High Resolution RTCP XR Metrics

draft-clark-avt-rtcphr-01.txt

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RTCP HR draft

• Similar concept to RTCP XR VoIP Metrics block

• Modular structure - sub-blocks

• Extends resolution of metrics
  – MOS estimates to 16 bits instead of 8

• Extends number of metrics
  – Concealed seconds, Severely concealed seconds
  – Wider range of jitter metrics

• Adds configuration block
  – Type of QoE algorithm
  – Codec type
  – Other data that stays essentially constant
Reference model (issue)
RTCP-HR Concealed Seconds Sub-block (new)

PARAMETERS:
Unimpaired seconds (US): No frame loss or discard
Concealed Second (CS): Second with any frame loss or discard
Severely concealed Second (SCS): Second with frame loss/discard above SCS threshold
SCS threshold: Milliseconds of loss/discard for SCS classification, default 50 ms

Independent of speech/silence state.
Seconds are non-overlapping, wall-clock.
Call Quality Metrics sub-block (extended)

- Listening & Conversational Quality MOS and R
  - Increased resolution from 8 to 16 bits vs RFC3611

- Signal, Noise, Echo levels
Issue - duplication of signaling data

- Configuration block duplicates some data available through signaling protocol

Endpoints communicate through SIP Proxy, and a Probe/Analyzer needs to know what codec is used.
Other issues....

• Header format should be consistent with other XR reports (to allow this block to be skipped)
  – Will address in next draft

• Definitions associated with start and end of call
  – Clarify text

• Correlation header
Issues & next steps

- **Next steps**
  - Very active reviewers, several implementors
  - Get next draft complete in June timeframe
  - ITU SG16 plan to use in H.248