

Revision of the Binary Floor Control Protocol (BFCP) for use over an unreliable transport

draft-sandbakken-xcon-bfcp-udp-01

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Motivation

- Current BFCP specification is TCP/TLS only
- NAT/firewall traversal needed
- TCP is often not applicable/appropriate

Approach

- Extend BFCP to specify use over unreliable transport
- Aiming to produce a trivial and workable extension without a major re-write or a completely new protocol
- Proposing minor changes to transaction model:
 - Requests have associated responses to complete transaction
 - Retransmission timer to ensure timely completion with failure detection
- Added mechanism to ensure bi-directional pin-holes
 - Keep-alive specified to hold pin-holes open

What has happened

- Revived draft after two year zombie state
- Formatted for easy merge into revisions of 4582/3
- Begun to address concerns raised on list since -00

Future work

- Investigating DTLS as secured transport
 - Particularly in context of participants behind NATs
- Investigating fragmentation issues
 - Trade-off between fragmentation and specifying constraints on attributes
 - UDP encapsulation of TCP to convey BFCP streams?
- May need protocol version field revision so that implementations can discern behaviours
- Intending to add some example signalling flows as implementation reference