Connectathon NEMO Test Report

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Connectathon Basics

Connectathon testing event was held last week, Feb 23–28 2004 in San Jose, California

Various protocols such as NFS, Mobile IPv4/v6, and this year, NEMO, are tested

The goal of the event is to test concept implementations, and improve the correctness and interoperability of new & old implementations, through:

- Interop tests
- Conformance tests
Three NEMO Basic Support implementations:

- KEIO University, Japan
- Nautilus project, Japan
- Nokia Research Center, California
Testing Setup

A test network was constructed with

- 3 HAs
- 2 MRs
- 2 MNNs
Testing Outline

- DHAAD - modified to only return list of HAs supporting Mobile Routers
- MR home registration with Prefix Option
  - Both MRs registered with one HA
  - Each MR registered with a different HA
- Ping was sent from MNN1 to MNN2, passing through both MRs and both HAs – for both cases above
Testing Outline, cont’d

- Explicit Mode was tested ( Implicit is supported by at least some implementations, but was not tested)

- All tests ended in success.
IPsec

- MR home registration with Prefix Option was also tested with IPsec
- IPsec was tested between HA and MR for both pairs -- KEIO and Nautilus
- IPsec implementations interoperated successfully between each other’s HA/MR
- Method used: ESP (DES-CBC) with authentication (HMAC-MD5)
Conclusions

- All tests were successful! Including IPsec interoperability.
- This exercise provided valuable experience and validates the NEMO Basic Support concept and implementability.
- NEMO was a good addition to the Connectathon suite of tests this year.