ffaudio fails to compile with FFmpeg 5.0

February 27, 2022 20:33 - Thomas Lange

Status: Closed
Priority: Minor
Assignee: plugins/ffaudio
Category: plugins/ffaudio
Target version: 4.2
Affects version: 4.1, 4.2

Start date: February 27, 2022
Due date:
% Done: 100%
Estimated time: 0.00 hour

Description
With FFmpeg 5.0 (shipped meanwhile by Arch Linux), some APIs return const pointers now. This causes build failures when using "-fpermissive".

ffaudio-core.cc: In function ‘AVInputFormat*
get_format_by_content(const char*, VFSFile&)’:
ffaudio-core.cc:291:36: error: invalid conversion from ‘const
AVInputFormat*’ to ‘AVInputFormat*’ [-fpermissive]
 291 |          f = av_probe_input_format2 (& d, true, & score);
    |          ~~~~~~~~~~~~~~~~~~~~~~~~~~^~~~~~~~~~~~~~~~~~~~~~~~~~
    |          const AVInputFormat*

ffaudio-core.cc: In function ‘bool find_codec(AVFormatContext*,
CodecInfo*)’:
ffaudio-core.cc:364:52: error: invalid conversion from ‘const
AVCodec*’ to ‘AVCodec*’ [-fpermissive]
 364 |          AVCodec * codec = avcodec_find_decoder
       |          (stream->codecpar->codec_id);
    |          ~~~~~~~~~~~~~~~~~~~~~~~~~~^~~~~~~~~~~~~~~~~~~~~~~~~~
    |          const AVCodec*

Workaround by Arch Linux: https://github.com/archlinux/svntogit-packages/commit/40cc5f012245a25c182afe3cd6ec27056381bbe4

History
#1 - February 27, 2022 20:38 - Thomas Lange

This causes build failures when using "-fpermissive".

Obviously missing a "not"...

#2 - February 28, 2022 16:08 - John Lindgren

Is it enough just to add "const" in our code? Or does that break things with older ffmpeg versions?
#3 - March 01, 2022 01:40 - Thomas Lange

- File ffaudio.diff added

It does not work directly, but we can cast away the "const" for "avformat_open_input[]".
The attached patch compiles with FFmpeg 4.4 and 5.0, tested with/without "export PKG_CONFIG_PATH=/usr/lib/ffmpeg4.4/pkgconfig".

Could you try it on an older distribution and/or Windows as well please?

#4 - March 01, 2022 21:39 - Artem S. Tashkinov

Thomas Lange wrote:

   Could you try it on an older distribution and/or Windows as well please?

Thanks for the patch, works fine with ffmpeg 5.0. Cannot test with ffmpeg 4.4 at the moment.

#5 - March 05, 2022 19:24 - John Lindgren

- % Done changed from 0 to 100
- Target version set to 4.2
- Status changed from New to Closed

This should be fixed in master now.

**Files**

| ffaudio.diff | 2.21 KB | March 01, 2022 | Thomas Lange |