

Careful Resume

draft-ietf-tsvwg-careful-resume-11

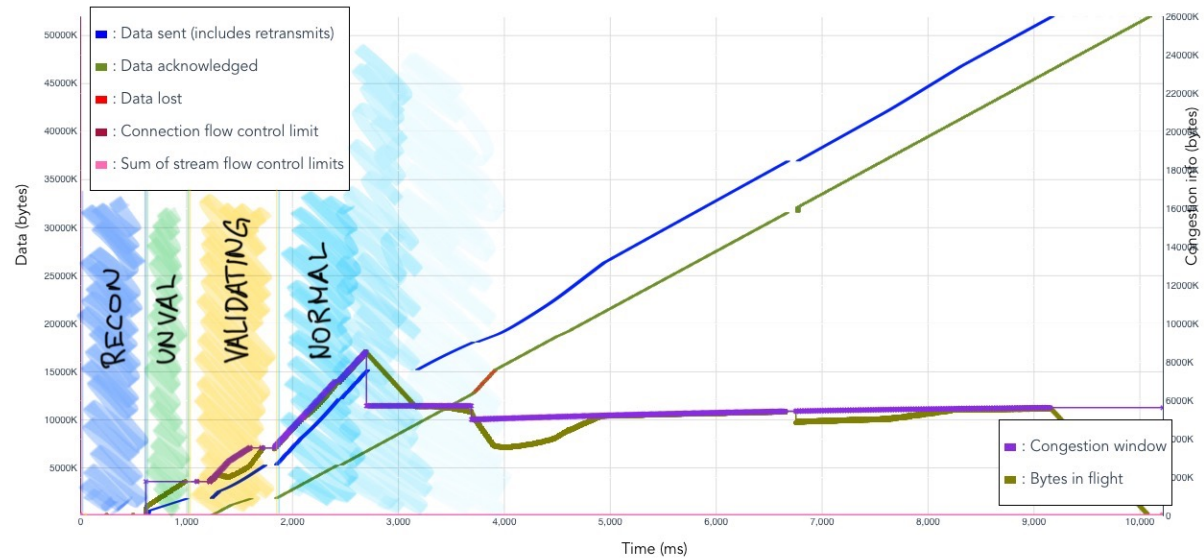
IETF 121

5th November 2024, Dublin

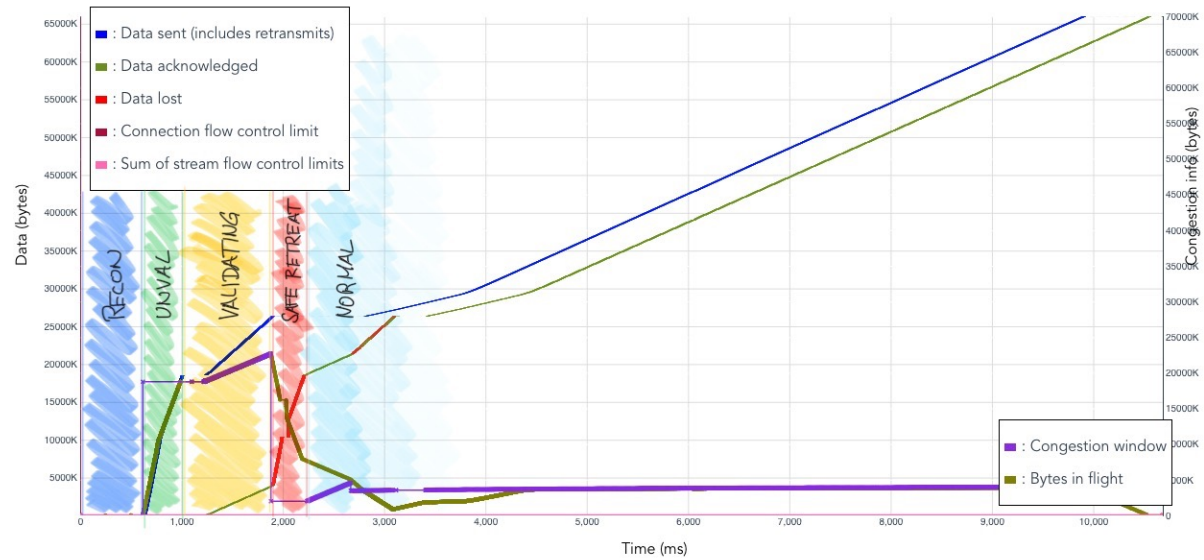
N. Kuhn, E. Stephan, G. Fairhurst, R. Secchi, C. Huitema

