

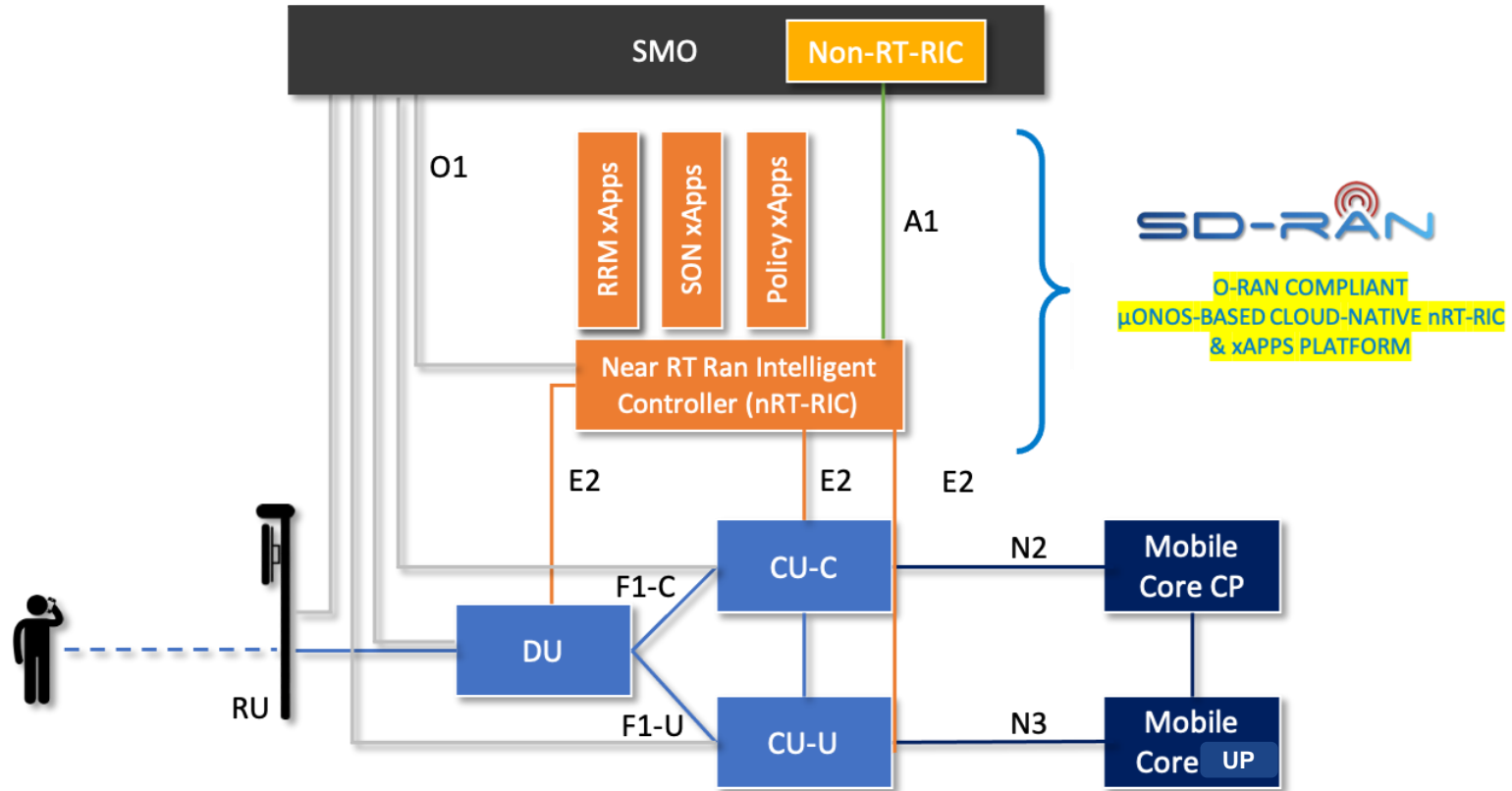


O-RAN E2AP implementation in OAI

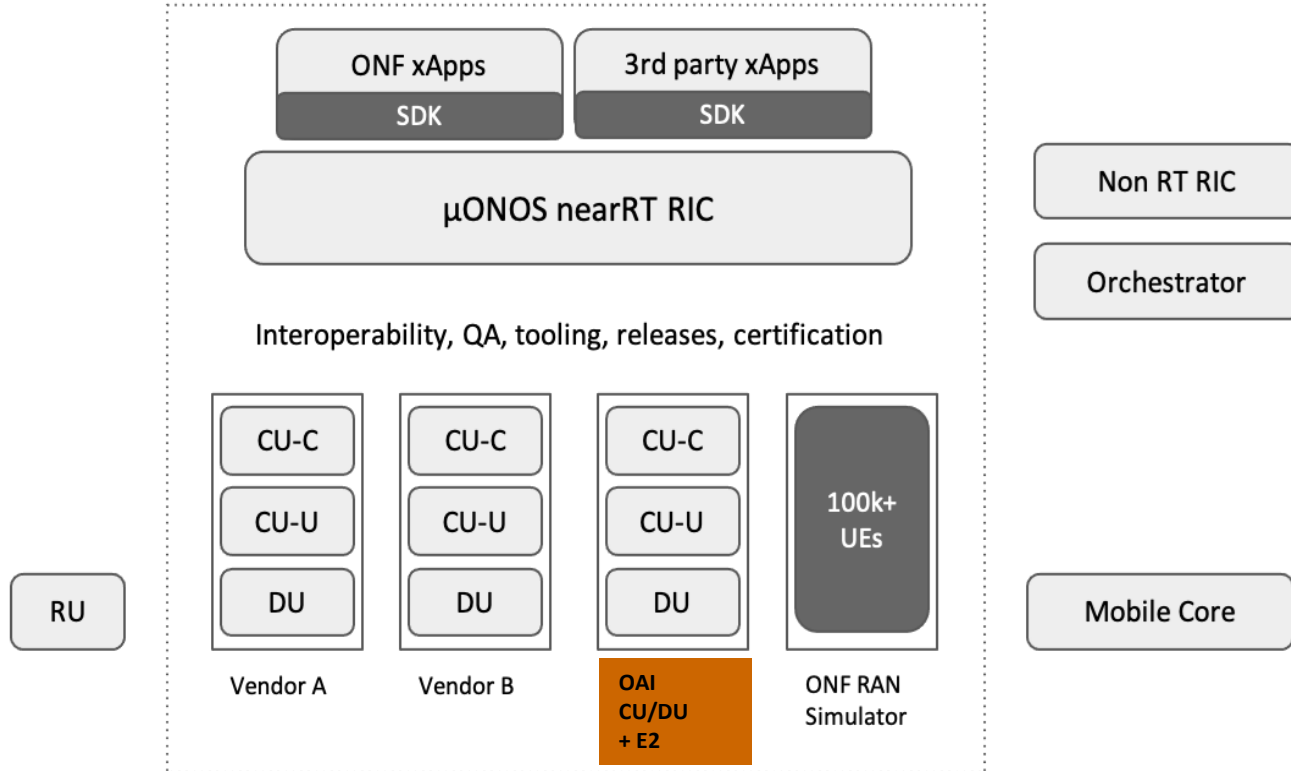
June 25, 2021

Shad Ansari
Open Networking Foundation

