

Project Scopes

The NONRTRIC project (and the O-RAN Non-RealTime RIC function) can be considered from a number of different viewpoints. This page presents some of these views:

Scope 1: A1 Controller (Mediator, Endpoint)

- Southbound: Provide termination point for A1 interface(s) – REST endpoint for messages to/from Near-RealTime RIC
- Northbound: Provide a more generic interface for A1 operations – provide interface to rApps, without the need for A1 message generation, addressing, coordination, mediation, etc.
- O1 interfaces do not terminate in NONRTRIC function (but may terminate in same controller host/instance)

Scope 2: Coordinate/Host A1 Policy Management Services

- Map high level RAN goal/intent directives to finely-scoped *A1 Policies* towards individual Near-RT RIC instances
- Informed by observed RAN context (provided over O1 via OAM functions), and other external context (via other SMO functions)
- Dynamically coordinate life cycles of A1 Policies in individual Near-RT RICs as contexts change

Scope 3: Coordinate ML/AI Models – In RAN (“E2 nodes” & Near-RT RICs) and NONRTRIC (TBC)

- Acts as model-training host
- May act as model-inference host (others: Near-RT RICs, “E2 nodes”)
- Dynamically coordinate ML/AI model lifecycle management (e.g. re-train, re-deploy, etc)
- Models are (always?) deployed over O1 interface

Scope 4: Enrichment Data Coordinator

- Additional context that is unavailable to Near-RT RICs (e.g. RAN data, SMO context, External context)
- Dynamically coordinate access and pass data to appropriate Near-RT RICs (e.g. for use in ML/AI model inference)

Scope 5: rApp Host & rApp Coordinator

- rApps may act as, or form part of, NONRTRIC- or SMO-level applications
- rApps, via rApp host function, may consume many other services - some from the NONRTRIC platform, some from the SMO platform, and some from other rApps
- Dynamically coordinate rApp lifecycle management

Scope 6: Provide R1 interface for rApps

- rApps may only consume services over the R1 interface (from NONRTRIC platform, or from SMO platform, or from other rApps)
- Platform services and services optionally provided by rApps must be exposed over the R1 Interface
- These services may be “standardized” R1 services or R1 extensions (some may be proprietary)