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1 Main Page

libplayer is a multimedia A/V abstraction layer API. Its goal is to interact with Enna Media Center.

libplayer provides a generic A/V API that relies on various multimedia player for Linux systems. It currently supports MPlayer (through slave-mode), xine, VLC and GStreamer.

Its main goal is to provide an unique API that player frontends can use to control any kind of multimedia

1.1 MT-Level 2

player underneath. For example, it provides a library to easily control MPlayer famous slave-mode.

1.1 MT-Level

Most functions in this API are indicated as being MT-Safe in multithreaded applications. That is right **only** if the functions are used concurrently with the same (player_t) controller. Else, unexpected behaviours can appear.

2 Data Structure Index

2.1 Data Structures

Here are the data structures with brief descriptions:

```
mrl_resource_cd_args_t (Arguments for audio CD )

mrl_resource_local_args_t (Arguments for local streams )

mrl_resource_network_args_t (Arguments for network streams )

mrl_resource_tv_args_t (Arguments for radio/tv streams )

mrl_resource_videodisc_args_t (Arguments for video discs )

player_init_param_t (Parameters for player_init() )

2

mrl_resource_local_args_t (Arguments for network streams )

3

mrl_resource_tv_args_t (Arguments for video discs )

4
```

3 File Index

3.1 File List

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

```
player.h 5
```

4 Data Structure Documentation

4.1 mrl_resource_cd_args_t Struct Reference

Arguments for audio CD.

```
#include <player.h>
```

4.1.1 Detailed Description

Arguments for audio CD.

Definition at line 330 of file player.h.

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

• player.h

4.2 mrl_resource_local_args_t Struct Reference

Arguments for local streams.

```
#include <player.h>
```

4.2.1 Detailed Description

Arguments for local streams.

Definition at line 324 of file player.h.

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

• player.h

4.3 mrl_resource_network_args_t Struct Reference

Arguments for network streams.

```
#include <player.h>
```

4.3.1 Detailed Description

Arguments for network streams.

Definition at line 367 of file player.h.

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

• player.h

4.4 mrl_resource_tv_args_t Struct Reference

Arguments for radio/tv streams.

```
#include <player.h>
```

4.4.1 Detailed Description

Arguments for radio/tv streams.

Definition at line 354 of file player.h.

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

• player.h

4.5 mrl_resource_videodisc_args_t Struct Reference

Arguments for video discs.

```
#include <player.h>
```

4.5.1 Detailed Description

Arguments for video discs.

Definition at line 338 of file player.h.

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

• player.h

4.6 player_init_param_t Struct Reference

```
Parameters for player_init() .
#include <player.h>
```

Data Fields

- player_ao_t ao
- player_vo_t vo
- uint32_t winid
- int(* event_cb)(player_event_t e, void *data)
- void * data
- const char * display
- player_quality_level_t quality

4.6.1 Detailed Description

Parameters for player_init().

Definition at line 173 of file player.h.

4.6.2 Field Documentation

4.6.2.1 player_ao_t player_init_param_t::ao

Audio output driver.

Definition at line 175 of file player.h.

4.6.2.2 void* player_init_param_t::data

User data for event callback.

Definition at line 184 of file player.h.

5 File Documentation 5

4.6.2.3 const char* player_init_param_t::display

Display to use with X11 video outputs.

The string has to follow the same rules that the DISPLAY environment variable. If display is NULL, then the environment variable is considered.

Definition at line 193 of file player.h.

4.6.2.4 int(* player_init_param_t::event_cb)(player_event_t e, void *data)

Public event callback.

Definition at line 182 of file player.h.

4.6.2.5 player_quality_level_t player_init_param_t::quality

Picture decoding quality.

Definition at line 196 of file player.h.

4.6.2.6 player_vo_t player_init_param_t::vo

Video output driver.

Definition at line 177 of file player.h.

4.6.2.7 uint32_t player_init_param_t::winid

Window ID to attach the video (X Window).

Definition at line 179 of file player.h.

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

• player.h

5 File Documentation

5.1 player.h File Reference

```
#include <inttypes.h>
#include <sys/types.h>
```

Data Structures

- struct player_init_param_t

 Parameters for player_init().
- struct mrl_resource_local_args_t

Arguments for local streams.

```
• struct mrl_resource_cd_args_t 
Arguments for audio CD.
```

- struct mrl_resource_videodisc_args_t Arguments for video discs.
- struct mrl_resource_tv_args_t

 Arguments for radio/tv streams.
- struct mrl_resource_network_args_t

 Arguments for network streams.

