Open Networking Korea 2018 Fall

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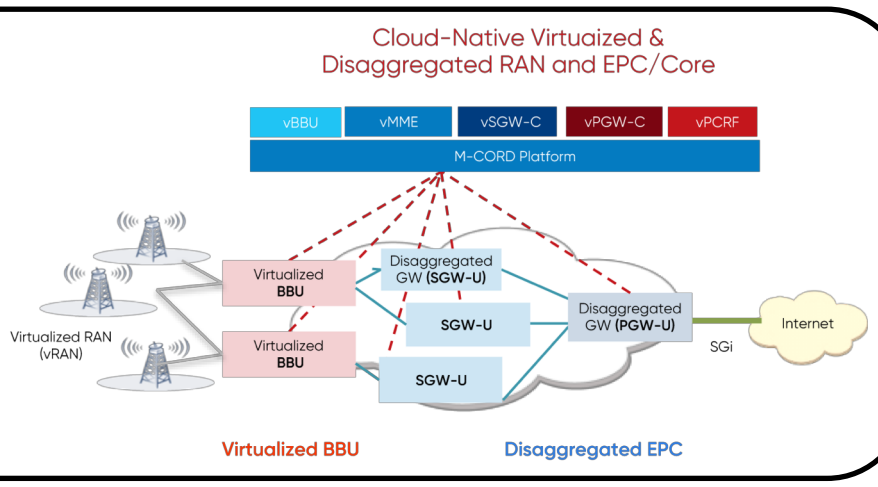
M-CORD 모니터링 시스템의 구조 및 개발

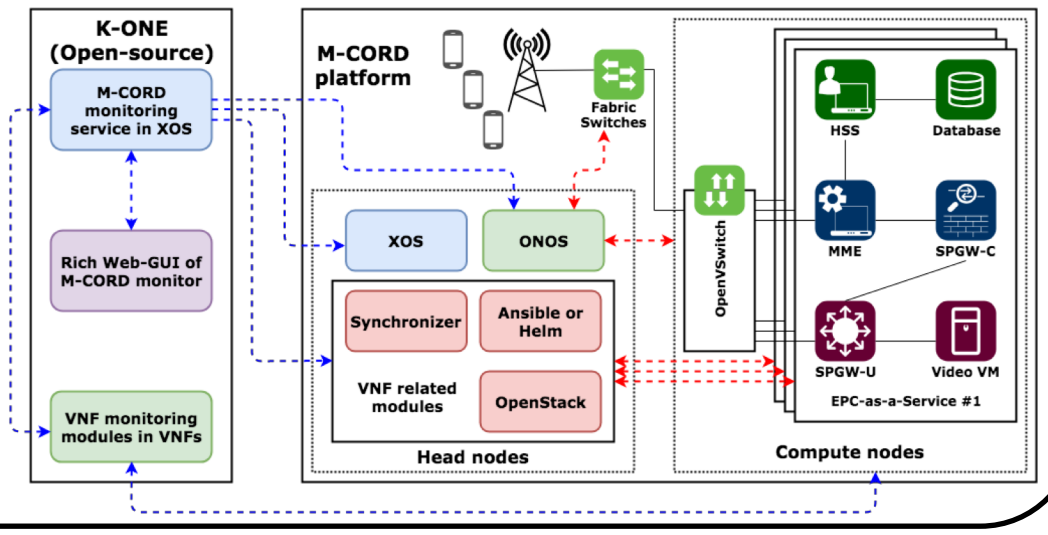
Introduction

- CORD: Central Office Re-architected as a DC
- M-CORD: CORD for mobile network (e.g., LTE)
- Components for M-CORD
  - Physical machines: head/compute nodes, eNB
  - Containers: synchronizers b/w XOS and others
  - LTE VNFs: VMs for LTE EPC network functions
- Need to monitor all components in M-CORD



Design

- M-CORD platform
  - Head node: control node of M-CORD
  - Compute nodes: running VNFs
  - Control components: XOS, ONOS
  - VNF related modules
- M-CORD Monitoring system
  - M-CORD monitoring service in XOS
  - Web-GUI of M-CORD monitor
  - VNF monitoring modules in VNFs



Implementation

- M-CORD monitoring service in XOS
  - Define M-CORD service/service instance
  - Define M-CORD slice and connectivity
  - M-CORD service graph to access all VNFs
- Web-GUI of M-CORD monitor
  - 1st: Running web server outside M-CORD
  - 2nd: Running web server inside synchronizer
  - 3rd: Visualize monitoring result on XOS GUI
- VNF monitoring modules in VNFs
  - To get CPU/MEM/NET info
  - To get ONOS information
- Other issues (will be resolved in this month)
  - How to access from synchronizers to VNFs?