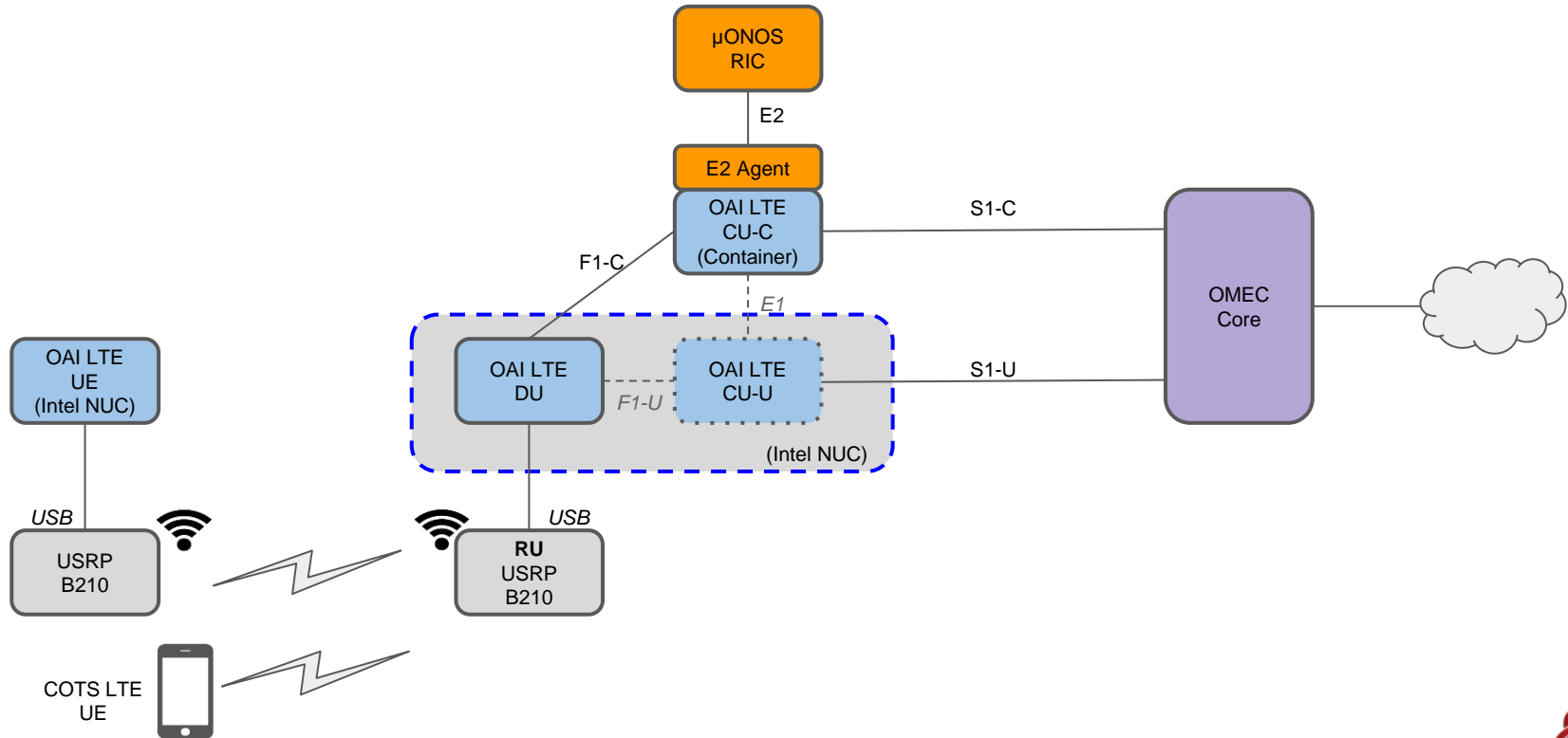
O-RAN Architecture



SD-RAN Solution

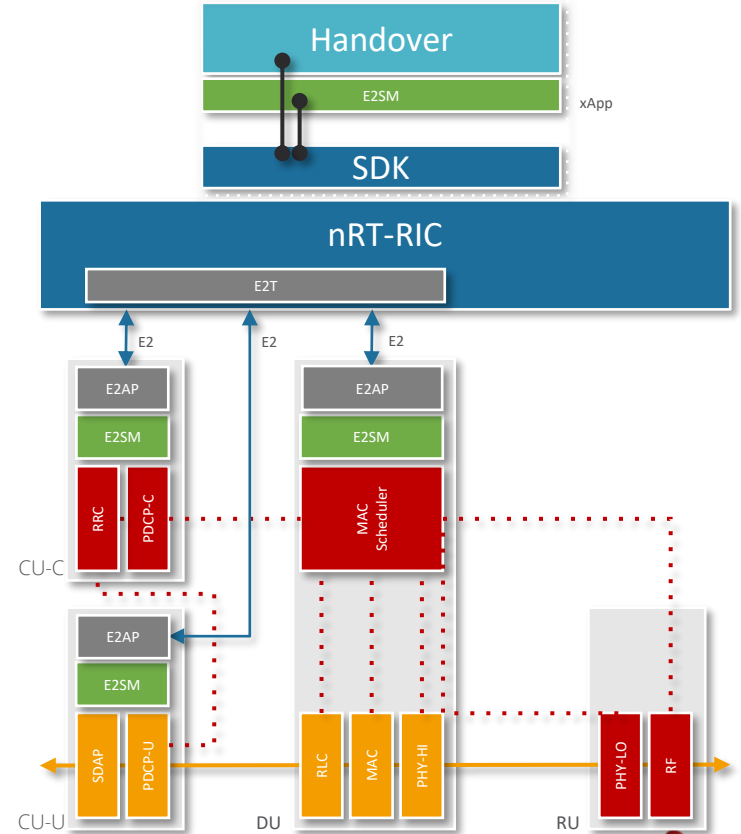


SD-RAN Component: CU/DU/RU & UE

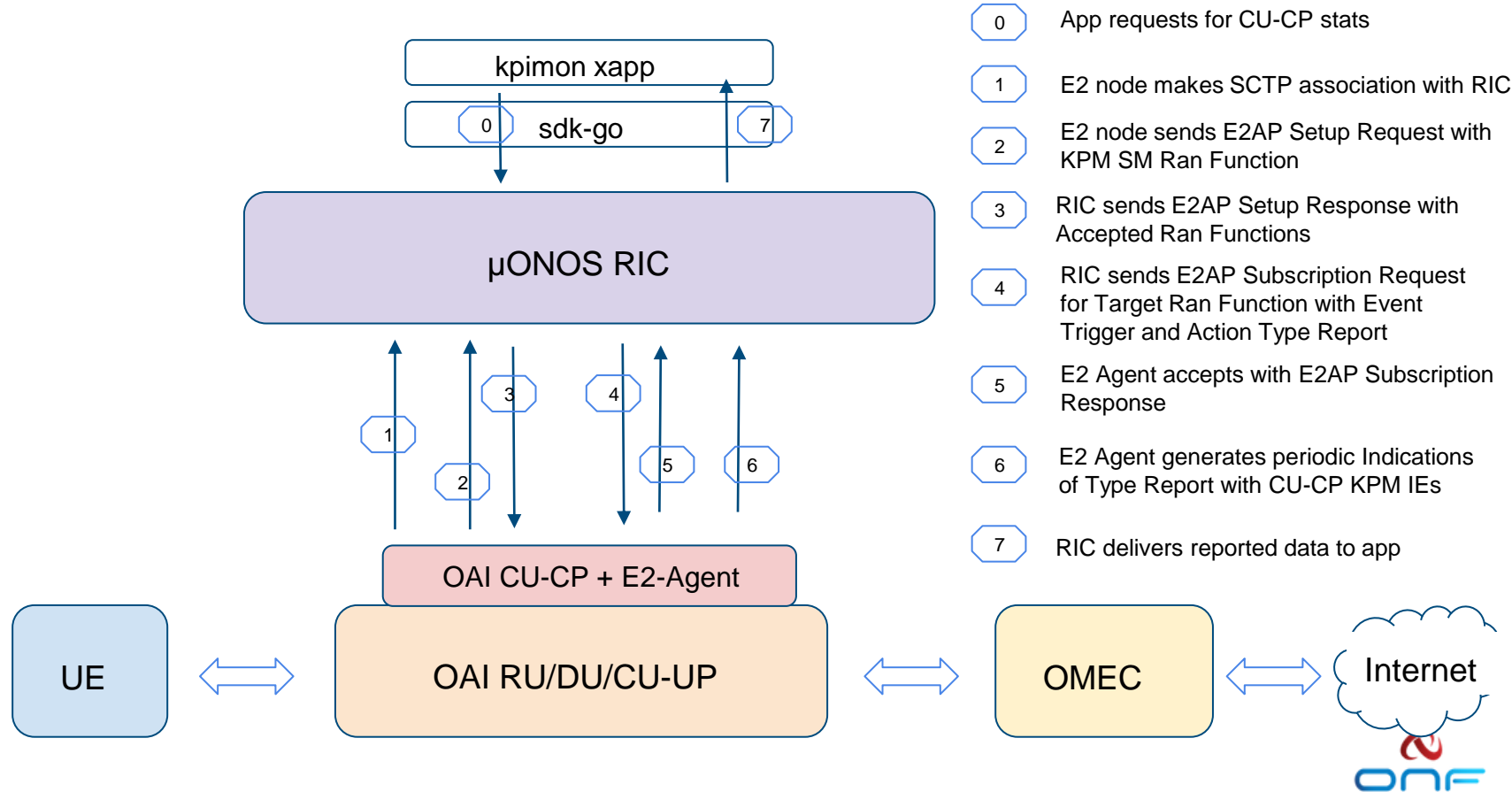


