



# Preparations & Integration for the M-CORD Demo at MWC 2018

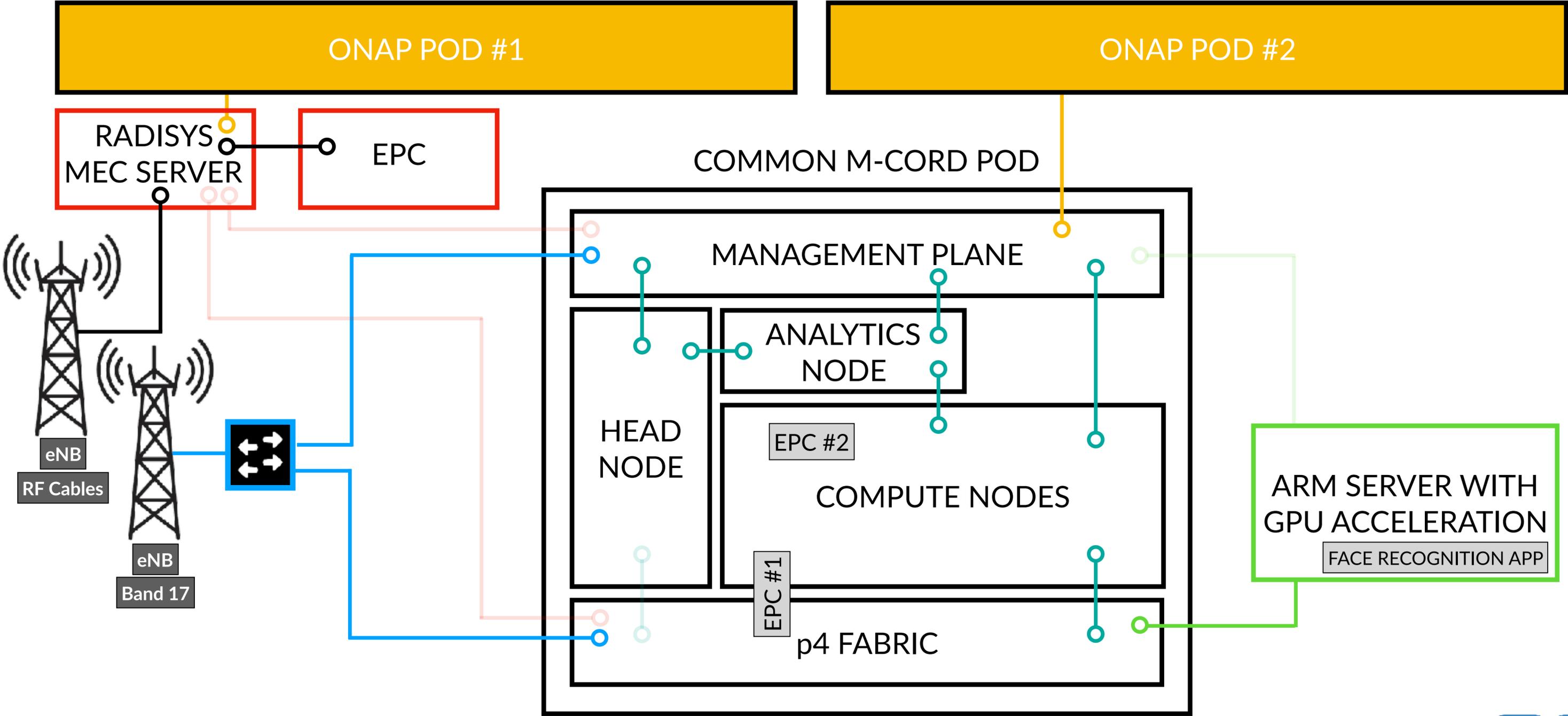
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An Operator Led Consortium



# MWC Demo Architecture



# Next Steps

- ONF-side:
  - MUST - Dev M-CORD pod to be made operational - DONE
  - MUST - Minor glitches on EPC to be resolved - need help from Intel & Sprint - DONE
  - DESIRABLE - EPC throughput performance to be enhanced- need help from Intel & Sprint - DONE
  - MUST - Two EPC instances to concurrently work and be reachable from the eNB - Will be completed by Thursday Morning
  - MUST - CollectD to be installed on the headnode - DONE
  - MUST - Mariner VMs to be installed on the devnode- need help from Mariner - DONE
  - MUST - ARM server to be connected to the fabric and end-to-end connectivity to be ensured - need help from ARM - DONE
  - MUST - XOS UI for ProgRAN to be completed - need help from Netsia
  - DESIRABLE - spgw.p4 bug to be fixed and program be re-compiled - need help from Barefoot - WILL DO A WORKAROUND

# Next Steps

- Netsia-side:
  - MUST - Dev ONAP pod to be made operational - DONE
  - MUST - CORD - ONAP connectivity over VPN ensured - need help from ONF
  - MUST - Closed loop analytics to be tested - need help from ONF & Mariner
  - MUST - Management router configuration to be conducted - need help from ONF
- Radisys-side:
  - DESIRABLE: Additional MEC features to be added

# Demo Story

## - Before the demo

- XOS instantiates EPC1 and EPC2
- eNB is connected to both EPC instances
- EPC1 is connected to the Streaming Server which hosts two videos:  
@240p and @720p
- EPC2 is connected to the Face Recognition Application
- Face Recognition Server database is populated with face data of ONF booth hosts
- Telemetry & Analytics modules instantiated on Head Node and Analytics Node (DevNode)
- **VISUAL:** XOS GUI shows the service graphs

# Demo Story

- **STEP 1: Network Slice Design**
  - **ONAP U-UI is used to manually design two network slices**
    - Streaming Service Slice:
      - UE1 is mapped to it
      - x% of RAN Resources allocated (suitable to view 240p streaming video)
      - eNB anchors the RAN Slice to EPC1
    - Face Recognition Service Slice:
      - UE2 is mapped to it
      - y% of RAN Resources allocated
      - eNB anchors the RAN Slice to EPC2
  - **VISUALS:**
    - ONAP ProgRAN U-UI for manual service design
    - XOS UI that pulls data from ONOS ProgRAN to automatically display the current status

# Demo Story

- **STEP 2: Runtime Operation**
  - **Streaming Service Slice Operation with Closed Loop Analytics**
    - PART 1:
      - UE1 chooses to view 240p video
      - The playback is pause-free
    - PART 2:
      - UE1 chooses to view 720p video
      - The playback QoE is poor
      - Analytics triggers a slice profile edit (x & y values are edited)
      - The playback becomes pause free
  - **VISUALS:**
    - UE1 display
    - ONAP ProgRAN U-UI (Change in the slice profiles)
    - XOS UI that pulls data from ONOS ProgRAN to display the current status (Change in the slice profiles)

# Demo Story

- **STEP 3: Runtime Operation**
  - **Face Recognition Service Running on GPU**
    - UE2 camera captures faces
    - The face recognition engine attempts to recognize them
  - **VISUALS:**
    - UE2 display
    - Face Recognition Service UI where the identities of the recognized faces are displayed

# Demo Story

- **STEP 4: MEC Interoperability**
  - **VoIP at the edge**
  - **VISUALS:**