Package 'fluidsynth'

October 4, 2024

Type Package
Title Read and Play Digital Music (MIDI)
Version 1.0.2
Description Bindings to 'libfluidsynth' to parse and synthesize MIDI files. It can read MIDI into a data frame, play it on the local audio device, or convert into an audio file.
License MIT + file LICENSE
Encoding UTF-8
RoxygenNote 7.3.1
Imports av, rappdirs
SystemRequirements fluidsynth: fluidsynth-devel (rpm) or libfluidsynth-dev (deb). On Linux you also need a soundfont provided by 'fluid-soundfont-gm' (Fedora) or 'sf3-soundfont-gm' (Debian/Ubuntu)
<pre>URL https://docs.ropensci.org/fluidsynth/</pre>
https://ropensci.r-universe.dev/fluidsynth
BugReports https://github.com/ropensci/fluidsynth/issues
NeedsCompilation yes
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2 fluidsynth_settings

```
fluidsynth_settings Fluidsynth settings
```

Description

Get available settings and their types. See <u>fluidsynth docs</u> for more information on the available options.

Usage

```
fluidsynth_setting_list()
fluidsynth_setting_options(setting)
fluidsynth_setting_default(setting)
libfluidsynth_version()
```

Arguments

setting

string with one of the options listed in fluidsynth_setting_list(), see examples.

Value

a list with available options

References

FluidSynth Settings Reference

See Also

```
Other fluidsynth: midi_play(), soundfonts
```

Examples

```
# List available settings:
fluidsynth_setting_list()
fluidsynth_setting_options('audio.driver')
fluidsynth_setting_default('synth.sample-rate')
```

midi_play 3

midi_play Play or convert a midi file

Description

Play a midi file to your audio device, render it to a file, or parse the raw data. Additional settings can be specified, see fluidsynth_setting_list for available options.

Usage

```
midi_play(
 midi = demo_midi(),
  soundfont = soundfont_path(),
  audio.driver = NULL,
  settings = list(),
  verbose = interactive()
)
midi_convert(
 midi = demo_midi(),
  soundfont = soundfont_path(),
 output = "output.mp3",
  settings = list(),
  verbose = interactive()
)
midi_read(midi = demo_midi(), verbose = FALSE)
demo_midi()
```

Arguments

midi path to the midi file

soundfont path to the soundfont

audio.driver which audio driver to use, see fluidsynth docs

settings a named vector with additional settings from fluidsynth_setting_list()

verbose print some progress status to the terminal

filename of the output. The out

Details

output

The midi_convert function internally uses fluidsynth to generate a raw wav file, and then av::av_audio_convert() to convert into the requested about format. See av::av_muxers() for supported output formats and their corresponding file extension.

You need a soundfont to synthesize midi, see the soundfonts page. On Linux you may also need to specify an audio.driver that works for your hardware, although on recent distributions the defaults generally work.

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Value

midi_read returns data frame with midi events.

See Also

Other fluidsynth: fluidsynth_settings, soundfonts

Examples

```
df <- midi_read(demo_midi())</pre>
```

soundfonts

Managing soundfonts

Description

FluidSynth requires a soundfont to synthesize a midi. On Linux distributions some soundfonts are often preinstalled, though their quality varies. If your midi sounds very poor, try using another soundfont.

Usage

```
soundfont_path(download = FALSE)
soundfont_download()
```

Arguments

download

automatically download soundfont if none exists.

Details

GeneralUser-GS by S. Christian Collins is a nice free soundfont. You can use soundfont_download() to install a copy of this soundbank for use by this package.

Value

the path to a local soundfont to synthesize a midi file.

See Also

Other fluidsynth: fluidsynth_settings, midi_play()

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