

Input file downloaded from:

https://drive.google.com/file/d/1FIEM_4gf7yNLipBMcBOKjqxqT406fKLi/view?usp=sharing

h264_1080.mp4

identical patch

---PATCHED-1----

```
static int get_input_packet(InputFile *f, AVPacket **pkt)
{
    if (f->readrate || f->rate_emu) {
        int i;
        int64_t file_start = copy_ts * (
            (f->ctx->start_time != AV_NOPTS_VALUE ? f->ctx->start_time *
!start_at_zero : 0) +
            (f->start_time != AV_NOPTS_VALUE ? f->start_time : 0)
        );
        float scale = f->rate_emu ? 1.0 : f->readrate;
        for (i = 0; i < f->nb_streams; i++) {
            InputStream *ist = input_streams[f->ist_index + i];
            int64_t stream_ts_offset = FFMAX(ist->first_dts != AV_NOPTS_VALUE ? ist->first_dts :
0, file_start);
            int64_t pts = av_rescale(ist->dts, 1000000, AV_TIME_BASE);
            int64_t now = (av_gettime_relative() - ist->start)*scale + stream_ts_offset;
            av_log(NULL, AV_LOG_WARNING, "#%d:%d |nb_packets: %"PRIu64" | pts: %"PRIu64" |now:
%"PRIu64" |decoded: %d |got_output: %d\n", ist->file_index, i, ist->nb_packets, pts, now,
ist->decoding_needed, ist->got_output);
            if (!ist->nb_packets) continue;
            if (pts > now) {
                av_log(NULL, AV_LOG_ERROR, "pts > now, ist->nb_packets = %d\n", ist->nb_packets);
                return AVERROR(EAGAIN);
            }
        }
    }
}
```

---PATCHED-2----

```
static int get_input_packet(InputFile *f, AVPacket **pkt)
{
    if (f->readrate || f->rate_emu) {
        int i;
        int64_t file_start = copy_ts * (
```

```

        (f->ctx->start_time != AV_NOPTS_VALUE ? f->ctx->start_time *
!start_at_zero : 0) +
        (f->start_time != AV_NOPTS_VALUE ? f->start_time : 0)
    );
    float scale = f->rate_emu ? 1.0 : f->readrate;
    for (i = 0; i < f->nb_streams; i++) {
        InputStream *ist = input_streams[f->ist_index + i];
        int64_t stream_ts_offset = FFMAX(ist->first_dts != AV_NOPTS_VALUE ? ist->first_dts :
0, file_start);
        int64_t pts = av_rescale(ist->dts, 1000000, AV_TIME_BASE);
        int64_t now = (av_gettime_relative() - ist->start)*scale + stream_ts_offset;
        av_log(NULL, AV_LOG_WARNING, "#%d:%d |nb_packets: %"PRIu64" | pts: %"PRIu64" |now:
%"PRIu64" |decoded: %d |got_output: %d\n", ist->file_index, i, ist->nb_packets, pts, now,
ist->decoding_needed, ist->got_output);
        if (!ist->nb_packets || (ist->decoding_needed && !ist->got_output)) continue;
        if (pts > now) {
            av_log(NULL, AV_LOG_ERROR, "pts > now, ist->nb_packets = %d\n", ist->nb_packets);
            return AERROR(EAGAIN);
        }
    }
}
}
}

```

(Difference is between line 19 and line 42), and added logs for EAGAIN return.

Decode command:

```
ffmpeg -re -ss 10 -i h264_1080.mp4 -an -vframes 24 -f null - -v 24
```

Results

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(shown till first frame output)

PATCHED-1 Decoded

```

#0:0 |nb_packets: 0 |dts: 0 | pts: 0 |now: 1051 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 1073 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 1 |dts: -73417 | pts: -73417 |now: 1150 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 1156 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 2 |dts: -31708 | pts: -31708 |now: 2876 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 2890 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 3 |dts: 10000 | pts: 10000 |now: 6252 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 3
#0:0 |nb_packets: 3 |dts: 10000 | pts: 10000 |now: 18932 |decoded: 1 |got_output: 0

