Quick-Start for DCCP

draft-fairhurst-tsvwg-dccp-qs-02
(Individual Submission)

Gorry Fairhurst
Arjuna Sathiaseelan
QS for DCCP

- Similar to QS with TCP [RFC 4782]
- Sender MAY use a Quick-Start request:
  - At start of a connection
  - In the middle of a connection
- SHOULD send request on a packet that is acknowledged
New in Revision –02

- Longer Quick-Start period (comment from Mark Allman).
- New section on interaction with middleboxes.
- Added description for CCID-4.
- Added clarification of PMTUD interaction.
- Section on QS Interval.
- Rewritten sections on what to do after loss/congestion.
- Clarified path-change trigger (e.g. mobility binding update).
- Other minor editorial NITs.

- No currently known remaining issues.
What happens if you send a QS-Request too often?
- Annoys routers (perform work on slow-path)
- Takes capacity from QS pool - particularly in multi-hop path.

Initial QS_Interval now 6 sec:
- 1s is too low, 10s probably too high.
- \{6, 12, 24, 48\} = 4 attempts to get a response.

What if you don’t get a QS-Approval?
- Exponential Backoff
  - QS_Interval = \max(6\text{s}, \max(QS\text{Prev}_\text{Interval} \times 2, 4\times\text{RTT}))
  - Until 64 seconds... then, sender must give-up!
What Next?

- Draft complete
- So.... The authors think this is ready for WGLC.