

FFMPEG

A Real-Time Open-Source Multimedia System

Carlos Castillo

- An open source project - <http://www.ffmpeg.org>
 - LGPL/GPL
 - Written in (portable) C
 - Enhancements in assembly (MMX,3DNow!,SSE,Altivec)
 - No proprietary code
 - Works in Linux, Unix, Mac OS X, and Windows
 - Very Fast (Real-time DVD Encoding to MPEG4/MP3)

- 3 Main Programs
 - Playback (Decoding) - FFPLAY
 - Transcoding - FFMPEG
 - Streaming - FFSERVER
- 2 Main Libraries
 - Decoding & Encoding Container Formats - LIBAVFORMAT
 - Decoding & Encoding Media Streams - LIBAVCODEC

What Formats does it support?

FFMPEG

MPEG audio	Raw MPEG4 video
MPEG-1 systems	DV
MPEG-2 PS	4xm
MPEG-2 TS	Playstation STR
ASF	Id RoQ
AVI	Interplay MVE
WAV	WC3 Movie
Macromedia Flash	Sega FILM/CPK
FLV	Westwood Studios VQA/AUD
Real Audio and Video	Id Cinematic (.cin)
Raw AC3	FLIC format
Raw MJPEG	Sierra VMD
Raw MPEG video	Sierra Online
Raw PCM8/16 bits, mulaw/Alaw	Matroska
Raw CRI ADX audio	Electronic Arts Multimedia
Raw Shorten audio	Nullsoft Video (NSV) format
SUN AU format	ADTS AAC audio
NUT	Creative VOC
QuickTime	American Laser Games MM
MPEG-4	AVS

What Codecs does it support?

FFMPEG

MPEG 1,2,4
MSMPEG4 V1,V2,V3
DivX / XviD
MJPEG - Many Forms
H.261,H.263,H.264!
On2VP3*/Theora
Quicktime Codecs * (Sorenson,Cinepak,etc...)
DirectShow Codecs * (MSVideo, MSRLE)
Indeo Video *
Windows Media Video * V7, V8
Real Video *
....

MPEG Layer 1/2/3 Audio
AC3 Audio
Vorbis Audio
Windows Media Audio *
MPEG 4 AAC
Many versions of IMA ADPCM
PCM Audio
Real Audio *
FLAC *
Shorten *
...

*** Indicates Decoding Only**

! Recent encoding addition

- Unix / Linux
 - MPlayer / MEncoder
 - VLC
 - Xine
 - GStreamer
- Mac OS X / Quicktime
 - FFusion
- Windows / DirectShow
 - FFdshow
- JMF
 - FOBS4JMF
- Many open-source projects