Typedefs

- typedef struct player_s player_t Player controller.
- typedef struct mrl_s mrl_t MRL object.

Enumerations

- enum player_type_t

 Player types.
- enum player_vo_t

 Player video outputs.
- enum player_ao_t

 Player audio outputs.
- enum player_event_t

 Player events.
- enum player_verbosity_level_t Player verbosity.
- enum mrl_type_t

 MRL types.
- enum mrl_resource_t

 MRL resources.
- enum mrl_snapshot_t
 Snapshot image file type.

- enum mrl_metadata_type_t

 MRL metadata.
- enum mrl_metadata_cd_type_t

 MRL CDDA/CDDB metadata.
- enum mrl_metadata_dvd_type_t
 MRL DVD/DVDNAV metadata.
- enum mrl_properties_type_t MRL properties.
- enum player_mrl_add_t

 Player MRL add mode.
- enum player_pb_t

 Player playback mode.
- enum player_loop_t

 Player loop mode.
- enum player_framedrop_t

 Player frame dropping mode.
- enum player_x_window_flags_t Player X11 window flags.
- enum player_pb_state_t Player playback state.
- enum player_pb_seek_t

 Player playback seek mode.
- enum player_mute_t

 Player mute state.
- enum player_video_aspect_t Player video aspect.
- enum player_sub_alignment_t Player subtitle alignment.
- enum player_dvdnav_t

 Player DVDnav commands.
- enum player_vdr_t

 Player VDR commands.

Functions

unsigned int libplayer_version (void)
 Return LIBPLAYER_VERSION_INT constant.

Player (Un)Initialization.

• player_t * player_init (player_type_t type, player_verbosity_level_t verbosity, player_init_param_t *param)

Initialization of a new player controller.

- void player_uninit (player_t *player)

 Uninitialization of a player controller.
- void player_set_verbosity (player_t *player, player_verbosity_level_t level) Set verbosity level.

Media Resource Locater (MRL) Helpers.

- mrl_t * mrl_new (player_t *player, mrl_resource_t res, void *args)
 Create a new MRL object.
- void mrl_add_subtitle (player_t *player, mrl_t *mrl, char *subtitle)

 Add a subtitle file to a MRL object.
- void mrl_free (player_t *player, mrl_t *mrl)

 Free a MRL object.
- mrl_type_t mrl_get_type (player_t *player, mrl_t *mrl)

 Get type of the stream.
- mrl_resource_t mrl_get_resource (player_t *player, mrl_t *mrl)

 Get resource of the stream.
- char * mrl_get_metadata (player_t *player, mrl_t *mrl, mrl_metadata_type_t m) Get metadata of the stream.
- char * mrl_get_metadata_cd_track (player_t *player, mrl_t *mrl, int trackid, uint32_t *length) Get metadata of a track with CDDA/CDDB MRL object.
- uint32_t mrl_get_metadata_cd (player_t *player, mrl_t *mrl, mrl_metadata_cd_type_t m) Get metadata of a CDDA/CDDB MRL object.
- uint32_t mrl_get_metadata_dvd_title (player_t *player, mrl_t *mrl, int titleid, mrl_metadata_dvd_type_t m)

Get metadata of a title with DVD/DVDNAV MRL object.

- char * mrl_get_metadata_dvd (player_t *player, mrl_t *mrl, uint8_t *titles)

 Get metadata of a DVD/DVDNAV MRL object.
- int mrl_get_metadata_subtitle (player_t *player, mrl_t *mrl, int pos, uint32_t *id, char **name, char **lang)

Get subtitle metadata of the MRL object.

- uint32_t mrl_get_metadata_subtitle_nb (player_t *player, mrl_t *mrl) Get the number of available subtitles.
- int mrl_get_metadata_audio (player_t *player, mrl_t *mrl, int pos, uint32_t *id, char **name, char **lang)

Get audio metadata of the MRL object.

