RTCP XR Metrics for Video

draft‑clark‑avt‑rtcpxr‑video‑01.txt
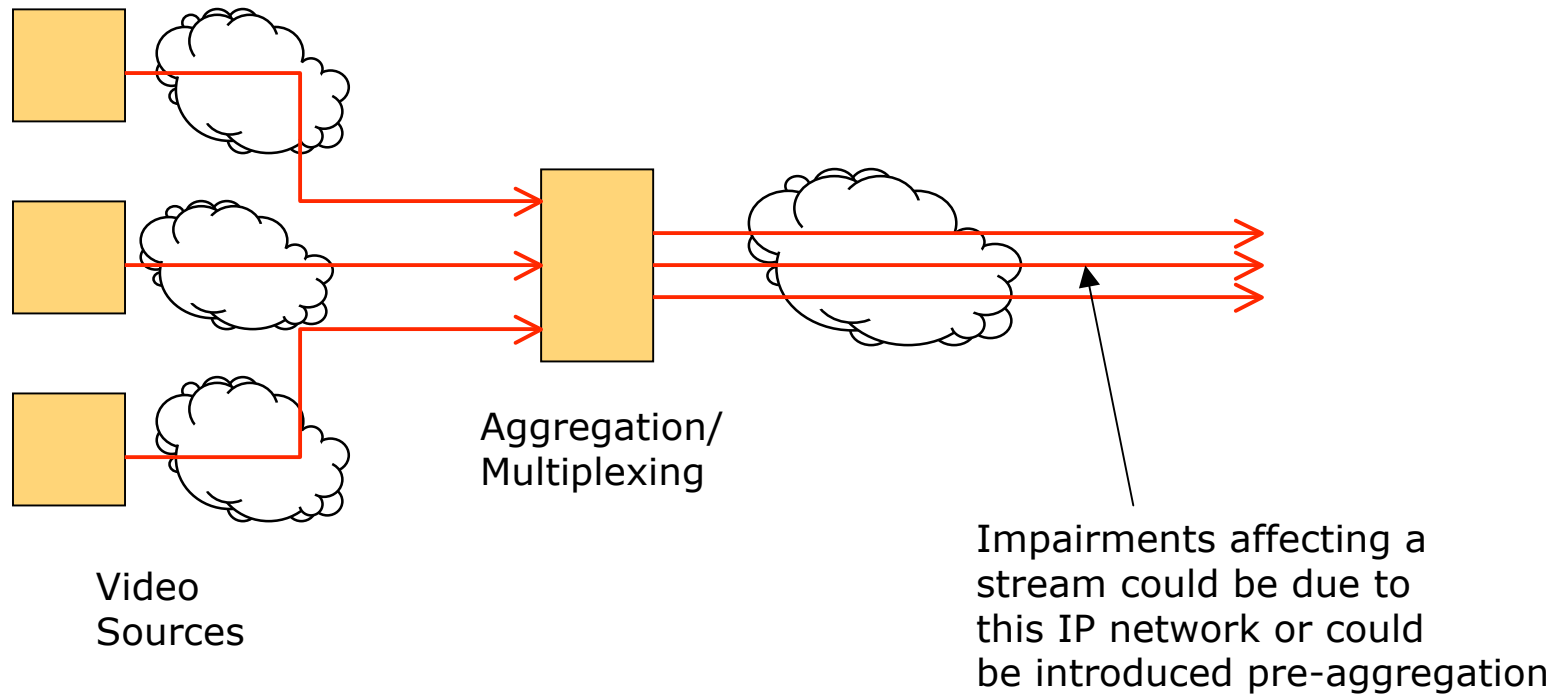
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Video metrics draft

- RTCP XR model for streaming or interactive video

- Trying to align with IIF (IPTV Interoperability Forum)

