Optimizing Mobile IPv6 (OMIPv6)

draft-haddad-mip6-cga-omipv6-02

OMIPv6 Features (1)

- CGA to replace authentication by providing a proof of ownership, while the RR procedure replaces authentication by a routing property.
- Semi-Permanent Security Associations created with the help of CGA public keys to make subsequent signaling efficient. OMIPv6 allows re-keying every 24 hours, which in turn helps minimizing the battery power consumption of the mobile device.

OMIPv6 Features (2)

- Home Routing while moving allowing the mobile node to request the CN to redirect the traffic to the HA till the completion of the signaling movement.
- Minimal Address Testing allowing significant reduction in the latency. The home address is tested every 24 hours.

OMIPv6 Performance

- Substantial Signaling Reduction (99.52%) if the mobile node does not move **often**. This is directly enabled by setting higher lifetime.
- Significant Signaling Reduction (33%) on per-movement signaling if the mobile node is moving fast.
- Significant Impact on Latency due to eliminating the HoTI/HoT messages. If the HA is far away and the CN on the same link, the latency is almost completely eliminated.
- Offers more Security Features.

WG Item?

Thank You...