libbluray

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Chapter 1

Class Index

1.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

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Chapter 2

File Index

2.1 File List

Here is a list of all documented files with brief descriptions:

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Chapter 3

Class Documentation

3.1 bd_chapter Struct Reference

Public Attributes

- uint32_t **idx**
- uint64_t **start**
- uint64_t **duration**
- uint64_t **offset**

The documentation for this struct was generated from the following file:

- src/libbluray/bluray.h

3.2 bd_clip Struct Reference

Public Attributes

- uint32_t **pkt_count**
- uint8_t **video_stream_count**
- uint8_t **audio_stream_count**
- uint8_t **pg_stream_count**
- uint8_t **ig_stream_count**
- uint8_t **sec_audio_stream_count**
- uint8_t **sec_video_stream_count**
- BLURAY_STREAM_INFO * **video_streams**
- BLURAY_STREAM_INFO * **audio_streams**

- BLURAY_STREAM_INFO * **pg_streams**
- BLURAY_STREAM_INFO * **ig_streams**
- BLURAY_STREAM_INFO * **sec_audio_streams**
- BLURAY_STREAM_INFO * **sec_video_streams**

The documentation for this struct was generated from the following file:

- src/libbluray/bluray.h

3.3 BD_EVENT Struct Reference

Public Attributes

- uint32_t **event**
- uint32_t **param**

The documentation for this struct was generated from the following file:

- src/libbluray/bluray.h

3.4 bd_stream_info Struct Reference

Public Attributes

- uint8_t **coding_type**
- uint8_t **format**
- uint8_t **rate**
- uint8_t **char_code**
- uint8_t **lang** [4]
- uint16_t **pid**
- uint8_t **aspect**

The documentation for this struct was generated from the following file:

- src/libbluray/bluray.h

3.5 bd_title_info Struct Reference

Public Attributes

- uint32_t **idx**
- uint32_t **playlist**
- uint64_t **duration**
- uint32_t **clip_count**
- uint8_t **angle_count**
- uint32_t **chapter_count**
- BLURAY_CLIP_INFO * **clips**
- BLURAY_TITLE_CHAPTER * **chapters**

The documentation for this struct was generated from the following file:

- src/libbluray/bluray.h

3.6 BLURAY_DISC_INFO Struct Reference

Public Attributes

- uint8_t **bluray_detected**
- uint8_t **first_play_supported**
- uint8_t **top_menu_supported**
- uint32_t **num_hdmv_titles**
- uint32_t **num_bdj_titles**
- uint32_t **num_unsupported_titles**
- uint8_t **aacs_detected**
- uint8_t **libaacs_detected**
- uint8_t **aacs_handled**
- uint8_t **bdplus_detected**
- uint8_t **libbdplus_detected**
- uint8_t **bdplus_handled**

The documentation for this struct was generated from the following file:

- src/libbluray/bluray.h

Chapter 4

File Documentation

4.1 src/libbluray/bluray.h File Reference

```
#include <stdint.h>
```

Classes

- struct bd_stream_info
- struct bd_clip
- struct bd_chapter
- struct bd_title_info
- struct BLURAY_DISC_INFO
- struct BD_EVENT

Defines

- #define TITLES_ALL 0
- #define TITLES_FILTER_DUP_TITLE 0x01
- #define TITLES_FILTER_DUP_CLIP 0x02
- #define TITLES_RELEVANT (TITLES_FILTER_DUP_TITLE | TITLES_FILTER_-DUP_CLIP)

Typedefs

- typedef struct bluray **BLURAY**
- typedef struct bd_stream_info **BLURAY_STREAM_INFO**
- typedef struct bd_clip **BLURAY_CLIP_INFO**

- typedef struct bd_chapter **BLURAY_TITLE_CHAPTER**
- typedef struct bd_title_info **BLURAY_TITLE_INFO**
- typedef void(∗ **bd_overlay_proc_f**)(void ∗, const struct bd_overlay_s ∗const)

Enumerations

- enum **bd_stream_type_e** {

  BLURAY_STREAM_TYPE_VIDEO_MPEG1 = 0x01, **BLURAY_STREAM_-TYPE_VIDEO_MPEG2** = 0x02, **BLURAY_STREAM_TYPE_AUDIO_MPEG1** = 0x03, **BLURAY_STREAM_TYPE_AUDIO_MPEG2** = 0x04,

  BLURAY_STREAM_TYPE_AUDIO_LPCM = 0x80, **BLURAY_STREAM_-TYPE_AUDIO_AC3** = 0x81, **BLURAY_STREAM_TYPE_AUDIO_DTS** = 0x82, **BLURAY_STREAM_TYPE_AUDIO_TRUHD** = 0x83,