Careful Resume

Jump Succeeds



Jump not performed



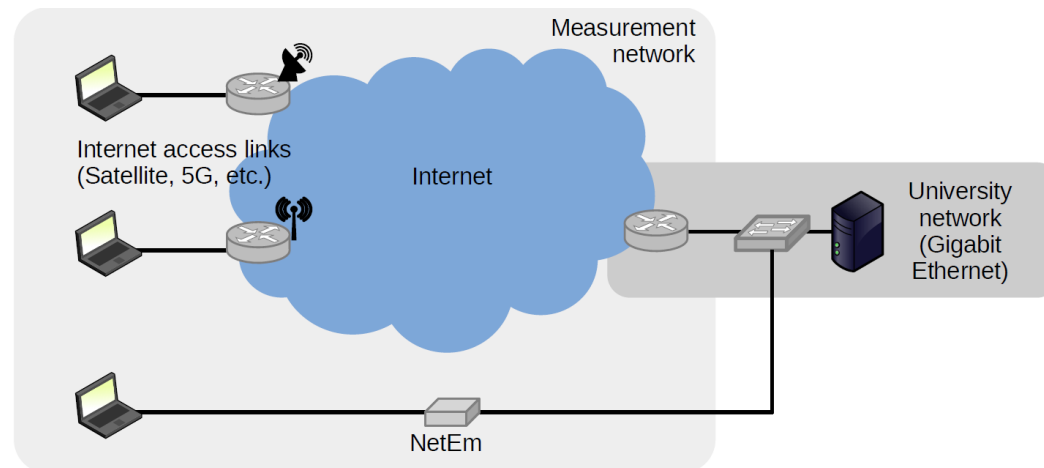
Qlog traces

Changes to the draft from -v10 to -v11

- Section 1.5 clarifies the design principles
- Clarifications on the transition RECON -> UNVAL
 - Sender may remain in RECON until transmit buffer contains data
 - Accommodates flexibility in CR implementations
 - Now; *pipesize = flight_size* on UNVAL entry and at the end of VALIDATING
- Added considerations on Careful Resume with BBR
- At exit from Safe Retreat: $ssthresh = \beta * pipesize$ $0.5 \leq \beta \leq 1$

Performance Analysis of CR/QUIC

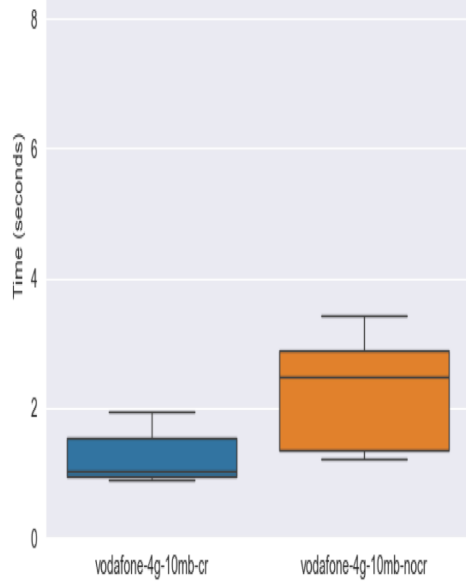
- Testing of CR in QUIC
 - Implementation/Testing in Picoquic (Joerg Deutschmann, Matthias Hefstaetter)
 - Implementation/Testing in Quiche (Ana Custura, Mihail Yanev)



