

NAT-PT Applicability

V6OPS WG

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Design Team Members

- Peter Barany
- Karim El-Malki
- Howard H. Wang
- Rob Austein
- Satomi Okazaki
- Senthil Sivakumar
- Suresh Satapati

Goals

To document the applicability of

- SIIT (RFC 2765)
- NAT-PT (RFC 2766)

SIIT Limitations

- Usage of IPv4-mapped addresses
- Translation Semantics – ICMP error messages (embedded headers), parameter problem
- Multicast will not work
- Limited support for IPsec ESP Transport mode (doesn't support ICMP)
- IPsec ESP tunnel mode, AH doesn't work

NAT-PT Limitations

- Difficult to cope up with ALG model to support applications
- All SIIT limitations + IPsec ESP transport mode doesn't work
- DNS-ALG
 - Failure modes for AAAA queries in IPv6->IPv4 direction

Applicability

- SIIT
 - header conversion algorithm is useful
 - IPv6 hosts are **really** not IPv6-only
 - RSIP style

Applicability (contd.)

- NAT-PT
 - Legacy v4 nodes
 - Special purpose networks – 3gpp
 - 3GPP hosts, running SIP-based IMS applications over IPv6, must be able to communicate with IPv4 SIP hosts
 - For IMS media translation
 - a proxy supplies the mapping as opposed to SIP-ALG

Next steps

- WG item ?