QUIC in Deep Space

Summary of progress made during IETF 120 Vancouver Hackathon

Marc Blanchet, marc.blanchet@viagenie.ca, 2024-07-11
Purpose

• Deep space has (very) large and (very) variable RTT

• QUIC with proper transport configuration worked
  • simulated with the Quinn QUIC stack, which exposes all the necessary transport parameters in its API

• However, not every QUIC stack exposes these transport configuration parameters in their API.

• Goal of the hackathon is to modify QUIC stacks to expose parameters and then do interop testing between QUIC stacks under the deep space scenario
Stacks

• QUIC stacks modified
  • Neqo
  • Aioquic
  • Cloudflare Quiche (not yet finished)
• Interop testing about to be done at the time of writing
• Participants:
  • Kota Yatagai, Robin Mueller, Laurent Toutain, Marc Blanchet

• FYI: Deep Space IP side meeting: Wednesday 8h00-9h30 Tennyson