

# 最简单的基于FFMPEG的Helloworld程序

2015年07月17日 10:43:41 阅读数：19588

最简单的基于FFmpeg的视频播放器系列文章列表：

[100行代码实现最简单的基于FFMPEG+SDL的视频播放器（SDL1.x）](#)

[最简单的基于FFMPEG+SDL的视频播放器 ver2（采用SDL2.0）](#)

[最简单的基于FFmpeg的解码器-纯净版（不包含libavformat）](#)

[最简单的基于FFMPEG+SDL的视频播放器：拆分-解码器和播放器](#)

[最简单的基于FFMPEG的Helloworld程序](#)

本文记录一个基于FFmpeg的HelloWorld程序。该程序可以打印出FFmpeg类库的基本信息。使用该程序通常可以验证FFmpeg是否正确的安装配置。

## 源代码

```
[cpp]
1.  /**
2.   * 最简单的FFmpeg Helloworld程序
3.   * Simplest FFmpeg HelloWorld
4.   *
5.   * 雷霄骕 Lei Xiaohua
6.   * leixiaohua1020@126.com
7.   * 中国传媒大学/数字电视技术
8.   * Communication University of China / Digital TV Technology
9.   * http://blog.csdn.net/leixiaohua1020
10.  *
11.  *
12.  * 本程序是基于FFmpeg函数的最简单的程序。它可以打印出FFmpeg类库的下列信息：
13.  * Protocol:   FFmpeg类库支持的协议
14.  * AVFormat:   FFmpeg类库支持的封装格式
15.  * AVCodec:    FFmpeg类库支持的编解码器
16.  * AVFilter:   FFmpeg类库支持的滤镜
17.  * Configure:  FFmpeg类库的配置信息
18.  *
19.  * This is the simplest program based on FFmpeg API. It can show following
20.  * informations about FFmpeg library:
21.  * Protocol:   Protocols supported by FFmpeg.
22.  * AVFormat:   Container format supported by FFmpeg.
23.  * AVCodec:    Encoder/Decoder supported by FFmpeg.
24.  * AVFilter:   Filters supported by FFmpeg.
25.  * Configure:  configure information of FFmpeg.
26.  *
27.  */
28.
29. #include <stdio.h>
30.
31. #define __STDC_CONSTANT_MACROS
32.
33. #ifdef _WIN32
34. //Windows
35. extern "C"
36. {
37. #include "libavcodec/avcodec.h"
38. #include "libavformat/avformat.h"
39. #include "libavfilter/avfilter.h"
40. };
41. #else
42. //Linux...
43. #ifdef __cplusplus
44. extern "C"
45. {
46. #endif
47. #include <libavcodec/avcodec.h>
48. #include <libavformat/avformat.h>
49. #include <libavfilter/avfilter.h>
50. #ifdef __cplusplus
51. };
```

```

52. #endif
53. #endif
54.
55. //FIX
56. struct URLProtocol;
57. /**
58.  * Protocol Support Information
59.  */
60. char * urlprotocolinfo(){
61.
62.     char *info=(char *)malloc(40000);
63.     memset(info,0,40000);
64.
65.     av_register_all();
66.
67.     struct URLProtocol *pup = NULL;
68.     //Input
69.     struct URLProtocol **p_temp = &pup;
70.     avio_enum_protocols((void **)p_temp, 0);
71.     while ((*p_temp) != NULL){
72.         sprintf(info, "%s[In ][%10s]\n", info, avio_enum_protocols((void **)p_temp, 0));
73.     }
74.     pup = NULL;
75.     //Output
76.     avio_enum_protocols((void **)p_temp, 1);
77.     while ((*p_temp) != NULL){
78.         sprintf(info, "%s[Out][%10s]\n", info, avio_enum_protocols((void **)p_temp, 1));
79.     }
80.
81.     return info;
82. }
83.
84. /**
85.  * AVFormat Support Information
86.  */
87. char * avformatinfo(){
88.
89.     char *info=(char *)malloc(40000);
90.     memset(info,0,40000);
91.
92.     av_register_all();
93.
94.     AVInputFormat *if_temp = av_iformat_next(NULL);
95.     AVOutputFormat *of_temp = av_oformat_next(NULL);
96.     //Input
97.     while(if_temp!=NULL){
98.         sprintf(info, "%s[In ] %10s\n", info, if_temp->name);
99.         if_temp=if_temp->next;
100.    }
101.    //Output
102.    while (of_temp != NULL){
103.        sprintf(info, "%s[Out] %10s\n", info, of_temp->name);
104.        of_temp = of_temp->next;
105.    }
106.    return info;
107. }
108.
109. /**
110.  * AVCodec Support Information
111.  */
112. char * avcodecinfo()
113. {
114.     char *info=(char *)malloc(40000);
115.     memset(info,0,40000);
116.
117.     av_register_all();
118.
119.     AVCodec *c_temp = av_codec_next(NULL);
120.
121.     while(c_temp!=NULL){
122.         if (c_temp->decode!=NULL){
123.             sprintf(info, "%s[Dec]", info);
124.         }
125.         else{
126.             sprintf(info, "%s[Enc]", info);
127.         }
128.         switch (c_temp->type){
129.             case AVMEDIA_TYPE_VIDEO:
130.                 sprintf(info, "%s[Video]", info);
131.                 break;
132.             case AVMEDIA_TYPE_AUDIO:
133.                 sprintf(info, "%s[Audio]", info);
134.                 break;
135.             default:
136.                 sprintf(info, "%s[Other]", info);
137.                 break;
138.         }
139.
140.         sprintf(info, "%s %10s\n", info, c_temp->name);
141.
142.         c_temp=c_temp->next;

