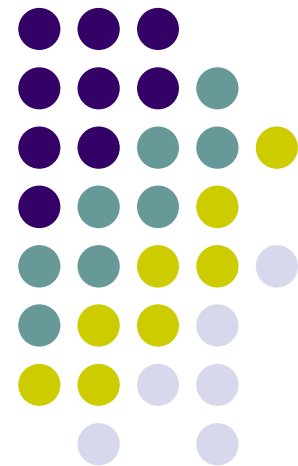


HIP Extension for Flow Mobility Management

draft-cao-hiprg-flow-mobility-00

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The HIP Mobility and Multihoming



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

Mobile

Corresponding

UPDATE: HITs, new locator(s), sig



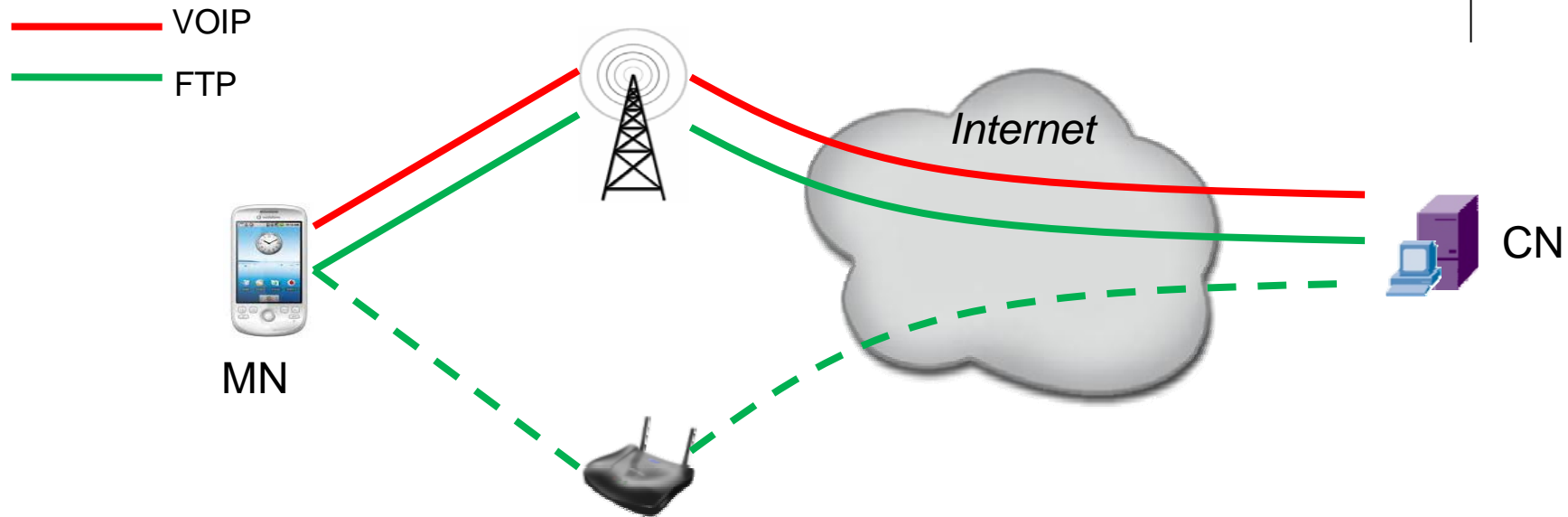
UPDATE: HITs, RR challenge, sig



UPDATE: HITs, RR response, sig



