

04-ffmpeg命令分类查询

主讲人：廖庆富

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ffmpeg命令分类查询

命令参数	内容	命令参数	内容
-version	显示版本	-bsfs	显示可用比特流filter
-buildconf	显示编译配置	-protocols	显示可用的协议
-formats	显示可用格式 (muxers+demuxers)	-filters	显示可用的过滤器
-muxers	显示可用复用器	-pix_fmts	显示可用的像素格式
-demuxers	显示可用解复用器	-layouts	显示标准声道名称
-codecs	显示可用编解码器 (decoders+encoders)	-sample_fmts	显示可用的音频采样格式
-decoders	显示可用解码器	-colors	显示可用的颜色名称
-encoders	显示可用编码器		

ffmpeg -version

```
G:\future\ffmpeg命令入门\test>ffmpeg -version
ffmpeg version 4.1 Copyright (c) 2000-2018 the FFmpeg developers
built with gcc 8.2.1 (GCC) 20181017
configuration: --disable-static --enable-shared --enable-gpl --enable-version3 --enable-sdl2 --enable-
e-gnutls --enable-iconv --enable-libass --enable-libbluray --enable-libfreetype --enable-libmp3lame --
-amrnb --enable-libopencore-amrwb --enable-libopenjpeg --enable-libopus --enable-libshine --enable-li
bsoxr --enable-libtheora --enable-libtwolame --enable-libvpx --enable-libwavpack --enable-libwebp --e
ble-libx265 --enable-libxml2 --enable-libzimg --enable-lzma --enable-zlib --enable-gmp --enable-libvi
orbis --enable-libvo-amrwbenc --enable-libmysofa --enable-libspeex --enable-libxvid --enable-libaom --
able-amf --enable-ffnvcodec --enable-cuvid --enable-d3d11va --enable-nvenc --enable-nvdec --enable-dx
th
libavutil      56. 22.100 / 56. 22.100
libavcodec     58. 35.100 / 58. 35.100
libavformat    58. 20.100 / 58. 20.100
libavdevice    58.  5.100 / 58.  5.100
libavfilter    7. 40.101 / 7. 40.101
libswscale     5.  3.100 / 5.  3.100
libswresample  3.  3.100 / 3.  3.100
libpostproc   55.  3.100 / 55.  3.100
```

ffmpeg-buildconf

```
G:\future\ffmpeg命令入门\test>ffmpeg -buildconf
ffmpeg version 4.1 Copyright (c) 2000-2018 the FFmpeg developers
  built with gcc 8.2.1 (GCC) 20181017
  configuration: --disable-static --enable-shared --enable-gpl --enable-version3 --enable-sdl2 --enable-gnutls --enable-iconv --enable-libass --enable-libbluray --enable-libfreetype --enable-libmp3lame --enable-libopencore-amrnb --enable-libopencore-amrwb --enable-libopenjpeg --enable-libopus --enable-libshine --enable-libsoxr --enable-libtheora --enable-libtwolame --enable-libvpx --enable-libwavpack --enable-libwebp --enable-libx265 --enable-libxml2 --enable-libzimg --enable-lzma --enable-zlib --enable-gmp --enable-libbrotli --enable-libvo-amrwbenc --enable-libmysofa --enable-lspspeex --enable-libxvid --enable-libaom --enable-amf --enable-ffnvcodec --enable-cuvid --enable-d3d11va --enable-nvenc --enable-nvdec --enable-yv12
  libavutil      56. 22.100 / 56. 22.100
  libavcodec     58. 35.100 / 58. 35.100
  libavformat    58. 20.100 / 58. 20.100
  libavdevice    58.  5.100 / 58.  5.100
  libavfilter     7. 40.101 /  7. 40.101
  libswscale     5.  3.100 /  5.  3.100
  libswresample  3.  3.100 /  3.  3.100
  libpostproc   55.  3.100 / 55.  3.100

configuration:
--disable-static
--enable-shared
--enable-gpl
--enable-version3
--enable-sdl2
--enable-fontconfig
--enable-gnutls
--enable-iconv
--enable-libass
--enable-libbluray
--enable-libfreetype
--enable-libmp3lame
--enable-libopencore-amrnb
--enable-libopencore-amrwb
--enable-libopenjpeg
--enable-libopus
```