```

```

143.     }
144.     return info;
145. }
146.
147. /**
148.  * AVFilter Support Information
149.  */
150. char * avfilterinfo()
151. {
152.     char *info=(char *)malloc(40000);
153.     memset(info,0,40000);
154.
155.     avfilter_register_all();
156.
157.     AVFilter *f_temp = (AVFilter *)avfilter_next(NULL);
158.
159.     while (f_temp != NULL){
160.         sprintf(info, "%s[%15s]\n", info, f_temp->name);
161.         f_temp=f_temp->next;
162.     }
163.     return info;
164. }
165.
166. /**
167.  * Configuration Information
168.  */
169. char * configurationinfo()
170. {
171.     char *info=(char *)malloc(40000);
172.     memset(info,0,40000);
173.
174.     av_register_all();
175.
176.     sprintf(info, "%s\n", avcodec_configuration());
177.
178.     return info;
179. }
180.
181. int main(int argc, char* argv[])
182. {
183.     char *infostr=NULL;
184.     infostr=configurationinfo();
185.     printf("\n<<Configuration>>\n%s",infostr);
186.     free(infostr);
187.
188.     infostr=urlprotocolinfo();
189.     printf("\n<<URLProtocol>>\n%s",infostr);
190.     free(infostr);
191.
192.     infostr=avformatinfo();
193.     printf("\n<<AVFormat>>\n%s",infostr);
194.     free(infostr);
195.
196.     infostr=avcodecinfo();
197.     printf("\n<<AVCodec>>\n%s",infostr);
198.     free(infostr);
199.
200.     infostr=avfilterinfo();
201.     printf("\n<<AVFilter>>\n%s",infostr);
202.     free(infostr);
203.
204.     return 0;
205. }

```

## 运行结果

Configure信息格式如下所示。

```

[plain]
1.  --disable-static --enable-shared --enable-gpl --enable-version3 --disable-w32threads --enable-avisynth --enable-bzlib --enable-fontc
onfig --enable-frei0r --enable-gnutls --enable-iconv --enable-libass --enable-libbluray --enable-libcaca --enable-libfreetype --
enable-libgsm --enable-libilbc --enable-libmodplug --enable-libmp3lame --enable-libopencore-amrnb --enable-libopencore-amrwb --enab
le-libopenjpeg --enable-libopus --enable-librtmp --enable-libschrödinger --enable-libsoxr --enable-libspeex --enable-libtheora --en
able-libtwolame --enable-libvidstab --enable-libvo-aacenc --enable-libvo-amrwbenc --enable-libvorbis --enable-libvpx --enable-libwav
pack --enable-libx264 --enable-libx265 --enable-libxavs --enable-libxvid --enable-decklink --enable-zlib

```

Protocol信息格式如下所示。

	[plain]		
1.	[In ]	cache	
2.	[In ]	concat	
3.	[In ]	crypto	
4.	[In ]	data	
5.	[In ]	file	
6.	[In ]	ftp	
7.	[In ]	gopher	
8.	[In ]	hls	
9.	[In ]	http	
10.	[In ]	httpproxy	
11.	[In ]	https	
12.	[In ]	mms	
13.	[In ]	mmst	
14.	[In ]	pipe	
15.	[In ]	rtp	
16.	[In ]	srtsp	
17.	[In ]	subfile	
18.	[In ]	tcp	
19.	[In ]	tls	
20.	[In ]	udp	
21.	[In ]	rtmp	
22.	[In ]	rtmpe	
23.	[In ]	rtmps	
24.	[In ]	rtmpt	
25.	[In ]	rtmpte	
26.	[In ]	(null)	
27.	[Out]	ftp	
28.	[Out]	gopher	
29.	[Out]	http	
30.	[Out]	httpproxy	
31.	[Out]	https	
32.	[Out]	md5	
33.	[Out]	pipe	
34.	[Out]	rtp	
35.	[Out]	srtsp	
36.	[Out]	tcp	
37.	[Out]	tls	
38.	[Out]	udp	
39.	[Out]	rtmp	
40.	[Out]	rtmpe	
41.	[Out]	rtmps	
42.	[Out]	rtmpt	
43.	[Out]	rtmpte	
44.	[Out]	(null)	

AVFormat信息格式如下所示。

	[plain]		
1.	[In ]	aac	
2.	[In ]	ac3	
3.	[In ]	act	
4.	[In ]	adf	
5.	[In ]	adp	
6.	[In ]	adx	
7.	[In ]	aea	
8.	[In ]	afc	
9.	[In ]	aiff	
10.	[In ]	amr	
11.	[In ]	anm	
12.	[In ]	apc	
13.	[In ]	ape	
14.	[In ]	aqtitle	
15.	[In ]	asf	
16.	[In ]	ass	
17.	[In ]	ast	
18.	[In ]	au	
19.	[In ]	avi	
20.	[In ]	avisynth	
21.	[In ]	avr	
22.	[In ]	avs	
23.	[In ]	bethsoftvid	
24.	[In ]	bfi	
25.	[In ]	bin	
26.	[In ]	bink	
27.	[In ]	bit	
28.	[In ]	bm	
29.	[In ]	brstm	
30.	[In ]	boa	
31.	[In ]	c93	
32.	[In ]	caf	
33.	[In ]	cavsvideo	
34.	[In ]	cdg	
35.	[In ]	cdxl	
36.	[In ]	cine	
37.	[In ]	concat	
38.	[In ]	data	