- uint32_t mrl_get_metadata_audio_nb (player_t *player, mrl_t *mrl)

 Get the number of available audio streams.
- uint32_t mrl_get_property (player_t *player, mrl_t *mrl, mrl_properties_type_t p)

 Get property of the stream.
- char * mrl_get_audio_codec (player_t *player, mrl_t *mrl)

 Get audio codec name of the stream.
- char * mrl_get_video_codec (player_t *player, mrl_t *mrl)

 Get video codec name of the stream.
- off_t mrl_get_size (player_t *player, mrl_t *mrl)

 Get size of the resource.
- void mrl_video_snapshot (player_t *player, mrl_t *mrl, int pos, mrl_snapshot_t t, const char *dst)

Take a video snapshot.

Player to MRL connection.

- mrl_t * player_mrl_get_current (player_t *player)

 Get current MRL set in the internal playlist.
- void player_mrl_set (player_t *player, mrl_t *mrl)

 Set MRL object in the internal playlist.
- void player_mrl_append (player_t *player, mrl_t *mrl, player_mrl_add_t when)

 Append MRL object in the internal playlist.
- void player_mrl_remove (player_t *player)
 Remove current MRL object in the internal playlist.
- void player_mrl_remove_all (player_t *player)

 Remove all MRL objects in the internal playlist.
- void player_mrl_previous (player_t *player)

 Go the the previous MRL object in the internal playlist.
- void player_mrl_next (player_t *player)

 Go the the next MRL object in the internal playlist.
- void player_mrl_continue (player_t *player)
 Go to the next MRL object accordingly to the loop and shuffle.

Player tuning & properties.

- int player_get_time_pos (player_t *player)

 Get current time position in the current stream.
- int player_get_percent_pos (player_t *player)

 Get percent position in the current stream.
- void player_set_playback (player_t *player, player_pb_t pb)

 Set playback mode.
- void player_set_loop (player_t *player, player_loop_t loop, int value) Set loop mode and value.
- void player_set_shuffle (player_t *player, int value) Shuffle playback in the internal playlist.
- void player_set_framedrop (player_t *player, player_framedrop_t fd)

 Set frame dropping with video playback.
- void player_set_mouse_position (player_t *player, int x, int y)

 Set the mouse position to the player.
- void player_x_window_set_properties (player_t *player, int x, int y, int w, int h, int flags)

 Set properties of X11 window handled by libplayer.
- void player_osd_show_text (player_t *player, const char *text, int x, int y, int duration) Show a text on the On-screen Display.
- void player_osd_state (player_t *player, int value) Enable/disable On-screen Display.

Playback related controls.

- player_pb_state_t player_playback_get_state (player_t *player)

 Get current playback state.
- void player_playback_start (player_t *player)

 Start a new playback.
- void player_playback_stop (player_t *player) Stop playback.
- void player_playback_pause (player_t *player)

 Pause and unpause playback.
- void player_playback_seek (player_t *player, int value, player_pb_seek_t seek)

 Seek in the stream.
- void player_playback_seek_chapter (player_t *player, int value, int absolute) Seek chapter in the stream.
- void player_playback_speed (player_t *player, float value) Change playback speed.

Audio related controls.

```
• int player_audio_volume_get (player_t *player)

Get current volume.
```

- void player_audio_volume_set (player_t *player, int value)

 Set volume.
- player_mute_t player_audio_mute_get (player_t *player)

 Get mute state.
- void player_audio_mute_set (player_t *player, player_mute_t value)

 Set mute state.
- void player_audio_set_delay (player_t *player, int value, int absolute) Set audio delay.
- void player_audio_select (player_t *player, int audio_id)

 Select audio ID.
- void player_audio_prev (player_t *player)

 Select the previous audio ID.
- void player_audio_next (player_t *player)
 Select the next audio ID.

Video related controls.

- void player_video_set_aspect (player_t *player, player_video_aspect_t aspect, int8_t value, int absolute)
 Set video aspect.
- void player_video_set_panscan (player_t *player, int8_t value, int absolute) Set video panscan.
- void player_video_set_aspect_ratio (player_t *player, float value) Set video aspect ratio.

Subtitles related controls.

- void player_subtitle_set_delay (player_t *player, int value) Set subtitle delay.
- void player_subtitle_set_alignment (player_t *player, player_sub_alignment_t a) Set subtitle alignment.
- void player_subtitle_set_position (player_t *player, int value) Set subtitle position.
- void player_subtitle_set_visibility (player_t *player, int value) Set subtitle visibility.
- void player_subtitle_scale (player_t *player, int value, int absolute) Set subtitle scale.

