

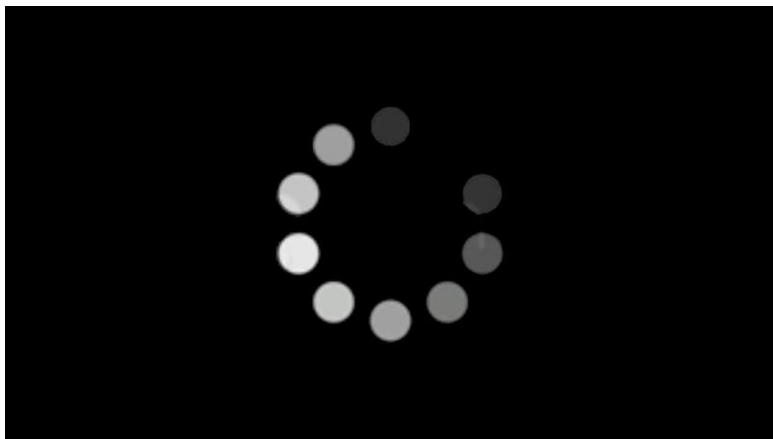
A Standard for Video QoE Metrics

Steve Heffernan,
Mux

CTA Standards Group R04 WG20



Quality of Experience (QoE)

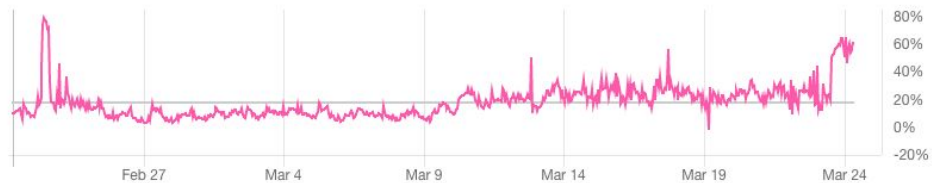


REBUFFER PERCENTAGE

16.94%

TOTAL WATCH TIME (HOURS)

435.95_k



● Rebuffer Percentage - - Mux Customer Avg (90 days)

