φfmedia

fast media player/recorder/converter

OVERVIEW

fmedia is a fast media player/recorder/converter for Windows, macOS, Linux and FreeBSD.
It provides smooth playback and recording even if devices are very slow.
It's highly customizable and can be easily extended with additional plugins.
Its low CPU & memory consumption saves energy when running on a notebook's battery.

Play or convert audio files, record new audio tracks from microphone, save songs from Internet radio, and much more!
fmedia is free and open-source project, and you can use it as a standalone application or as a library for your own software.

fmedia can decode: .mp3, .ogg (Vorbis, Opus), .opus, .m4a/.mp4 (AAC, ALAC, MPEG), .mka/.mkv (AAC, ALAC, MPEG, Vorbis), .avi (AAC, MPEG), .aac, .mpc, .flac, .ape, .wv, .wav.
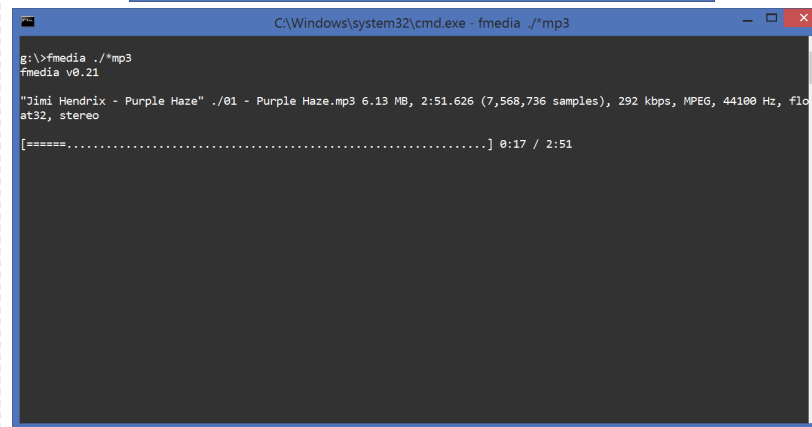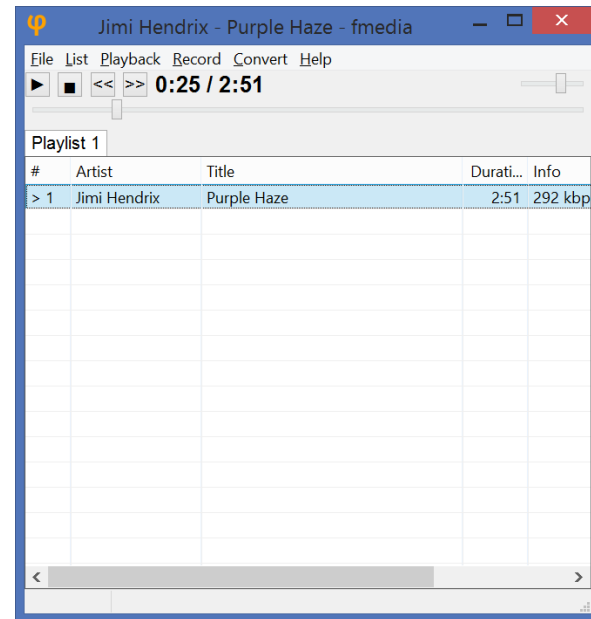
fmedia can encode into: .mp3, .ogg, .opus, .m4a (AAC), .flac, .wav.

You'll find more detailed information about fmedia in README.txt file inside the package.

ARTICLES

- Architecture of fmedia (Apr 14, 2018)
- Audio Formats Comparison (upd. Mar 27, 2017)
- How To Easily Record Sound On Windows And Linux (upd. Feb 13, 2018)
- How To Convert Audio Files (upd. Dec 11, 2016)

SCREENSHOTS

See all screenshots.

DOWNLOAD

Windows x64:
fmedia-1.0.1-win-x64.zip

Windows x86 (32-bit):
fmedia-1.0.1-win-x86.zip

Linux x86-64:
fmedia-1.0.1-linux-amd64.tar.xz

Linux i686 (32-bit):
fmedia-0.31-linux-i686.tar.xz

FreeBSD amd64:
fmedia-0.30.2-bsd-amd64.tar.xz

Mac OS X amd64:
fmedia-1.0-macos-amd64.zip

Self-contained. fmedia uses modified versions of 3rd party libraries: libALAC, libfdk-aac, libFLAC, libMAC, libmp3lame, libmpg123, libmpc, libogg, libopus, libsoxr, libvorbisenc, libvorbis, libwavpack, libDynamicAudioNormalizer. Everything is inside the package, so no additional dependencies are required to be installed on your system.

Portable. No installation, just uncompress the package anywhere you want!