- void player_subtitle_select (player_t *player, int sub_id) Select subtitle ID.
- void player_subtitle_prev (player_t *player)

 Select the previous subtitle ID.
- void player_subtitle_next (player_t *player)
 Select the next subtitle ID.

DVD specific controls.

- void player_dvd_nav (player_t *player, player_dvdnav_t value) DVD Navigation commands.
- void player_dvd_angle_select (player_t *player, int angle) Select DVD angle.
- void player_dvd_angle_prev (player_t *player)

 Select the previous DVD angle.
- void player_dvd_angle_next (player_t *player)

 Select the next DVD angle.
- void player_dvd_title_select (player_t *player, int title)

 Select DVD title.
- void player_dvd_title_prev (player_t *player)

 Select the previous DVD title.
- void player_dvd_title_next (player_t *player)

 Select the next DVD title.

TV/DVB specific controls.

- void player_tv_channel_select (player_t *player, const char *channel) Select TV channel.
- void player_tv_channel_prev (player_t *player)

 Select the previous TV channel.
- void player_tv_channel_next (player_t *player)

 Select the next TV channel.

Radio specific controls.

- void player_radio_channel_select (player_t *player, const char *channel) Select radio channel.
- void player_radio_channel_prev (player_t *player)

 Select the previous radio channel.
- void player_radio_channel_next (player_t *player)

Select the next radio channel.

VDR specific controls.

• void player_vdr (player_t *player, player_vdr_t value) VDR commands.

Global libplayer functions.

- int libplayer_wrapper_enabled (player_type_t type) Test if a wrapper is enabled.
- int libplayer_wrapper_supported_res (player_type_t type, mrl_resource_t res)

 Test if a resource is supported by a wrapper.

5.1.1 Detailed Description

GeeXboX libplayer public API header.

Definition in file player.h.

5.1.2 Typedef Documentation

5.1.2.1 typedef struct mrl_s mrl_t

MRL object.

This handles an audio, video or image resource.

Definition at line 269 of file player.h.

5.1.2.2 typedef struct player_s player_t

Player controller.

This controls a multimedia player.

Definition at line 111 of file player.h.

5.1.3 Enumeration Type Documentation

5.1.3.1 enum mrl_metadata_cd_type_t

MRL CDDA/CDDB metadata.

Definition at line 394 of file player.h.

5.1.3.2 enum mrl_metadata_dvd_type_t

MRL DVD/DVDNAV metadata.

Definition at line 400 of file player.h.

5.1.3.3 enum mrl_metadata_type_t

MRL metadata.

Definition at line 383 of file player.h.

5.1.3.4 enum mrl_properties_type_t

MRL properties.

Definition at line 407 of file player.h.

5.1.3.5 enum mrl_resource_t

MRL resources.

Definition at line 286 of file player.h.

5.1.3.6 enum mrl_snapshot_t

Snapshot image file type.

Definition at line 375 of file player.h.

5.1.3.7 enum mrl_type_t

MRL types.

Definition at line 272 of file player.h.

5.1.3.8 enum player_ao_t

Player audio outputs.

Definition at line 137 of file player.h.

5.1.3.9 enum player_dvdnav_t

Player DVDnav commands.

Definition at line 1460 of file player.h.

5.1.3.10 enum player_event_t

Player events.

Definition at line 146 of file player.h.

5.1.3.11 enum player_framedrop_t

Player frame dropping mode.

Definition at line 861 of file player.h.

5.1.3.12 enum player_loop_t

Player loop mode.

Definition at line 854 of file player.h.

5.1.3.13 enum player_mrl_add_t

Player MRL add mode.

Definition at line 745 of file player.h.

5.1.3.14 enum player_mute_t

Player mute state.

Definition at line 1148 of file player.h.

5.1.3.15 enum player_pb_seek_t

Player playback seek mode.

Definition at line 1042 of file player.h.

5.1.3.16 enum player_pb_state_t

Player playback state.

Definition at line 1035 of file player.h.

5.1.3.17 enum player_pb_t

Player playback mode.

Definition at line 848 of file player.h.

5.1.3.18 enum player_sub_alignment_t

Player subtitle alignment.

