Workshop: Writing Python xApps for OSC's Platform

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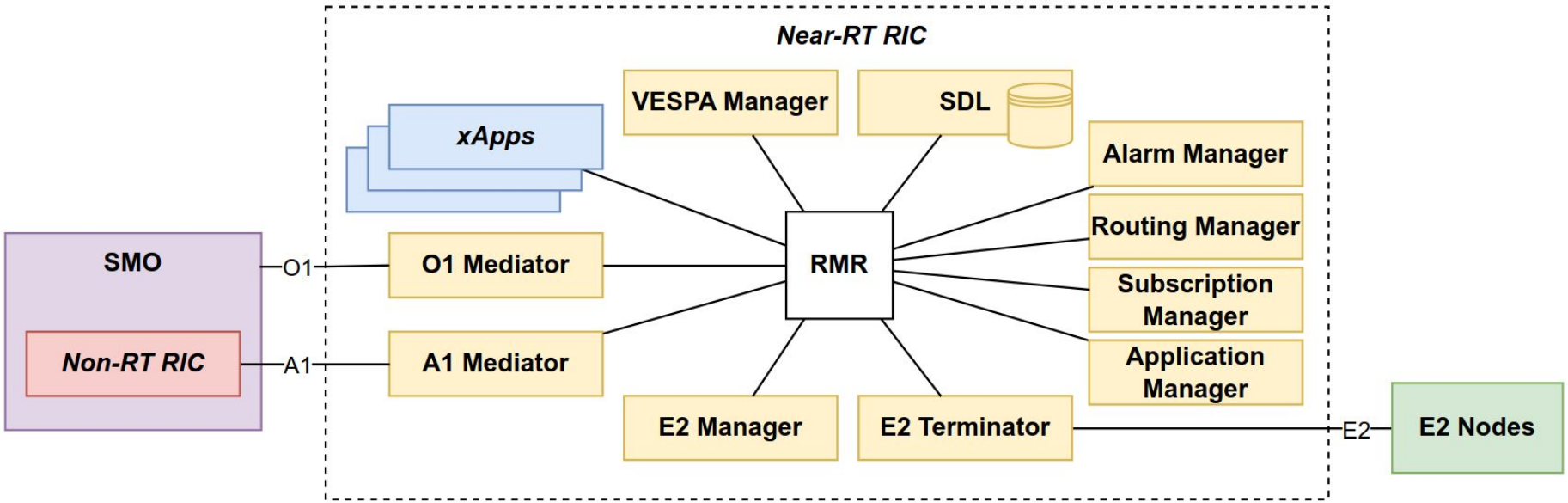
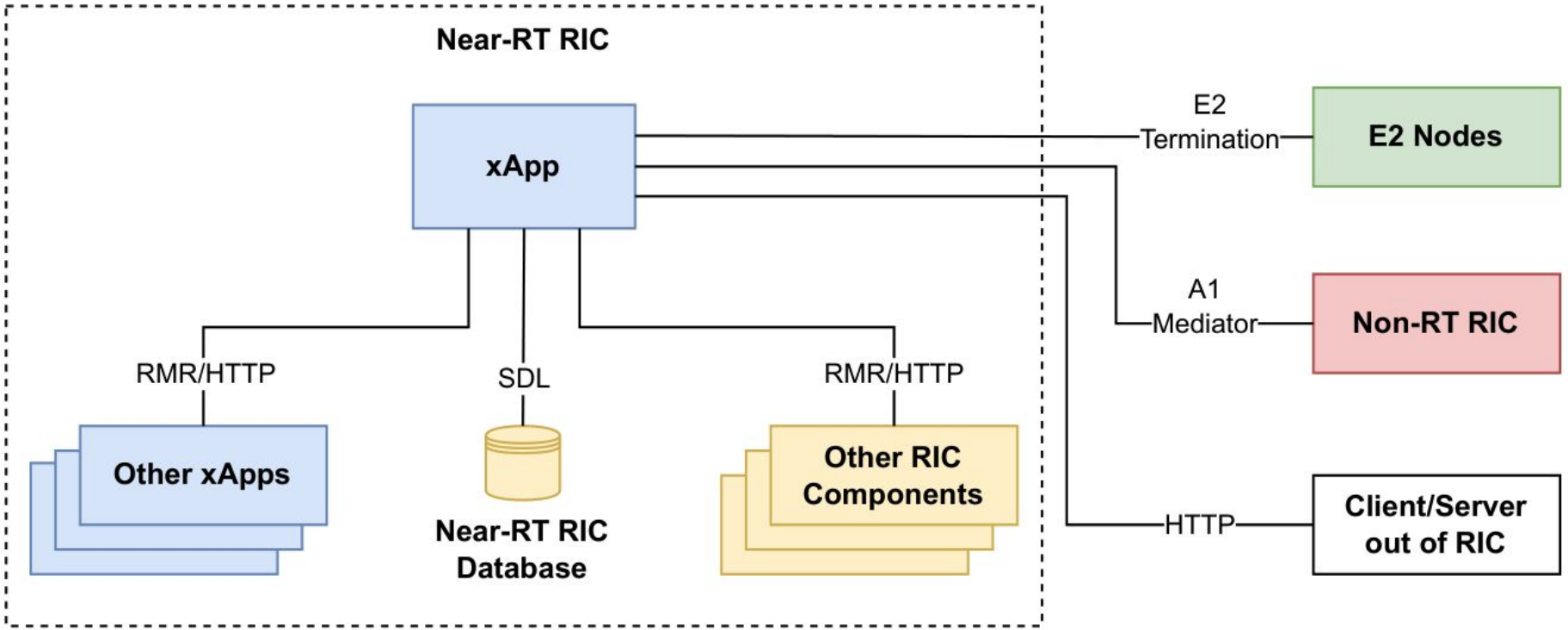
Agenda

