Stream Control Transmission Protocol (SCTP) Network Address Translation Support
draft-ietf-tsvwg-natsupp-23.txt

Randall Stewart (randall@lakerest.net)
Michael Tüxen (tuexen@fh-muenster.de)
Irene Rüngeler (i.ruengeler@fh-muenster.de)
Status

• AD Reviews from
  – Magnus Westerlund
  – Martin Duke

• Alternative: draft-porfiri-tsvwg-sctp-natsupp
Major Issues

1. Handling of IP fragmentation at NAT
2. Controlling of NAT friendly behavior of end point
3. Improve multihoming support of internal hosts
4. Support of multiple external addresses
5. Addition of remote address in NAT binding table (at least when restarts are not disabled)
6. Processing of SCTP packets by NAT (chunk parsing)
7. Change of definition of association (end point change)
Possible Ways Forward

1. Improve the current method (addresses 2 – 5)
   a) Adding entries to NAT binding table will result in increased complexity, which was removed at some time

2. Always use the fallback mechanism (addresses 2 – 7)
   a) Never disable restarts, don’t use verification tags anymore
   b) Add external and remote address to NAT binding table
   c) Much like an SCTP unaware NAT, less complex than the current solution
   d) Increases the chance of a collision resulting in association setup failures

3. Switch to draft-porfiri-.tsvwg-sctp-natsupp

4. Drop the work on NAT for SCTP