

NAT6 Issues

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IPv4 - IPv6 Co-Existence Interim

ALGs

- FTP : Yes
 - All major browsers support PASV
 - Don't need 4to4 ALG but does not solve 6to4 (rfceditor.org)
- SIP, RTSP, MGCP : No
- Others we care about? H323

Client Port Control

- Protocol that allows devices behind the NAT to request a port? A particular port?
- Issue is around authorization
- Recommendation: This is orthogonal issue, leave to NAT-PMP, UPnP, whatever

Fragmentation

- Goals: Works, allows application level path MTU discover, does not cause additional delay
- Do we assume ICMP always works?
- Problem case V4 side has MTU of say 600 and V6 side wants to send 800 byte packet
- How to do it?

Fragmentation Options

- A) something better than B, C, or D
- B) V6 end hosts include Fragmentation Header in all packets larger than about 500 octets
- C) Host sends first packet, NAT sends ICMP error telling host to insert fragmentation error. Host resends
- D) Host sends first packet, NAT forwards, if NAT gets an ICMP error, it sends it back to V6 host for retransmission

Out of order fragments?

- Drop them?
- Alternatives get complicated to mitigate DOS attacks

IPSec AH

No