

## #2401 closed defect (fixed)

Opened 3 months ago

Closed 3 months ago

# A Division by zero occurred in function demux\_avi\_read\_packet of libmpdemux/demux\_avi.c

Reported by:	ylzs	Owned by:	beastd
Priority:	normal	Component:	undetermined
Version:	HEAD	Severity:	major
Keywords:		Cc:	
Blocked By:		Blocking:	
Reproduced by developer:	no	Analyzed by developer:	no

## Description

Version: SVN-r38374-13.0.1

Build command: ../configure --disable-ffmpeg\_a && make (compiling with asan)

Summary of the bug: An division by zero is found in function play() which affects mencoder and mplayer The attached file can reproduce this issue (ASAN-recompilation is needed).

How to reproduce:

1.Command: ./mencoder -ovc lavc -oac lavc -o /dev/null ./testcase

./mplayer ./testcase

2.Result:

```
MEncoder SVN-r38374-13.0.1 (C) 2000-2022 MPlayer Team
success: format: 0 data: 0x0 - 0x2aa8
libavformat version 58.29.100 (external)
AVI file format detected.
[aviheader] Video stream found, -vid 0
[aviheader] Audio stream found, -aid 1
AddressSanitizer:DEADLYSIGNAL
=====
==32677==ERROR: AddressSanitizer: FPE on unknown address 0x563dfce77dc4 (pc 0x5
#0 0x563dfce77dc4 in demux_avi_read_packet /home/jlx/good_mplayer/mplayer/1
AddressSanitizer can not provide additional info.
SUMMARY: AddressSanitizer: FPE /home/jlx/good_mplayer/mplayer/libmpdemux/demux_
==32677==ABORTING
```

```
MPlayer SVN-r38374-9 (C) 2000-2022 MPlayer Team

Playing /home/jlx/crashes/id^%000048,sig^%08,src^%000002,time^%8657653,execs^%4
libavformat version 58.29.100 (external)
AVI file format detected.
[aviheader] Video stream found, -vid 0
[aviheader] Audio stream found, -aid 1

MPlayer interrupted by signal 8 in module: demux_open
- MPlayer crashed by bad usage of CPU/FPU/RAM.
```

Recompile MPlayer with --enable-debug and make a 'gdb' backtrace and disassembly. Details in DOCS/HTML/en/bugreports\_what.html#bugreports\_crash.

- MPlayer crashed. This shouldn't happen.

It can be a bug in the MPlayer code or in your drivers or in your gcc version. If you think it's MPlayer's fault, please read DOCS/HTML/en/bugreports.html and follow the instructions there. We can't and won't help unless you provide this information when reporting a possible bug.

Program received signal SIGFPE, Arithmetic exception.

0x00005637aa590311 in demux\_avi\_read\_packet (demux=0x5637ac1247a0, ds=0x5637ac1158  
priv->avi\_audio\_pts=0;

LEGEND: STACK | HEAP | CODE | DATA | RWX | RODATA

[ REGISTERS ]

```
RAX 0x14
RBX 0x16
RCX 0x0
RDX 0x0
RDI 0x5637ac1247a0 -> 0x5637aa7a3c20 (demuxer_desc_avi) -> 0x5637aa754dbc <-
RSI 0x0
R8 0x1
R9 0x1
R10 0x0
R11 0x5637aa592800 (demux_open_hack_avi+240) <- mov    eax, dword ptr [rbx +
R12 0x5637ac1260f0 -> 0x5637ac122480 <- 0x1062773130
R13 0x5637ac1247a0 -> 0x5637aa7a3c20 (demuxer_desc_avi) -> 0x5637aa754dbc <-
R14 0x62773130
R15 0x15
RBP 0x5637ac126050 <- 0x0
RSP 0x7ffc013e54a0 -> 0x5637ac126050 <- 0x0
RIP 0x5637aa590311 (demux_avi_read_packet+657) <- div    ecx
```

[ DISASM ]

```
► 0x5637aa590311 <demux_avi_read_packet+657>    div    ecx
      ↓
0x5637aa590311 <demux_avi_read_packet+657>    div    ecx
```

[ SOURCE (CODE) ]

In file: /home/jlx/good\_mplayer/mplayer/libmpdemux/demux\_avi.c

```
153     pts = priv->audio_block_no *
154         (float)((sh_audio_t*)demux->audio->sh)->audio.dwScale /
155         (float)((sh_audio_t*)demux->audio->sh)->audio.dwRate;
156     } else
157         pts=priv->avi_audio_pts; //+priv->pts_correction;
► 158     priv->avi_audio_pts=0;
159     // update blockcount:
160     priv->audio_block_no+=
161     (len+priv->audio_block_size-1)/priv->audio_block_size;
162     } else
163     if(ds==demux->video){
```

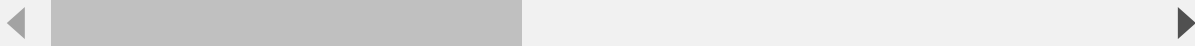
[ STACK ]

```
00:0000 | rsp 0x7ffc013e54a0 -> 0x5637ac126050 <- 0x0
01:0008 |      0x7ffc013e54a8 <- 0xffffffffffffffff
02:0010 |      0x7ffc013e54b0 <- 0x1
03:0018 |      0x7ffc013e54b8 -> 0x5637ac122480 <- 0x1062773130
04:0020 |      0x7ffc013e54c0 -> 0x5637ac1247a0 -> 0x5637aa7a3c20 (demuxer_desc
```

```
05:0028 | 0x7ffc013e54c8 ◀- 0x15
06:0030 | 0x7ffc013e54d0 →▶ 0x5637ac1260f0 →▶ 0x5637ac122480 ◀- 0x10627731
07:0038 | 0x7ffc013e54d8 ◀- 0xffff00000000
```

[ BACKTRACE ]

```
▶ f 0 5637aa590311 demux_avi_read_packet+657
f 1 5637aa591962 demux_avi_fill_buffer+1250
f 2 5637aa584955 ds_fill_buffer+341
f 3 5637aa584955 ds_fill_buffer+341
f 4 5637aa592b1e demux_open_hack_avi+1038
f 5 5637aa592b1e demux_open_hack_avi+1038
f 6 5637aa592b1e demux_open_hack_avi+1038
f 7 5637aa5858f3 demux_open_stream+931
```



## Attachments (1)

- [testcase](#) (10.7 KB) - added by ylzs 3 months ago.

## Change History (2)

by ylzs, 3 months ago

Attachment: [testcase](#) added

comment:1 by reimar, 3 months ago

Resolution: → fixed

Status: new → closed

Fixed by r38386.

**Note:** See [TracTickets](#) for help on using tickets.