**Distributed Mobility Management Protocol** for WiFi Users in Fixed Network Behcet Sarikaya(<u>sarikaya@ieee.org</u>) Li Xue (xueliucb@gmail.com) IETF 95

draft-sarikaya-dmm-for-wifi-04

## **DMM for WiFi** Virtualized Control Plane P-GW App MME APP S-GW App HSS ADD BNG ADD Northbound Interface SDN Controller SDN Controller for for Core Network Backhaul Network i2rs Client P-Router UG-Route eNodeB Group 1 Ingress Egress P-F buter B-Router Internet/ IMS/Other Ingress PDN Layer-3 Network Egres Netconf P-Router UG-Router eNodeB SDN Controller for Group 2 Access Network i2rs Agent Access Point 1 010 Residential Gateway Δ -----ሕ Gress **OpenFlow** Access Point 2

## What is new in Rev. 04

- MN is assigned a prefix and it keeps this prefix as it moves
- In Rev. 04, we addressed handling route establishment after handover (host route issue) in the context of Netconf & Yang
- Used Netmod WG work on A YANG Data Model for Routing Management as the basis in experimental work
- At nUGW, retrieve the active route for MN, add a host route for the new MN, propagate upstream;
- At pUGW, delete the route



## **RPC to delete the route at pUGW**

- <rpc message-id="101" ... >
- get-config(running, filter=(destination-prefix, next-hop-address))
- edit-config(running, delete, config)

## RPC to Add a new route for MN at nUGW

- <rpc message-id="101" ... >
- get-config(running, filter=(destination-prefix, next-hop-address))
- edit-config(running, create, config)





- Previous revisions: Clarified SDN model for Layer 2 and Layer 3 route management
- Added Multicast support
- This revision: added route management on handover
- Future work?