The HIP Mobility and Multihoming

- HIP supports end host mobility and multihoming via use of LOCATOR parameter as specified in RFC5206
The New Scenario and Requirement

- When WLAN becomes available, the MN only moves the data intensive flows to the new locator
  - Cost efficient
  - Load balancing
- The MN should be able to notify the CN the “flow granularity” information.
Our Proposal

- E-Locator: an extended Locator format to include flow information in an UPDATE message
- Re-address without Rekey

Mobile Host

Peer Host

UPDATE (ESP_INFO, E-LOCATOR, SEQ)
----------------------------------------------->
UPDATE (ESP_INFO, SEQ, ACK, ECHO_REQUEST)
<-----------------------------------------------

UPDATE (ACK, ECHO_RESPONSE)
----------------------------------------------->
Our Proposal (Cont..)

- Re-address with Multi-homed-Initiated Rekey

Mobile Host
UPDATE(ESP_INFO, E-LOCATOR, SEQ, [DIFFIE_HELLMAN])

Peer Host
--------------------------------------->
UPDATE(ESP_INFO, SEQ, ACK, [DIFFIE_HELLMAN,] ECHO_REQUEST)

UPDATE(ACK, ECHO_RESPONSE)
--------------------------------------->
## E-Locator Format

<table>
<thead>
<tr>
<th>Traffic Type</th>
<th>Locator Type</th>
<th>Locator Length</th>
<th>Reserved</th>
<th>FLP</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRI</td>
<td>Locator Lifetime</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Extended Flag**

**Flow description RFC6089**
Thank you

- Q&A?