HIP mobility (RFC 5206bis) issue review

March 31, 2011

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Introduction

- Basic use case (from Figure 3 of RFC 5206-bis):

```
Mobile Host                                    Peer Host

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

RFC5206 scope

- In scope:
  – Messaging and elements of procedure for "break-before-make" HIP mobility
  – LOCATOR parameter
  – Use cases and basic procedures for HIP multihoming

- Out of scope:
  – NAT traversal specifications
  – Detailed procedures for end-host multihoming
  – initial reachability of a mobile host
  – location privacy
  – simultaneous mobility of both hosts
  – localized mobility management
  – mobile routers
  – transport triggers
  – cross-family handovers

RFC5206bis scope

- In scope:
  - Use cases for HIP mobility (including "make before break")
  - Messaging and elements of procedure for HIP mobility
  - LOCATOR parameter
  - NAT traversal considerations
  - cross-family handovers
  - simultaneous mobility of both hosts (rendevous server)
- Out of scope:
  - Use cases and basic procedures for HIP multihoming
  - NAT traversal specifications
  - Detailed procedures for end-host multihoming
  - initial reachability of a mobile host
  - location privacy
  - localized mobility management
  - mobile routers
  - transport triggers

Issue review

Issues tracked on WG tracker:

http://trac.tools.ietf.org/wg/hip/trac/report/1

Issues related to mobility (and not multihoming)

1) Double jump support
Proposal: Add to this -03 draft, _and_ to RFC 5204

2) Inclusion of LOCATOR in R2 vs. R1
Proposal: no change

Issue review (cont.)

Issues tracked on WG tracker:

> http://trac.tools.ietf.org/wg/hip/trac/report/1

4) Make before break use case missing

5) Cross-family handovers missing

6) Peer-locator disclosure policies

8) decouple locator annoucement from SA creation

Proposal: Describe use cases and behaviors in -03

Issue review (cont.)

Issues tracked on WG tracker:

http://trac.tools.ietf.org/wg/hip/trac/report/1

10) LOCATOR/locator terminology in RFC 5206

Proposal: rename parameter to "LOCATOR-SET"

12) add use case to send UPDATE via RVS

Proposal: Adopt (related to issue 1)

13) SEQ/ACK handling in 5201, UPDATE handling in 5206 is awkward partition of specification

Proposal: Coordinate with 5201

Issue review (cont.)

Issues tracked on WG tracker:

http://trac.tools.ietf.org/wg/hip/trac/report/1

14) can actual IP addresses of UPDATEs be used?

Proposal: Accept

15) name UPDATES to UPDATE1,2,3? (or U1, U2, U3)

Proposal: Discuss in context of 5201

21) UPDATE signature and HI inclusion

Proposal: Optional signature, optional HI inclusion?

Future work

- multihoming
  - http://tools.ietf.org/html/draft-ietf-hip-multihoming-00
- NAT traversal for mobility and multihoming
  - Based on: http://tools.ietf.org/html/draft-melen-hip-nat-mm-00