RTCP Streaming Extended Reports

draft-tseng-avt-rtcp-streaming-extens-00.txt

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The Objective

Operator of streaming media service/server would like to know the user's quality of experience (QoE).

e.g.,

- long periods of silence vs.periodic, short "clicks"
- extent of video corruption; effect of dropped frames

Packet loss info is good,but not enough.

The Solution

We define a RTCP packet extension whereby the client/player can record and report statistics of:

- “Rebuffering” duration:

  Continuous periods of time during which presentation was halted without user command.

- Corruption:

  Continuous period of incorrect media playback due to packet loss or bit-errors.

The actual effects are player, decoder, or application dependent.

Known Issues

- Even the best measurement of corruption is only an best guess of “good” frames vs. “bad” frames.
- Existing application architectures may not support collection or transport of such data.
- Current (and future?) comments on the reflector.

Where to go from here?

We would like to hammer out the details and ultimately generate an extension to RFC 3611 that broadly covers user-level QoE for all video and audio over lossy, packet-based networks.