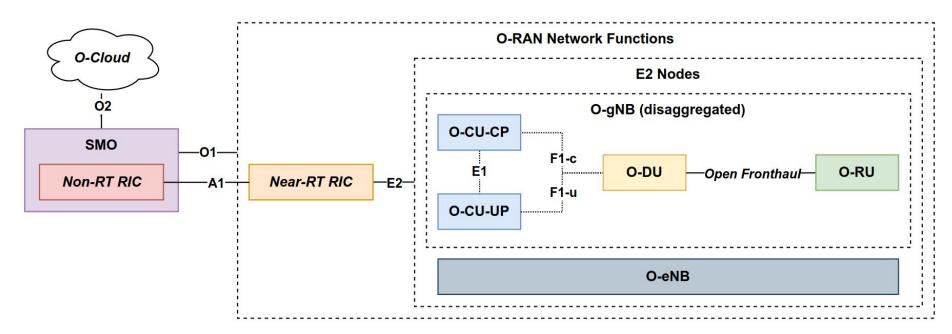
# Workshop: Writing Python xApps for OSC's Platform

Daniel "Dante" Campos

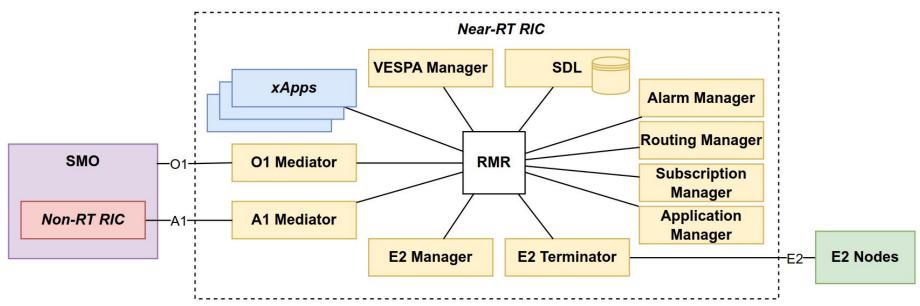
### Agenda

- Class 1: Managing, checking, and configuring xApps
  - O-RAN architecture
  - OSC's Near-RT RIC architecture
  - Commom xApp endpoints
  - xApp deployment workflow
  - Class 1 xApp
  - Practical exercises
- Class 2: xApp overview, logging, SDL, and REST
- Class 3: RMR communication and E2 Nodes subscription

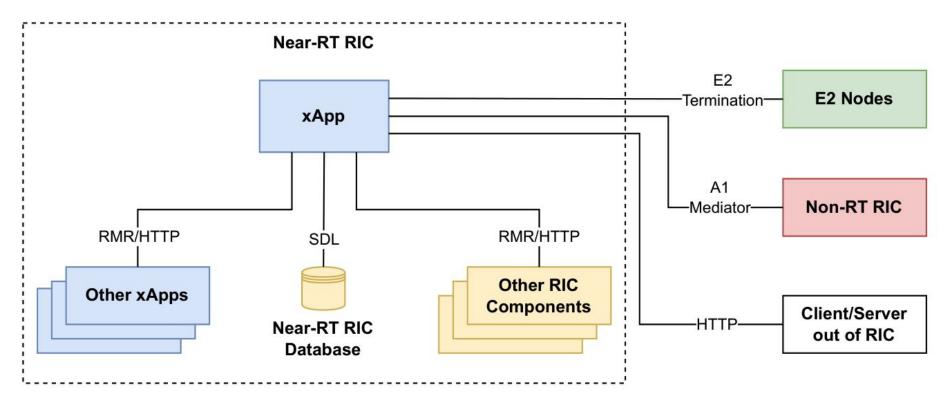
#### O-RAN architecture



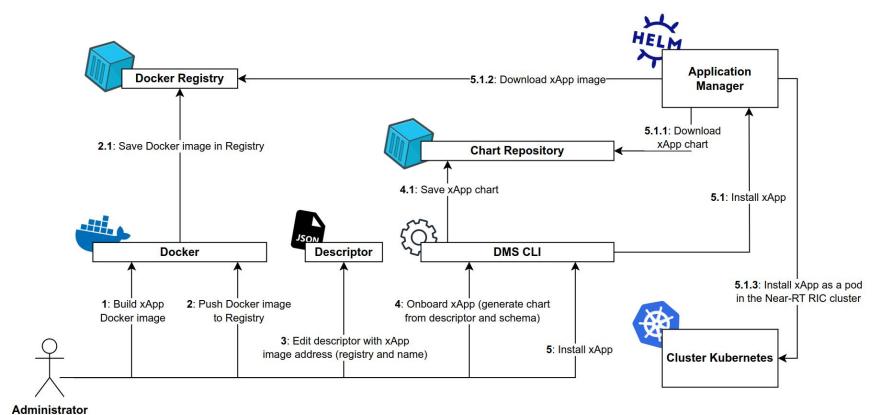
#### OSC's Near-RT RIC architecture



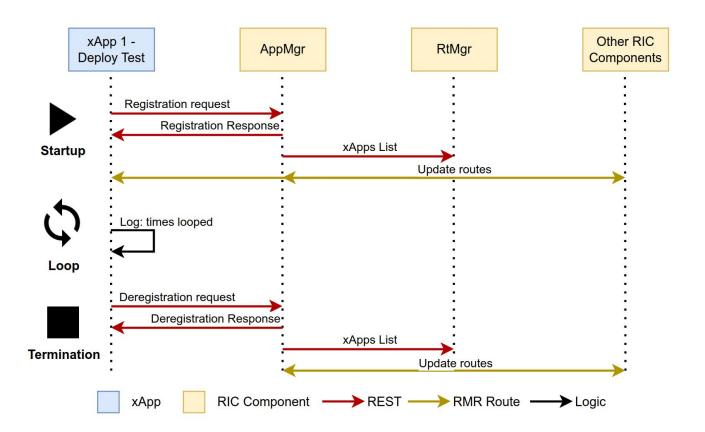
## Commom xApp endpoints



# xApp deployment workflow



## Class 1 xApp



#### References

#### OSC's xApp writer's guide v2:

https://wiki.o-ran-sc.org/download/attachments/17269011/xApp\_Writer\_s\_Guide\_v 2.pdf?version=4&modificationDate=1625642899082&api=v2

OSC's Python xApp Framework: <a href="https://pypi.org/project/ricxappframe/">https://pypi.org/project/ricxappframe/</a>

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