Mobility - MIPv6 and NEMO

May 18, 2007
<<Agenda>>

- Status update
- Issue and TODO items
1.1 MIPv6 - Status Update

Logo Phase-2 MIPv6 is stable now.

History

- **Jun, 2005** Logo Phase-2 MIPv6 was started.
- **May, 2006** 2 items was added to Home Agent conformance test.
  - Test item HA-6-2-1, HA-6-2-2
- **Aug, 2006** Documents was updated.
  - The content not change. Only appearance correction.
  - Cover, Acknowledgement and Copyright
- **Oct, 2006** The mistake was corrected to Correspondent Node conformance test.
  - Test item CN-6-3-2

### MIPv6

- Phase-2 Policy (for release revision 1.0.8) (pdf file) (updated at 2006/8/21)
- Phase-2 Policy Appendix (for release revision 1.0.8) (pdf file) (updated at 2006/8/21)
- Guidelines for Implementation and Priorities in Testing (for release revision 3.3.3) (pdf file) (updated at 2006/8/21)
- Test Specifications
  - Correspondent Node (CN) Test Profile (for release revision 3.1.4) (pdf file) (updated at 2006/10/3)
  - Home Agent (HA) Test Profile (for release revision 3.1.5) (pdf file) (updated at 2006/8/21)
  - Mobile Node (MN) Test Profile (for release revision 3.1.5) (pdf file) (updated at 2006/8/21)
- Interoperability test scenario (for release revision 1.4.3) (pdf file) (updated at 2006/8/21)
1.2 MIPv6 - Approved List

- **Approved list**
  - CN: 0 product
  - HA: 2 products (NTT (Japan) x2)
  - MN: 2 products (Samsung (India), NTT (Japan))

- **Present state**
  The number of MIPv6 has not been increased since June last year..

* We have received the inquiry from one vendor. They will apply for Logo MIPv6 after Logo Core.
1.3 MIPv6 - Special measures

- **Treatment of the number of venders issue**

<table>
<thead>
<tr>
<th>Special measures for Mobile Node</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of venders connected have been described to the Interoperability test scenario.</td>
</tr>
<tr>
<td>In the principle, 4 vendors (HA(2 vendors) and CN(2 vendors)) are the necessary condition for Mobile Node.</td>
</tr>
<tr>
<td>In the special measures, 2 vendors (HA(2 vendors) and CN(2 vendors)) are the necessary condition. And, executes and reports the test on the principle within one year.</td>
</tr>
<tr>
<td>The application procedure in special measures is the same as a usual application procedure.</td>
</tr>
<tr>
<td>There is special measures because the number of venders is few now. When the number of vendors will increase in the future, this special measures will become invalid.</td>
</tr>
</tbody>
</table>

- **Maintenance of special measures**

  The testing with four venders has been the difficult situation continues now, because there are few available products. We are maintaining the special measures.
1.4 NEMO Status Update

History
- Jan, 2007 Logo Phase-2 NEMO started!

<table>
<thead>
<tr>
<th>NEMO</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Phase-2 Policy (for release revision 1.0.0) (pdf file) (updated at 2007/1/22)</td>
</tr>
<tr>
<td>- Phase-2 Policy Appendix (for release revision 1.0.0) (pdf file) (updated at 2007/01/22)</td>
</tr>
<tr>
<td>- Guidelines for Implementation and Priorities in Testing (for release revision 1.0.0) (pdf file) (updated at 2007/1/22)</td>
</tr>
<tr>
<td>- Test Specifications</td>
</tr>
<tr>
<td>- Home Agent (HA) Test Profile (for release revision 1.0.0) (pdf file) (updated at 2007/01/22)</td>
</tr>
<tr>
<td>- Mobile Router (MR) Test Profile (for release revision 1.0.0) (pdf file) (updated at 2007/01/22)</td>
</tr>
<tr>
<td>- Interoperability test scenario (for release revision 1.0.0) (pdf file) (updated at 2007/1/22)</td>
</tr>
</tbody>
</table>

Approved list
- There is no application yet..
1.5 NEMO - Criteria

- RFC3963 has not described “MUST”.
  - Home network model: “extended” / “aggregate”
  - MR home address: “from home link” / “from mobile network prefix”

- Criteria on Logo

  We think that it is too rich to demand both from all products. And two alternatives without mandating either make non-interoperable world. Then, we put the bias for the reasons that the mandating one is very reasonable. We think naturally that home Address be configured from Home Link Prefix is basic method same as MIPv6.

<table>
<thead>
<tr>
<th>NEMO</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The target product of current Logo NEMO is NEMO Extended Home Network model, and Home Address derived from Home Network Prefix (Other home network models and Home Address derived from Mobile Network Prefix are treated as a further study in the future depending on the implementing situation.)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Extended Home Network model</th>
<th>Home Address from Home Link</th>
<th>Home Address from Mobile Network Prefix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target</td>
<td>The outside of the target</td>
<td>The outside of the target</td>
</tr>
<tr>
<td>Aggregate Home Network model</td>
<td>The outside of the target</td>
<td>The outside of the target</td>
</tr>
</tbody>
</table>
2.1 TODO - Mobility with IPsec v3 (a)

- RFC4877 updates MIPv6/NEMO with IPsec v3 and IKE v2.
- Logo
  * Logo IPsec was updated with IPsec v3 in April, 2007.
  We will focus MIPv6 with IPsec v3 this year, and NEMO with IPsec v3 next year.
  We suspend MIPv6 with IKE v2, and see the Logo IPsec with IKE v2.
2.1 TODO - MIPv6 with IPsec v3 (b)

Content of update
Logo MIPv6 is added new Advanced Function "IPsec v3". As for the change point, the IPsec setting variation only increases.

Conformance test
The number of tests doesn't change. The test execute twice by changing the setting of IPsec.

Interoperability test
The test procedure doesn't change. The test execute twice to each vender by changing the setting of IPsec. (Four times in total, because it tests originally with two other parties.)

Schedule
Aug, 2007 Internal review
Sep, 2007 Public review
Oct, 2007 Dry run
Nov, 2007 Revision Up
2.2 TODO - Others

- Common examination procedure over category.
  Logo MIP made the examination manual.
  I want you to raise the opinion referring to this and to make the examination manual for each category.

- The mobile interoperability test with “vel” system.
  NICI hopes to apply "vel system" to Logo MIP.
  We examine it.

- Are there mobility RFCs and drafts that we should watch?