Definition at line 1335 of file player.h.

5.1.3.19 enum player_type_t

Player types.

Definition at line 114 of file player.h.

5.1.3.20 enum player_vdr_t

Player VDR commands.

Definition at line 1681 of file player.h.

5.1.3.21 enum player_verbosity_level_t

Player verbosity.

Definition at line 157 of file player.h.

5.1.3.22 enum player_video_aspect_t

Player video aspect.

Definition at line 1271 of file player.h.

5.1.3.23 enum player_vo_t

Player video outputs.

Definition at line 123 of file player.h.

5.1.3.24 enum player_x_window_flags_t

Player X11 window flags.

Definition at line 868 of file player.h.

5.1.4 Function Documentation

5.1.4.1 unsigned int libplayer_version (void)

Return LIBPLAYER_VERSION_INT constant.

5.1.4.2 int libplayer_wrapper_enabled (player_type_t type)

Test if a wrapper is enabled.

Warning

MT-Safe in multithreaded applications.

Parameters

 \leftarrow *type* Player type.

Returns

1 if enabled, 0 otherwise.

5.1.4.3 int libplayer_wrapper_supported_res (player_type_t type, mrl_resource_t res)

Test if a resource is supported by a wrapper.

Warning

MT-Safe in multithreaded applications.

Parameters

 \leftarrow *type* Player type.

 \leftarrow res Resource type.

Returns

1 if supported, 0 otherwise.

5.1.4.4 void $mrl_add_subtitle$ (player_t * player, $mrl_t * mrl$, char * subtitle)

Add a subtitle file to a MRL object.

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- $\leftarrow mrl$ MRL object, NULL for current.
- \leftarrow *subtitle* Location of the subtitle file to be added.

5.1.4.5 void mrl_free (player_t * player, mrl_t * mrl)

Free a MRL object.

Never use this function when the MRL (or a linked MRL) is set in the playlist of a player controller.

Warning

Must be used only as the last mrl function for one MRL object. MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- $\leftarrow mrl$ MRL object.

5.1.4.6 char* mrl_get_audio_codec (player_t * player, mrl_t * mrl)

Get audio codec name of the stream.

Wrappers supported (even partially): MPlayer, xine

Warning

The returned pointer must be freed when no longer used. MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *mrl* MRL object, NULL for current.

Returns

Audio codec name, NULL otherwise.

5.1.4.7 char* mrl_get_metadata (player_t * player, mrl_t * mrl, mrl_metadata_type_t m)

Get metadata of the stream.

This function can be slow when the stream is not (fastly) reachable.

Wrappers supported (even partially): MPlayer, VLC, xine

Warning

The returned pointer must be freed when no longer used. MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *mrl* MRL object, NULL for current.
- $\leftarrow m$ Type of metadata to get.

Returns

Metadata string, NULL otherwise.

5.1.4.8 int mrl_get_metadata_audio (player_t * player, mrl_t * mrl, int pos, uint32_t * id, char ** name, char ** lang)

Get audio metadata of the MRL object.

This function can be slow when the stream is not (fastly) reachable.

The pos argument is the position of the audio stream in the internal list of libplayer. The first audio stream begins with 1. id returned by this function can be used with player_audio_select().

Wrappers supported (even partially): MPlayer

Warning

The pointers (name and lang) must be freed when no longer used. MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

- ← *mrl* MRL object, NULL for current.
- \leftarrow *pos* Position of the audio stream.
- \rightarrow *id* ID of the audio stream, NULL to ignore.
- → *name* Name of the audio stream, NULL to ignore.
- \rightarrow *lang* Language of the audio stream, NULL to ignore.

Returns

1 for success, 0 if the audio stream is not available.

5.1.4.9 uint32_t mrl_get_metadata_audio_nb (player_t * player, mrl_t * mrl)

Get the number of available audio streams.

This function can be slow when the stream is not (fastly) reachable.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *mrl* MRL object, NULL for current.

Returns

Number of audio streams.

5.1.4.10 uint32_t mrl_get_metadata_cd (player_t * player, mrl_t * mrl, mrl_metadata_cd_type_t m)

Get metadata of a CDDA/CDDB MRL object.

This function can be slow when the stream is not (fastly) reachable.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- $\leftarrow mrl$ MRL object, NULL for current.
- $\leftarrow m$ Type of metadata to get.

