

Retransmission for SSM Sessions

draft-vancaenegem-avtcore-retransmission-for-ssm-00

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Tom Van Caenegem, Bill Ver Steeg and Ali C. Begen

Tom.Van_Caenegem@alcatel-lucent.com, {billvs, abegen}@cisco.com

Introduction

- The draft

 - Discusses potential issues when providing RTP retransmissions

 - Presents solutions to avoid unnecessary feedback suppression

 - Addresses congestion control for retransmissions in an SSM environment

- Basic architecture that is considered is from RAMS (RFC 6285) which follows RFC 5760

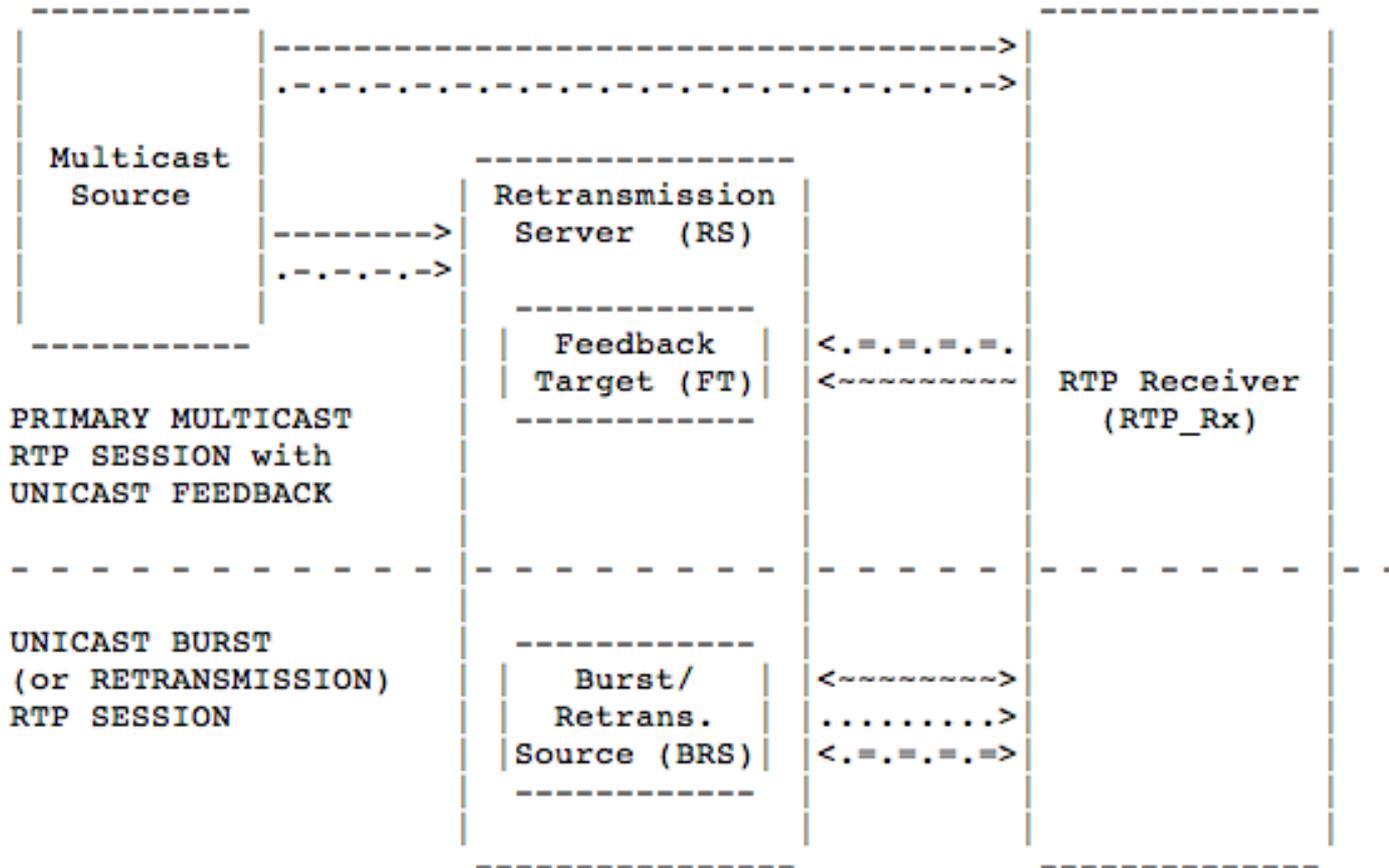
 - With a unicast retransmission session between a Retransmission Server (hosting the Feedback Target) and the RTP receivers

 - Additionally a multicast retransmission session may be present (sourced at Distribution Source or the RS/FT)

- Introduction of Unsolicited Retransmissions

 - A retransmission for which the RS did not receive a NACK (because the NACK was suppressed by the RTP receiver)

Primary SSM and Unicast Retransmission Sessions



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-----> Multicast RTP Flow
...--> Multicast RTCP Flow
.=.=.=> Unicast RTCP Reports
~~~~~> Unicast RTCP Feedback Messages
.....> Unicast RTP Flow
    
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Highlights

- Draft is fully aligned with RFC 6285

Normative reference to RFC 6284 (Port mapping)

- Feedback suppression has a negative impact on retransmission service fulfillment and the draft proposes some means to avoid this drawback

Draft specifies behavior of the FT and DS in terms of handling RTCP NACK messages received from RTP receivers

Draft proposes a new RSI message and/or extension in RAMS-I message as a means to allow for feedback suppression sub-domains when multiple FTs are deployed

Relation to draft-ietf-avtcore-feedback-supression-rtp

- draft-ietf-avtcore-feedback-supression-rtp-04 defines a new RTCP message:
 - Sent by an “intermediate” node, and triggered by an incoming RTCP feedback message, to suppress feedback from other receivers
 - Not constrained to any architecture
- Our draft refers to the “third-party loss report” message
- Proposed Way Forward
 - Trim down the WG draft to the bare essentials in scope with its charter
 - Progress draft-vancaenegem-avtcore-retransmission-for-ssm based on further feedback and suggestions