Package: fluidsynth (via r-universe)

June 28, 2024

Type Package

Title Read and Play Digital Music (MIDI)

Version 1.0.0

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.

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Encoding UTF-8

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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)

URL <https://docs.ropensci.org/fluidsynth/>

<https://ropensci.r-universe.dev/fluidsynth>

BugReports <https://github.com/ropensci/fluidsynth/issues>

Repository https://ropensci.r-universe.dev

RemoteUrl https://github.com/ropensci/fluidsynth

RemoteRef main

RemoteSha 2c7e4fcb9f8b1e7ec0944ced982ff33d1faecb88

Contents

fluidsynth_settings   *Fluidsynth settings*

Description

Get available settings and their types. See fluidsynth docs 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 | *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
output	filename of the output. The out

Details

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.

Value

midi_read returns data frame with midi events.

See Also

Other fluidsynth: `fluidsynth_settings`, `soundfonts`

Examples

```
df <- midi_read(demo_midi())
```

---

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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