39.	[In ]	daud
40.	[In ]	dfa
41.	[In ]	dirac
42.	[In ]	dnxhd
43.	[In ]	dsf
44.	[In ]	dsicin
45.	[In ]	dtc
46.	[In ]	dtshd
47.	[In ]	dv
48.	[In ]	dxa
49.	[In ]	ea
50.	[In ]	ea_cdata
51.	[In ]	eac3
52.	[In ]	epaf
53.	[In ]	ffm
54.	[In ]	ffmetadata
55.	[In ]	filmstrip
56.	[In ]	flac
57.	[In ]	flic
58.	[In ]	flv
59.	[In ]	4xm
60.	[In ]	frm
61.	[In ]	g722
62.	[In ]	g723_1
63.	[In ]	g729
64.	[In ]	gif
65.	[In ]	gsm
66.	[In ]	gxf
67.	[In ]	h261
68.	[In ]	h263
69.	[In ]	h264
70.	[In ]	hevc
71.	[In ]	hls,applehttp
72.	[In ]	hnm
73.	[In ]	ico
74.	[In ]	idcin
75.	[In ]	idf
76.	[In ]	iff
77.	[In ]	ilbc
78.	[In ]	image2
79.	[In ]	image2pipe
80.	[In ]	alias_pix
81.	[In ]	brender_pix
82.	[In ]	ingenient
83.	[In ]	ipmovie
84.	[In ]	ircam
85.	[In ]	iss
86.	[In ]	iv8
87.	[In ]	ivf
88.	[In ]	jacosub
89.	[In ]	qv
90.	[In ]	latm
91.	[In ]	lmlm4
92.	[In ]	loas
93.	[In ]	lvf
94.	[In ]	lxf
95.	[In ]	m4v
96.	[In ]	matroska,webm
97.	[In ]	mgsts
98.	[In ]	microdvd
99.	[In ]	mjpeg
100.	[In ]	mlp
101.	[In ]	mlv
102.	[In ]	mm
103.	[In ]	mmf
104.	[In ]	mov,mp4,m4a,3gp,3g2,mj2
105.	[In ]	mp3
106.	[In ]	mpc
107.	[In ]	mpc8
108.	[In ]	mpeg
109.	[In ]	mpegts
110.	[In ]	mpegtsraw
111.	[In ]	mpegvideo
112.	[In ]	mpl2
113.	[In ]	mpsub
114.	[In ]	msnwctcp
115.	[In ]	mtv
116.	[In ]	mv
117.	[In ]	mvi
118.	[In ]	mxf
119.	[In ]	mxg
120.	[In ]	nc
121.	[In ]	nistsphere
122.	[In ]	nsv
123.	[In ]	nut
124.	[In ]	nuv
125.	[In ]	ogg
126.	[In ]	oma
127.	[In ]	paf
128.	[In ]	alaw
129.	[In ]	mulaw

130.	[In ]	f64be
131.	[In ]	f64le
132.	[In ]	f32be
133.	[In ]	f32le
134.	[In ]	s32be
135.	[In ]	s32le
136.	[In ]	s24be
137.	[In ]	s24le
138.	[In ]	s16be
139.	[In ]	s16le
140.	[In ]	s8
141.	[In ]	u32be
142.	[In ]	u32le
143.	[In ]	u24be
144.	[In ]	u24le
145.	[In ]	u16be
146.	[In ]	u16le
147.	[In ]	u8
148.	[In ]	pjs
149.	[In ]	pmp
150.	[In ]	pva
151.	[In ]	pvf
152.	[In ]	qcp
153.	[In ]	r3d
154.	[In ]	rawvideo
155.	[In ]	realtext
156.	[In ]	redspark
157.	[In ]	rl2
158.	[In ]	rm
159.	[In ]	roq
160.	[In ]	rpl
161.	[In ]	rsd
162.	[In ]	rso
163.	[In ]	rtp
164.	[In ]	rtsp
165.	[In ]	sami
166.	[In ]	sap
167.	[In ]	sbg
168.	[In ]	sdp
169.	[In ]	sdr2
170.	[In ]	film_cpk
171.	[In ]	shn
172.	[In ]	siff
173.	[In ]	smk
174.	[In ]	smjpeg
175.	[In ]	smush
176.	[In ]	sol
177.	[In ]	sox
178.	[In ]	spdif
179.	[In ]	srt
180.	[In ]	psxstr
181.	[In ]	subviewer1
182.	[In ]	subviewer
183.	[In ]	swf
184.	[In ]	tak
185.	[In ]	tedcaptions
186.	[In ]	thp
187.	[In ]	tiertexseq
188.	[In ]	tmv
189.	[In ]	truehd
190.	[In ]	tta
191.	[In ]	txd
192.	[In ]	tty
193.	[In ]	vc1
194.	[In ]	vc1test
195.	[In ]	vivo
196.	[In ]	vmd
197.	[In ]	vobsub
198.	[In ]	voc
199.	[In ]	vplayer
200.	[In ]	vqf
201.	[In ]	w64
202.	[In ]	wav
203.	[In ]	wc3movie
204.	[In ]	webvtt
205.	[In ]	wsaud
206.	[In ]	wsvqa
207.	[In ]	wtv
208.	[In ]	wv
209.	[In ]	xa
210.	[In ]	xbin
211.	[In ]	xmv
212.	[In ]	xwma
213.	[In ]	yop
214.	[In ]	yuv4mpegpipe
215.	[In ]	libmodplug
216.	[Out]	a64
217.	[Out]	ac3
218.	[Out]	adts
219.	[Out]	adx
220.	[Out]	aiff

