Communication between a HIP-enabled Host and a Legacy Host

draft-cao-hiprg-legacy-host-00

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March 29, 2011
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HIP Evolution – Initial phase

- Some hosts are HIP enabled while most Internet services are not HIP aware.
HIP Proxies
-per draft-irtf-hiprg-proxies

- “A primary function of HIP proxies is to exchange messages with HIP hosts on the performance of legacy hosts, using standard HIP protocols”
  - DNS Intercepting (DI)
  - Non-DNS Interception (N-DI)
The Problem

- In order to support the communication initiated by HIP hosts, the HIP proxies of a private network should have the knowledge essential to represent the ML hosts to perform HIP BEXs.
The Problem

- The legacy host should be aware of using the proxy
  - Should be involved in the registration process, however sometime not easy
- Finding a solution that the legacy host can be totally unaware of the configuration
Our Proposal: Walk-around

<table>
<thead>
<tr>
<th>HIP Host</th>
<th>Proxy</th>
<th>non-HIP host</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DNS Query QTYPE=HIP</td>
<td></td>
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<tr>
<td>2. DNS Response HIT&amp;HI</td>
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<tr>
<td>3. DNS Query QTYPE=A</td>
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<tr>
<td>4. DNS Response IP-A</td>
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<tr>
<td>5-8. BASE EXCHANGE (I1, R1, I2, R2)</td>
<td></td>
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</tr>
<tr>
<td>9. HIP PACKET FORMAT</td>
<td>10. LEGACY IP PACKET</td>
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<td>11. HIP PACKET FORMAT</td>
<td>12. LEGACY IP PACKET</td>
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</tbody>
</table>
Other considerations

- **Security**
  - Communication between the local proxy and legacy host may be protected by IPsec

- **Integration**
  - Should this way be incorporated into the current hiprg-proxies draft?