- Class 1: Managing, checking, and configuring xApps
- Class 2: xApp overview, logging, SDL, and REST
- Class 3: RMR communication and E2 Nodes subscription
  - OSC's Near-RT RIC architecture
  - Common xApp endpoints
  - Flow comparison: Xapp vs RMRXapp
  - Class 3 xApps - RMR communication
  - Class 3 xApps - E2 Node subscription

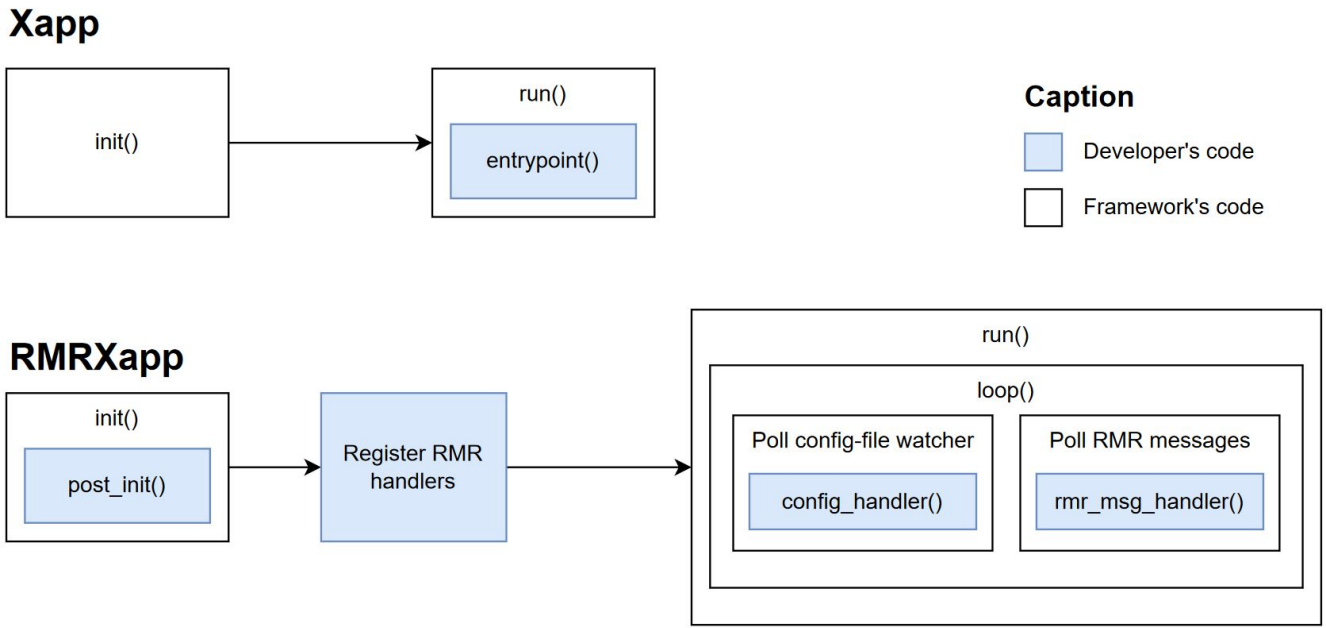
OSC's Near-RT RIC architecture



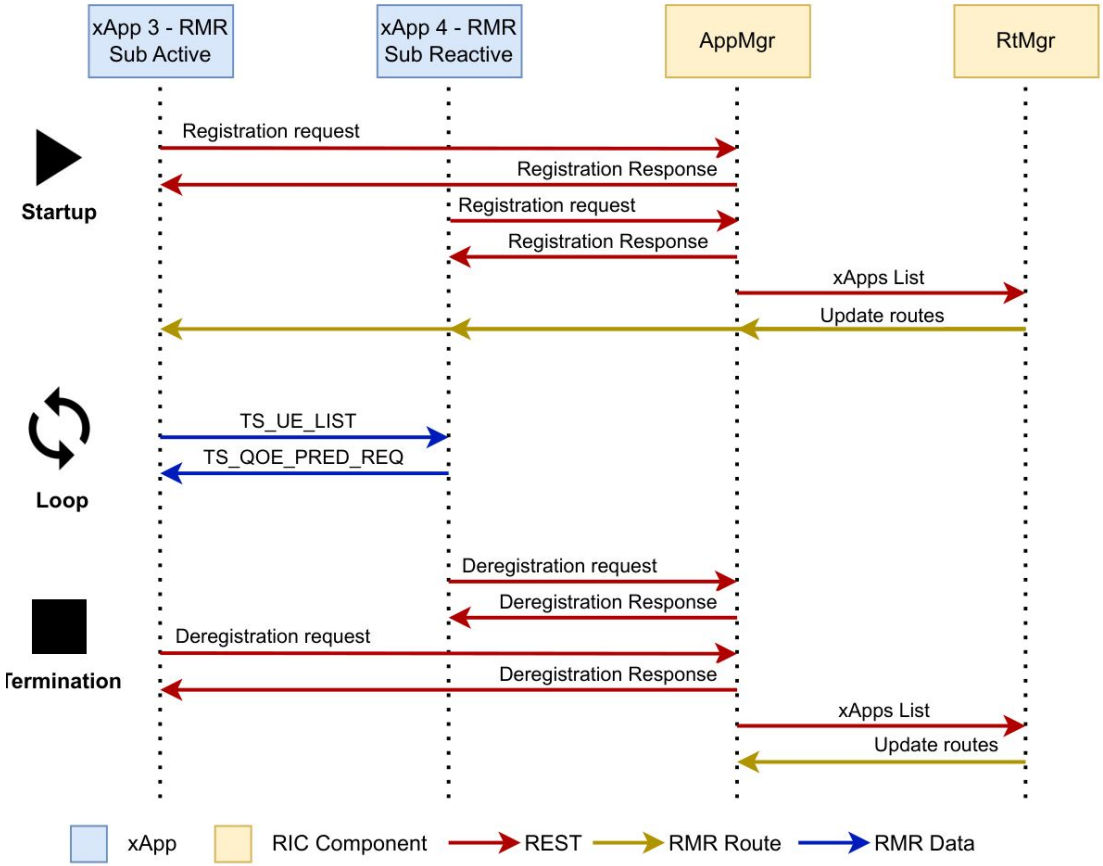
Common xApp endpoints



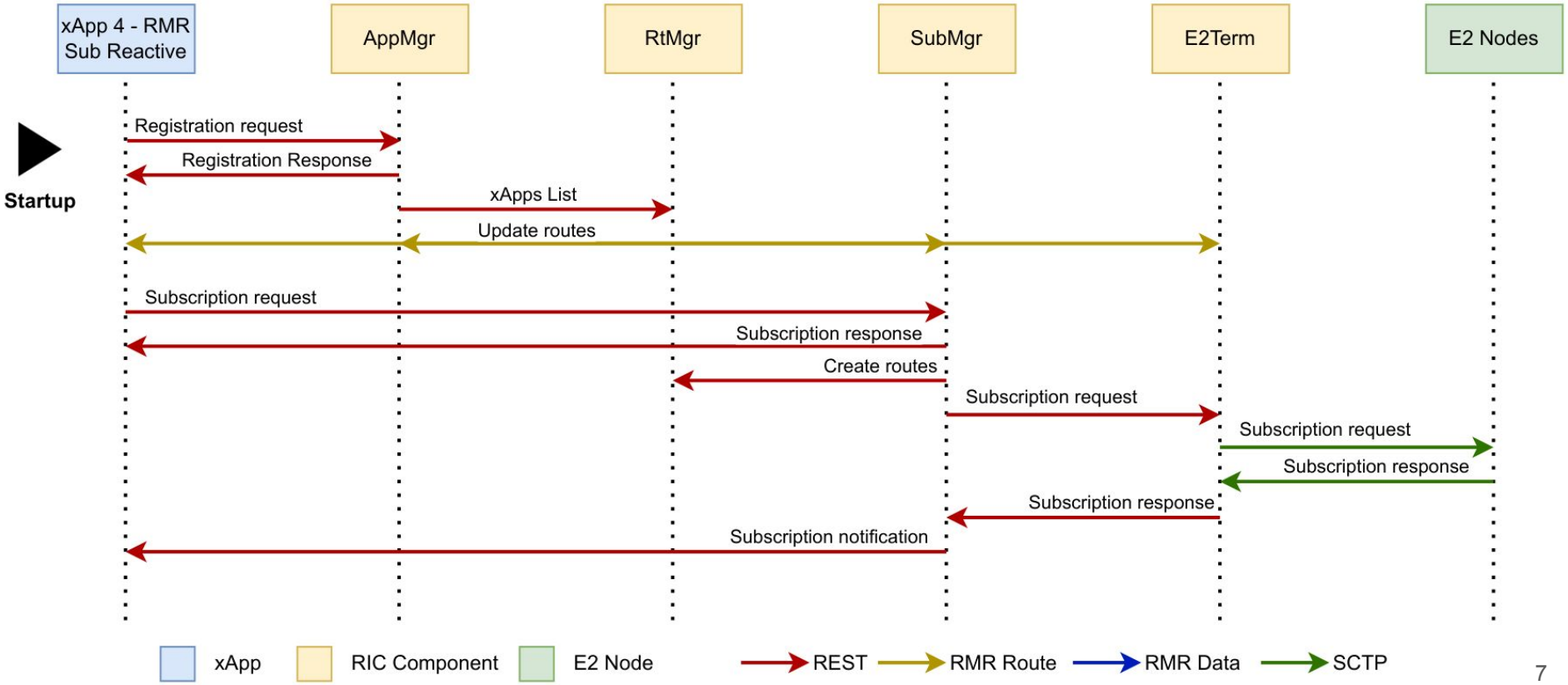
Flow comparison: Xapp vs RMRXapp



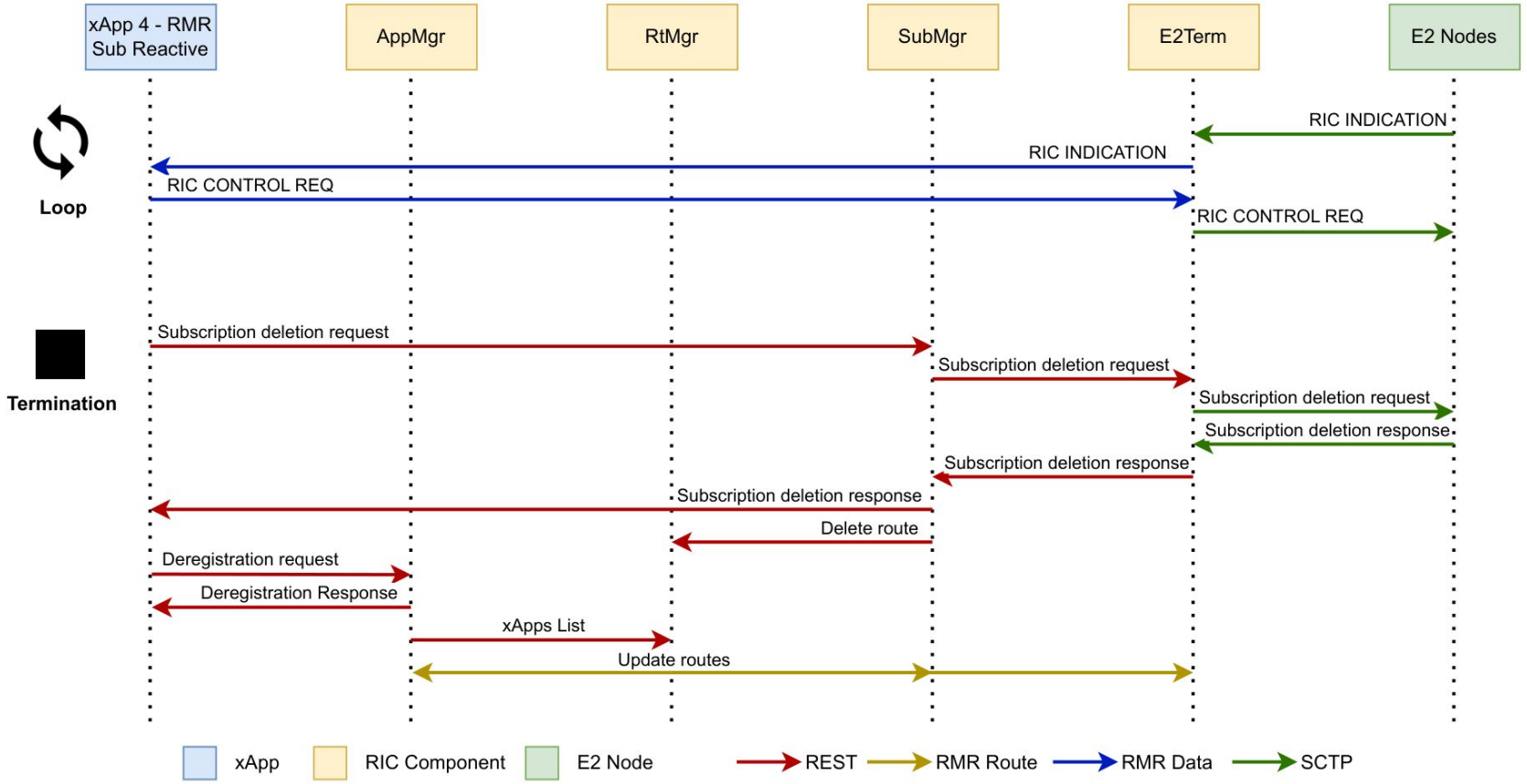
Class 3 xApps - RMR communication



Class 3 xApps - E2 Node subscription



Class 3 xApps - E2 Node subscription



References

OSC's xApp writer's guide v2:
https://wiki.o-ran-sc.org/download/attachments/17269011/xApp_Writer_s_Guide_v2.pdf?version=4&modificationDate=1625642899082&api=v2

OSC's Python xApp Framework: https://pypi.org/project/ricxappframe/

OSC's Subscription Manager Documentation:
https://docs.o-ran-sc.org/projects/o-ran-sc-ric-plt-submgr/en/latest/

Polese, Michele, et al. "**Understanding O-RAN: Architecture, interfaces, algorithms, security, and research challenges.**" IEEE Communications Surveys & Tutorials 25.2 (2023): 1376-1411.