E2AP & E2SM

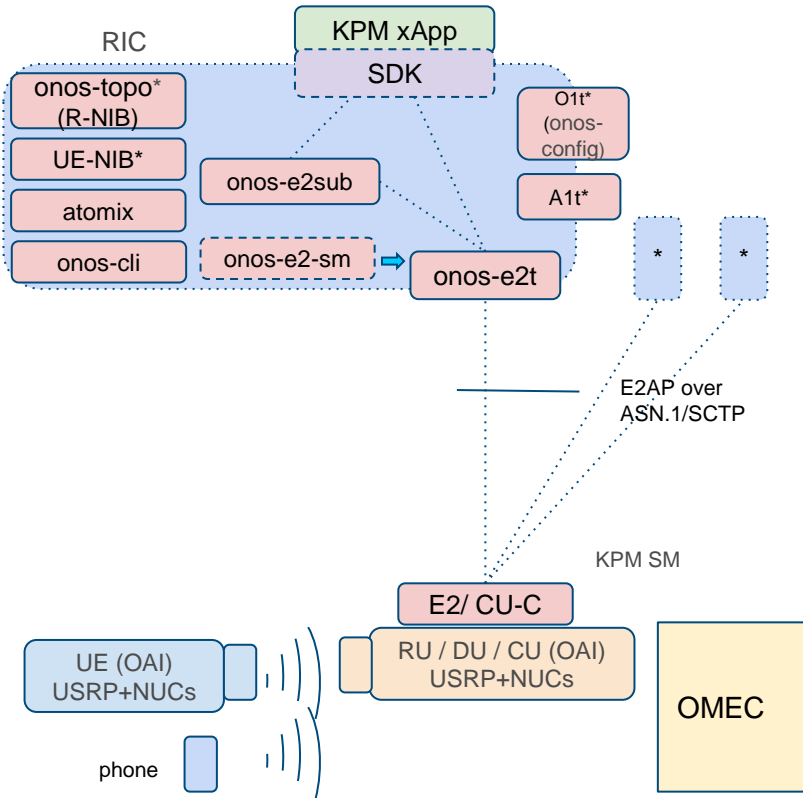
- E2AP defines the general protocol by which the nRT-RIC and disaggregated E2 Nodes communicate.
 - Action Types: Report, Insert, Policy, Control
- E2SMs are “contracts” between an xApp and the E2 Node. They define function specific protocols that are implemented on top of the E2AP specification.
- The implementation of a given E2SM on the gNB side requires explicit feature and interface development / stack enhancements
- E2AP & E2SM-KPM support added to OAI



