FAST HANDOVERS FOR PROXY MOBILE IPV6

<draft-ietf-mipshop-pfmipv6-00>

Hidetoshi Yokota KDDI Lab

Kuntal Chowdhury Starent Networks

Rajeev Koodli Starent Networks

Basavaraj Patil Nokia

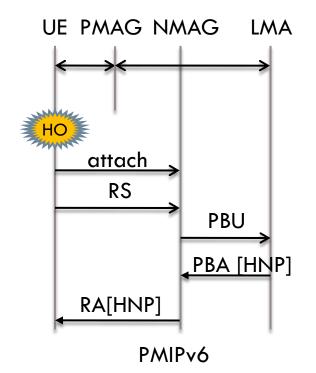
Frank Xia Huawei

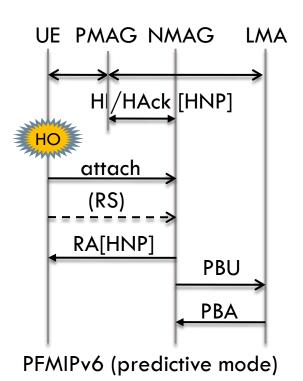
Changes from -03 (other than MH vs. ICMPv6 issue)

- MN-HoA was replaced with MN-HNP
- □ IPv4 transport support was revised (Section 4.2)
 - Description about IPv4 transport between MAGs (formerly Section 7) was removed
- IANA Considerations were added (Section 9)
- Early Router Advertisement (Section 5)
- Description about NUD/RA on the new link (Section 5)
- □ GRE Key Option (Section 6.2.5)

Early Router Advertisement

- PFMIPv6 allows the NMAG to send a RA to the MN before receiving PBA
- If PBA returns a failure code, the NMAG MUST invalidate the HNP by sending a RA with zero prefix lifetime (RFC5213 Section 6.12)





Description about NUD/RA on the new link

- Link change may or may not be hidden from the MN
 - If it is hidden, the MN doesn't do anything and everything is fine
 - □ If it is not hidden, the MN performs NUD
 - If the NMAG can respond to it and send a RA, it will save a lot
 - All MAGs are supposed to have the same link-layer and link-local addresses

GRE Key option

- HI/HAck should be able to transfer three keys: uplink and downlink keys for inter-MAG tunnel, and uplink key for PMIPv6 tunnel
- Either HI or HAck needs to convey two keys and the received MAG needs to distinguish them
 - A new field "Tunnel-Type" is added in GRE Key Option defined by "draft-ietf-netImm-grekey-option"
- Is this PFMIP specific or a more global thing?

Next steps

□ Resolve MH vs. ICMPv6 issue and move forward...