

Some updates on QUIC deployment numbers

maprg - IETF-106 Singapore - Nov 18, 2019

QUIC traffic at YouTube

- QUIC was **33%** of egress as of Dec 2017 [SIGCOMM](#)
- QUIC is now slightly more than **50%** of YouTube egress traffic volume
 - QUIC is now slightly more than **50%** of YouTube video playbacks

QUIC Rollout at Facebook

- 80-90% of API requests from one of Facebook's major mobile apps uses IETF QUIC with mvfst (<https://github.com/facebookincubator/mvfst>)
 - Measured at server metrics of request level data based on a sampled dataset of http request metrics
 - IETF QUIC version draft 23
- 10-20% non-QUIC traffic is actually a combination of a holdout a/b test group to measure long term impact as well as fallbacks and to a small extent older apps.
 - The numbers reflect more about how much Facebook rolls out QUIC so far vs. fallbacks which are a smaller part of requests.

QUIC on DT's fixed broadband

Representative measurement of DT's fixed broadband subscriber UDP/443 traffic, averaged over the last weeks retroactively from Nov 16, reveals:

- QUIC share compared to the overall unicast traffic volume
 - ~10% DOWN link
 - ~4% UP link
- A slight decrease compared to one year ago.
 - See slide 3: <https://datatracker.ietf.org/meeting/104/materials/slides-104-tsvwg-sessb-43-markus-amend-multipath-dccp>
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QUIC @ Akamai

- Offer QUIC based on User Agent, Geo Location, “CDN Product”
 - User Agent: only Chrome (will qualify other UAs in 2020)
 - Geo Location: 100% in North America, less elsewhere
 - Products: mostly Media products (video, large objects, ...)
- Clients offered QUIC that end up using QUIC:
 - Depends on the geo location
 - In China: only ~20% (UAs on Android always claim to be Chrome but are not)
- Traffic Volume
 - Typically ~1% of total volume for the products for which QUIC is enabled
 - Daily peaks are 600-800 Gbps. Max peak is ~1.8 Tbps.
 - 0-RTT: ~50% of connections

QUIC Versions

New successful QUIC connections per 2 minutes.
The anti-correlation of Q043 and Q046 is interesting.