ffmpeg-formats

```
File formats:
D. = Demuxing supported
.E = Muxing supported
--
D 3dostr      3DO STR
E 3g2         3GP2 (3GPP2 file format)
E 3gp         3GP (3GPP file format)
D 4xm         4X Technologies
E a64         a64 - video for Commodore 64
D aa          Audible AA format files
D aac         raw ADTS AAC (Advanced Audio Coding)
DE ac3        raw AC-3
D acm         Interplay ACM
D act         ACT Voice file format
D adf         Artworx Data Format
D adp         ADP
D ads         Sony PS2 ADS
E adts        ADTS AAC (Advanced Audio Coding)
```

ffmpeg -muxers

```
File formats:
D. = Demuxing supported
.E = Muxing supported
--
E 3g2          3GP2 (3GPP2 file format)
E 3gp          3GP (3GPP file format)
E a64          a64 - video for Commodore 64
E ac3          raw AC-3
E adts         ADTS AAC (Advanced Audio Coding)
E adx          CRI ADX
E aiff         Audio IFF
E alaw         PCM A-law
E amr          3GPP AMR
E apng         Animated Portable Network Graphics
E aptx         raw aptX (Audio Processing Technology for Bluetooth)
E aptx_hd      raw aptX HD (Audio Processing Technology for Bluetooth)
E asf          ASF (Advanced / Active Streaming Format)
E asf_stream    ASF (Advanced / Active Streaming Format)
E ass          SSA (SubStation Alpha) subtitle
E ast          AST (Audio Stream)
```

ffmpeg -demuxers

```
File formats:
D. = Demuxing supported
.E = Muxing supported
--
D 3dostr      3DO STR
D 4xm         4X Technologies
D aa          Audible AA format files
D aac         raw ADTS AAC (Advanced Audio Coding)
D ac3         raw AC-3
D acm         Interplay ACM
D act         ACT Voice file format
D adf         Artworx Data Format
D adp         ADP
D ads         Sony PS2 ADS
D adx         CRI ADX
D aea         MD STUDIO audio
D afc         AFC
D aiff        Audio IFF
D aix         CRI AIX
D alaw        PCM A-law
D alias_pix   Alias/Wavefront PIX image
D amr         3GPP AMR
```

ffmpeg -devices

```
Devices:
D. = Demuxing supported
.E = Muxing supported
--
D dshow          DirectShow capture
D lavfi          Libavfilter virtual input device
E sdl,sdl2       SDL2 output device
D vfwcap         Vfw video capture
```


ffmpeg-codecs

Codecs:

D..... = Decoding supported

.E.... = Encoding supported

..U... = Video codec

..A... = Audio codec

..S... = Subtitle codec

...I.. = Intra frame-only codec

....L. = Lossy compression

.....S = Lossless compression

```
-----
D.U.I.S 012v          Uncompressed 4:2:2 10-bit
D.U.L. 4xm            4X Movie
D.U.I.S 8bps          QuickTime 8BPS video
.E.U.I.L. a64_multi    Multicolor charset for Commodore 64 (encoders: a64mu
.E.U.I.L. a64_multi5   Multicolor charset for Commodore 64, extended with 5
)
D.U..S aasc           Autodesk RLE
D.U.I.L. aic          Apple Intermediate Codec
DE.U.I.S alias_pix     Alias/Wavefront PIX image
DE.U.I.L. amv          AMV Video
D.U.L. anm            Deluxe Paint Animation
D.U.L. ansi           ASCII/ANSI art
DEU..S apng            APNG (Animated Portable Network Graphics) image
DE.U.I.L. asv1         ASUS U1
DE.U.I.L. asv2         ASUS U2
D.U.I.L. aura          Auravision AURA
D.U.I.L. aura2         Auravision Aura 2
DEU.L. av1             Alliance for Open Media AV1 (decoders: libaom-av1 )
D.U... avrn           Avid AVI Codec
-- More --
```

ffmpeg -decoders

```
Decoders:
U..... = Video
A..... = Audio
S..... = Subtitle
.F.... = Frame-level multithreading
..S... = Slice-level multithreading
...X.. = Codec is experimental
....B. = Supports draw_horiz_band
.....D = Supports direct rendering method 1
-----
U....D 012v          Uncompressed 4:2:2 10-bit
U....D 4xm           4X Movie
U....D 8bps          QuickTime 8BPS video
U....D aasc          Autodesk RLE
UF...D aic           Apple Intermediate Codec
U....D alias_pix     Alias/Wavefront PIX image
U....D amv           AMU Video
U....D anm           Deluxe Paint Animation
U....D ansi          ASCII/ANSI art
UF...D apng          APNG (Animated Portable Network Graphics) image
U....D asv1          ASUS U1
U....D asv2          ASUS U2
U....D aura          Auravision AURA
U....D aura2         Auravision Aura 2
U....D libaom-av1     libaom AV1 (codec av1)
U..... avrn         Avid AUI Codec
U....D avrp         Avid 1:1 10-bit RGB Packer
U....D avs           AUS (Audio Video Standard) video
U....D avui          Avid Meridien Uncompressed
-- More --
```

