

Application interaction

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Motivation

- Application wants to provide *hints* to the
 - congestion control or codecon 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