Application interaction

Varun Singh, callstats.io
Stefan Holmer, Google

Yokohama, IETF 94,
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Motivation

• Application wants to provide *hints* to the
  - congestion control or codec
  on what it *thinks* it wants?

• Congestion controller may control one or more streams associated to one more codecs
What is an Application?

• JS application?
• RTP Application?
  – Instances of RTP application is a browser
Application Control

• Configures a set of values
• Measures if those values are met
  – If not, it can switch off stream(s).
  – **Worst case**: the circuit breaker will trigger
Application’s PoV

• The congestion controller:
  – Performs bandwidth estimation and hides the following
    • Pacing buffer
    • De-jitter buffer
    • FEC, retx
  – Controls the codec
  – Provides statistics
Session configuration parameters

• Configurable:
  – max bit rate
  – per stream priority
  – session start bit rate (hint, because the congestion control may know better from)

• Not configurable
  – min bit rate (neither for the session nor the codec.)
Codec configurations

• max bit rate

• Range metrics
  – Min/max frame rate
  – Min/max frame resolution

• foobarPreference
  – maintain-framerate
  – maintain-framesize
  – None (meaning codec can do whatever makes sense within both ranges)
Next Steps

• Write this into a proposal
  – draft-xx-app-cc-codec-interactions