ICE-tcp

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Changes Since -05

- ICE-lite resolution from last meeting: no ICE-lite, but just use comedia and allow mix of ICE-lite and comedia for TCP in one SDP
- Made SRTP discussion less specific to DTLS-SRTP

Big Problems

- ICE-tcp uses simultaneous opens as its prime technique for direct connections through double NAT
- Saikat's paper: http://saikat.guha.cc/pub/imc05-tcpnat.pdf Calls this P2PNAT (without port prediction) and it has only a 45% chance of working
- Requires end-host support for SO – concerns that this doesn't work on XP!
- Falling back to TURN in these cases maybe OK but not always – p2psip

Port Prediction

- Many NAT allocate port+1 for TCP connections from same internal IP/port
- Include, in the offer, port and port+1, let ICE sort out which one works
  - May even work as a local implementation choice
- But:
  - Port prediction increasingly ineffective due to cascaded NAT

Recommendations

- Define a port prediction mechanism as an informative document, separate from ICE-tcp

- Issue them both at same time to make sure the whole thing works

- Get volunteers to run some tests on OS to check S-O support and verify draft mechanisms

- And pursue a more radical approach: TCP over UDP – as another separate draft