NEMO Multi-homing Issues

Prepared for 58th IETF NEMO WG

By

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draft-ng-nemo-multihoming-issues-02.txt

draft-paik-nemo-multihoming-problem-00.txt

draft-charbon-nemo-multihoming-evaluation-00/1.txt

Internet Draft Status

- Changes to draft-ng-nemo-multihoming-issues
  - ❖ Added ownership-oriented approach to taxonomy
  - ❖ Attempt to merge in draft-charbon-... result in description of various benefits brought by multihoming: load sharing, fault tolerance, etc

- Update to draft-charbon-nemo-multihoming-evaluation
  - ❖ Suppose to be –01 version
  - ❖ Yet to appear in the IETF Repository

New Multihoming Draft

☐ New Problem Statement Draft (draft-paik-nemo-multihoming-problem)

❖ Motivation: How to use multiple connections ?

❖ Pre-requisite: Clear definition for connection availability

  • In terminology draft, "has simultaneously more than one active connection"

❖ Connection selection

  • Who selects a connection ?

❖ Implementation issues from connection selection

  • HAs/MRs coordination, etc.

❖ The others

  • Multihoming solution scalability

  • RO considerations

Summary of Discussions on ML (1/2)

❑ Erik's Comment

  ❖ Proposed the 'Ownership-oriented Approach' of looking at multihomed mobile networks

  ❖ Differentiate base on whether the mobile router(s) and home agent(s) belong to the same or different entity

❑ Discussions between Julien, Vijay, and Alex

  ❖ For dynamic loading and policy benefits brought on by multihoming with NEMO, some form of CoA identification and prefix preference indications are needed

  ❖ Suggested that the multiplecoa draft (submitted in MIP WG) can be used for CoA identification

  ❖ Suggested a Prefix Preference Option to the mobility header

Summary of Discussions on ML (2/2)

☐ Alex questioned on the interaction between WGs (NEMO, Multi6, HIPBoF, MIPv6) on multihoming related issues

❖ My Personal Opinion:

- The document is to identify NEMO-related multihoming issues, and problems if any
- The problems will be solved in the most appropriate WG(s), our initial goal is just to raise awareness to such problems

❖ Monday's BarBoF on Mobility and Multihoming

- General consensus is for each relevant WG to clearly define the problem statement

☐ William's Comment

❖ Security considerations should be described especially for multihoming operations involving entities from different administration domains

❖ An option to turn on/off load balancing

Moving Forward

☐ NEMO WG Document (personal proposal)

❖ Identify what multihoming scenarios should be supported by Basic NEMO Support

❖ Identify any multihoming-related problems that are specific to NEMO, or the implications are more significant in NEMO

❖ Discuss implementation related issues when integrating multihoming with NEMO Basic Support

❖ More of an Informational document