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)
----->
```

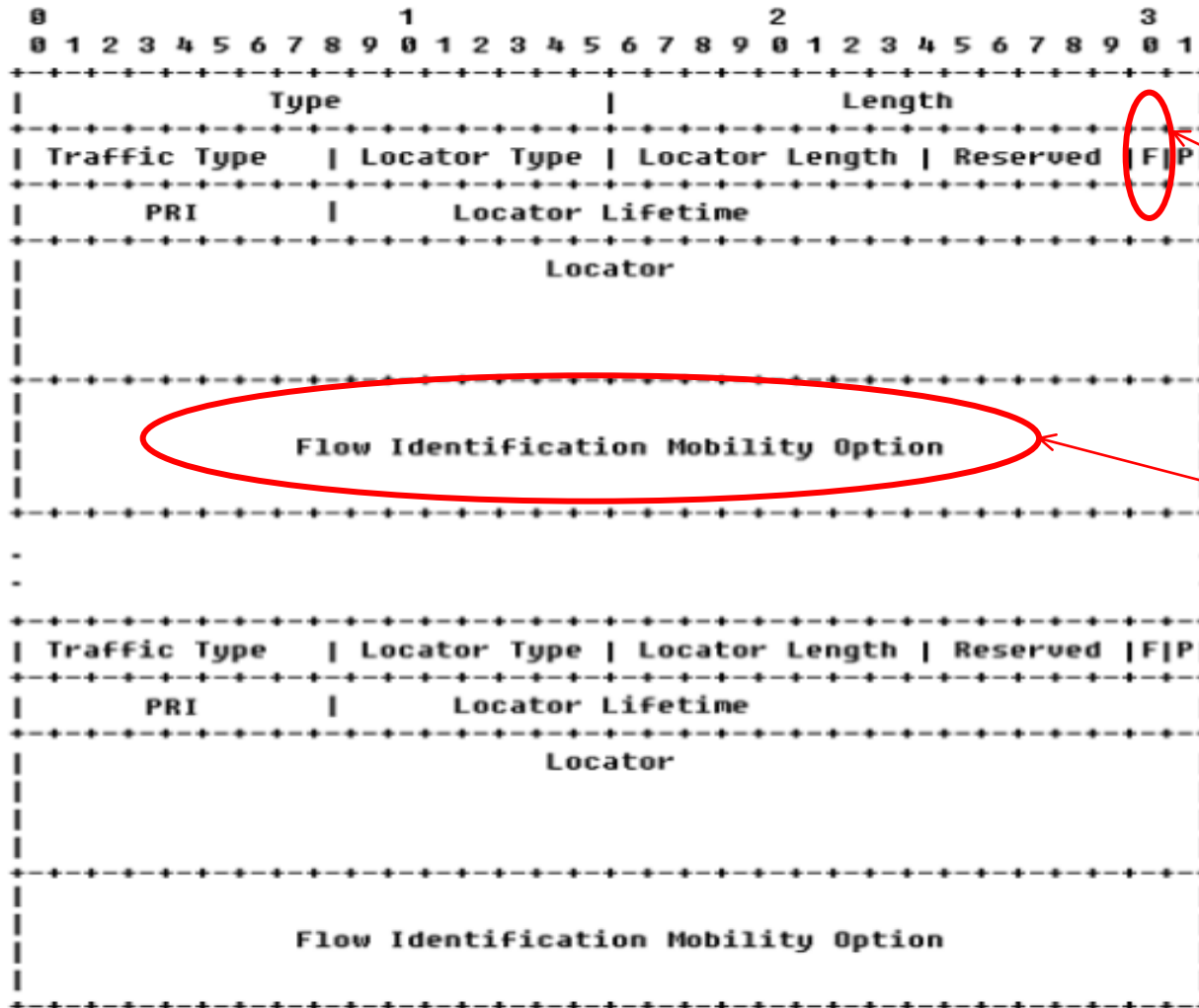
Our Proposal (Cont..)



- Re-address with Multi-homed-Initiated Rekey

```
Mobile Host                                     Peer Host
UPDATE(ESP_INFO, E-LOCATOR, SEQ, [DIFFIE_HELLMAN])
----->
UPDATE(ESP_INFO, SEQ, ACK, [DIFFIE_HELLMAN,] ECHO_REQUEST)
<-----
UPDATE(ACK, ECHO_RESPONSE)
----->
```

E-Locator Format



Extended Flag

Flow description
RFC6089

Thank you

- Q&A?

