RIC Dashboard Application

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Child pages:

This page analyzes the requirements and features for the Portal - RIC Dashboard web application.

Requirements

| Key | Summary | Т | Created | Updated | Due | Assignee | Reporter | Р | Status | Resolution | |
|-----|---------|---|---------|---------|-----|----------|----------|---|--------|------------|--|
| | | | | | | | | | | | |

No issues found

R1 Features and Enablers (Seed Code R1 version):

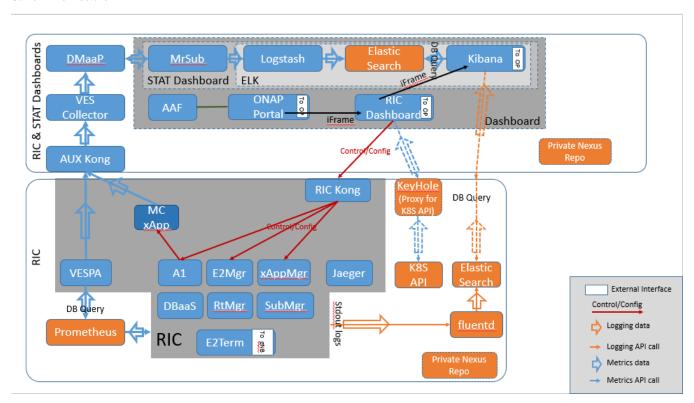
- GUI to manage the RIC signaling connection (SETUP, RESET, remove SCTP connection) with the gNB and eNB
 GUI to trigger subscription on UE information
- GUI to manage xApps lifecycle (deploy/undeploy)
- "Big Red Button"
- GUI to manage functional xApps (specific xApps functionality)
 GUI to display search and filter RIC metrics
- GUI to display and query for signaling connection status and xApp status

| Requirement | Component | Comments |
|--|---|----------|
| GUI to manage the RIC signaling connection (SETUP, RESET) with the gNB, and eNB, | 1. RIC Dashboard 2. A1 Mediator 3. E2 Manager | |
| GUI to trigger subscription on UE information | 1. RIC Dashboard 2. A1 Mediator 3. UE Manager | |
| GUI to manage xApps lifecycle (Deploy, Undeploy) | 1. RIC Dashboard 2. A1 Mediator 3. xApp Manager | |

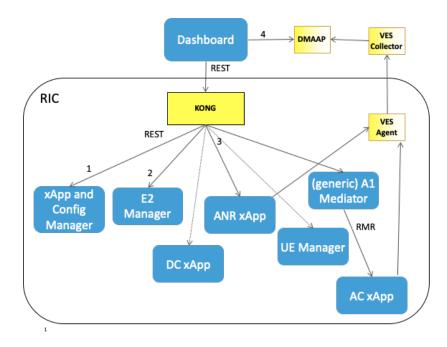
| GUI to display and query for the signaling connection status and xApp status | 1. RIC Dashboard 2. A1 Mediator 3. E2 Manager 4. xApp Manager | |
|--|---|--|
| GUI to display, search and filter RIC metrics | 1. RIC Dashboard 2. VES Agent | This includes displaying the latency for each control loop execution (min/max/avg) |
| [Stretch Goal] GUI to configure xApps | 1. RIC Dashboard 2. A1 Mediator 3. xApps | |

Architecture

Current Architecture



Dashboard (R1 + R2)

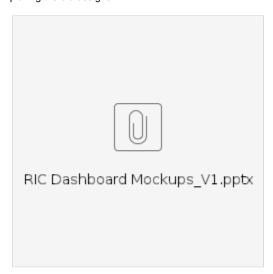


- 1 xApp configuration and life cycle management (update config, deploy, undeploy, status)
- 2 RIC-RAN connection management (setup, reset, disconnect)
- 3 xApp control (ANR, simple intents)
- 4 Metrics

UI/UX Designs

These designs are reviewed in R0 sprints in the initial phases of seed code.

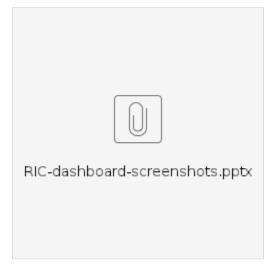
Documenting this just to track the evolution of the UI/UX screens and to show the thought process, so that we do not get into the cycle of redesigning and picking the old designs.



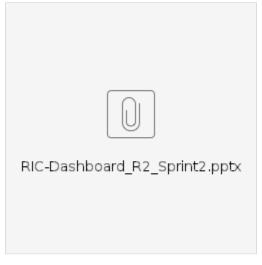
Demos and screenshots

R1 - Pendulum demo with RIC Dashboard:

RIC Dashboard functional screen shots latest version (R1 - Sprint4):



R2 - Sprint 2:



R2 - Sprint 3:

Dynamic xApp configurations screens and design



Repo details

 $The project code is available in the LF gerrit repository \ \underline{https://gerrit.o-ran-sc.org/r/admin/repos/portal/ric-dashboard}$

Deployment instructions

Integration team can use dashboard's deployable docker image.

Deployment instructions and dependencies are up-to-date here - R0 Component Dependency, Building, and Run Process Discovery

- Language: Java Backend and Angular Frontend
 Build dependencies and versions: openjdk:11
 How to build: Jenkins job defined in ci-management gerrit repo
 Run-time dependencies and versions: Helm chart defined in it/dep gerrit repo
 How to run: Helm chart defined in it/dep gerrit repo