

RSB GStreamer Integration - Bug #2098

First soundchunk determines pipeline delay

11/20/2014 03:07 PM - C. Leichsenring

Status: Closed	Start date: 11/20/2014
Priority: Normal	Due date:
Assignee:	% Done: 0%
Category:	Estimated time: 0.00 hour
Target version:	
Description	
<p>The first soundchunk received introduces a delay to the whole pipeline equal to its own length. This does not go away, even after a timestamp reset through a pause in sending data to the pipeline.</p> <p>I initially thought this phenomenon might be the root of the problem but it is not:</p> <p>gst_rsb_src_base->buffer_number is initialized to 0 but then subsequently starts at 1 because it is incremented at buffer creation time:</p> <pre>GST_BUFFER_OFFSET (temp) = gst_rsb_src_base->buffer_number; GST_BUFFER_OFFSET_END(temp) = ++gst_rsb_src_base->buffer_number;</pre> <p>This leads to problems when the buffer number is used to assess the timestamps for the extrapolate scheduler:</p> <pre>*timestamp = (gst_rsb_src_base->first_event_element_time + (static_cast<guint64>(gst_rsb_src_base->buffer_number) * *duration));</pre> <p>Cf. https://projects.cit-ec.uni-bielefeld.de/issues/4368</p>	

History

#1 - 11/21/2014 05:38 PM - C. Leichsenring

- Subject changed from Buffer number is incongruent to First soundchunk determines pipeline delay

- Description updated

Testing revealed that the error is actually different than I initially thought.

#2 - 11/24/2014 04:16 PM - C. Leichsenring

- Status changed from New to Rejected

Well, the buffer numbering is still odd but since this doesn't have a functional aspect, I'm closing this because "don't care".

#3 - 11/24/2014 04:21 PM - C. Leichsenring

- Status changed from Rejected to Closed

Oh, well, too many tabs and I changed the subject ... since this bug is no longer about the buffer numbering, closing it isn't as straightforward. A fix is in the resume-stream-fix branch. Let's gain some more experience with how this behavior goes and then we can see if and how to change the master behavior.