Mobile Multicast Sender Support in PMIPv6 Domains with Base Multicast Deployment

draft-schmidt-multimob-pmipv6-base-source-00

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Objective of the Draft

- Clarify operations of mobile multicast sources at basic deployment of multicast support in PMIPv6 domains – i.e., source mobility in the scenario of draft-ietf-multimob-pmipv6-base-solution
  - Demystification: it works

- Informational work: No new protocols needed

- Pragmatic base approach as for listeners:
  - Suboptimal routes are price for simplicity
The PMIP Picture with Multicast Base Deployment

Put Standard Mcast Querier onto LMA: DR or MLD Proxy

Put Standard MLD Proxy onto MAG: 1 Instance per Uplink
Multicast Base Deployment with Mobile Source

Multicast Anchor

Unicast Tunnel

DR or MLD Proxy

MLD Proxy forwards locally and per Uplink

Multicast Senders & Receivers
Combined Signaling: MCast on PMIP

MN1                  MAG1                  MN2                  MAG2                  LMA
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Efficiency Issues

- Routing is optimal for receivers at the sender’s MAG that belong to the same LMA, and for the fixed Internet.
- Routing detours via LMAs, whenever:
  - Mobile listener is attached to another MAG
  - Mobile listener is associated with a different LMA
- No way to suppress the forwarding uplink to LMA.
- Admission control/rate limiting may be desirable to prevent flooding LMAs.
Summary & Outcome

- This draft explains source mobility in the base scenario
- Traffic flows/aggregation may be optimal, but need not be
- Draft extends minimal solution to senders
  - Should be published to fill the gap
  - Does not exhaust the issues of source mobility

Proposal to WG:

Make this a quick informational source
Questions?