  BLURAY_STREAM_TYPE_AUDIO_AC3PLUS = 0x84, **BLURAY_STREAM_-TYPE_AUDIO_DTSHD** = 0x85, **BLURAY_STREAM_TYPE_AUDIO_DTSHD_-MASTER** = 0x86, **BLURAY_STREAM_TYPE_VIDEO_VC1** = 0xea,

  BLURAY_STREAM_TYPE_VIDEO_H264 = 0x1b, **BLURAY_STREAM_-TYPE_SUB_PG** = 0x90, **BLURAY_STREAM_TYPE_SUB_IG** = 0x91, **BLURAY_-STREAM_TYPE_SUB_TEXT** = 0x92 }
- enum **bd_video_format_e** {

  BLURAY_VIDEO_FORMAT_480I = 1, **BLURAY_VIDEO_FORMAT_576I** = 2, **BLURAY_VIDEO_FORMAT_480P** = 3, **BLURAY_VIDEO_FORMAT_-1080I** = 4,

  BLURAY_VIDEO_FORMAT_720P = 5, **BLURAY_VIDEO_FORMAT_1080P** = 6, **BLURAY_VIDEO_FORMAT_576P** = 7 }
- enum **bd_video_rate_e** {

  BLURAY_VIDEO_RATE_24000_1001 = 1, **BLURAY_VIDEO_RATE_24** = 2, **BLURAY_VIDEO_RATE_25** = 3, **BLURAY_VIDEO_RATE_30000_1001** = 4,

  BLURAY_VIDEO_RATE_50 = 6, **BLURAY_VIDEO_RATE_60000_1001** = 7 }
- enum **bd_video_aspect_e** { **BLURAY_ASPECT_RATIO_4_3** = 2, **BLURAY_-ASPECT_RATIO_16_9** = 3 }
- enum **bd_audio_format_e** { **BLURAY_AUDIO_FORMAT_MONO** = 1, **BLURAY_-AUDIO_FORMAT_STEREO** = 3, **BLURAY_AUDIO_FORMAT_MULTI_-CHAN** = 6, **BLURAY_AUDIO_FORMAT_COMBO** = 12 }
- enum **bd_audio_rate_e** {

  BLURAY_AUDIO_RATE_48 = 1, **BLURAY_AUDIO_RATE_96** = 4, **BLURAY_-AUDIO_RATE_192** = 5, **BLURAY_AUDIO_RATE_192_COMBO** = 12,

  BLURAY_AUDIO_RATE_96_COMBO = 14 }

- enum **bd_char_code_e** {

  BLURAY_TEXT_CHAR_CODE_UTF8 = 0x01, **BLURAY_TEXT_CHAR_-CODE_UTF16BE** = 0x02, **BLURAY_TEXT_CHAR_CODE_SHIFT_JIS** = 0x03, **BLURAY_TEXT_CHAR_CODE_EUC_KR** = 0x04,

  BLURAY_TEXT_CHAR_CODE_GB18030_20001 = 0x05, **BLURAY_TEXT_-CHAR_CODE_CN_GB** = 0x06, **BLURAY_TEXT_CHAR_CODE_BIG5** = 0x07 }
- enum **bd_player_setting** {

  BLURAY_PLAYER_SETTING_PARENTAL = 13, **BLURAY_PLAYER_-SETTING_AUDIO_CAP** = 15, **BLURAY_PLAYER_SETTING_AUDIO_-LANG** = 16, **BLURAY_PLAYER_SETTING_PG_LANG** = 17,

  BLURAY_PLAYER_SETTING_MENU_LANG = 18, **BLURAY_PLAYER_-SETTING_COUNTRY_CODE** = 19, **BLURAY_PLAYER_SETTING_REGION_-CODE** = 20, **BLURAY_PLAYER_SETTING_VIDEO_CAP** = 29,

  BLURAY_PLAYER_SETTING_TEXT_CAP = 30, **BLURAY_PLAYER_-SETTING_PLAYER_PROFILE** = 31 }
- enum **bd_event_e** {

  BD_EVENT_NONE = 0, **BD_EVENT_ERROR**, **BD_EVENT_ANGLE**, **BD_-EVENT_TITLE**,

  BD_EVENT_PLAYLIST, **BD_EVENT_PLAYITEM**, **BD_EVENT_CHAPTER**, **BD_EVENT_AUDIO_STREAM**,

  BD_EVENT_IG_STREAM, **BD_EVENT_PG_TEXTST_STREAM**, **BD_EVENT_-PIP_PG_TEXTST_STREAM**, **BD_EVENT_SECONDARY_AUDIO_STREAM**,