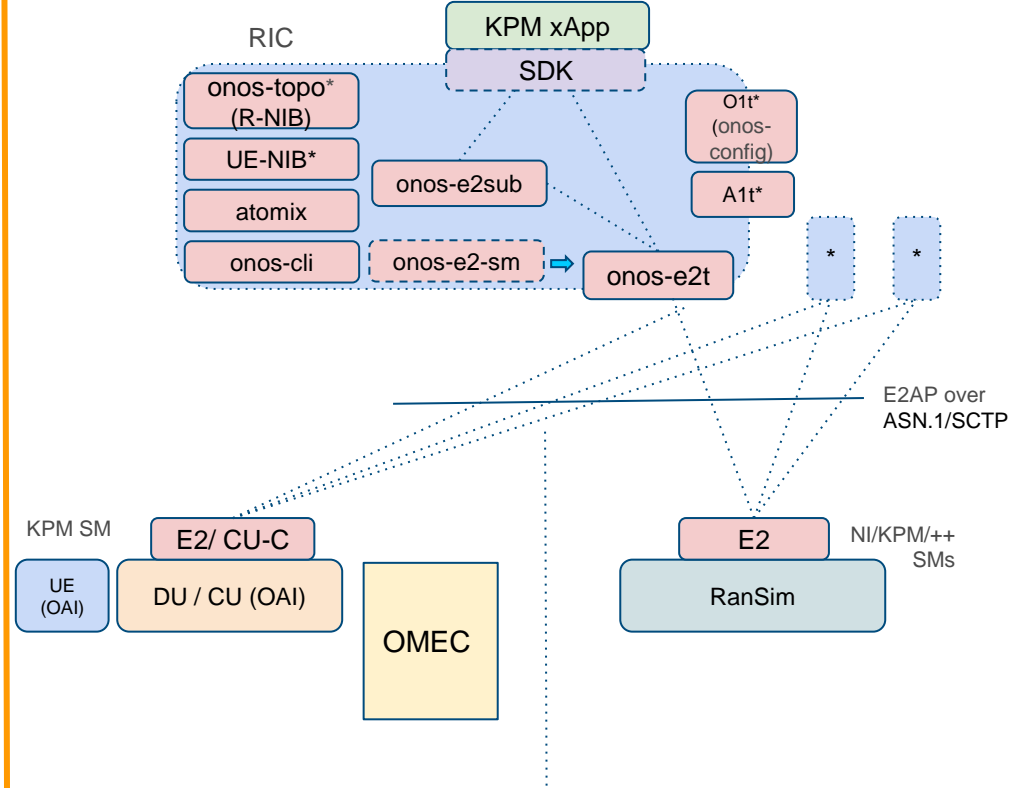
OAI CU-CP + E2 Agent



SD-RAN v1.0

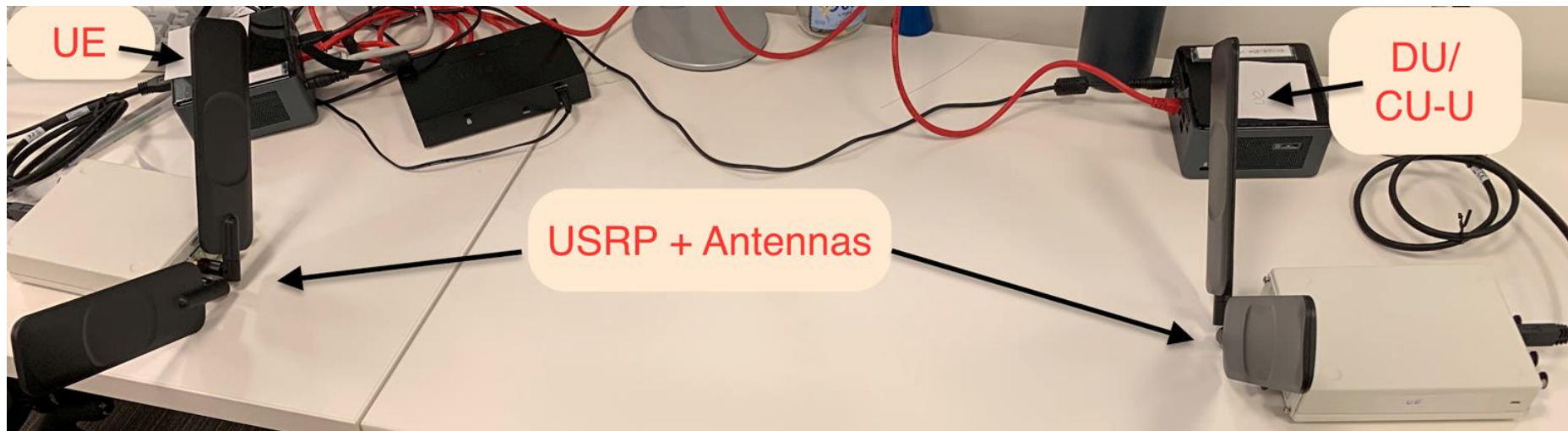


SD-RAN on hardware



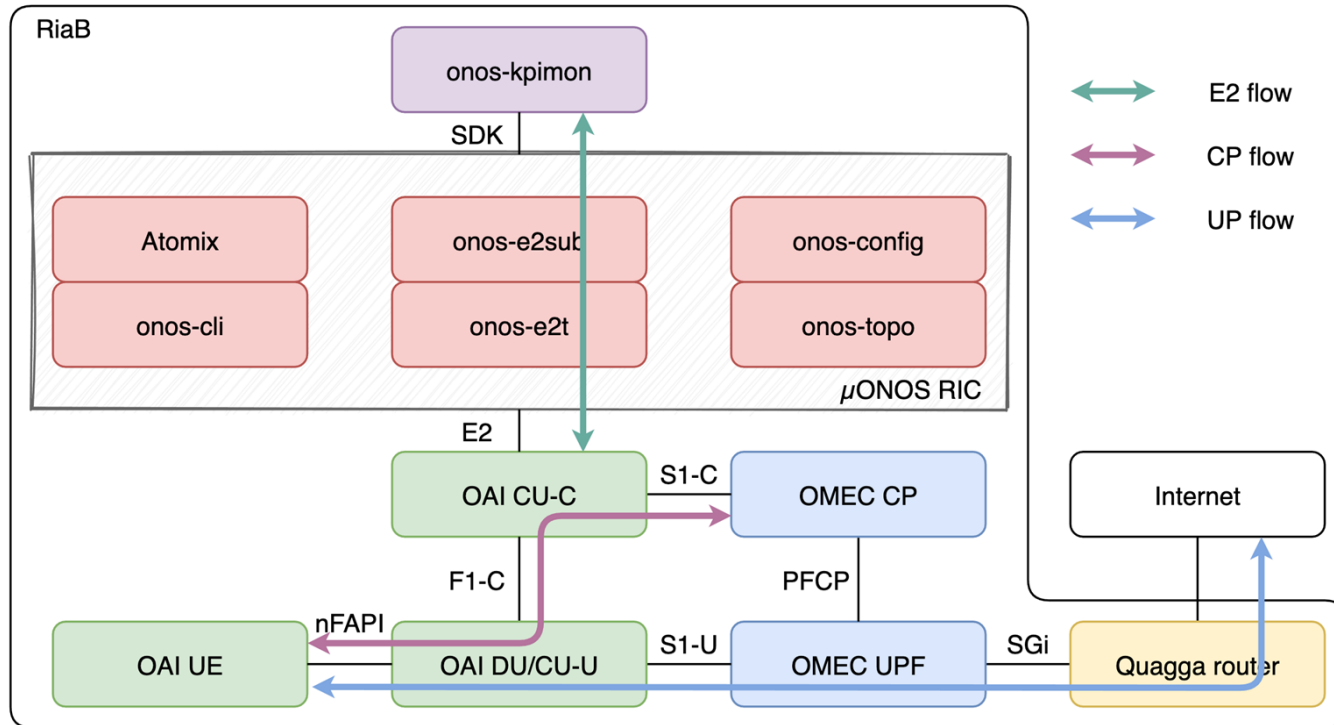
