RTCP Feedback for Congestion Control

RMCAT Design Team

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QUICK recap

The design team was formed after IETF94 to design a generic congestion feedback message

The design team proposed their design as

- A XR block
- A RTCP feedback message

It was presented to AVTCORE wg

Suggestion was to drop the XR block

- Prime reason is better deployability

Design Team Goal

"The RTP Media Congestion Avoidance Techniques (RMCAT) Working Group formed a design team to analyze feedback requirements from various congestion control algorithms and to design a generic feedback message to help ensure interoperability across those algorithms. The feedback message is designed for a sender - based congestion control, which means the receiver of the media will send necessary feedback to the sender of the media to perform the congestion control at the sender.”

Required feedback information

for

A sender based congestion control

Packet level - information block

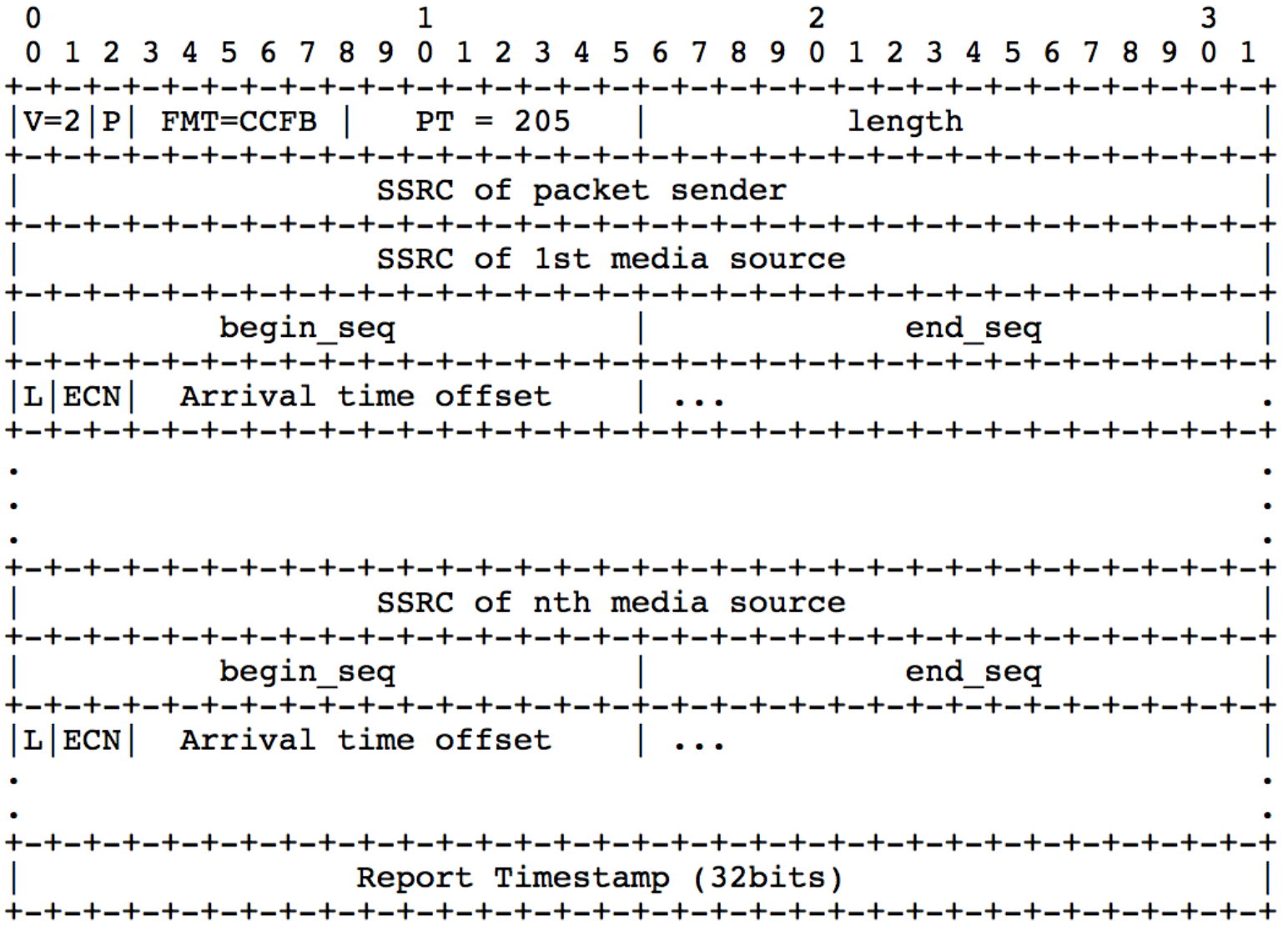
Packet Identifier - RTP sequence number.

Packet Arrival Time - Arrival time stamp at the receiver of the media.

Packet ECN marking - If ECN [RFC3168] is used, it is necessary to report on the 2 bit ECN mark in received packets,

The feedback messages can have one or more of the above information blocks. Grouped by SSRC.

The packet format



Congestion Control Feedback (CCFB) is sent as a RTCP Transport Layer Feedback Message

Aiming for feedback per media frame with an interval of 50-200ms

Current status

- The DT presented the draft at AVTCORE wg
- The AVTCORE wg adopted the draft
  - draft-ietf-avtcore-cc-feedback
- The AVTCORE wg will take CCFB through finalization process
- Expected outcome is a standard track RFC

What about RMCAT DT?

Job well done!!

Thanks and close the DT