

## #2402 closed defect (duplicate)

Opened 3 months ago

Closed 3 months ago

### A Division by zero occurred in function demux\_open\_avi() 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 (last modified by ylzs)

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 demux\_open\_avi () 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:

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

Playing /home/jlx/crashes/id^%000056,sig^%08,src^%001688,time^%14273883,execs^%
libavformat version 58.29.100 (external)
AVI file format detected.
[aviheader] Video stream found, -vid 0
[aviheader] Audio stream found, -aid 1
AVI: No audio stream found -> no sound.

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.
```

```
MEncoder SVN-r38374-13.0.1 (C) 2000-2022 MPlayer Team
success: format: 0 data: 0x0 - 0x2ab4
libavformat version 58.29.100 (external)
AVI file format detected.
[aviheader] Video stream found, -vid 0
[aviheader] Audio stream found, -aid 1
```

```

AVI: No audio stream found -> no sound.
AddressSanitizer:DEADLYSIGNAL
=====
==19160==ERROR: AddressSanitizer: FPE on unknown address 0x55eacc77d2e7 (pc 0x5
    #0 0x55eacc77d2e7 in demux_open_avi /home/jlx/good_mplayer/mplayer/libmpdem
    #1 0x55eacc77d2e7 in demux_open_hack_avi /home/jlx/good_mplayer/mplayer/lib

AddressSanitizer can not provide additional info.
SUMMARY: AddressSanitizer: FPE /home/jlx/good_mplayer/mplayer/libmpdemux/demux_
==19160==ABORTING

```

```

Breakpoint 3, demux_open_avi (demuxer=<optimized out>) at libmpdemux/demux_avi.
571          asamples+=(len+priv->audio_block_size-1)/priv->audio_block_size
LEGEND: STACK | HEAP | CODE | DATA | RWX | RODATA

```

```

[ REGISTERS]
RAX 0x4
RBX 0x55904d5f8d00 -> 0x55904d5f9410 <- 0xe1e1e1e1e1e1
RCX 0x2fb
RDX 0x4
RDI 0x0
RSI 0x55904d5f9440 <- 0x1062773130
R8 0x1
R9 0x0
R10 0x55904d5f9470 <- 0x0
R11 0x0
R12 0x55904d5f73b0 -> 0x55904bcf5ec0 (demuxer_desc_avi) -> 0x55904bccffcc <-
R13 0x55904d5f8c60 <- 0x0
R14 0x55904d5f8d80 -> 0x55904d593400 <- 0x2fb00000000
R15 0x0
RBP 0x4
RSP 0x7fff5a391720 -> 0x55904d593400 <- 0x2fb00000000
RIP 0x55904bb55aa7 (demux_open_hack_avi+1351) <- lea    eax, [rax + r9 - 1]

[ DISASSEMBLY]
> 0x55904bb55aa7 <demux_open_hack_avi+1351>    lea    eax, [rax + r9 - 1]
0x55904bb55aac <demux_open_hack_avi+1356>    xor    edx, edx
0x55904bb55aae <demux_open_hack_avi+1358>    div    r9d
    ↓
0x55904bb55aae <demux_open_hack_avi+1358>    div    r9d

```

```

[ SOURCE CODE]
In file: /home/jlx/good_mplayer/mplayer/libmpdemux/demux_avi.c
566         vsize+=len;
567         ++vsamples;
568     }
569     else if(d_audio->id == id) {
570         asize+=len;
> 571     asamples+=(len+priv->audio_block_size-1)/priv->audio_block_size;
572     }
573 }
574 mp_msg(MSGT_DEMUX, MSGL_V,
575         "AVI video size=%"PRIu64" (%zu) audio size=%"PRIu64" (%zu)\n"
576         vsize, vsamples, asize, asamples);

```

```

[ STACK]
00:0000 | rsp | 0x7fff5a391720 -> 0x55904d593400 <- 0x2fb00000000
01:0008 |     | 0x7fff5a391728 -> 0x55904d5f9430 <- 0x1062773130
02:0010 |     | 0x7fff5a391730 -> 0x55904d5f8c60 <- 0x0
03:0018 |     | 0x7fff5a391738 <- 0xffffffff
04:0020 |     | 0x7fff5a391740 <- 0x62773130ffffffff

```


```
04:0020 0x7fff5a391748 0x588a634aec56d900
05:0028 0x7fff5a391748 ← 0x588a634aec56d900
06:0030 0x7fff5a391750 ← 0xffffffff
07:0038 0x7fff5a391758 → 0x55904bcf5ec0 (demuxer_desc_avi) → 0x55904bcf5ec0 [ BACKTR
```

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```
► f 0 55904bb55aa7 demux_open_hack_avi+1351
f 1 55904bb55aa7 demux_open_hack_avi+1351
f 2 55904bb48743 demux_open_stream+931

f 3 55904bb49231 demux_open+753
f 4 55904bac0642 main+1042
f 5 7f7b8118c0b3 __libc_start_main+243
```

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## Attachments (1)

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

## Change History (3)

by ylzs, 3 months ago

Attachment: [testcase](#) added

comment:1 by ylzs, 3 months ago

Description: modified ([diff](#))

comment:2 by reimar, 3 months ago

Resolution: → duplicate

Status: new → closed

Reported issue is duplicate of [#2401](#) but sample also shows a crash issue fixed in r38389.

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