Next Steps in IP Mobility (NSIIM)

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Mailing list for Charter Discussion

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- To subscribe -
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- Archive:
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Scope of IP Mobility in NSIIM

- IP Mobility is:
  - Movement w.r.t an existing and stable infrastructure
  - L3 Mobility
- Baseline for IP Mobility:
  - Mobile IPv4 (RFC3344) and
  - Mobile IPv6 (draft-ietf-mobileip-ipv6-xx)

- IP Mobility is NOT:
  - MANET
    - Movement in the absence of a dependable infrastructure
  - NEMO
    - Mobile infrastructure
  - PANA/AAA
    - Authentication and authorization infrastructure
  - L2 Mobility

BoF Intent

- At the 10000 ft level:
  - Rethink and focus the IETF efforts in the IP mobility space

- What it means:
  - Prioritization of IP Mobility topics
  - Tackle problems that are relevant for near term deployment
    - Focus on the "**E**" aspect of IETF
  - Separating the Mobility work for IPv4 and IPv6

- Identify:
  - What should the IRTF do in the IP Mobility space?

Proposal

- Create the following IP Mobility WGs:

1. MIP4
   - Deals with:
   1. Mobility in IPv4 networks (baseline being RFC3344)
   2. Operator and deployment issues
   3. Other standard organizations' requirements for deployment

2. MIP6
   - Deals with:
   1. Mobility for IPv6
   2. Deployment challenges and growing pains

MIP4

- MIPv4 is currently in deployment phase and its own forum will help determine appropriate activities
- What should be done in this WG:
  - Advancing the base protocol and a few others to DS
  - VPN solution for MobileIPv4
  - MIB
- Other items of interest:
  - Dynamic Home Agent assignment (?)
  - Home agent reliability (?)
- The above are initial suggestions. MIPv4 folks should really identify key work items that are deployment relevant

MIP6

- Proposal is to work on:
  - Optimizations of the base protocol
  - Reliability of home agents
  - Bootstrapping MIPv6 SAs
  - Alternatives to RR based RO
  - Hierarchical MIPv6
  - Fast HOs
  - MIB
- Learn from implementation experience and interops to identify and fix issues in the base protocol
- Others:
  - AAA interactions?

IRTF

- What work in IRTF would help the IP Mobility work done in IETF?
  - Form a research community similar to the TCP research community
  - Enable comparison of research results (apples to apples)
    - Develop common scenarios, tools, parameters and methodologies (akin to the TCP research toolset)
  - Simulation of mobility models and protocols
- What the IRTF will NOT do:
  - Study of revolutionary or radically new architectures for IP mobility

Going Forward

- Discuss charter details on the ML setup for this
- Submit charters to IESG by Mid-April
- Determine the level of interest and commitment to IRTF work

- Target:
  - Two new WGs at IETF57