Open-source. You can download the sourcecode from here:
https://github.com/stsaz/fmedia

CHANGES

```
fmedia v1.0.1 - Sep 17, 2018

 - .m4a write: fix segfault (v1.0 bug)
 - gui: tray icon disappeared (v1.0 bug)


fmedia v1.0 - Sep 10, 2018

 + macOS: CoreAudio playback & capture
 + delay modules loading (alac ape avi mkv mp4 mpc soxr wav wavpack)
 + --stop-dblevel=DB[;TIME][;MINTIME] - If MINTIME is specified,
   stop only after MINTIME time has passed
 - file: windows: reading from EOF position doesn't result in an error
```

INSTALL ON WINDOWS

1. Unpack archive to the directory of your choice, e.g. to "C:\Program Files\fmedia"

   - Right click on fmedia package file (e.g. `fmedia-1.0-win-x64.zip`) in Explorer
   - Choose "Extract All..." in the popup menu
   - Follow the Wizard steps

2. Optionally, run the following command from console (cmd.exe):

   ```
   "C:\Program Files\fmedia\fmedia.exe" --install
   ```

   This command will:

   - add fmedia directory into user's environment
   - create a desktop shortcut to `fmedia-gui.exe`

3. Run `fmedia-gui.exe` to open graphical interface; or execute commands via `fmedia.exe` from console (cmd.exe).

INSTALL ON LINUX

1. Unpack archive to the directory of your choice, e.g. to `/usr/local/fmedia-1`:

   ```
   tar Jxf ./fmedia-1.0-linux-amd64.tar.xz -C /usr/local
   ```

2. Optionally, create a symbolic link:

   ```
   ln -s /usr/local/fmedia-1/fmedia /usr/local/bin/fmedia
   ```

FEATURES

fmedia consists of many different modules that are joined together in a chain (or conveyer) to get things done. After the user issues a command to fmedia, the core module builds the chain of modules needed to perform the task and then starts the conveyer. The processing moves back and forth between the modules until the job is done.

Here's the diagram that describes fmedia's abilities:

INPUT

- File
- Directory
- ICY
- WASAPI
- Windows Direct Sound
- ALSA
- CoreAudio

FORMATS

Multimedia:

- .mp4/.m4a
- .mkv/.mka
- .avi

Audio:

- .ogg/.opus
- .mp3
- .aac
- .mpc
- .flac
- .ape
- .wv
- .wav

Playlists:

- .m3u/.m3u8
- .pls
- .cue

DECODERS

Lossy:

- MPEG
- Vorbis
- Opus
- AAC LC/HE/HEv2
- Musepack

Lossless:

- FLAC
- ALAC
- WavPack
- APE

PROCE

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USE-CASES

Note the difference between UNIX and Windows terminals when you use special characters and spaces:

- Use single quotes ('') on Linux (sh, bash), e.g.:

```
fmedia './my file.ogg'
fmedia file.wav -o '$filename.ogg'
```

- Use double quotes ("") on Windows (cmd.exe), e.g.:

```
fmedia "./my file.ogg"
```

PLAY

Play files, directories, Internet-radio streams

```
fmedia ./file.ogg ./*.mp3
fmedia ./Music
fmedia http://radio-stream:80/
```

Play (mix) multiple streams simultaneously

```
fmedia --mix ./file1.ogg ./file2.ogg
```

Play wav file with a corrupted header

```
fmedia ./file.raw --fseek=44
```

CONVERT

Convert with parameters

```
fmedia ./file.ogg --out=./file.wav --format=int16
fmedia ./file.wav --out=./file.ogg --vorbis.quality=7.0
fmedia ./file.wav --out=./file.mp3 --mpeg-quality=0 --rate=48000
```

Convert all .wav files from the current directory to .ogg

```
fmedia ./*.wav --out=.ogg
```

Convert file and override meta info

```
fmedia ./file.flac --out=.ogg --meta='artist=Artist Name;comment=My Comment'
```

Extract several tracks from .cue file

```
fmedia ./album.flac.cue --track=3,7,13 --out='$tracknumber. $artist - $title.flac'
```

Split audio file

```
fmedia ./file.wav --seek=00:35 --until=01:35 --out=./file-1.wav
```

Cut compressed audio without re-encoding

```
fmedia ./file.ogg --out=./out.ogg --seek=1:00 --until=2:00 --stream-copy
```

Copy left channel's audio from a stereo source

```
fmedia ./stereo.ogg -o left.wav --channels=left
```

Change sound volume in an audio file

```
fmedia --gain=5.0 ./file.wav --out=./file-loud.wav
```

RECORD

Capture audio from the default audio input device until stopped

```
fmedia --record --out=rec.flac
```

Record with the specific audio format

```
fmedia --record -o rec.wav --format=int24 --channels=mono --rate=48000
```

Record for 60 seconds then stop

```
fmedia --record --out=rec.flac --until=60
```

Record while playing

```
fmedia ./file.ogg --record --out=./rec.wav
```

Live output

```
fmedia --record
```

Record audio from Internet radio (without re-encoding)

```
fmedia http://radio-stream:80/ -o ./radio.mp3 --stream-copy
```

Play AND record audio from Internet radio into separate files (without re-encoding)

```
fmedia http://radio-stream:80/ --out-copy -o './$time. $artist - $title.mp3' --strea
```

OTHER FUNCTIONS

Print audio meta info

```
fmedia --info ./file.mp3
```

Print audio meta info and all tags

```
fmedia --info --tags ./file.mp3
```

Show PCM information

```
fmedia input.ogg --pcm-peaks
```

FEEDBACK

Please report bugs to stsaz [at] yandex.ru. Your suggestions and source code patches are also greatly appreciated.