

Extensions to the PMIPv6 Access Network Identifier Option

draft-pazhyannur-netext-civic-location-ani-subopt-02.txt

Rajesh S. Pazhyannur (presenter)

Overview

- RFC 6757 defines ANI option for PMIPv6
 - Sub-options for Geo-location, Network Identifier, Operator Identifier
- Draft extends ANI with following sub-options
 1. Civic Location Sub-option
 2. MAG Group Identifier Sub-option
 3. ANI Update Timer Sub-option

Updates to previous draft

1. Civic Location format extended

- Useful for MAG on indoor Wi-Fi APs (no accurate GPS information)
- Encoding: Binary (DHCP-RFC 4776) or XML (PIDF-LO RFC 5139)
- Note on Security Consideration (identical to that in RFC 6757)

2. Update-Timer Sub option

- When update-timer expires, MAG sends update only if ANI values have changed
- Useful when MAG is on a Wi-Fi controller. Clients make frequent handover between APs. Mobility between APs visible to MAG but need not be reported to LMA since inter-AP mobility is not handled by PMIPv6. PBU/PBAs just for ANI update may cause overload.

3. Group Identifier Sub option

- A collection of MAGs (typically in same area) is assigned a group ID.
- Useful when MAG is on a Wi-Fi AP. Today, Access Points typically provisioned with an AP group. AP groups are used for common policy (QoS, Access, etc.); coarse AP location; sharing 802.11 keys (PMK)

Next Steps

- Civic Location has been adopted by s2a for Release 12.
 - Stage 3 (protocol specification) is ongoing and expected to finish by July
- Seeking adoption as a working group document
 - More credible draft Reference for 3GPP documents