

# SDN based DMM

<http://tools.ietf.org/html/draft-liu-sdn-mobility-00>

<https://tools.ietf.org/html/draft-liu-cloud-mobile-core-00>

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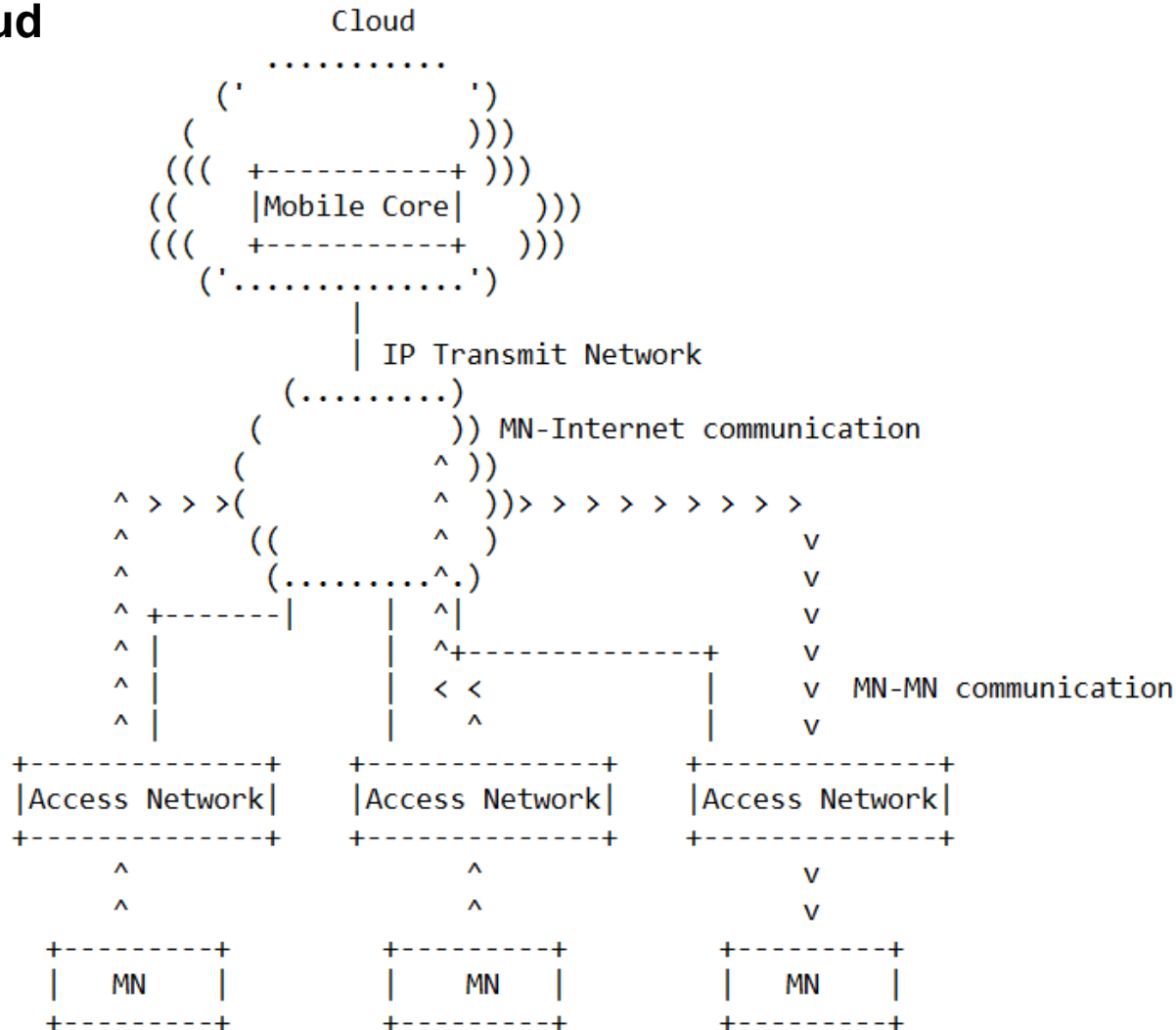
# Background and Motivation

- There are ongoing research work and discussions of using SDN/Open Flow in cellular network[1][2].
- Virtualization of mobile core network introduces a new deployment model. And that leads to new requirement of mobility management.

[1] OpenRoads: empowering research in mobile networks(<http://dl.acm.org/citation.cfm?id=1672331>)

[2] ONF: Wireless Mobile WG

**Control Plane is centralized and deployed in cloud**



**Data plane is preferred to be distributed**

**Deployment Model of Mobile Core Network Virtualization**

# Example of SDN based DMM Solution

- The mobile node moves to a new attach point without changing its IP address.
- The first hop switch in the data plane detects the mobility event of the mobile node.
- It notify the controller/mobility management function about this mobility event in a timely manner.
- A new routing path is set for the mobile node by the controller/mobility management function in a timely manner.
- Session continuity is maintained since the mobile node's IP address is not changed.

# Next Step

- Interest from the group?
- In the re-charter scope?