

## OSC NONRTRIC Release G

**NONRTRIC Team** 

OSC RSAC: July 2022

## Proposal:

- 1: R1 Service Exposure & Management
- 2: R1 Data Management & Exposure
- 3: rApp Manager
- 4: Continue A1-Policy & A1-Enrichment-Information evolution (& R1-A1)
- 5: Sample use cases (rApps)
- 6: Testing, Maintenance & Housekeeping

#### 1: R1 Service Exposure & Management

- Continue work of Service execution platform extensions (K8s, Istio, Keycloak, OPA, Gateway) to enable service isolation & exposure
  - Create/apply K8S configurations to isolate platform services and rApp microservices, then configure controlled secure access between service
  - Continue to study fine-grained service-specific access control & exposure for non-microservice parts of rApps
- Extend Release F prototyping of 3GPP CAPIF-aligned Service Exposure Manager function (& API)
  - Registry for service producers & consumers support service discovery
  - Extend to trigger service sandboxing & exposure set-up at service registration time
  - Extend to provide necessary tokens/credentials etc. to access service (exposure)
    for authenticated consumers

#### 2: R1 Data management & Exposure

- Align with emerging proposals for R1-DME where possible
- R1 DME Data Catalog:
  - Extend current Information Coordinator Service to act as a Data Catalog
    - .. as proposed in O-RAN WG2 R1-DME discussions
- R1 Data delivery & filtering (kafka & REST)
  - Securely subscribe & manage subscription to filtered data (e.g. PM data, data for ML training, etc.)
  - Demonstrate O1-PM jobs (RAN->rApp), A1-EI jobs (rApps->RAN) & arbitrary data jobs (e.g. rApp->rApp)

#### 3: rApp Manager

- Build on ONAP "Automation Composition" model & platform to implement rApp use cases
- Demonstrate controlled on-boarding & LCM rApps with & without μService
  - Coordinate investigation with ONAP team to investigate support for ASDs in rApp model & LCM
  - Extend "Automation Composition Manager (ACM)" with "Participants" to support R1-DME (requires investigation), R1-A1-Policy and R1-A1-El
- Overlap with Service Exposure work to examine role of an rApp Manager to support controlled exposure & LCM of μService and non-μService parts of an rApp
- Investigate where parts of rApp executes in KNative environment (e.g. ML model part of an rApp)
- ... requires use cases

- 4: Continue A1-Policy & A1-Enrichment-Information evolution (& R1-A1)
  - Small extensions to A1-Policy & A1-Enrichment-Information specs continue
  - Southbound: A1 Interface
    - Evolve A1-Policy Management Service & Information Coordinator Service (A1-EI)
  - Northbound: R1-A1(P) & R1-DME Interfaces
    - Evolve A1-Policy Management Service & Information Coordinator Service

#### 5: Sample use cases (rApps)

- Requirements Drivers for rApp/R1 development
- High degree of cross-project integration activity
- 1. O-DU Slice Assurance (RSAC Mandated)
- 2. O-RU-FH recovery (RSAC Mandated)
- 3. Healthcheck / Hello-World (RSAC Mandated)
- 4. ONAP 5G-SON (rApp/platform support for existing ONAP use case)
- 5. Grow existing set of "Hello World" test cases in NONRTRIC test suite

#### 6: Testing, Maintenance & Housekeeping

- Continually growing Function Test & Integration Test environment (as capabilities are added)
- Integration
  - Support integration, deployment & configuration of SMO/Non-RT-RIC related functions & usecases in OSC Integration env.
- Project coordination, Documentation, Delivery, Reporting, Cross-project alignment,
  Community demos, O-RAN Standardization support, etc.

# Ericsson Software Technology

