ffaudio fails to compile with FFmpeg 5.0

February 27, 2022 20:33 - Thomas Lange

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?
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

<table>
<thead>
<tr>
<th>File</th>
<th>Size</th>
<th>Date</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>ffaudio.diff</td>
<td>2.21 KB</td>
<td>March 01, 2022</td>
<td>Thomas Lange</td>
</tr>
</tbody>
</table>