

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

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# Status

- After WGLC.
- AD Reviews from
  - Magnus Westerlund
  - Martin Duke
- Alternate proposal from Ericsson:  
[draft-porfiri-tsvwg-sctp-natsupp-01](#)

# SCTP and NAT

- An SCTP endpoint has a list of IP addresses and a single port number.
- Port numbers can only be translated if it is done consistently.
- When not translating port numbers, how to handle port number collisions?
- How to handle multihomed scenarios?  
Specific behavior of endpoints.

# Major Issues from AD Reviews

1. Handling of IP fragmentation at NAT
2. Controlling of NAT friendly behavior of end point:  
Improve multihoming support of internal hosts.  
Provide examples for active and passive association setups.
3. Support of multiple external addresses.
4. Addition of remote address in NAT binding table (at least when restarts are not disabled).
5. Processing of SCTP packets by NAT (chunk parsing), handling of INIT, INIT-ACK, and ASCONF chunks, when to add state, when to send packets (if at all).
6. 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