221. [Out] amr  
222. [Out] asf  
223. [Out] ass  
224. [Out] ast  
225. [Out] asf\_stream  
226. [Out] au  
227. [Out] avi  
228. [Out] avm2  
229. [Out] bit  
230. [Out] caf  
231. [Out] cavsvideo  
232. [Out] crc  
233. [Out] data  
234. [Out] daud  
235. [Out] dirac  
236. [Out] dnxhd  
237. [Out] dts  
238. [Out] dv  
239. [Out] eac3  
240. [Out] f4v  
241. [Out] ffm  
242. [Out] ffmetadata  
243. [Out] filmstrip  
244. [Out] flac  
245. [Out] flv  
246. [Out] framecrc  
247. [Out] framemd5  
248. [Out] g722  
249. [Out] g723\_1  
250. [Out] gif  
251. [Out] gxf  
252. [Out] h261  
253. [Out] h263  
254. [Out] h264  
255. [Out] hds  
256. [Out] hevc  
257. [Out] hls  
258. [Out] ico  
259. [Out] ilbc  
260. [Out] image2  
261. [Out] image2pipe  
262. [Out] ipod  
263. [Out] ircam  
264. [Out] ismv  
265. [Out] ivf  
266. [Out] jacosub  
267. [Out] latm  
268. [Out] m4v  
269. [Out] md5  
270. [Out] matroska  
271. [Out] matroska  
272. [Out] microdvd  
273. [Out] mjpeg  
274. [Out] mlp  
275. [Out] mmf  
276. [Out] mov  
277. [Out] mp2  
278. [Out] mp3  
279. [Out] mp4  
280. [Out] mpeg  
281. [Out] vcd  
282. [Out] mpeg1video  
283. [Out] dvd  
284. [Out] svcd  
285. [Out] mpeg2video  
286. [Out] vob  
287. [Out] mpegts  
288. [Out] mpjpeg  
289. [Out] mxp  
290. [Out] mxf\_d10  
291. [Out] null  
292. [Out] nut  
293. [Out] oga  
294. [Out] ogg  
295. [Out] oma  
296. [Out] opus  
297. [Out] alaw  
298. [Out] mulaw  
299. [Out] f64be  
300. [Out] f64le  
301. [Out] f32be  
302. [Out] f32le  
303. [Out] s32be  
304. [Out] s32le  
305. [Out] s24be  
306. [Out] s24le  
307. [Out] s16be  
308. [Out] s16le  
309. [Out] s8  
310. [Out] u32be  
311. [Out] u32le  
312. [Out] u24be

312.	[Out]	u24ve
313.	[Out]	u24le
314.	[Out]	u16be
315.	[Out]	u16le
316.	[Out]	u8
317.	[Out]	psp
318.	[Out]	rawvideo
319.	[Out]	rm
320.	[Out]	roq
321.	[Out]	rso
322.	[Out]	rtp
323.	[Out]	rtsp
324.	[Out]	sap
325.	[Out]	segment
326.	[Out]	stream_segment,ssegment
327.	[Out]	smjpeg
328.	[Out]	smoothstreaming
329.	[Out]	sox
330.	[Out]	spdif
331.	[Out]	speex
332.	[Out]	srt
333.	[Out]	swf
334.	[Out]	tee
335.	[Out]	3g2
336.	[Out]	3gp
337.	[Out]	mkvtimestamp_v2
338.	[Out]	truehd
339.	[Out]	uncodedframecrc
340.	[Out]	vc1
341.	[Out]	vc1test
342.	[Out]	voc
343.	[Out]	w64
344.	[Out]	wav
345.	[Out]	webm
346.	[Out]	webvtt
347.	[Out]	wtv
348.	[Out]	wv
349.	[Out]	yuv4mpegpipe

AVCodec信息格式如下所示。

	[plain]  
1.	[Enc][Video] a64multi
2.	[Enc][Video] a64multi5
3.	[Dec][Video] aasc
4.	[Dec][Video] aic
5.	[Enc][Video] alias_pix
6.	[Dec][Video] alias_pix
7.	[Enc][Video] amv
8.	[Dec][Video] amv
9.	[Dec][Video] anm
10.	[Dec][Video] ansi
11.	[Enc][Video] asv1
12.	[Dec][Video] asv1
13.	[Enc][Video] asv2
14.	[Dec][Video] asv2
15.	[Dec][Video] aura
16.	[Dec][Video] aura2
17.	[Enc][Video] avrp
18.	[Dec][Video] avrp
19.	[Dec][Video] avrn
20.	[Dec][Video] avs
21.	[Enc][Video] avui
22.	[Dec][Video] avui
23.	[Enc][Video] ayuv
24.	[Dec][Video] ayuv
25.	[Dec][Video] bethsoftvid
26.	[Dec][Video] bfi
27.	[Dec][Video] binkvideo
28.	[Enc][Video] bmp
29.	[Dec][Video] bmp
30.	[Dec][Video] bmv_video
31.	[Dec][Video] brender_pix
32.	[Dec][Video] c93
33.	[Dec][Video] cavs
34.	[Dec][Video] cdgraphics
35.	[Dec][Video] cdxl
36.	[Enc][Video] cinepak
37.	[Dec][Video] cinepak
38.	[Enc][Video] cljr
39.	[Dec][Video] cljr
40.	[Dec][Video] cllc
41.	[Enc][Audio] comfortnoise
42.	[Dec][Audio] comfortnoise
43.	[Dec][Video] cpia
44.	[Dec][Video] camstudio
45.	[Dec][Video] cyuv
46.	[Dec][Video] dfa



