Proxy Mobile IPv4

draft-leung-mip4-proxy-mode-00.txt

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Problem Statement

Many IPv4 host don’t have Mobile IP function

- Operating systems lack support
- Mobility still needed for these devices
Proxy Mobile IPv4

- **Mobile Station**
  - IPv4 host without Mobile IP function

- **Mobility Proxy Agent**
  - Mobile IP client function on entity providing mobility service for the mobile station
Solution Benefits

- Support for Unmodified Hosts
- Airlink Consumption
- Reduction of Signaling Overhead in the Network
- Support for Heterogeneous Wireless Link Technologies
- Support for IPv4 and IPv6 Host
Control Flow

<table>
<thead>
<tr>
<th>MS</th>
<th>MPA</th>
<th>HA</th>
<th>CN</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>MPA sends RRQ to HA</td>
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<tr>
<td></td>
<td></td>
<td>MBE: HoA @ MPA’s CoA</td>
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<tr>
<td></td>
<td>HA sends RRP to MPA</td>
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<td>MPA state created</td>
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PMIPv4 Considerations

- Registration sequencing
- Resource cleanup
- ARP
- ICMP
- DHCP
- PPP IPCP
- Link-local multicast and broadcast
Next Step

Seeking WG decision?
• Working group item
• Collapse multiple Proxy Mobile IPv4 drafts