draft-denis-behave-dccp-00

BEHAVE working group meeting

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VideoLAN project, VLC

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[1]with help from Gorry Fairhurst, University of Aberdeen, UK

Outline

DCCP in five seconds

- connection-oriented protocol with congestion control
- no transport-layer keep-alives

- Basically, how should a *nice* NATs handle DCCP?
- IP addresses and DCCP ports translation
- Bindings allocation and maintainance

Implications on:

- DCCP connection handshake (similar to TCP)
- DCCP checksum

- Layer-4 support required from NATs (contrary to ESP et al).
- No multi-homing and CRC issues (contrary SCTP).

Solution 1: modify the NAT

- recognize IP protocol number for DCCP
- mangle IP and ports very much like BEHAVE-TCP
- leave sequence numbers untouched
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- DCCP state machine needs modification for *simultaneous open* → draft-fairhurst-dccp-behave-update
- field deployment problematic w.r.t. legacy NATs (understatement)
- possibly useful basis for v6/v4 translation
- needed by draft-ietf-v6ops-cpe-simple-security

Solution 2: tunneling

- append a UDP header between IP and DCCP
- leave NATs unmodified

- need out-of-band negociation
- the usual issues involved with tunneling
- solutions exist already (ESP-in-UDP, Teredo. . .)

No need to specify anything there, do we?

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- In BEHAVE working, do we want this forward?
- Also need input from DCCP working group!

That's all, folks!

Any extra questions?