46.	[Dec][Video]	ora
47.	[Dec][Video]	dirac
48.	[Enc][Video]	dnxhd
49.	[Dec][Video]	dnxhd
50.	[Enc][Video]	dpx
51.	[Dec][Video]	dpx
52.	[Dec][Video]	dsicinvideo
53.	[Enc][Video]	dvvideo
54.	[Dec][Video]	dvvideo
55.	[Dec][Video]	dxa
56.	[Dec][Video]	dxtory
57.	[Dec][Video]	eacmv
58.	[Dec][Video]	eamad
59.	[Dec][Video]	eatgq
60.	[Dec][Video]	eatgv
61.	[Dec][Video]	eatqi
62.	[Dec][Video]	8bps
63.	[Dec][Audio]	8svx_exp
64.	[Dec][Audio]	8svx_fib
65.	[Dec][Video]	escape124
66.	[Dec][Video]	escape130
67.	[Dec][Video]	exr
68.	[Enc][Video]	ffv1
69.	[Dec][Video]	ffv1
70.	[Enc][Video]	ffvhuff
71.	[Dec][Video]	ffvhuff
72.	[Dec][Video]	fic
73.	[Enc][Video]	flashsv
74.	[Dec][Video]	flashsv
75.	[Enc][Video]	flashsv2
76.	[Dec][Video]	flashsv2
77.	[Dec][Video]	flic
78.	[Enc][Video]	flv
79.	[Dec][Video]	flv
80.	[Dec][Video]	4xm
81.	[Dec][Video]	fraps
82.	[Dec][Video]	frwu
83.	[Dec][Video]	g2m
84.	[Enc][Video]	gif
85.	[Dec][Video]	gif
86.	[Enc][Video]	h261
87.	[Dec][Video]	h261
88.	[Enc][Video]	h263
89.	[Dec][Video]	h263
90.	[Dec][Video]	h263i
91.	[Enc][Video]	h263p
92.	[Dec][Video]	h263p
93.	[Dec][Video]	h264
94.	[Dec][Video]	hevc
95.	[Dec][Video]	hnm4video
96.	[Enc][Video]	huffyuv
97.	[Dec][Video]	huffyuv
98.	[Dec][Video]	idcinvideo
99.	[Dec][Video]	iff
100.	[Dec][Video]	iff
101.	[Dec][Video]	indeo2
102.	[Dec][Video]	indeo3
103.	[Dec][Video]	indeo4
104.	[Dec][Video]	indeo5
105.	[Dec][Video]	interplayvideo
106.	[Enc][Video]	jpeg2000
107.	[Dec][Video]	jpeg2000
108.	[Enc][Video]	jpegls
109.	[Dec][Video]	jpegls
110.	[Dec][Video]	jv
111.	[Dec][Video]	kgv1
112.	[Dec][Video]	kmvc
113.	[Dec][Video]	lagarith
114.	[Enc][Video]	ljpeg
115.	[Dec][Video]	loco
116.	[Dec][Video]	mdec
117.	[Dec][Video]	mimic
118.	[Enc][Video]	mjpeg
119.	[Dec][Video]	mjpeg
120.	[Dec][Video]	mjpegb
121.	[Dec][Video]	mmvideo
122.	[Dec][Video]	motionpixels
123.	[Enc][Video]	mpeg1video
124.	[Dec][Video]	mpeg1video
125.	[Enc][Video]	mpeg2video
126.	[Dec][Video]	mpeg2video
127.	[Enc][Video]	mpeg4
128.	[Dec][Video]	mpeg4
129.	[Dec][Video]	mpegvideo
130.	[Dec][Video]	msa1
131.	[Dec][Video]	msmpeg4v1
132.	[Enc][Video]	msmpeg4v2
133.	[Dec][Video]	msmpeg4v2
134.	[Enc][Video]	msmpeg4
135.	[Dec][Video]	msmpeg4
136.	[Dec][Video]	msrle
137.	[Dec][Video]	mss1

138.	[Dec][Video]	mss1
139.	[Enc][Video]	mss2
140.	[Dec][Video]	msvideo1
141.	[Dec][Video]	mszh
142.	[Dec][Video]	mts2
143.	[Dec][Video]	mvc1
144.	[Dec][Video]	mvc2
145.	[Dec][Video]	mxpeg
146.	[Dec][Video]	nuv
147.	[Dec][Video]	paf_video
148.	[Enc][Video]	pam
149.	[Dec][Video]	pam
150.	[Enc][Video]	pbm
151.	[Dec][Video]	pbm
152.	[Enc][Video]	pcx
153.	[Dec][Video]	pcx
154.	[Enc][Video]	pgm
155.	[Dec][Video]	pgm
156.	[Enc][Video]	pgmyuv
157.	[Dec][Video]	pgmyuv
158.	[Dec][Video]	pictor
159.	[Enc][Video]	png
160.	[Dec][Video]	png
161.	[Enc][Video]	ppm
162.	[Dec][Video]	ppm
163.	[Enc][Video]	prores
164.	[Dec][Video]	prores
165.	[Enc][Video]	prores_aw
166.	[Enc][Video]	prores_ks
167.	[Dec][Video]	prores_lgpl
168.	[Dec][Video]	ptx
169.	[Dec][Video]	qdraw
170.	[Dec][Video]	qpeg
171.	[Enc][Video]	qtrle
172.	[Dec][Video]	qtrle
173.	[Enc][Video]	r10k
174.	[Dec][Video]	r10k
175.	[Enc][Video]	r210
176.	[Dec][Video]	r210
177.	[Enc][Video]	rawvideo
178.	[Dec][Video]	rawvideo
179.	[Dec][Video]	rl2
180.	[Enc][Video]	roqvideo
181.	[Dec][Video]	roqvideo
182.	[Dec][Video]	rpza
183.	[Enc][Video]	rv10
184.	[Dec][Video]	rv10
185.	[Enc][Video]	rv20
186.	[Dec][Video]	rv20
187.	[Dec][Video]	rv30
188.	[Dec][Video]	rv40
189.	[Enc][Audio]	s302m
190.	[Dec][Audio]	s302m
191.	[Dec][Video]	sanm
192.	[Enc][Video]	sgi
193.	[Dec][Video]	sgi
194.	[Dec][Video]	sgirle
195.	[Dec][Video]	smackvid
196.	[Dec][Video]	smc
197.	[Dec][Video]	smvjpeg
198.	[Enc][Video]	snow
199.	[Dec][Video]	snow
200.	[Dec][Video]	sp5x
201.	[Enc][Video]	sunrast
202.	[Dec][Video]	sunrast
203.	[Enc][Video]	svq1
204.	[Dec][Video]	svq1
205.	[Dec][Video]	svq3
206.	[Enc][Video]	targa
207.	[Dec][Video]	targa
208.	[Dec][Video]	targa_y216
209.	[Dec][Video]	theora
210.	[Dec][Video]	thp
211.	[Dec][Video]	tiertexseqvideo
212.	[Enc][Video]	tiff
213.	[Dec][Video]	tiff
214.	[Dec][Video]	tmv
215.	[Dec][Video]	truemotion1
216.	[Dec][Video]	truemotion2
217.	[Dec][Video]	camtasia
218.	[Dec][Video]	tsc2
219.	[Dec][Video]	txd
220.	[Dec][Video]	ultimotion
221.	[Enc][Video]	utvideo
222.	[Dec][Video]	utvideo
223.	[Enc][Video]	v210
224.	[Dec][Video]	v210
225.	[Dec][Video]	v210x
226.	[Enc][Video]	v308
227.	[Dec][Video]	v308
228.	[Enc][Video]	v408

