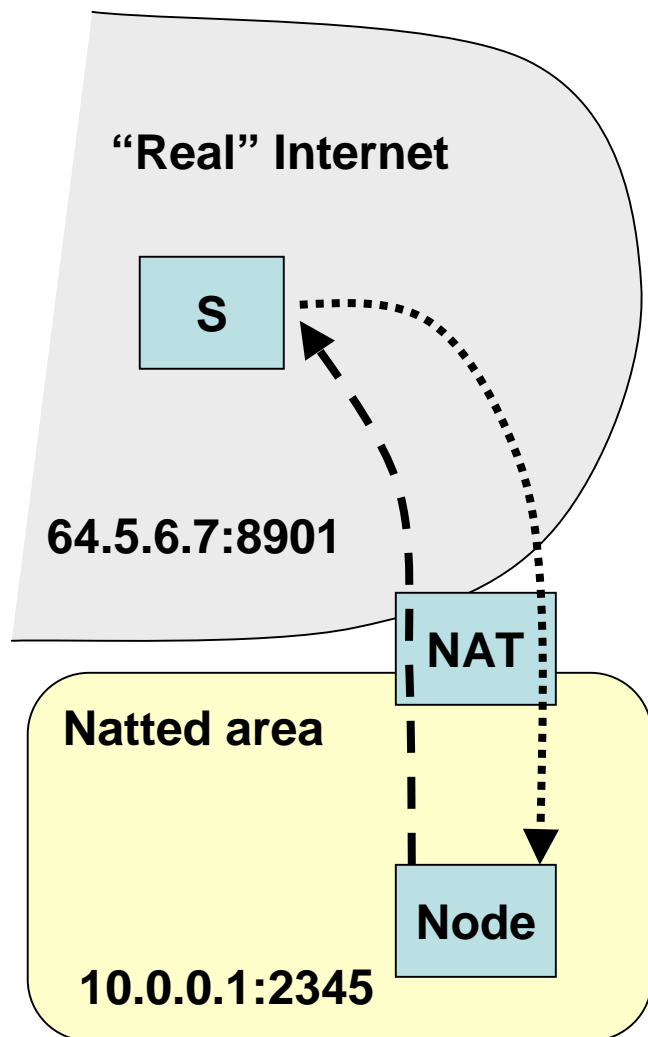


SDP & RTP & NAT

Christian Huitema

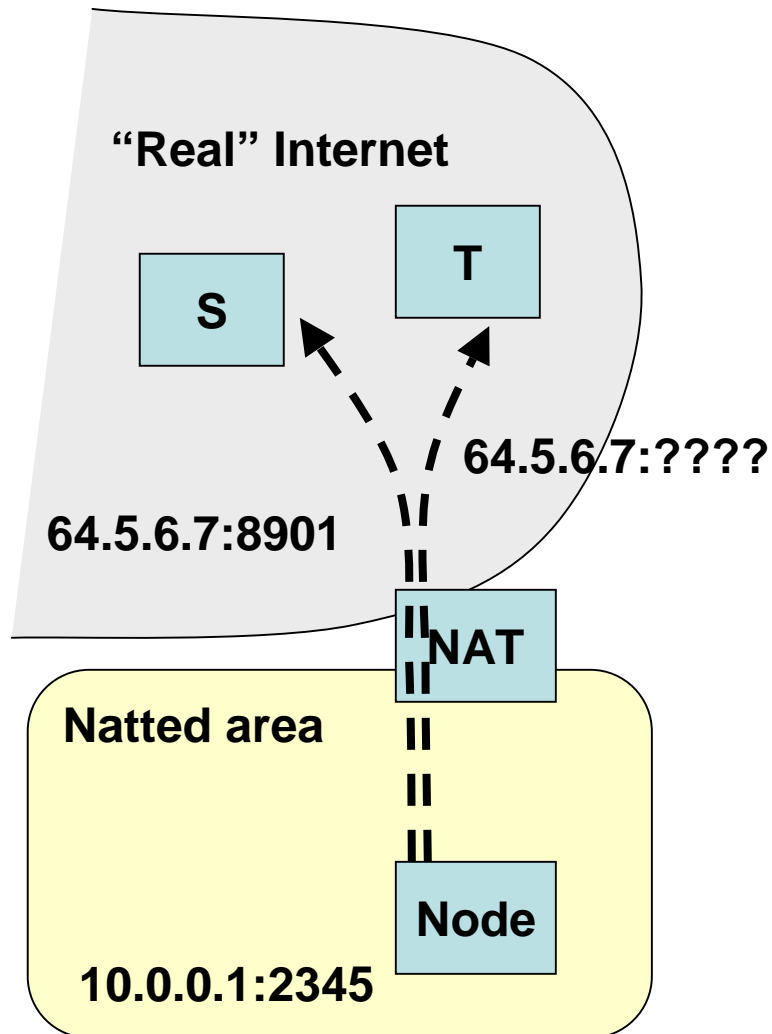
What NAT do



- Map ports
 - TCP connection
 - UDP stream (activity)
- Firewall variants
 - One port, any peer
 - One port, any “authorized” peer
 - One port per peer
- Two problems
 - Make NAT “UDP friendly”,
 - Use random port numbers for RTP, RTCP

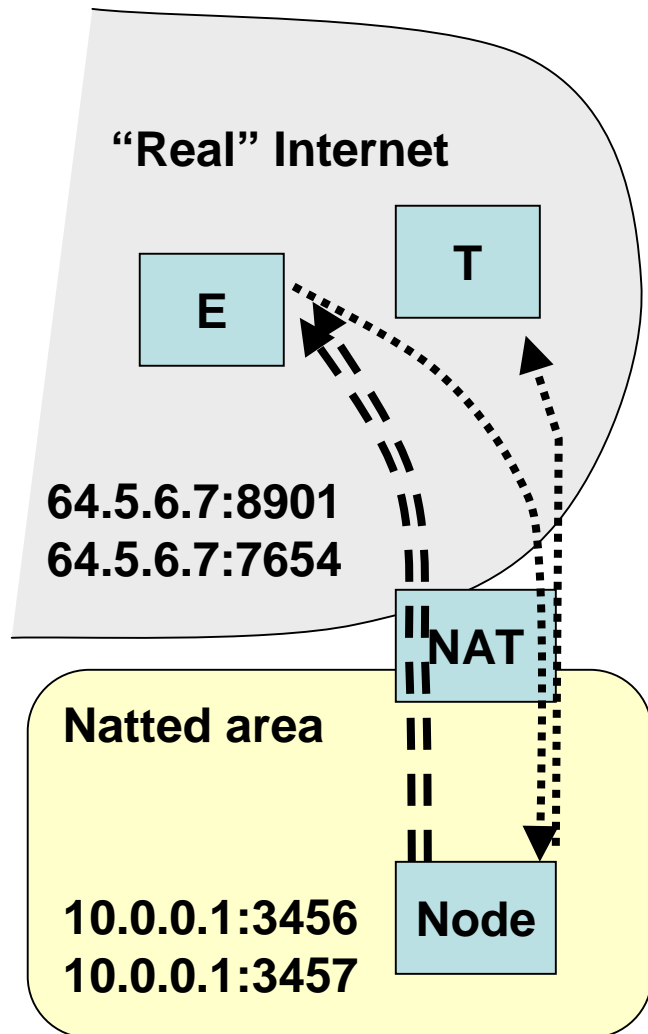
Recommendation for NAT:

[draft-huitema-natreq4udp-00.txt](#)



- Two mapping variants
 - Same port / Different port
- Two firewall variants
 - Accept / Require “activity”
- Problem
 - Different ports make “conferencing” very hard
 - Firewall makes “call transfer” and “signalling” hard
 - Not secure anyway...
- Recommendation
 - Use same mapping,
 - Don’t “firewall” the user.
- Can we publish it, please?

Document mapping in SDP: draft-huitema-natreq4udp-00.txt



- NAT map RTP, RTCP
 - Oddity ?
 - Sequencing ?
- Mapping can be learned
 - Use “echo server”
- Proposal: document in SDP
 - Allow RTP > odd port
 - “a=rtcp=7654”
- AVT comment
 - If deviate oddity, document two ports.
- Decision
 - Last call ?