- Support for
  - RTP, MPEG-TS or MPEG-TS over RTP
  - UDP or TCP

- Metrics
  - Transport metrics for each layer
  - IP Transport Quality
  - Picture Quality
  - Audio Quality
  - Multimedia Quality (Picture, Audio Quality and Audio-Video Sync)
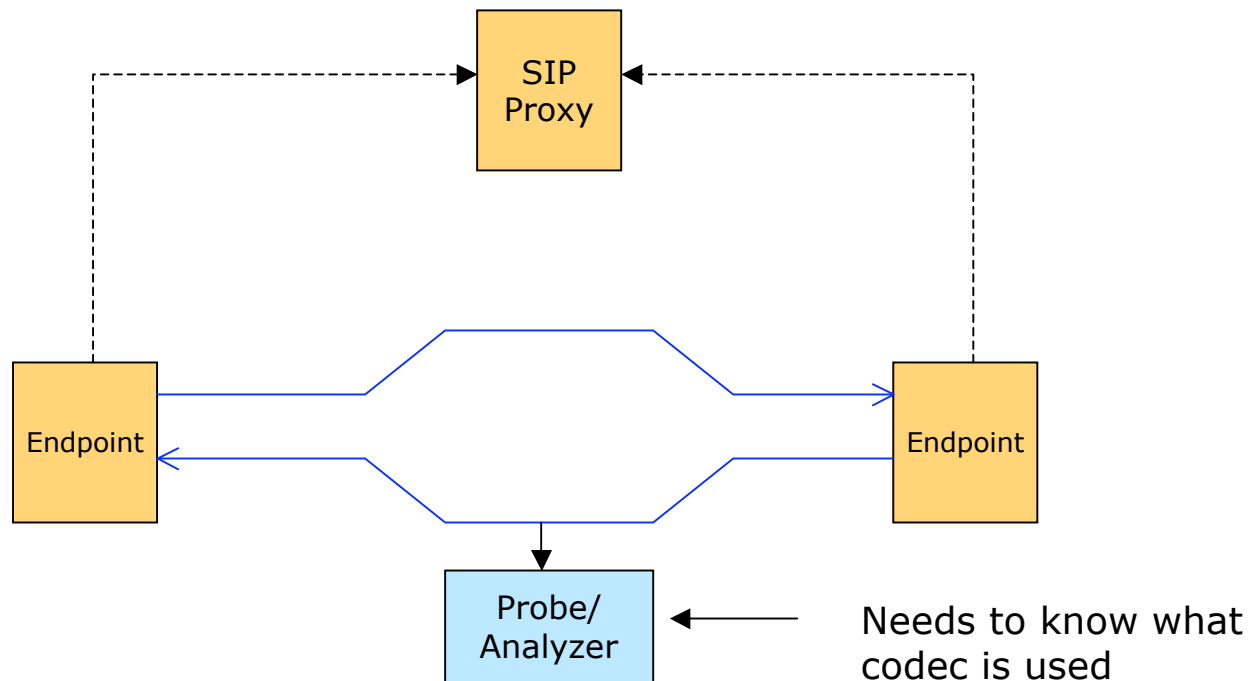
Metrics blocks

- Header

- IP Layer Loss Metrics
  - Pre/Post FEC Loss Rate

- RTP Metrics
  - SSRC, Loss, Discard, Jitter, Burst/Gap Metrics

- MPEG-TS Metrics
  - PID, Loss, Discard, Jitter, Burst/Gap Metrics

- Audio/Video Metrics
  - IP Transport, Picture Quality, Audio Quality, Multimedia Quality, Bit rates, Audio Video delay, Round trip delay
  - Plan to add metrics related to full vs interpolated frames

- Playout Buffer Metrics
  - Buffer level, playout interruptions

- Configuration block
  - Codec type, frame size, frames/sec, QoE algorithms

Multiplexed streams

Video
Sources

Aggregation/
Multiplexing

Impairments affecting a
stream could be due to
this IP network or could
be introduced pre-aggregation

Issue - duplication of signaling data

- Configuration block duplicates some data available through signaling protocol

Next Steps

- Get feedback from AVT and other standards forums (e.g. IIF….)

- Building prototype implementation

- Next draft May-June timeframe