229.	[Dec][Video]	v408
230.	[Enc][Video]	v410
231.	[Dec][Video]	v410
232.	[Dec][Video]	vb
233.	[Dec][Video]	vble
234.	[Dec][Video]	vc1
235.	[Dec][Video]	vc1image
236.	[Dec][Video]	vcr1
237.	[Dec][Video]	vmdvideo
238.	[Dec][Video]	vmnc
239.	[Dec][Video]	vp3
240.	[Dec][Video]	vp5
241.	[Dec][Video]	vp6
242.	[Dec][Video]	vp6a
243.	[Dec][Video]	vp6f
244.	[Dec][Video]	vp7
245.	[Dec][Video]	vp8
246.	[Dec][Video]	vp9
247.	[Dec][Video]	vqavideo
248.	[Dec][Video]	webp
249.	[Enc][Video]	wmv1
250.	[Dec][Video]	wmv1
251.	[Enc][Video]	wmv2
252.	[Dec][Video]	wmv2
253.	[Dec][Video]	wmv3
254.	[Dec][Video]	wmv3image
255.	[Dec][Video]	wmv1
256.	[Dec][Video]	xan_wc3
257.	[Dec][Video]	xan_wc4
258.	[Enc][Video]	xbm
259.	[Dec][Video]	xbm
260.	[Enc][Video]	xface
261.	[Dec][Video]	xface
262.	[Dec][Video]	xl
263.	[Enc][Video]	xwd
264.	[Dec][Video]	xwd
265.	[Enc][Video]	y41p
266.	[Dec][Video]	y41p
267.	[Dec][Video]	yop
268.	[Enc][Video]	yuv4
269.	[Dec][Video]	yuv4
270.	[Dec][Video]	012v
271.	[Dec][Video]	zerocodec
272.	[Enc][Video]	zlib
273.	[Dec][Video]	zlib
274.	[Enc][Video]	zmbv
275.	[Dec][Video]	zmbv
276.	[Enc][Audio]	aac
277.	[Dec][Audio]	aac
278.	[Dec][Audio]	aac_latm
279.	[Enc][Audio]	ac3
280.	[Dec][Audio]	ac3
281.	[Enc][Audio]	ac3_fixed
282.	[Dec][Audio]	ac3_fixed
283.	[Enc][Audio]	alac
284.	[Dec][Audio]	alac
285.	[Dec][Audio]	als
286.	[Dec][Audio]	amrnb
287.	[Dec][Audio]	amrwb
288.	[Dec][Audio]	ape
289.	[Dec][Audio]	atrac1
290.	[Dec][Audio]	atrac3
291.	[Dec][Audio]	atrac3plus
292.	[Dec][Audio]	binkaudio_dct
293.	[Dec][Audio]	binkaudio_rdft
294.	[Dec][Audio]	bmv_audio
295.	[Dec][Audio]	cook
296.	[Enc][Audio]	dca
297.	[Dec][Audio]	dca
298.	[Dec][Audio]	dsd_lsb
299.	[Dec][Audio]	dsd_msb
300.	[Dec][Audio]	dsd_lsb_planar
301.	[Dec][Audio]	dsd_msb_planar
302.	[Dec][Audio]	dsicinaudio
303.	[Enc][Audio]	eac3
304.	[Dec][Audio]	eac3
305.	[Dec][Audio]	evrc
306.	[Dec][Audio]	wavesynth
307.	[Enc][Audio]	flac
308.	[Dec][Audio]	flac
309.	[Enc][Audio]	g723_1
310.	[Dec][Audio]	g723_1
311.	[Dec][Audio]	g729
312.	[Dec][Audio]	gsm
313.	[Dec][Audio]	gsm_ms
314.	[Dec][Audio]	iac
315.	[Dec][Audio]	imc
316.	[Dec][Audio]	mace3
317.	[Dec][Audio]	mace6
318.	[Dec][Audio]	metasound
319.	[Dec][Audio]	mLp

