Post-Repair Loss RLE for RTCP XR

draft-ietf-avt-post-repair-rtcp-xr-00

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Ali C. Begen, Dong Hsu and Michael Lague

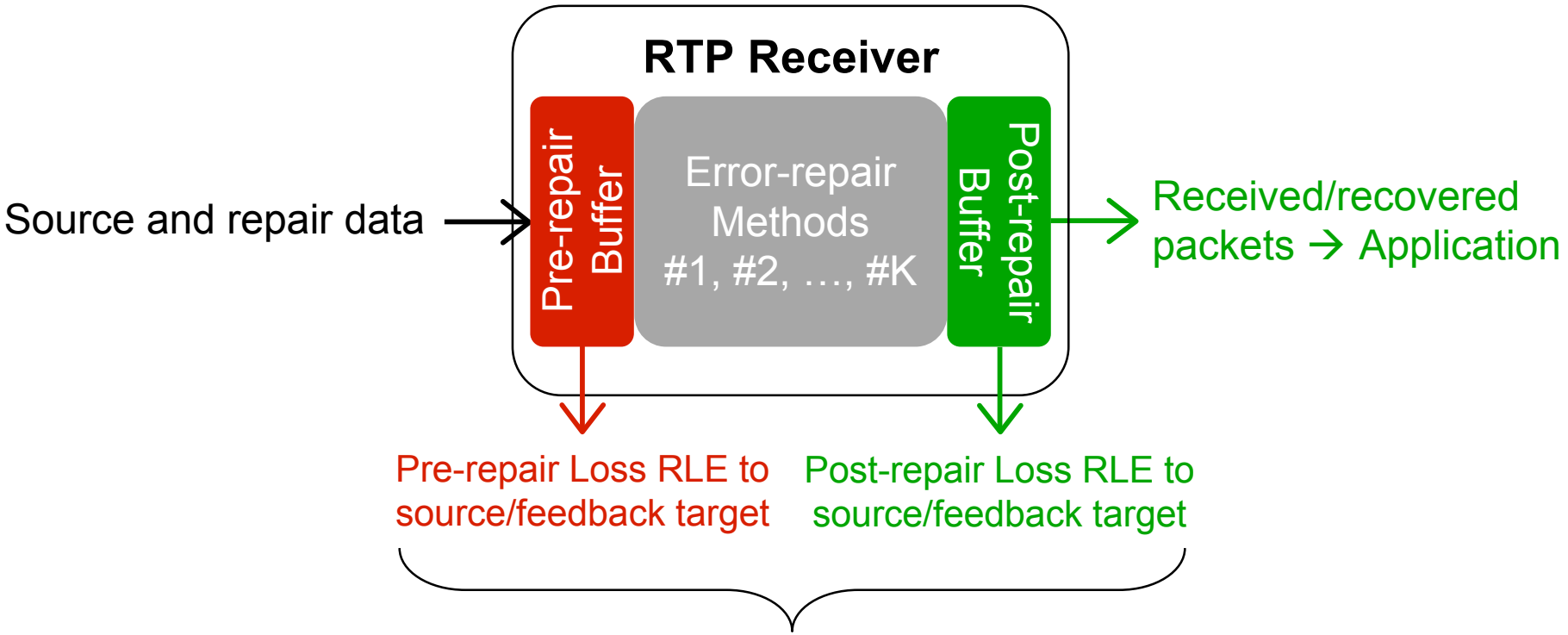
{abegen, dohsu, mlague}@cisco.com

Introduction

- Currently, we have
  - Receiver reports (RR) that carry packet loss rate information
  - Extended reports (XR) that carry loss bitmaps
- These (pre-repair) reports care about the losses before any repair method is applied at the receiver side
- This document
  - Defines a new RTCP XR block type for post-repair loss bitmaps
  - Defines SDP signaling and registers the new block type with IANA