ffmpeg -encoders

```
Encoders:
U..... = Video
A..... = Audio
S..... = Subtitle
.F.... = Frame-level multithreading
..S... = Slice-level multithreading
...X.. = Codec is experimental
....B. = Supports draw_horiz_band
.....D = Supports direct rendering method 1
-----
U..... a64multi          Multicolor charset for Commodore 64 (co
U..... a64multi5        Multicolor charset for Commodore 64, ex
U..... alias_pix       Alias/Wavefront PIX image
U..... amv             AMU Video
U..... apng            APNG (Animated Portable Network Graphic
U..... asv1            ASUS U1
U..... asv2            ASUS U2
U..X.. libaom-av1       libaom AV1 (codec av1)
U..... avrp            Avid 1:1 10-bit RGB Packer
U..X.. avui            Avid Meridien Uncompressed
U..... ayuv            Uncompressed packed MS 4:4:4:4
U..... bmp             BMP (Windows and OS/2 bitmap)
U..... cinepak         Cinepak
U..... cljr            Cirrus Logic AccuPak
U.S... uc2             SMPTE UC-2 (codec dirac)
UFS... dnxhd           UC3/DNxHD
U..... dpx             DPX (Digital Picture Exchange) image
UFS... dvvideo         DU (Digital Video)
U.S... ffv1            FFmpeg video codec #1
-- More --
```

ffmpeg-bsfs

```
Bitstream filters:
aac_adtstoasc
av1_metadata
chomp
dump_extra
dca_core
eac3_core
extract_extradata
filter_units
h264_metadata
h264_mp4toannexb
h264_redundant_pps
hapqa_extract
hevc_metadata
hevc_mp4toannexb
imxdump
mjpeg2jpeg
mjpegadump
mp3decomp
mpeg2_metadata
mpeg4_unpack_bframes
mov2textsub
noise
null
remove_extra
text2movsub
trace_headers
vp9_metadata
vp9_raw_reorder
-- More --
```

ffmpeg -protocols

```
Supported file protocols:
```

```
Input:
```

```
  async  
  bluray  
  cache  
  concat  
  crypto  
  data  
  ffrtmpcrypt  
  ffrtmphttp  
  file  
  ftp  
  gopher  
  hls  
  http  
  httpproxy  
  https  
  mmsh  
  mmst  
  pipe  
  rtmp  
  rtmpe  
  rtmps  
  rtmpt  
  rtmpte  
  rtmps  
  rtp  
  srtp  
  subfile  
-- More --
```

ffmpeg -filters

```
Filters:
T.. = Timeline support
.S. = Slice threading
..C = Command support
A = Audio input/output
U = Video input/output
N = Dynamic number and/or type of input/output
I = Source or sink filter

... abench          A->A      Benchmark part of a filtergraph.
... acompessor      A->A      Audio compressor.
... acontrast       A->A      Simple audio dynamic range compression/expansion filter.
... acopy           A->A      Copy the input audio unchanged to the output.
... acue            A->A      Delay filtering to match a cue.
... acrossfade      AA->A     Cross fade two input audio streams.
... acrossover      A->N      Split audio into per-bands streams.
... acrusher        A->A      Reduce audio bit resolution.
.S. adeclick        A->A      Remove impulsive noise from input audio.
.S. adeclip         A->A      Remove clipping from input audio.
T.. adelay          A->A      Delay one or more audio channels.
... aderivative     A->A      Compute derivative of input audio.
... aecho           A->A      Add echoing to the audio.
... aemphasis       A->A      Audio emphasis.
... aeval           A->A      Filter audio signal according to a specified expression.
T.. afade           A->A      Fade in/out input audio.
TSC afftdn         A->A      Denoise audio samples using FFT.
... afftfilt        A->A      Apply arbitrary expressions to samples in frequency domain.
.S. afir            AA->N     Apply Finite Impulse Response filter with supplied coefficients.
... aformat         A->A      Convert the input audio to one of the specified formats.
... agate           A->A      Audio gate.
-- More --
```

