Update on the Failure Detection Draft in MULTI6

draft-ietf-multi6-failure-detection-00.txt

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Presentation Outline

- Summary of content
- Changes
- Issues going forward

Summary of Content 1/2

- Talks about existing work in this space (SCTP, MOBIKE, HIP, NAT traversal)
- Provides a model where "lower layers" such as L2 or IPv6 ND provide information to MULTI6

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- Defines a few basic concepts
 - Available addresses
 - Locally operational address pairs
 - Operational address pairs

Summary of Content 2/2

- Gives guidelines for an algorithm to select an address pair to be used
- Suggests a protocol for testing reachability, even under the assumption of not having bidirectional reachability

Changes from draft-arkko-...-00.txt

- Relaxed rules regarding the use of non-global addresses in multihoming
- Added a discussion of ICMP verification rules
- Added a discussion of how the discovery protocol could use either payload packets or separate MULTI6 signaling packets
- Added a discussion of ICE/TURN/STUN
- Added a discussion of IPv6 source address selection rules
- Addressed editorial issues from Pekka Savola, Francis Dupont and others

Remaining Issues

- Protocol details need to be specified
- How to optimize the case when upper layers are not providing progress information? Can payload packets help here?
- Different applications may have different urgency and a different definition of a failure how to deal with this in an IP layer solution?
- Need to synchronize & integrate with the other parts of the MULTI6/SHIM6 solution

Questions?

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