Mobile IPv6 Advanced Socket API Extensions

Draft-chakrabarti-mobileip-mipext-advapi-00.txt Samita.Chakrabarti@Sun.com Erik.Nordmark@Sun.com

Why MIPv6 Socket API?

- Draft-ietf-ipngwg-rfc2292bis-09.txt contains packet header definitions for everything except Mobile IPv6 packet headers
- Mobile IPv6 adds extensions to IPv6 Protocol header

Mobility Header, Home Address Destination Option and Routing Header Type 2

- This document is an extension to the IPv6 Advanced Socket API
- Complimentary to draft-yokote-mobileip-api-01.txt which provides access to mobility related state

What it covers

- Definitions of constants and structures for Mobile IPv6 specific C programs
- How to access HOA and Routing Header Type 2 using IPv6 Advanced socket API
- How user-level application can observe Mobility Header using IPv6 RAW sockets
- /etc/protocols update for Mobility Header Protocol

Discussions at the mobileip list

New protocol name for the API

Proposed: mh
Other alternatives (mobility, mipv6 etc..)

- A new header file for mobility header related definitions and structures (netinet/<new_protocol_name>.h)
- What prefix to use for data structures and definitions (mh_* or ip6m_*)?
- Draft needs to incorporate HA ICMPv6 related definitions and structures (consistent with rfc2292bis)
- Routing Header Type 2 structure mandates single IPv6 address as per base Mobile IPv6 Protocol
- Should the apps be allowed to set MIPv6 headers?

The API may not disallow this ability; it is up to the implementation to allow this feature

Next Step

• Does anyone plan to use this type of API in the near future?

• Should this draft be a starting point of a working group draft, similar to RFC2292-bis?