ffmpeg -pix_fmts

```
Pixel formats:
I.... = Supported Input  format for conversion
.O... = Supported Output format for conversion
...H.. = Hardware accelerated format
...P.. = Paletted format
....B = Bitstream format

FLAGS NAME                NB_COMPONENTS BITS_PER_PIXEL
-----
IO... yuv420p              3              12
IO... yuyv422              3              16
IO... rgb24                3              24
IO... bgr24                3              24
IO... yuv422p              3              16
IO... yuv444p              3              24
IO... yuv410p              3               9
IO... yuv411p              3              12
IO... gray                 1               8
IO..B monow                 1               1
IO..B monob                 1               1
I..P. pal8                 1               8
IO... yuvj420p             3              12
IO... yuvj422p             3              16
IO... yuvj444p             3              24
IO... uyvy422              3              16
.... uyvyuy411             3              12
IO... bgr8                 3               8
.O..B bgr4                 3               4
IO... bgr4_byte            3               4
IO... rgb8                 3               8
-- More --
```

ffmpeg -layouts

Individual channels:

NAME	DESCRIPTION
FL	front left
FR	front right
FC	front center
LFE	low frequency
BL	back left
BR	back right
FLC	front left-of-center
FRC	front right-of-center
BC	back center
SL	side left
SR	side right
TC	top center
TFL	top front left
TFC	top front center
TFR	top front right
TBL	top back left
TBC	top back center
TBR	top back right
DL	downmix left
DR	downmix right
WL	wide left
WR	wide right
SDL	surround direct left
SDR	surround direct right
LFE2	low frequency 2

Standard channel layouts:

-- More --

NAME DECOMPOSITION

mono	FC
stereo	FL+FR
2.1	FL+FR+LFE
3.0	FL+FR+FC
3.0(back)	FL+FR+BC
4.0	FL+FR+FC+BC
quad	FL+FR+BL+BR
quad(side)	FL+FR+SL+SR
3.1	FL+FR+FC+LFE
5.0	FL+FR+FC+BL+BR
5.0(side)	FL+FR+FC+SL+SR
4.1	FL+FR+FC+LFE+BC
5.1	FL+FR+FC+LFE+BL+BR
5.1(side)	FL+FR+FC+LFE+SL+SR
6.0	FL+FR+FC+BC+SL+SR
6.0(front)	FL+FR+FLC+FRC+SL+SR
hexagonal	FL+FR+FC+BL+BR+BC
6.1	FL+FR+FC+LFE+BC+SL+SR
6.1(back)	FL+FR+FC+LFE+BL+BR+BC
6.1(front)	FL+FR+LFE+FLC+FRC+SL+SR
7.0	FL+FR+FC+BL+BR+SL+SR
7.0(front)	FL+FR+FC+FLC+FRC+SL+SR
7.1	FL+FR+FC+LFE+BL+BR+SL+SR
7.1(wide)	FL+FR+FC+LFE+BL+BR+FLC+FRC
7.1(wide-side)	FL+FR+FC+LFE+FLC+FRC+SL+SR
octagonal	FL+FR+FC+BL+BR+BC+SL+SR
hexadecagonal	FL+FR+FC+BL+BR+BC+SL+SR+TFL+TFC+TFR+TBL+TBC+TBR+WL+WR
downmix	DL+DR

-- More --

ffmpeg-sample_fmts

name	depth
u8	8
s16	16
s32	32
f1t	32
dbl	64
u8p	8
s16p	16
s32p	32
f1tp	32
dbl	64
s64	64
s64p	64

ffmpeg -colors

```
name                #RRGGBB
AliceBlue            #f0f8ff
AntiqueWhite         #faebd7
Aqua                 #00ffff
Aquamarine           #7fffd4
Azure                #f0ffff
Beige                #f5f5dc
Bisque               #ffe4c4
Black                #000000
BlanchedAlmond       #ffeacd
Blue                 #0000ff
BlueViolet           #8a2be2
Brown                #a52a2a
BurlyWood            #deb887
CadetBlue            #5f9ea0
Chartreuse           #7fff00
Chocolate            #d2691e
Coral                #ff7f50
CornflowerBlue       #6495ed
Cornsilk            #fff8dc
Crimson              #dc143c
Cyan                 #00ffff
DarkBlue            #00008b
DarkCyan            #008b8b
DarkGoldenRod        #b8860b
DarkGray            #a9a9a9
DarkGreen           #006400
DarkKhaki            #bdb76b
DarkMagenta          #8b008b
-- More --
```

查看具体分类所支持的参数

语法: `ffmpeg -h type=name`

比如: `ffmpeg -h muxer=flv`
`ffmpeg -h filter=atempo` (atempo调整音频播放速率)
`ffmpeg -h encoder=libx264`