SD-RAN in a Box

Hardware Setup

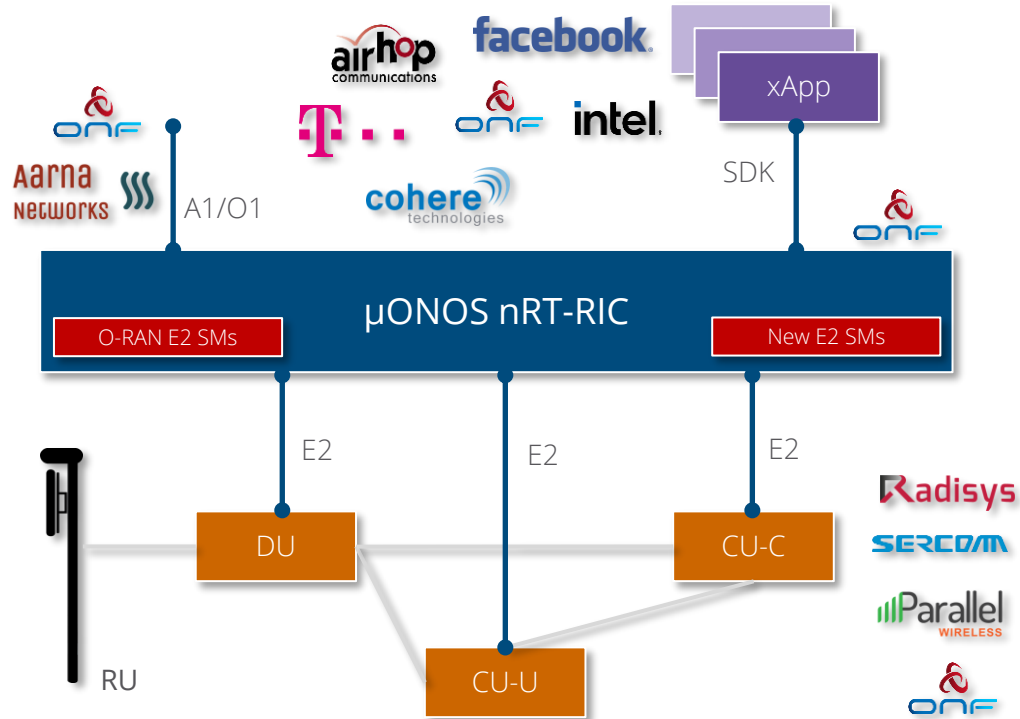


SD-RAN Dev/Test: sdRan-in-a-Box (RiaB)

OAI version



SD-RAN





Thank You

<https://opennetworking.org/sd-ran/>