CR-enabled vs CR-disabled

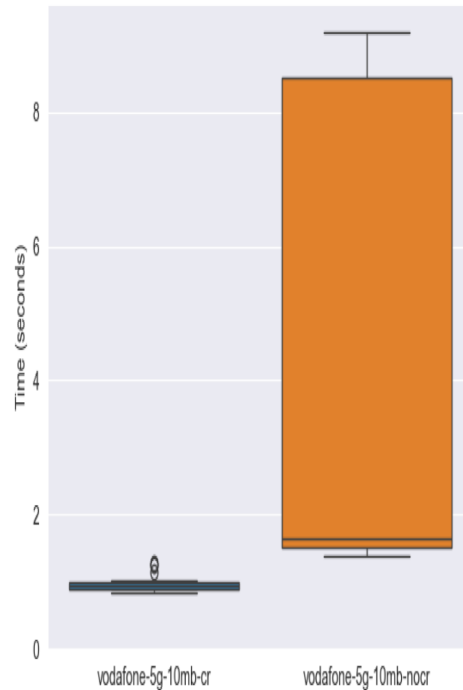
4G

- 10 Mb transfer
- CloudFlare Quiche



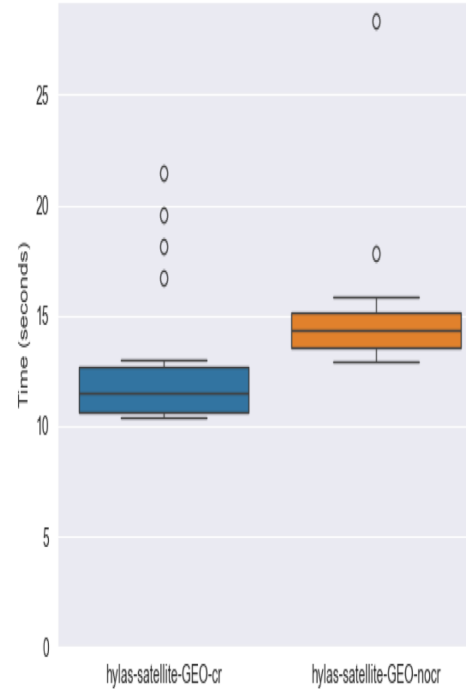
Vodafone

5G



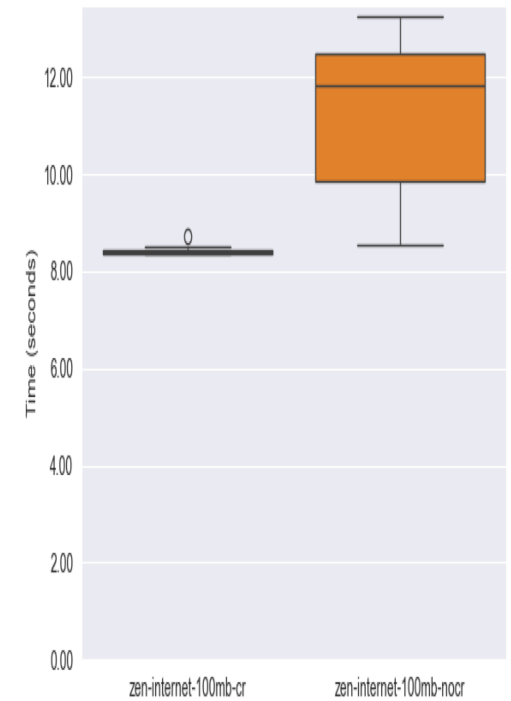
Vodafone

GEO



Hylas1

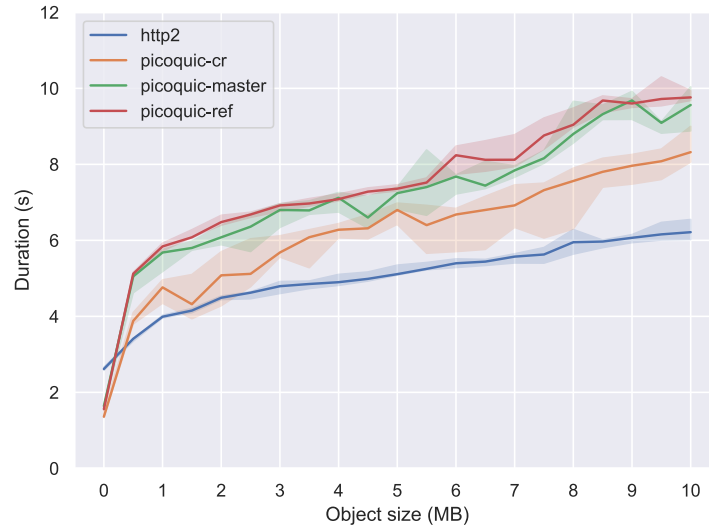
Fibre



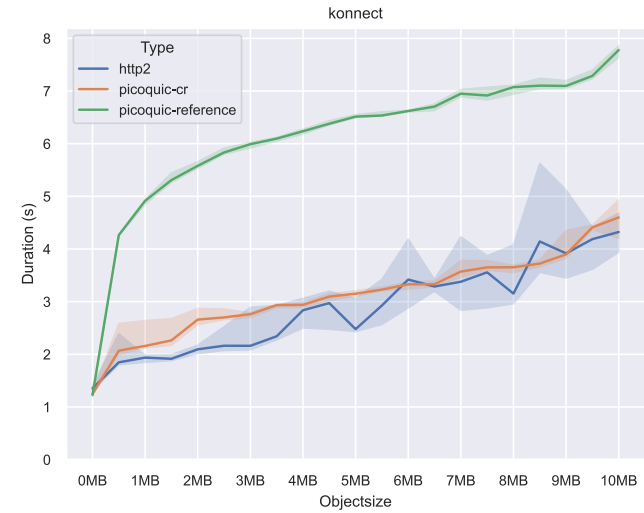
Zen Internet

Obj. Completion time over Satcom (Picoquic/CR)

