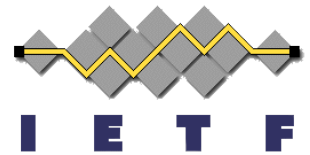


Local Prefix Lifetime Management for Proxy Mobile IPv6

draft-korhonen-dmm-local-prefix

Jouni Korhonen, Teemu
Savolainen



Comparisons

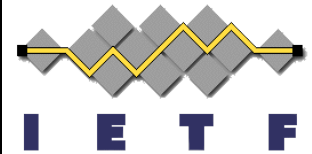
Specific to this proposal

- Minimal changes to RFC5213:
 - No new “roles” or functional entities. Also does not increase amount of signaling messages.
 - No assumptions on mobile nodes.
- The I-D concentrates basically only topologically incorrect prefix/address deprecation and the associated context transfer via LMA.
- Does not provide means for reallocation of the mobility anchor (i.e. LMA).
- Does not even try to provide mobility for local prefixes/addresses.
- Covers both DHCP and SLAAC cases of PMIPv6 address management.

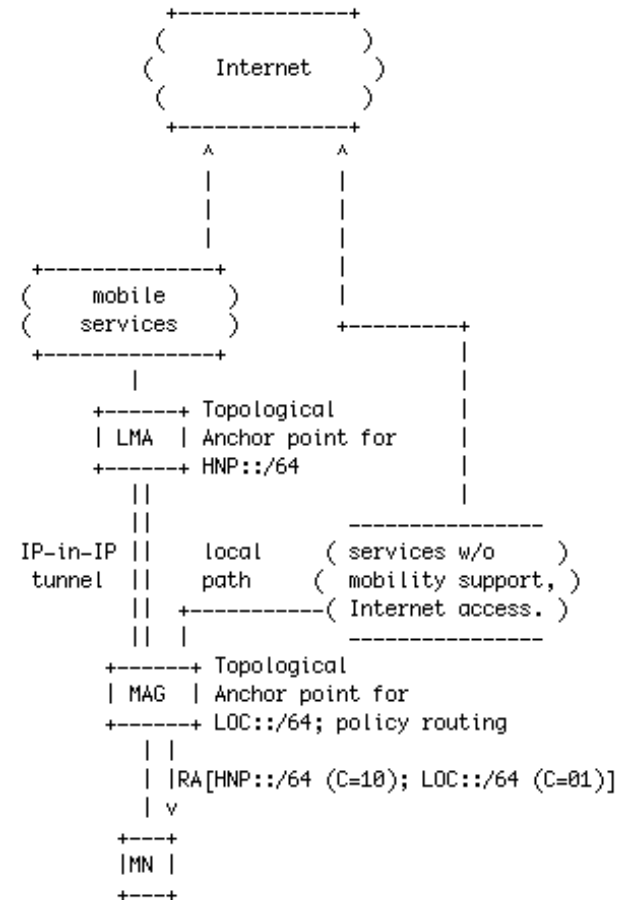
Common to others

- Builds on top of “vanilla” RFC5213 PMIPv6.
- Emphasizes the use of local prefixes/addresses (that are topologically not anchored to LMA).
- Recommends (as an option) temporary tunneling between MAGs.
 - (note.. to reduce the state and amount of tunneling, the justification for temporary MAG-MAG tunneling should be carefully evaluated)

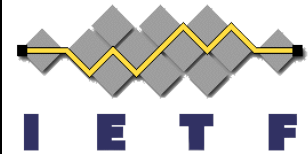
Example Use Case: Offloading and Local Resources



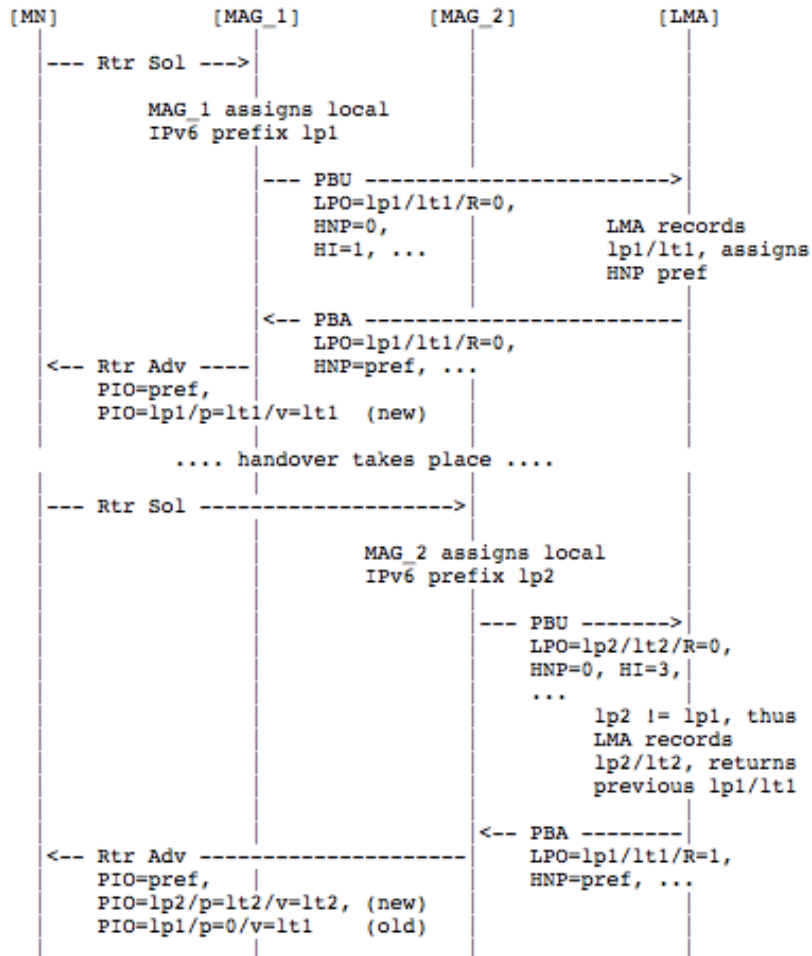
- Local prefix (LOC::- Traffic using local prefix bypasses LMA i.e. MAG does not tunnel it to the LMA.
- The LMA anchored prefix (HNP::- Prefix properties ('C' flags) inform the end host about the anchoring properties of the prefix.
- IP stack and programming APIs make use of prefix coloring:
 - Local prefix is preferred over LMA anchored prefix.
 - Prefix with no properties still preferred over LMA anchored prefix.



Local Prefix/Address Deprecation



SLAAC



DHCPv6

