Mobile Edge and M-CORD.

Mobile Edge is Critical for Services

M-CORD has the potential to be a service delivery platform for the Mobile Edge

Gagan Puranik
Latency

High-frequency trading (HFT) <1
VR gaming
Cloud-assisted car driving
AR -- non gaming
Hi-res cloud gaming (FPS)
Fios On Demand & Go90
Webpage first fold load
IM chat

Latency requirements in milliseconds

Max tolerable network delay
Max expected application delay for processing/buffering/display, etc.

Only feasible in edge cloud
Centralized cloud implementation viable

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5G Vision

5G will enable very diverse use cases with extreme range of requirements

- A trillion of devices with different needs
- GB transferred in an instant
- Mission-critical wireless control and automation

**4G**
- Ultra reliability
- <1 ms radio latency
- 10 000 x more traffic
- 10 years on battery
- 10-100 x more devices
- M2M ultra low cost

**5G**
- >10 Gbps peak data rates
- 100 Mbps whenever needed
- 10 000 x more traffic
- 10 years on battery
- 10-100 x more devices
- M2M ultra low cost

(LOW POWER) WIDE AREA  CROWD  ULTRA-DENSE  OUTDOOR

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Mobile Edge is Critical

For service providers to offer new revenue-generating services

All these devices require new classes of services

A mobile edge is well suited to provide the services

- Smart Phones
- VR Headsets
- Different IoT
- Automated Cars
- Drones

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M-CORD as a Mobile Edge Service Delivery Platform

Software architecture and stack: ONOS + OpenStack + Docker + XOS

VNF-as-a-Service
Cloud services
New classes of services
Service composition

Hardware
OCP-certified white box servers, switches, and ROADM as turnkey rack(s)
Thank you.