RTCP Feedback for Congestion Control

RMCAT Design Team
Presenter: Zaheduzzaman Sarker
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 level information for 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.
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