RTCP XR Metrics for Video

draft-clark-avt-rtcp-xr-video-01.txt

Alan Clark, Amy Pendleton
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

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**Diagram:**

- **Endpoint**
- **SIP Proxy**
- **Probe/Analyzer**

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IETF 65 AVT
Next Steps

- Get feedback from AVT and other standards forums (e.g. IIF....)
- Building prototype implementation
- Next draft May-June timeframe