



Kick-Off For M-CORD Demo at MWCA 2018

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An Operator Led Consortium



AGENDA

- **Timeline and Open Invitation to Participate**
- **Booth Details**
- **Potential Demo Parts**
 - **All Kubernetes M-CORD**
 - **Open Source EPC Performance**
 - **xRAN**
 - **Network Slicing**
 - **Analytics**
 - **ONAP Integration**
 - **P4 Fabric & 3GPP UP for One Slice**

TIMELINE



- We need to finalize the demo story and get it ready by: September 1, 2018

ALL KUBERNETES M-CORD

- **With CORD 6.0, CORD control plane has been already migrated to Kubernetes orchestration.**
- **The goal for the demo is to showcase the feasibility of:**
 - **Containerizing the EPC**
 - **Orchestrating with Kubernetes**
- **There are some issues**
 - **Support for multiple network interfaces - Using Multus plugin**
 - **Intel is working on this.**
 - **Consequences to CORD architecture and XOS Control**
 - **We at ONF have started to investigate this**

xRAN

- With O-RAN announcement, xRAN is gaining momentum once again.
- We have already demonstrated this - there were some bugs - last year at MWCA
- It would be great to include it in the demo
 - Need xRAN compliant eNB - Radisys?
 - Need Controller - ONF needs to make sure it is fully integrated into the CORD MWCA demo version.

Network Slicing

- This is something we have been demo'ing for a while.
- We need to ensure ProgRAN-capable eNB connectivity to all Kubernetes CORD.
- The ProgRAN controller needs to be included in the CORD release
- Multiple EPC instances need to be instantiated.
 - One instance using P4 UP?

Analytics

- We have demo'ed Analytics based on RAN network state from ONOS ProgRAN at MWC
- We should replicate this
- In addition, it would be good to get container state from Kubernetes and at least show that it can be monitored in real-time



ONAP Integration

- We have demoed Network Slice design and closed-loop automation at MWC
- We should duplicate this.
 - Need an ONAP Pod - Remote? Netsia? Radisys?
- Can we do a quick, interim solution where a command from ONAP triggers XOS to instantiate a new service?

P4

- An all-P4 fabric is desired.
- Can we still do a multi-vendor fabric? Will Cavium and Mellanox participate?
- If not, will an all-Barefoot fabric be feasible? Do we have the devices available?
- We need to ensure ONOS Fabric in the demo version of CORD supports necessary southbound.
- Can we install Deep Insight and monitor traffic?
- It is desirable to demo the P4-based 3GPP UP here again.
 - We need a second EPC Helm Chart for this purpose

Any Other Ideas? Contributions?