  BD_EVENT_SECONDARY_VIDEO_STREAM, **BD_EVENT_PG_TEXTST**, **BD_EVENT_PIP_PG_TEXTST**, **BD_EVENT_SECONDARY_AUDIO**,

  BD_EVENT_SECONDARY_VIDEO, **BD_EVENT_SECONDARY_VIDEO_-SIZE**, **BD_EVENT_MENU_PAGE_ID**, **BD_EVENT_SELECTED_BUTTON_-ID**,

  BD_EVENT_POPUP_OFF, **BD_EVENT_ENABLE_BUTTON**, **BD_EVENT_-DISABLE_BUTTON**, **BD_EVENT_STILL** }

Functions

- uint32_t bd_get_titles (BLURAY ∗bd, uint8_t flags)
- BLURAY_TITLE_INFO ∗ bd_get_title_info (BLURAY ∗bd, uint32_t title_idx)
- BLURAY_TITLE_INFO ∗ bd_get_playlist_info (BLURAY ∗bd, uint32_t playlist)
- void bd_free_title_info (BLURAY_TITLE_INFO ∗title_info)
- BLURAY ∗ bd_open (const char ∗device_path, const char ∗keyfile_path)
- void bd_close (BLURAY ∗bd)
- int64_t bd_seek (BLURAY ∗bd, uint64_t pos)
- int64_t bd_seek_time (BLURAY ∗bd, uint64_t tick)

- int bd_read (BLURAY *bd, unsigned char *buf, int len)
- int64_t bd_seek_chapter (BLURAY *bd, unsigned chapter)
- int64_t bd_chapter_pos (BLURAY *bd, unsigned chapter)
- uint32_t bd_get_current_chapter (BLURAY *bd)
- int64_t bd_seek_mark (BLURAY *bd, unsigned mark)
- int bd_select_playlist (BLURAY *bd, uint32_t playlist)
- int bd_select_title (BLURAY *bd, uint32_t title)
- int bd_select_angle (BLURAY *bd, unsigned angle)
- void bd_seamless_angle_change (BLURAY *bd, unsigned angle)
- uint64_t bd_get_title_size (BLURAY *bd)
- uint32_t bd_get_current_title (BLURAY *bd)
- unsigned bd_get_current_angle (BLURAY *bd)
- uint64_t bd_tell (BLURAY *bd)
- uint64_t bd_tell_time (BLURAY *bd)
- const BLURAY_DISC_INFO * **bd_get_disc_info** (BLURAY *)
- int bd_set_player_setting (BLURAY *bd, uint32_t idx, uint32_t value)
- int **bd_set_player_setting_str** (BLURAY *bd, uint32_t idx, const char *s)
- int **bd_start_bdj** (BLURAY *bd, const char *start_object)
- void **bd_stop_bdj** (BLURAY *bd)
- int **bd_play** (BLURAY *bd)
- int **bd_read_ext** (BLURAY *bd, unsigned char *buf, int len, BD_EVENT *event)

- int **bd_get_event** (BLURAY *bd, BD_EVENT *event)
- int **bd_play_title** (BLURAY *bd, unsigned title)
- int **bd_menu_call** (BLURAY *bd)
- void **bd_register_overlay_proc** (BLURAY *bd, void *handle, bd_overlay_proc_-f func)
- void **bd_user_input** (BLURAY *bd, int64_t pts, uint32_t key)

4.1.1 Detailed Description

external API header

4.1.2 Define Documentation

4.1.2.1 #define TITLES_ALL 0

all titles.

4.1.2.2 #define TITLES_FILTER_DUP_CLIP 0x02

remove titles that have duplicate clips.

4.1.2.3 #define TITLES_FILTER_DUP_TITLE 0x01

remove duplicate titles.

4.1.2.4 #define TITLES_RELEVANT (TITLES_FILTER_DUP_TITLE | TITLES_FILTER_DUP_CLIP)

remove duplicate titles and clips

4.1.3 Function Documentation

4.1.3.1 int64_t bd_chapter_pos (BLURAY * *bd*, unsigned *chapter*)

Find the byte position of a chapter

Parameters

bd	BLURAY object
chapter	chapter to find position of

Returns

seek position of chapter start

4.1.3.2 void bd_close (BLURAY * *bd*)

Free libbluray objects

Parameters

bd	BLURAY object

4.1.3.3 void bd_free_title_info (BLURAY_TITLE_INFO * *title_info*)