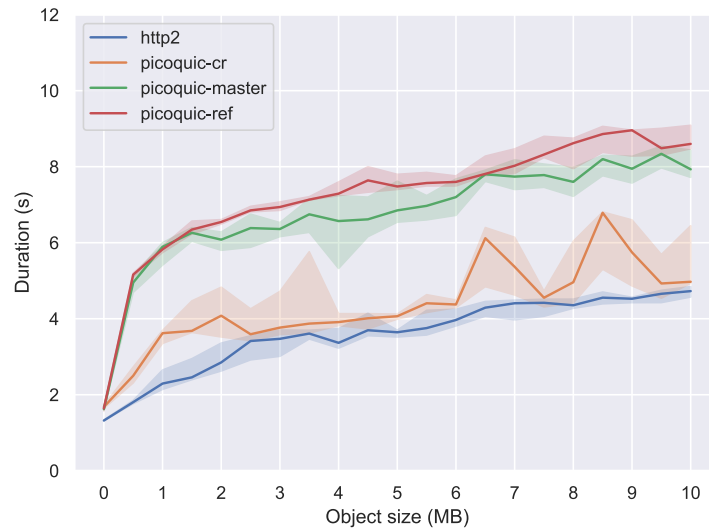
**Brdy
KA-SAT**



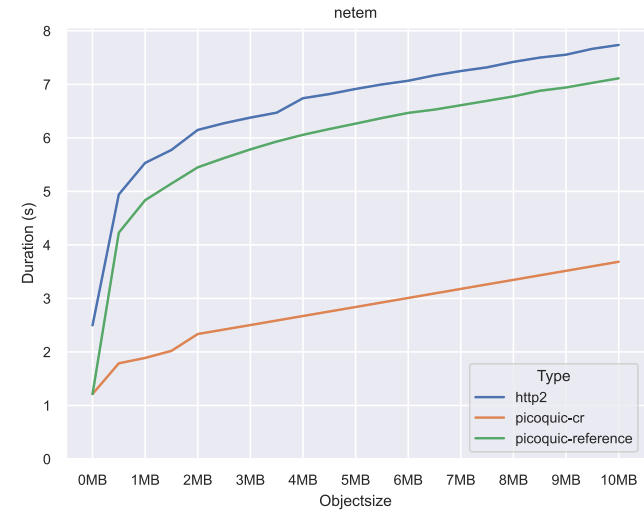
Konnect



SkyDSL



Netem

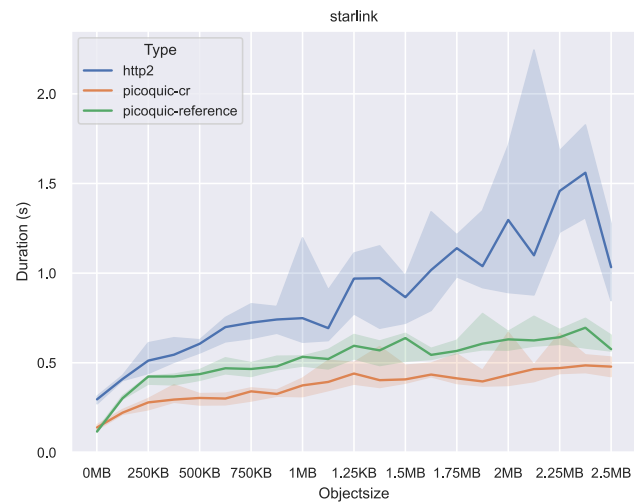


Message transfer time (Picoquic/CR)

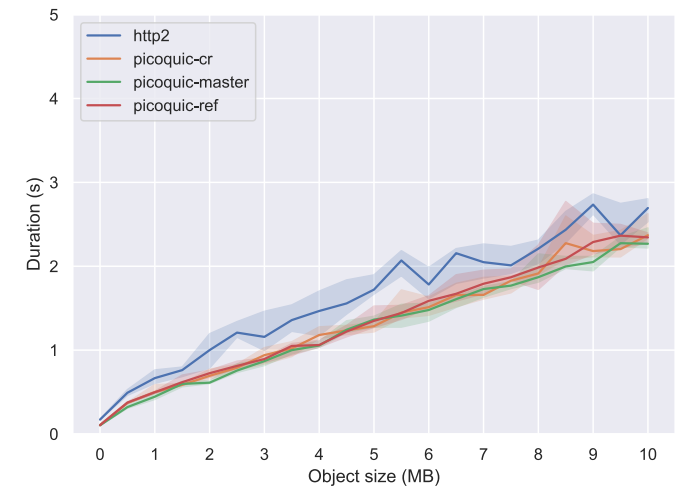
5G



Starlink



Congstar LTE



Next Steps

- We have received several reviews informally
- We have no pending issues to address
- Is this ready for a Working Group Last Call?