

RTCP Extension for Third-party Loss Report

draft-ietf-avtcore-feedback-supression-rtp-08

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Overview

- Objective and solution
 - Deal with feedback implosion when feedback forwarding to avoid duplicate report does not work.
 - Draft defines the third party loss report using RTP/AVPF feedback format
 - Draft discuss use of new message in various cases.
 - Change history
 - 05 version aiming at WGLC discussed in Quebec meeting
 - 06~07 version receives comments on the list from Magnus, Colin, Tom and Roni.
 - 08 version contains update reflecting that discussion
- Next slide

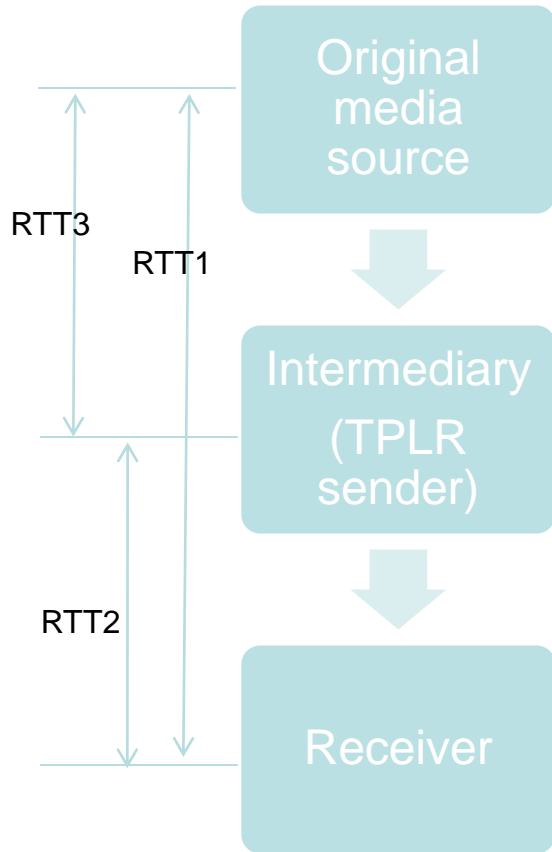
Changes since 05 versions

- Revising the SSM use case section to focus on the use of TPLR.
- Update and reorganize references
- Remove Seq Nr field in figure 2 for payload specific feedback
- Editorial changes to the Introduction, Protocol Overview, SDP Signaling, Message Format, Use cases, Security Consideration and IANA sections.
- Restructuring the protocol overview section to clarify the round trip time calculation and receiver behavior to the additional TPLR.

Issue – Second Loss issue

- When a receiver gets a TPLR message, expecting a retransmission packet which get lost on the leg from DS / Media source to the receiver.
 - Is it still relevant to ask for retransmission? (see RFC 4585 3..7.1)
 - If yes which RTT should be used for timeout (TO) until the retransmission reaches the receiver?
- Use RTT between original media source and receiver is not accurate
 - Only valid when sender of TPLR is very close to the media source.
- The actual time can be based on
 - The time for the retransmission packet from the media source to the receiver based on Receiver Reference Time XR Block and DLRR XR Block.
 - The time for the NACK from the sender of TPLR to reach the media source.
 - It can be estimated using the RTT between the sender of TPLR and receiver and the RTT between the media source and receiver.

Time based solution



- Current solution based on RTT between original media source and the sender of TPLR
 - calculate the RTT1 based on Receiver Reference Time XR Block by using the measurement method defined in the figure 2 of RFC3550
 - obtain RTT2 from round trip sub report in RSI packet
 - set timer based on $(RTT1 - RTT2) = RTT3$.
- Another option
 - Define new report block similar to the round trip sub report block specified RFC 5760
 - Use this new report block to carry RRT3 directly.

Next Step

- Can we just not set timeout when the retransmitted packet for the second loss doesn't help?
 - Deal with TPLR in the same way as NACK
- WGLC?