Mobile IPv4
Mobile IPv6

Interoperability
Testing for
MIPV4/MIPv6

Connectathon 2002

Interoperability Testing update

Samita Chakrabarti

Samita.chakrabarti@Sun.com

Samita Chakrabarti
Samita.chakrabarti@Sun.com

I E T F

Mobile IPv6 Testing

Technology co-ordinators : Samita Chakrabarti (Sun)

John Lesser (UNH)

Mobile IPv6 Base draft – version 15

Total Participants   10

- 6 HA implmentations
- 7 CN implementations
- 3 MN implementations
- 1 protocol analyzer implementation
- 2 Conformance Test implementations

UNH (Tests for CN and Interop)

TAHI (Automated Tests for HA, CN and MN)

Mobile IP working group

Mobile IPv6 Test Results

Results/Issues(Base MIPv6 draft-15):

- No major interoperability issues
- Issues were mailed in the mobile-ip list to resolve them in draft version 16
- 3 implementations had authentication sub-option
- No other security mechanisms were tested/implemented

2 Major issues/questions :

- How useful is "refresh" field in BACK ?

    Removal of "refresh" field saves bits, otherwise more clarification is needed

- Should BACK from HA contain RH when MN de-registers at home network ?

    It makes sense not to include RH in this case.

Mobile IPv6 Test Results

Fast MIPv6 Handoff draft:

- 2 implementations
- Ad-hoc testing were performed between these two implementations for mobile node controlled handoffs

Draft issues were not discussed at the Connectathon discussion forum. Issues will be mailed to the mobile-ip list by Alper Yegin.

Mobile IPv4 Testing

MIPv4 Technology Co-ordination : Samita Chakrabarti (Sun)

Total Participants : 6

    3 FA and HA implementations

    3 MN implementations

    1 MIPv4 protocol analyzer implementation

Conformance Tests provided by Sun Microsystems Inc.

Mobile IPv4 Testing

Specifications Tested:

RFC2002-bis (All vendors)

RFC3220   (at least 3 implementations)

RFC3024   (All vendors, but most of them did not

implement LPAS feature)

RFC2794   (All vendors)

RFC3012   (3 implementors)

draft-ietf-mobileip-aaa-key-00.txt (2 implementors)

draft-ietf-mobileip-nat-traversal-00.txt (1 implementation)

Mobile IPv4 Testing

Resutls and Issues:

- All of them interoperated with each-other

- No major problems or issues

- RFC3220 specification issues were projected at Connectathon discussion forum.

Issues need to be clarified/corrected:

- What error code should a MN receive when it sends multiple MN-HA auth extensions in the regReq ?

    Proposal : Poorly formatted request

- Draft should clarify that "Poorly formatted request" should be used in the cases of out-of-order extension headers as well.

- Conflicting satement in 3.7.2.1 of RFC3220

Mobile IP Connectathon Update

Questions ?

Mobile IP working group