```

```
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 18991 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 4 |dts: 51708 | pts: 51708 |now: 20072 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 4
#0:0 |nb_packets: 4 |dts: 51708 | pts: 51708 |now: 31367 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 4
#0:0 |nb_packets: 4 |dts: 51708 | pts: 51708 |now: 42099 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 4
#0:0 |nb_packets: 4 |dts: 51708 | pts: 51708 |now: 52602 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 52638 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 5 |dts: 93417 | pts: 93417 |now: 53373 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 5
#0:0 |nb_packets: 5 |dts: 93417 | pts: 93417 |now: 64877 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 5
#0:0 |nb_packets: 5 |dts: 93417 | pts: 93417 |now: 77488 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 5
#0:0 |nb_packets: 5 |dts: 93417 | pts: 93417 |now: 87961 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 5
#0:0 |nb_packets: 5 |dts: 93417 | pts: 93417 |now: 100582 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 100605 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 6 |dts: 135125 | pts: 135125 |now: 101532 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 6
#0:0 |nb_packets: 6 |dts: 135125 | pts: 135125 |now: 114169 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 6
#0:0 |nb_packets: 6 |dts: 135125 | pts: 135125 |now: 124383 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 6
#0:0 |nb_packets: 6 |dts: 135125 | pts: 135125 |now: 137010 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 137056 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 7 |dts: 176833 | pts: 176833 |now: 138176 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 7
#0:0 |nb_packets: 7 |dts: 176833 | pts: 176833 |now: 150360 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 7
#0:0 |nb_packets: 7 |dts: 176833 | pts: 176833 |now: 162965 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 7
#0:0 |nb_packets: 7 |dts: 176833 | pts: 176833 |now: 173729 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 7
#0:0 |nb_packets: 7 |dts: 176833 | pts: 176833 |now: 186382 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 186435 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 8 |dts: 218542 | pts: 218542 |now: 187521 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 8
#0:0 |nb_packets: 8 |dts: 218542 | pts: 218542 |now: 198024 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 8
#0:0 |nb_packets: 8 |dts: 218542 | pts: 218542 |now: 208139 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 8
#0:0 |nb_packets: 8 |dts: 218542 | pts: 218542 |now: 220735 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 220782 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 9 |dts: 260250 | pts: 260250 |now: 221996 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 9
#0:0 |nb_packets: 9 |dts: 260250 | pts: 260250 |now: 234558 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 9
#0:0 |nb_packets: 9 |dts: 260250 | pts: 260250 |now: 244755 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 9
#0:0 |nb_packets: 9 |dts: 260250 | pts: 260250 |now: 255553 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 9
#0:0 |nb_packets: 9 |dts: 260250 | pts: 260250 |now: 268191 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 268264 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 10 |dts: 301958 | pts: 301958 |now: 268513 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 10
```

```

#0:0 |nb_packets: 10 |dts: 301958 | pts: 301958 |now: 279088 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 10
#0:0 |nb_packets: 10 |dts: 301958 | pts: 301958 |now: 291659 |decoded: 1 |got_output: 0
pts > now, ist->nb_packets = 10
#0:0 |nb_packets: 10 |dts: 301958 | pts: 301958 |now: 304279 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 304325 |decoded: 0 |got_output: 0
first time to got frame, it takes 316329 us
#0:0 |nb_packets: 11 |dts: 385375 | pts: 385375 |now: 306790 |decoded: 1 |got_output: 1
pts > now, ist->nb_packets = 11
#0:0 |nb_packets: 11 |dts: 385375 | pts: 385375 |now: 319446 |decoded: 1 |got_output: 1
pts > now, ist->nb_packets = 11

```

It takes 316329 us. Several EAGAIN returns are triggered.

PATCHED-2 Decoded

```

#0:0 |nb_packets: 0 |dts: 0 | pts: 0 |now: 848 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 864 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 1 |dts: -73417 | pts: -73417 |now: 934 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 939 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 2 |dts: -31708 | pts: -31708 |now: 2684 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 2702 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 3 |dts: 10000 | pts: 10000 |now: 6109 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 6123 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 4 |dts: 51708 | pts: 51708 |now: 8993 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 9010 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 5 |dts: 93417 | pts: 93417 |now: 11999 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 12018 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 6 |dts: 135125 | pts: 135125 |now: 14732 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 14746 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 7 |dts: 176833 | pts: 176833 |now: 17402 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 17416 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 8 |dts: 218542 | pts: 218542 |now: 20239 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 20260 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 9 |dts: 260250 | pts: 260250 |now: 22943 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 22962 |decoded: 0 |got_output: 0
#0:0 |nb_packets: 10 |dts: 301958 | pts: 301958 |now: 25760 |decoded: 1 |got_output: 0
#0:1 |nb_packets: 0 |dts: 0 | pts: 0 |now: 25781 |decoded: 0 |got_output: 0
first time to got frame, it takes 38845 us
#0:0 |nb_packets: 11 |dts: 385375 | pts: 385375 |now: 29959 |decoded: 1 |got_output: 1
pts > now, ist->nb_packets = 11
#0:0 |nb_packets: 11 |dts: 385375 | pts: 385375 |now: 42552 |decoded: 1 |got_output: 1
pts > now, ist->nb_packets = 11

```

it takes 38845 us. No time waiting(EAGAIN) is triggered before we got the first frame.

PATCHED-1 Streamcopied

PATCHED-2 Streamcopied

No much difference could be observed, streamcopy is fast enough.