Synchronized Playback in RAMS

draft-yang-avt-rtp-synced-playback-00

IETF#75, July 2009, Stockholm

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The issue induced by RAMS: Increasing inter-user playback delay

Different Receivers will have different delay due to the use of Rapid Acquisition of Multicast RTP Session
The total inter-user playback delay

Multicast media streaming - >

Switching from unicast burst to multicast

Unicast burst media streaming - >

Playback sequence of video frame when receivers only receive multicast media streaming

The total inter-user playback delay including

Playback sequence of video frame after receivers receive unicast burst media streaming
Reducing the playback delay
----Speedup of media rendering

RRs receive two additional information from RAMS-I:
- N - the playback delay reduction target in number of frame durations;
- V - recommended interval, in frames, between two continuous events for skipping of one frame.

The method of the speedup playback is that, after each V frames, one frame is skipped as if it was not present, and the presentation time of each remaining frame is shifted earlier by one frame duration, until totally N frames have been skipped.
Advantages of the proposal

- Reduce inter-user playback delay
- Allow the use of long random access period length for improved compression efficiency when RAMS is in use
Thank you

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