

Metrics and Logging

MOQ

IETF 120, July 2024

Status Quo

- Application typically need to report information about media to able to monitor and debug media quality issues
 - Near real time information allows management systems to correct for any quality issues in time.
- Choices typically followed include:
 - Sending metrics/logging information **real-time** (problem is this impacts media)
 - Sending metrics/logging information at the **end of the session** (problem is this is too late, may not get all the metrics if the application closes.)
 - Combination or somewhere in between of both (carries over problems from both of the above)

Problem Statement

Bandwidth Competition

Metrics/Logging reporting compete with application bandwidth

Unshared Congestion Context

When things go bad, congestion control context between the Application's metrics and its main data, can impact negatively the application experience.

Everything is treated as important

All Metrics/Logging are treated the same regardless of their relative importance.

Proposal

Metrics and logging over MOQT Tracks

Benefits with $\frac{\text{metrics/logging}}{\text{moq}}$

- Fine grain control of priorities
 - Some logging might be more important than media
 - Most metrics may be less important than media
- Media is inherently bursty, and this allows the media to take all the bandwidth in peaks yet send the metrics and logging data when the media is not using the peak bandwidth
- Shared congestion context
- Can cache information on local relay and only transfer if requested by collection service