320.	[Dec][Audio]	mp1
321.	[Dec][Audio]	mp1float
322.	[Enc][Audio]	mp2
323.	[Dec][Audio]	mp2
324.	[Dec][Audio]	mp2float
325.	[Enc][Audio]	mp2fixed
326.	[Dec][Audio]	mp3
327.	[Dec][Audio]	mp3float
328.	[Dec][Audio]	mp3adu
329.	[Dec][Audio]	mp3adufloat
330.	[Dec][Audio]	mp3on4
331.	[Dec][Audio]	mp3on4float
332.	[Dec][Audio]	mpc7
333.	[Dec][Audio]	mpc8
334.	[Enc][Audio]	nellymoser
335.	[Dec][Audio]	nellymoser
336.	[Dec][Audio]	on2avc
337.	[Dec][Audio]	paf_audio
338.	[Dec][Audio]	qcelp
339.	[Dec][Audio]	qdm2
340.	[Enc][Audio]	real_144
341.	[Dec][Audio]	real_144
342.	[Dec][Audio]	real_288
343.	[Dec][Audio]	ralf
344.	[Dec][Audio]	shorten
345.	[Dec][Audio]	sipr
346.	[Dec][Audio]	smackaud
347.	[Enc][Audio]	sonic
348.	[Dec][Audio]	sonic
349.	[Enc][Audio]	sonicls
350.	[Dec][Audio]	tak
351.	[Dec][Audio]	truehd
352.	[Dec][Audio]	truespeech
353.	[Enc][Audio]	tta
354.	[Dec][Audio]	tta
355.	[Dec][Audio]	twinvq
356.	[Dec][Audio]	vmdataudio
357.	[Enc][Audio]	vorbis
358.	[Dec][Audio]	vorbis
359.	[Enc][Audio]	wavpack
360.	[Dec][Audio]	wavpack
361.	[Dec][Audio]	wmaLossless
362.	[Dec][Audio]	wmapro
363.	[Enc][Audio]	wmav1
364.	[Dec][Audio]	wmav1
365.	[Enc][Audio]	wmav2
366.	[Dec][Audio]	wmav2
367.	[Dec][Audio]	wmavoice
368.	[Dec][Audio]	ws_snd1
369.	[Enc][Audio]	pcm_alaw
370.	[Dec][Audio]	pcm_alaw
371.	[Dec][Audio]	pcm_bluray
372.	[Dec][Audio]	pcm_dvd
373.	[Enc][Audio]	pcm_f32be
374.	[Dec][Audio]	pcm_f32be
375.	[Enc][Audio]	pcm_f32le
376.	[Dec][Audio]	pcm_f32le
377.	[Enc][Audio]	pcm_f64be
378.	[Dec][Audio]	pcm_f64be
379.	[Enc][Audio]	pcm_f64le
380.	[Dec][Audio]	pcm_f64le
381.	[Dec][Audio]	pcm_lxf
382.	[Enc][Audio]	pcm_mulaw
383.	[Dec][Audio]	pcm_mulaw
384.	[Enc][Audio]	pcm_s8
385.	[Dec][Audio]	pcm_s8
386.	[Enc][Audio]	pcm_s8_planar
387.	[Dec][Audio]	pcm_s8_planar
388.	[Enc][Audio]	pcm_s16be
389.	[Dec][Audio]	pcm_s16be
390.	[Enc][Audio]	pcm_s16be_planar
391.	[Dec][Audio]	pcm_s16be_planar
392.	[Enc][Audio]	pcm_s16le
393.	[Dec][Audio]	pcm_s16le
394.	[Enc][Audio]	pcm_s16le_planar
395.	[Dec][Audio]	pcm_s16le_planar
396.	[Enc][Audio]	pcm_s24be
397.	[Dec][Audio]	pcm_s24be
398.	[Enc][Audio]	pcm_s24daud
399.	[Dec][Audio]	pcm_s24daud
400.	[Enc][Audio]	pcm_s24le
401.	[Dec][Audio]	pcm_s24le
402.	[Enc][Audio]	pcm_s24le_planar
403.	[Dec][Audio]	pcm_s24le_planar
404.	[Enc][Audio]	pcm_s32be
405.	[Dec][Audio]	pcm_s32be
406.	[Enc][Audio]	pcm_s32le
407.	[Dec][Audio]	pcm_s32le
408.	[Enc][Audio]	pcm_s32le_planar
409.	[Dec][Audio]	pcm_s32le_planar
410.	[Enc][Audio]	pcm_u8

