RTCP XR Report Block for Burst/Gap Loss metric Reporting
draft-ietf-xrblock-rtcp-xr-burst-gap-loss-01

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Document Status

- WG draft moving from early AVT WG after AVT split.

- 3 open issues were firstly raised on the list and discussed in the Taipei meeting.
  - Combined loss/discard
  - Early vs late discard
  - Add three more metrics into Burst/Gap Loss Report blocks
    - Time Since Last Burst
    - Max burst length
    - Average burst and gap loss/discard rates

- These open issues were followed after Taipei meeting
  - The first two fixed and the last clarified but unclosed.
  - Many Thanks to our reviewers
    - Charles Eckel, Colin Perkin, Qin Wu, Varun Singh

- A new version (-01) was submitted addressing these open issues.

Change#1: new flag bit for Loss/ Discard Combination

- Alan noted that burst gap discard is seldom or never reported independently.

- Solution:
  - Set Loss and Discard Combination flag to 1 if the burst gap loss report is present in conjunction with the burst gap discard report in the same compound RTCP packet and MUST be set to '0' otherwise.
  - If the burst gap discard is not sent with burst gap loss, then the receiver should discard burst gap loss with 'C' flag set to 1.
  - If the 'C' flag is set to 0, then receiver should not discard burst gap loss metric block when burst gap discard is not received.

Issue # Early vs late discard

- This issue doesn't affect this document.

- This issue will be discussed in another presentation linked to Discard draft

- Addressed in [draft-ietf-xrblock-rtcp-xr-discard].

Issue # Burst/Gap Loss Report Block Enhancement

- This issue was raised by Alan before Taiwan meeting and three new metric are proposed to add to this reporting block
  - **Metric 1:** Average burst/gap loss/discard rates
    - Equivalent to burst loss rate, burst discard rate, gap loss rate, gap discard rate in [draft-zorn-xrblock-rtcp-xr-al-stat].
  - **Metric 2:** Max burst length
    - Use burst duration mean and variance can estimate how large is Max burst Length
    - Burst duration mean and variance are defined in [draft-zorn-xrblock-rtcp-xr-al-stat].
  - **Metric 3:** Time Since Last Burst
    - Not used to calculate burst gap summary statistics as other metrics included already.
    - Computation complexity is large
      - Relying on RLE loss, duplication, discard report
      - Observer the first packet sequence number of last burst during the interval
      - Using synchronization information in the header to calculate it using sequence number
- Conclusion: Not necessary to add them into this draft.

Follow Up

- Question?