MIPv6 RAW mobility

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Aim and scope

- There are use cases where reliability and availability are key requirements for wireless heterogeneous networks in which connected devices might be mobile

Goals:
- Discuss and specify control plane solutions to cope with mobility, by proactively preparing the network for the change of point of attachment of a connected mobile node
- Define Mobile IPv6 extensions implementing these control plane solutions
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Example scenario
Connectivity for a traffic flow with stringent QoS requirements established between MN and the external node

1. RAW HO indication
   (UE_ID, nPoA_ID, nRAW_ID, QoS)

2. RAW HO Initiate
   (UE_ID, oPoA_ID, oRAW_ID, QoS)

3. RAW track computation

5. RAW HO ACK
   (UE_ID, nPoA_ID, nRAW_ID, QoS)

6. Bicasting starts

7. RAW signalling (in or out-band)
   to start using new subtracks

8. Bicasting stops

MN is moving and decides to attach to nPoA

MN attaches to nPoA
Network-controlled RAW-enabled mobility

Connectivity for a traffic flow with stringent QoS requirements established between MN and the external node

1. RAW HO indication (UE_ID, nPoA_ID, nRAW_ID, QoS)
2. RAW HO Initiate (UE_ID, oPoA_ID, oRAW_ID, QoS)
3. RAW track computation
4. RAW HO ACK (UE_ID, QoS)
5. RAW HO ACK (UE_ID, nPoA_ID, nRAW_ID, QoS)
6 (optional). Bicasting starts
7. RAW signalling (in or out-band) to start using new subtracks
8 (optional). Bicasting stops

MN is about to attach to nPoA (this might be triggered by the network or by the UE)

The network triggers the signaling

MN attaches to nPoA

PCE

PSE

PSE

PCE

External node (e.g., XR server)
Proxy Mobile IPv6 extensions

- **RAW HO Initiate**

- **RAW HO ACK**
Proxy Mobile IPv6 extensions

- New mobility options
  - RAW_ID mobility option
  - PoA_ID mobility option
- RAW QoS mobility option
Next steps

● Collect feedback from DMM and RAW (will be presented there as well)

● Questions/comments?