Free BLURAY_TITLE_INFO object

Parameters

title_info	BLURAY_TITLE_INFO object

4.1.3.4 unsigned bd_get_current_angle (BLURAY * *bd*)

Return the current angle

Parameters

bd	BLURAY object

Returns

current angle

4.1.3.5 uint32_t bd_get_current_chapter (BLURAY * *bd*)

Get the current chapter

Parameters

bd	BLURAY object

Returns

current chapter

4.1.3.6 uint32_t bd_get_current_title (BLURAY * *bd*)

Returns the current title index

Parameters

bd	BLURAY object

Returns

current title index

4.1.3.7 BLURAY_TITLE_INFO* bd_get_playlist_info (BLURAY * *bd*, uint32_t *playlist*)

Get information about a playlist

Parameters

bd	BLURAY object
playlist	playlist number

Returns

allocated BLURAY_TITLE_INFO object, NULL on error

4.1.3.8 BLURAY_TITLE_INFO* bd_get_title_info (BLURAY * *bd*, uint32_t *title_idx*)

Get information about a title

Parameters

bd	BLURAY object
title_idx	title index number

Returns

allocated BLURAY_TITLE_INFO object, NULL on error

4.1.3.9 uint64_t bd_get_title_size (BLURAY * *bd*)

Returns file size in bytes of currently selected title, 0 in no title selected

Parameters

bd	BLURAY object

Returns

file size in bytes of currently selected title, 0 if no title selected

4.1.3.10 uint32_t bd_get_titles (BLURAY * *bd*, uint8_t *flags*)

This must be called after bd_open() and before bd_select_title(). Populates the title list in BLURAY. Filtering of the returned list is controled through title flags

Parameters

bd	BLURAY object
flags	title flags

Returns

number of titles found

4.1.3.11 BLURAY* bd_open (const char * *device_path*, const char * *keyfile_path*)

Initializes libbluray objects

Parameters

device_path	path to mounted Blu-ray disc
keyfile_path	path to KEYDB.cfg (may be NULL)

Returns

allocated BLURAY object, NULL if error

4.1.3.12 int bd_read (BLURAY * *bd*, unsigned char * *buf*, int *len*)

Read from currently selected title file, decrypt if possible

Parameters

bd	BLURAY object
buf	buffer to read data into
len	size of data to be read

Returns

size of data read, -1 if error

4.1.3.13 void bd_seamless_angle_change (BLURAY * *bd*, unsigned *angle*)

Initiate seamless angle change

Parameters

bd	BLURAY object
angle	angle to change to

4.1.3.14 int64_t bd_seek (BLURAY * *bd*, uint64_t *pos*)

Seek to pos in corrently selected title

Parameters

bd	BLURAY object
pos	position to seek to

Returns

current seek position

4.1.3.15 int64_t bd_seek_chapter (BLURAY * *bd*, unsigned *chapter*)

Seek to a chapter. First chapter is 0

Parameters

bd	BLURAY object
chapter	chapter to seek to

Returns

current seek position

4.1.3.16 int64_t bd_seek_mark (BLURAY * *bd*, unsigned *mark*)

Seek to a playmark. First mark is 0

Parameters

bd	BLURAY object
mark	playmark to seek to

Returns

current seek position

4.1.3.17 int64_t bd_seek_time (BLURAY * *bd*, uint64_t *tick*)

Seek to specific time in 90Khz ticks

Parameters

bd	BLURAY ojbect
tick	tick count

Returns

current seek position

4.1.3.18 int bd_select_angle (BLURAY * bd, unsigned angle)

Set the angle to play

Parameters

bd	BLURAY object
angle	angle to play

Returns

1 on success, 0 if error

4.1.3.19 int bd_select_playlist (BLURAY * bd, uint32_t playlist)

Select a playlist

Parameters

bd	BLURAY object
playlist	playlist to select

Returns

1 on success, 0 if error

4.1.3.20 int bd_select_title (BLURAY * bd, uint32_t title)

Select the title from the list created by bd_get_titles()

Parameters

bd	BLURAY object
title	title to select

Returns

1 on success, 0 if error

4.1.3.21 int bd_set_player_setting (BLURAY * bd, uint32_t idx, uint32_t value)

Update player setting registers

Parameters

bd	BLURAY object
idx	Player setting register
value	New value for player setting register

Returns

1 on success, 0 on error (invalid setting)

4.1.3.22 uint64_t bd_tell (BLURAY * *bd*)

Return current pos

Parameters

bd	BLURAY object

Returns

current seek position

4.1.3.23 uint64_t bd_tell_time (BLURAY * *bd*)

Return current time

Parameters

bd	BLURAY object

Returns

current time

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