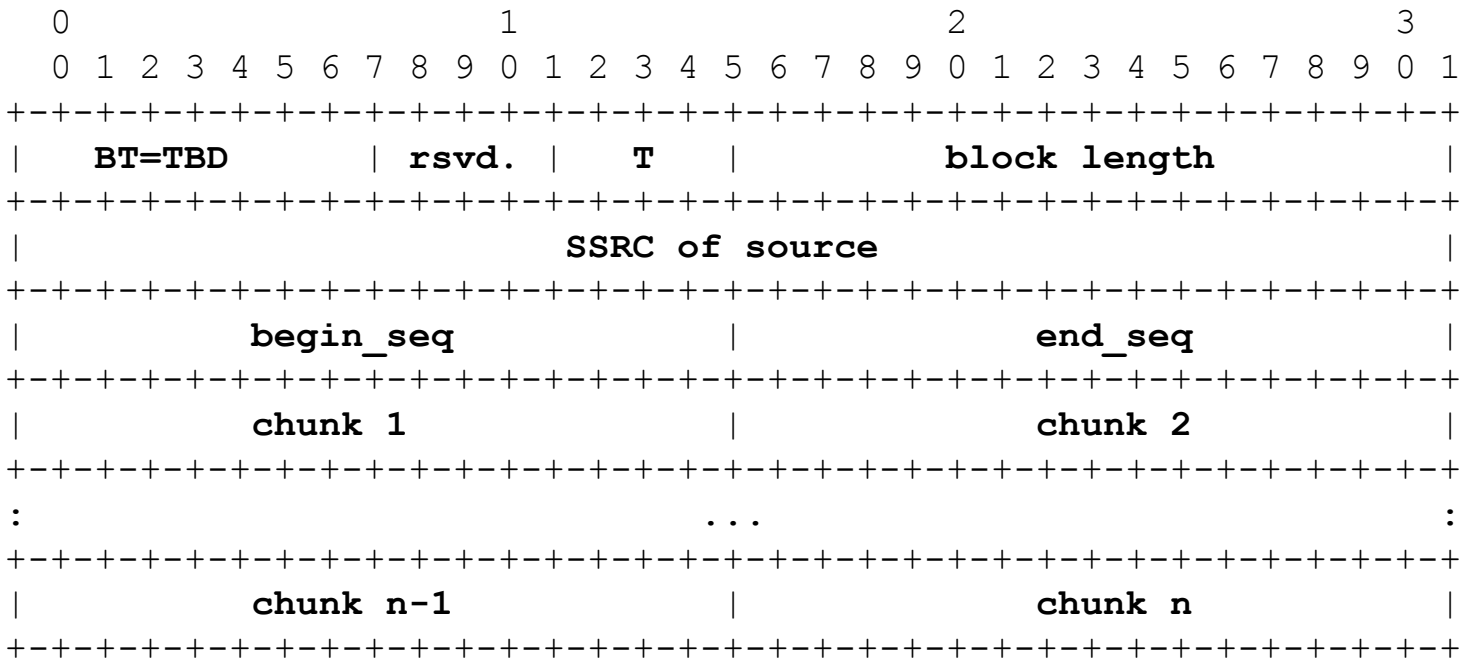
  → By comparing the pre and post-repair loss bitmaps, we can determine the effectiveness of error-repair techniques

Post-Repair Loss RLE Report



The difference tells us the aggregated performance of the error-repair methods

Post-Repair Loss RLE Report Block



- Block type (BT): 8 bits (TBD)
- Thinning (T): 4 bits. 0 indicates that there is no thinning
- Block length: 16 bits
- SSRC of source: 32 bits
- Begin_seq: 16 bits
- End_seq: 16 bits
- Chunk i: 16 bits (as defined in RFC 3611)

SDP Signaling

- The "`rtcp-xr`" attribute is defined in RFC 3611

```
rtcp-xr-attrib = "a=rtcp-xr:"
     [xr-format *(SP xr-format)] CRLF

xr-format = "post-repair-loss-rle" ["=" max-size]

max-size  = 1*DIGIT ; maximum block size in octets
```

Next Steps

- WGLC?