HIP research group

HIP-RG meeting
IETF 73

November 21, 2008

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**Agenda**

- Introductory slides (this presentation)
- HIP Extensions for Object-to-Object Communications (Gyu Myoung Lee)
  - draft-lee-hip-object-01.txt
- Delivering Geographic Location in HIP (Hui Deng)
  - draft-cao-hip-geolocation-01.txt
- Update on the HIP-based Secure Mobile Architecture project at Boeing (Tom Henderson)
- HIP for Linux Status Report (Joakim Koskela)

- **Open Discussion**
HIP RG administrative overview

- Mailing list:

- Supplemental web page (wiki):
  - [http://www.openhip.org/irtf/wiki](http://www.openhip.org/irtf/wiki)

- HIP PRG charter
  - Evaluate benefit/impact of deploying HIP
  - Experiment with HIP software
  - Analyze HIP in context of real networks
  - Prepare report to IESG
What is HIP?

• A proposal to use public keys as names for Internet stacks, and to use these names within the TCP/IP architecture
  – Please see RFC 4423 for an overview of the HIP architecture
  – Please see RFC 5201-5206 for specifications

• What is the difference between the HIP WG and the HIP RG?
Note: IRTF groups can produce RFCs
   - see: draft-irtf-rfcs-03.txt

The HIPRG has one RG draft:
   - draft-irtf-hip-experiment-04.txt
   - Our main RG deliverable
   - Updated in July 2008

Revised drafts since last meeting:
   - draft-ahrenholz-hiprg-dht-03.txt
   - draft-cao-hip-geolocation-01.txt
   - draft-jiang-hiprg-hhit-arch-01.txt
   - draft-lee-hip-object-01.txt
Software sites

• Three public implementations of HIP available:
  – HIPL (HIP for Linux) (Helsinki HIIT)
    • http://infrahip.hiit.fi
  – HIP4BSD (Ericsson NomadicLab)
    • http://hip4inter.net
  – OpenHIP
    • http://www.openhip.org

• Three test servers:
  – http://hipserver.mct.phantomworks.org
  – http://woodstock{4|6}.hip4inter.net
  – http://hipserver.hiit.fi
WG update

• HIP WG not meeting at this IETF

• WG charter items:
  – Basic HIP Extensions for Traversal of Network Address Translators
  – Basic Socket Interface Extensions for Host Identity Protocol (HIP)
  – HIP Certificates
  – HIP BONE: Host Identity Protocol (HIP) Based Overlay Networking Environment
  – HIP Immediate Carriage and Conveyance of Upper-layer Protocol Signaling (HICCUPS)
  – ORCHID generation (no draft yet)
HIP enthusiasts may want to look at:

- **Identifier Locator Network Protocol (ILNP)**
  - Also, “hostname-oriented network stack” by C. Vogt, in RRG

- **Proposed transport protocol architecture changes**

- **D. Thaler, “Why do we really want an ID/locator split anyway?”** Sigcomm Mobiarch 2008 Keynote