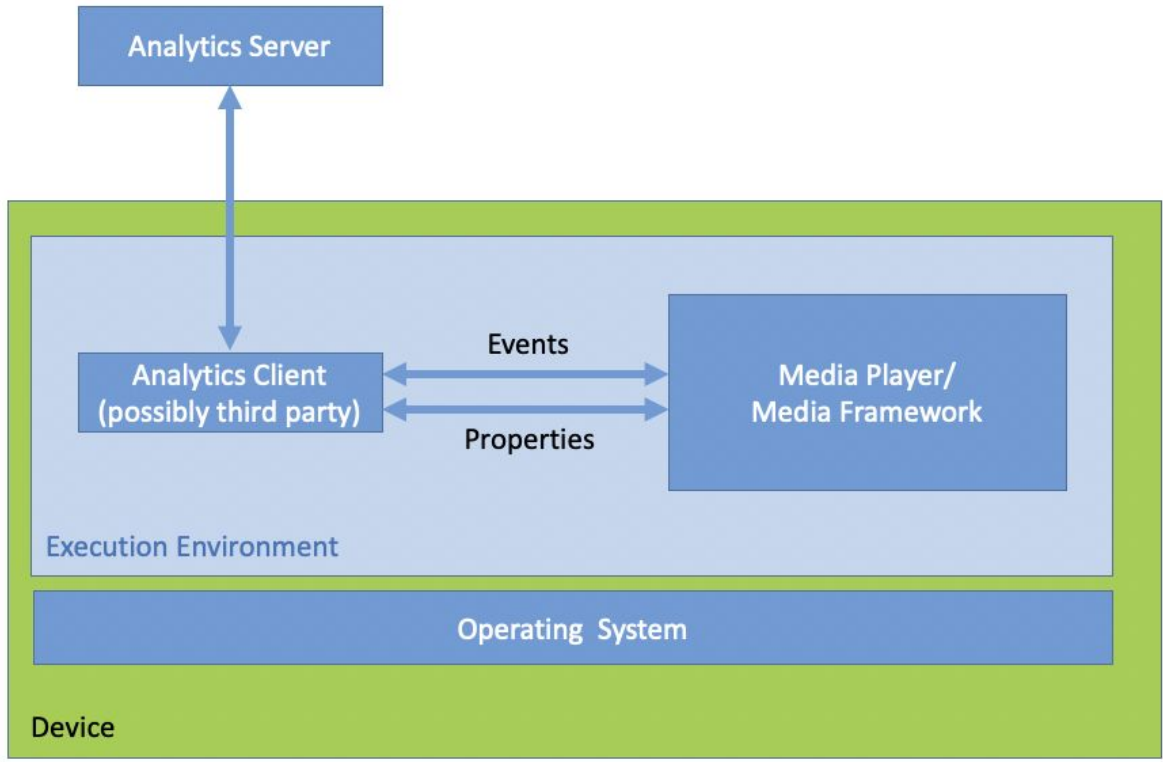


Diagram: Generic player and analytics agent

Example

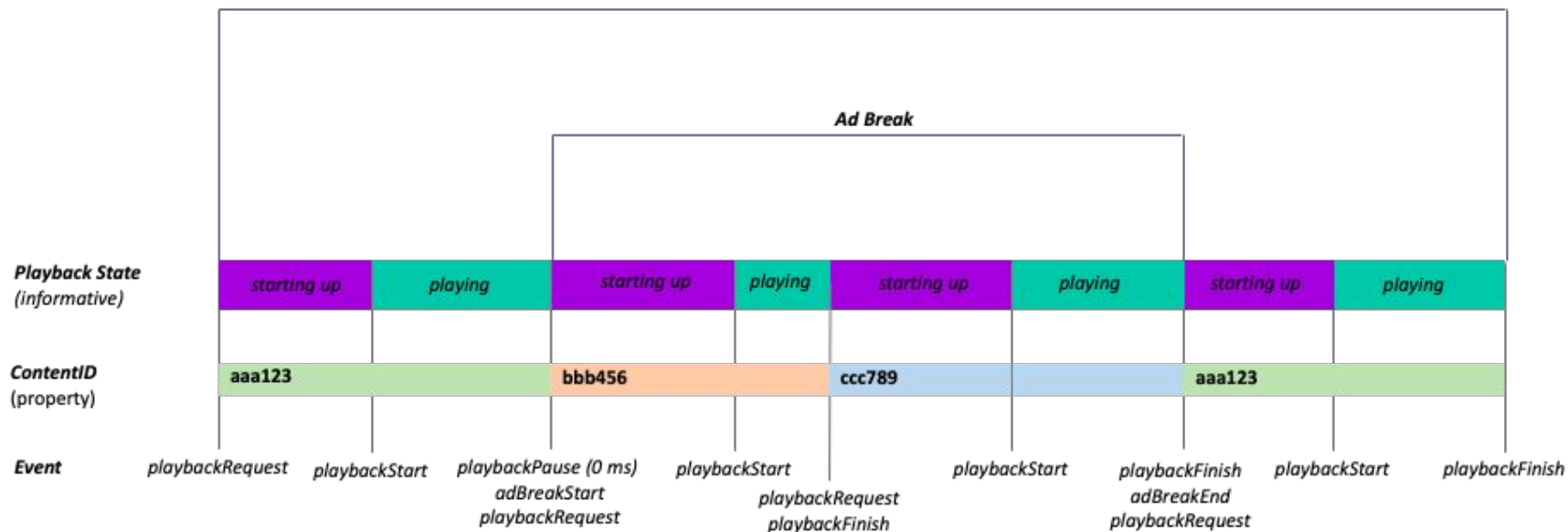
Aggregate Metric: Playback Failure Percentage

Session Metric: playbackFailed (boolean)

Player Event: *playbackFail*

Player Property: *contentId*

Playback Session



$initialStartupTime = playbackStart - playbackRequest$

Note: when in an ad break, all playback events are still possible and valid (e.g. *playbackPause*, *playbackStalled*) and should be treated the same when calculating Playback Session metrics, with the exception of *playbackFinish*, which designates the end of an individual unit of content. The contentID is used to differentiate between different ad content and primary content.

Playback Success/Failure

- Playback Failure Percentage
- Exits Before Video Start Percentage

Stalling/Rebuffering

- Average Playback Stalled Count
- Average Playback Stalled Rate
- Average Stalled Time Percentage

Startup Time

- Average Initial Startup Time

Video & Audio Quality

- Average Playback Bitrate

A Standard for Video QoE Metrics

Thanks!

Steve Heffernan, Mux

steve@mux.com

@heff