A Collaborative Open Source Approach to Deploying O-RAN

Panelist:
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- Seshu Kumar Mudiganti, Principal Architect at Wind River, TSC Member at Nephio, PTL OSC SMO
- Tim Carey, Consultant at Qualcomm, Hi Phy Profile Spec Rapporteur at ORAN WG6
- David Kinsey, AT&T & OSC Technical Oversight Committee Co-Chair

Moderator:
Raymond Knopp, President OpenAirInterface Software Alliance
Decoupled SMO Services Architecture

End to End Service Orchestration and Slice Management

- SMOS Communication
  - Service Orchestration
  - Service Assurance
  - RAN Analytics

- SMO Services
  - RAN Domain Management
  - Data Management and Exposure
  - AI/ML Workflows
  - Software Packaging Onboarding
  - Topology and Inventory

- E2E Services

- SMOS
  - O2ims
    - IMS
      - monitor
      - inventory
      - provision
      - lcm
    - O2dms
      - DMS
      - IMS services
      - monitor
      - inventory
      - provision
      - lcm

- O-Cloud
  - FOCON
  - NFO
  - Non-RT RIC
    - <xApp>
  - RAN NF OAM
    - FM|CM|PM
  - Near-RT RIC
    - <xApp>
  - CU-C/U
  - DU
  - DU

- Physical Network
  - RU

Fig Source: O-RAN-WG1.Decoupled-SMO-Architecture-TR-R003-v01.00.0910
O-RAN Integration Architecture for Nephio

Service Management and Exposure

Data Management and Exposure

SMO Services

RAN Domain Management

End to End Service Orchestration and Slice Management

SMOS Communication

FOCOM
Nephio API Adapter

NFO
Nephio API Adapter

Non-RT RIC
<xApp>

RAN NF OAM
FM|CM|PM

O2dms

O2ims

IMS
monitor
inventory
lcm

DMS
IMS services
monitor
inventory
lcm

Near-RT RIC
<xApp>

Nephio Workload Cluster

OAI Network Functions

Realized by Using Nephio Enablers

O2dms

DU

RU

Physical Network
Collaboration between three communities

What role each open-source community (OAI, OSC and Nephio and OAI) and O-RAN should play to collaboratively achieve the goal of deployment and management of the O-RAN NFs?
Any questions from the audience?