Returns

Metadata value.

5.1.4.11 char* mrl_get_metadata_cd_track (player_t * player, mrl_t * mrl, int trackid, uint32_t * length)

Get metadata of a track with CDDA/CDDB MRL object.

This function can be slow when the stream is not (fastly) reachable.

Wrappers supported (even partially): MPlayer

Warning

The returned pointer must be freed when no longer used. MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *mrl* MRL object, NULL for current.
- \leftarrow *trackid* Track ID on the CD.
- \rightarrow *length* Length of the track (millisecond).

Returns

Title of the track (CDDB only), NULL otherwise.

5.1.4.12 char* mrl_get_metadata_dvd (player_t * player, mrl_t * mrl, uint8_t * titles)

Get metadata of a DVD/DVDNAV MRL object.

This function can be slow when the stream is not (fastly) reachable.

Wrappers supported (even partially): MPlayer, xine

Warning

The returned pointer must be freed when no longer used. MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *mrl* MRL object, NULL for current.
- \rightarrow *titles* How many titles on the DVD.

Returns

Volume ID, NULL otherwise.

5.1.4.13 uint32_t mrl_get_metadata_dvd_title (player_t * player, mrl_t * mrl, int titleid, mrl_metadata_dvd_type_t m)

Get metadata of a title with DVD/DVDNAV MRL object.

This function can be slow when the stream is not (fastly) reachable.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- ← *mrl* MRL object, NULL for current.
- \leftarrow *titleid* Title ID on the DVD.
- $\leftarrow m$ Type of metadata to get.

Returns

Metadata value.

5.1.4.14 int mrl_get_metadata_subtitle (player_t * player, mrl_t * mrl, int pos, uint32_t * id, char ** name, char ** lang)

Get subtitle metadata of the MRL object.

This function can be slow when the stream is not (fastly) reachable.

The pos argument is the position of the subtitle in the internal list of libplayer. The first subtitle begins with 1. id returned by this function can be used with player_subtitle_select().

Wrappers supported (even partially): MPlayer

Warning

The pointers (name and lang) must be freed when no longer used. MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *mrl* MRL object, NULL for current.
- \leftarrow *pos* Position of the subtitle.
- \rightarrow *id* ID of the subtitle, NULL to ignore.
- → *name* Name of the subtitle, NULL to ignore.
- \rightarrow *lang* Language of the subtitle, NULL to ignore.

Returns

1 for success, 0 if the subtitle is not available.

5.1.4.15 uint32_t mrl_get_metadata_subtitle_nb (player_t * player, mrl_t * mrl)

Get the number of available subtitles.

This function can be slow when the stream is not (fastly) reachable.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- $\leftarrow mrl$ MRL object, NULL for current.

Returns

Number of subtitles.

5.1.4.16 uint32_t mrl_get_property (player_t * player, mrl_t * mrl, mrl_properties_type_t p)

Get property of the stream.

Wrappers supported (even partially): MPlayer, VLC, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- $\leftarrow mrl$ MRL object, NULL for current.
- $\leftarrow p$ Type of property.

Returns

Property value.

5.1.4.17 mrl_resource_t mrl_get_resource (player_t * player, mrl_t * mrl)

Get resource of the stream.

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- $\leftarrow mrl$ MRL object, NULL for current.

Returns

Resource of MRL object.

5.1.4.18 off_t mrl_get_size (player_t * player, mrl_t * mrl)

Get size of the resource.

Wrappers supported (even partially): MPlayer, VLC, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- $\leftarrow mrl$ MRL object, NULL for current.

Returns

Size of the stream (bytes).

5.1.4.19 mrl_type_t mrl_get_type (player_t * player, mrl_t * mrl)

Get type of the stream.

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *mrl* MRL object, NULL for current.

Returns

Type of MRL object.

5.1.4.20 char* mrl_get_video_codec (player_t * player, mrl_t * mrl)

Get video codec name of the stream.

Wrappers supported (even partially): MPlayer, xine

Warning

The returned pointer must be freed when no longer used. MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *mrl* MRL object, NULL for current.

Returns

Video codec name, NULL otherwise.

5.1.4.21 mrl_t* mrl_new (player_t * player, mrl_resource_t res, void * args)

Create a new MRL object.

