Forward Erasure Correction Coding in QUIC

Forward error correction (FEC) is a method to add redundant data before transmission over an unreliable network to account for potential packet losses (“erasures”) and to avoid retransmissions. QUIC is a modern transport protocol which is increasingly deployed on the internet. There are ongoing discussions about integration of FEC schemes into QUIC.

In this thesis you will work on incorporating FEC into a QUIC library and assess its effects.

- familiarize yourself with FEC and available QUIC FEC approaches
- identify a suitable QUIC library
- integrate a FEC approach into the QUIC library
- assess the impact of your changes based on reproducible measurements

Related Work


Requirements

- experience with C or C++
- structured work style

Contact

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