411.	[Dec][Audio]	pcm_u8
412.	[Enc][Audio]	pcm_u16be
413.	[Dec][Audio]	pcm_u16be
414.	[Enc][Audio]	pcm_u16le
415.	[Dec][Audio]	pcm_u16le
416.	[Enc][Audio]	pcm_u24be
417.	[Dec][Audio]	pcm_u24be
418.	[Enc][Audio]	pcm_u24le
419.	[Dec][Audio]	pcm_u24le
420.	[Enc][Audio]	pcm_u32be
421.	[Dec][Audio]	pcm_u32be
422.	[Enc][Audio]	pcm_u32le
423.	[Dec][Audio]	pcm_u32le
424.	[Dec][Audio]	pcm_zork
425.	[Dec][Audio]	interplay_dpcm
426.	[Enc][Audio]	roq_dpcm
427.	[Dec][Audio]	roq_dpcm
428.	[Dec][Audio]	sol_dpcm
429.	[Dec][Audio]	xan_dpcm
430.	[Dec][Audio]	adpcm_4xm
431.	[Enc][Audio]	adpcm_adx
432.	[Dec][Audio]	adpcm_adx
433.	[Dec][Audio]	adpcm_afc
434.	[Dec][Audio]	adpcm_ct
435.	[Dec][Audio]	adpcm_dtk
436.	[Dec][Audio]	adpcm_ea
437.	[Dec][Audio]	adpcm_ea_maxis_xa
438.	[Dec][Audio]	adpcm_ea_r1
439.	[Dec][Audio]	adpcm_ea_r2
440.	[Dec][Audio]	adpcm_ea_r3
441.	[Dec][Audio]	adpcm_ea_xas
442.	[Enc][Audio]	g722
443.	[Dec][Audio]	g722
444.	[Enc][Audio]	g726
445.	[Dec][Audio]	g726
446.	[Dec][Audio]	g726le
447.	[Dec][Audio]	adpcm_ima_amv
448.	[Dec][Audio]	adpcm_ima_apc
449.	[Dec][Audio]	adpcm_ima_dk3
450.	[Dec][Audio]	adpcm_ima_dk4
451.	[Dec][Audio]	adpcm_ima_ea_eacs
452.	[Dec][Audio]	adpcm_ima_ea_sead
453.	[Dec][Audio]	adpcm_ima_iss
454.	[Dec][Audio]	adpcm_ima_oki
455.	[Enc][Audio]	adpcm_ima_qt
456.	[Dec][Audio]	adpcm_ima_qt
457.	[Dec][Audio]	adpcm_ima_rad
458.	[Dec][Audio]	adpcm_ima_smjpeg
459.	[Enc][Audio]	adpcm_ima_wav
460.	[Dec][Audio]	adpcm_ima_wav
461.	[Dec][Audio]	adpcm_ima_ws
462.	[Enc][Audio]	adpcm_ms
463.	[Dec][Audio]	adpcm_ms
464.	[Dec][Audio]	adpcm_sbpro_2
465.	[Dec][Audio]	adpcm_sbpro_3
466.	[Dec][Audio]	adpcm_sbpro_4
467.	[Enc][Audio]	adpcm_swf
468.	[Dec][Audio]	adpcm_swf
469.	[Dec][Audio]	adpcm_thp
470.	[Dec][Audio]	adpcm_vima
471.	[Dec][Audio]	adpcm_xa
472.	[Enc][Audio]	adpcm_yamaha
473.	[Dec][Audio]	adpcm_yamaha
474.	[Dec][Audio]	vima
475.	[Enc][Other]	ssa
476.	[Dec][Other]	ssa
477.	[Enc][Other]	ass
478.	[Dec][Other]	ass
479.	[Enc][Other]	dvbsub
480.	[Dec][Other]	dvbsub
481.	[Enc][Other]	dvdsub
482.	[Dec][Other]	dvdsub
483.	[Dec][Other]	jacosub
484.	[Dec][Other]	microdvd
485.	[Enc][Other]	mov_text
486.	[Dec][Other]	mov_text
487.	[Dec][Other]	mpl2
488.	[Dec][Other]	pgssub
489.	[Dec][Other]	pjs
490.	[Dec][Other]	realtext
491.	[Dec][Other]	sami
492.	[Enc][Other]	srt
493.	[Dec][Other]	srt
494.	[Enc][Other]	subrip
495.	[Dec][Other]	subrip
496.	[Dec][Other]	subviewer
497.	[Dec][Other]	subviewer1
498.	[Dec][Other]	text
499.	[Dec][Other]	vplayer
500.	[Dec][Other]	webvtt
501.	[Enc][Other]	xsub

502.	[Dec][Other]	xsub
503.	[Enc][Audio]	libgsm
504.	[Dec][Audio]	libgsm
505.	[Enc][Audio]	libgsm_ms
506.	[Dec][Audio]	libgsm_ms
507.	[Enc][Audio]	libilbc
508.	[Dec][Audio]	libilbc
509.	[Enc][Audio]	libmp3lame
510.	[Enc][Audio]	libopencore_amrnb
511.	[Dec][Audio]	libopencore_amrnb
512.	[Dec][Audio]	libopencore_amrwb
513.	[Enc][Video]	libopenjpeg
514.	[Dec][Video]	libopenjpeg
515.	[Enc][Audio]	libopus
516.	[Dec][Audio]	libopus
517.	[Enc][Video]	libschrödinger
518.	[Dec][Video]	libschrödinger
519.	[Enc][Audio]	libspeex
520.	[Dec][Audio]	libspeex
521.	[Enc][Video]	libtheora
522.	[Enc][Audio]	libtwolame
523.	[Enc][Audio]	libvo_aacenc
524.	[Enc][Audio]	libvo_amrwbenc
525.	[Enc][Audio]	libvorbis
526.	[Dec][Audio]	libvorbis
527.	[Enc][Video]	libvpx
528.	[Dec][Video]	libvpx
529.	[Enc][Video]	libvpx-vp9
530.	[Dec][Video]	libvpx-vp9
531.	[Enc][Audio]	libwavpack
532.	[Enc][Video]	libx264
533.	[Enc][Video]	libx264rgb
534.	[Enc][Video]	libx265
535.	[Enc][Video]	libxavs
536.	[Enc][Video]	libxvid
537.	[Dec][Video]	bintext
538.	[Dec][Video]	xbin
539.	[Dec][Video]	idf

## 下载

### Simplest FFmpeg Player

#### 项目主页

SourceForge：<https://sourceforge.net/projects/simplestffmpegplayer/>

Github：[https://github.com/leixiaohua1020/simplest\\_ffmpeg\\_player](https://github.com/leixiaohua1020/simplest_ffmpeg_player)

开源中国：[http://git.oschina.net/leixiaohua1020/simplest\\_ffmpeg\\_player](http://git.oschina.net/leixiaohua1020/simplest_ffmpeg_player)

CSDN下载地址：<http://download.csdn.net/detail/leixiaohua1020/8924321>

本程序实现了视频文件的解码和显示（支持HEVC，H.264，MPEG2等）。

是最简单的FFmpeg视频解码方面的教程。

通过学习本例子可以了解FFmpeg的解码流程。

项目包含6个工程：

simplest\_ffmpeg\_player：标准版，FFmpeg学习的开始。

simplest\_ffmpeg\_player\_su：SU（SDL Update）版，加入了简单的SDL的Event。

simplest\_ffmpeg\_decoder：一个包含了封装格式处理功能的解码器。使用了libavcodec和libavformat。

simplest\_ffmpeg\_decoder\_pure：一个纯净的解码器。只使用libavcodec（没有使用libavformat）。

simplest\_video\_play\_sdl2：使用SDL2播放YUV的例子。

**simplest\_ffmpeg\_helloworld：输出FFmpeg类库的信息。**

文章标签：[FFmpeg](#) [libavcodec](#) [libavformat](#) [libavfilter](#) [urlprotocol](#)

个人分类：[FFMPEG](#)

所属专栏：[FFmpeg](#)