A1 adapter/interface capabilities in ONAP to manage A1 Policies Support multiple A1 targets in the RAN and multi-version A1 interface for different A1 targets, introduce secure TLS communication. Components impacted: (CCSDK/CDS; SDN-C (SDN-R); Modeling SC)

o <u>REQ-345</u>: Optimization and SON functions for 5G RAN. Self-optimization, Self-Healing, Self-configuration Components impacted: (CCSDK/CDS; DCAE; OOF; Policy; SDN-C (SDN-R))

o <u>REQ-318</u>: PNF Plug and Play allows for ONAP to support PNF registration and discovery Components impacted: (SO; Modeling SC)

o $\underline{\text{REQ-324}}\text{:}$ The xNF Software Upgrade use case allows for ONAP to update the xNF software Components impacted: (AAI; SDC; SO; VID)

o <u>REQ-381</u> : Bulk PM data collection control provides a dynamic and efficient way to configure performance measurement collection Components impacted: (DCAE)