This function can be slow when the stream is not (fastly) reachable.

The argument args and the strings provided with args must be allocated dynamically. The pointers are freed by libplayer when a mrl is no longer available.

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow res Resource type.
- \leftarrow args Arguments specific to the resource type.

Returns

MRL object, NULL otherwise.

5.1.4.22 void mrl_video_snapshot (player_t * player, mrl_t * mrl, int pos, mrl_snapshot_t t, const char * dst)

Take a video snapshot.

One frame at the pos (in second) is saved to dst.

Wrappers supported (even partially): MPlayer, VLC

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- $\leftarrow mrl$ MRL object, NULL for current.
- \leftarrow *pos* Time position (second).
- $\leftarrow t$ Image file type.
- \leftarrow dst Destination file, NULL for default filename in the current directory.

5.1.4.23 player_mute_t player_audio_mute_get (player_t * player)

Get mute state.

Wrappers supported (even partially): MPlayer, VLC, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

Returns

Mute state.

5.1.4.24 void player_audio_mute_set (player_t * player, player_mute_t value)

Set mute state.

Wrappers supported (even partially): MPlayer, VLC, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

- \leftarrow *player* Player controller.
- \leftarrow *value* Mute state to set.

5.1.4.25 void player_audio_next (player_t * player)

Select the next audio ID.

It stays on the same audio ID if no next stream exists.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.26 void player_audio_prev (player_t * player)

Select the previous audio ID.

It stays on the same audio ID if no previous stream exists.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.27 void player_audio_select (player_t * player, int audio_id)

Select audio ID.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

- \leftarrow *player* Player controller.
- \leftarrow *audio_id* ID of the audio stream to select.

5.1.4.28 void player_audio_set_delay (player_t * player, int value, int absolute)

Set audio delay.

Only useful with video files to set delay between audio and video streams.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- ← *value* Delay to set (millisecond).
- \leftarrow absolute Mode, 0 for relative.

5.1.4.29 int player_audio_volume_get (player_t * player)

Get current volume.

Wrappers supported (even partially): MPlayer, VLC, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

Returns

Volume (percent).

5.1.4.30 void player_audio_volume_set (player_t * player, int value)

Set volume.

Wrappers supported (even partially): MPlayer, VLC, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

- \leftarrow *player* Player controller.
- \leftarrow *value* Volume to set (percent).

5.1.4.31 void player_dvd_angle_next (player_t * player)

Select the next DVD angle.

It stays on the same if no next angle exists.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.32 void player_dvd_angle_prev (player_t * player)

Select the previous DVD angle.

It stays on the same if no previous angle exists.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.33 void player_dvd_angle_select (player_t * player, int angle)

Select DVD angle.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

- \leftarrow *player* Player controller.
- \leftarrow angle Angle to select.

5.1.4.34 void player_dvd_nav (player_t * player, player_dvdnav_t value)

DVD Navigation commands.

Wrappers supported (even partially): MPlayer, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- ← value Command to send.

5.1.4.35 void player_dvd_title_next (player_t * player)

Select the next DVD title.

It stays on the same if no next title exists.

Wrappers supported (even partially): VLC

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.36 void player_dvd_title_prev (player_t * player)

Select the previous DVD title.

It stays on the same if no previous title exists.

Wrappers supported (even partially): VLC

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.37 void player_dvd_title_select (player_t * player, int title)

Select DVD title.

Wrappers supported (even partially): MPlayer, VLC

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *title* Title to select.

5.1.4.38 int player_get_percent_pos (player_t * player)

Get percent position in the current stream.

Wrapper supported (even partially): MPlayer, VLC, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

Returns

Percent position.

5.1.4.39 int player_get_time_pos (player_t * player)

Get current time position in the current stream.

Wrappers supported (even partially): MPlayer, VLC, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

Returns

Time position (millisecond).

5.1.4.40 player_t* player_init (player_type_t type, player_verbosity_level_t verbosity, player_init_param_t * param)

Initialization of a new player controller.

Multiple player controllers can be initialized with any wrappers. The same Window ID can be used to attach their video.

For a description of each parameters supported by this function:

See also

```
player_init_param_t
```

When a parameter in param is 0 (or NULL), its default value is used. If param is NULL, then all default values are forced for all parameters.

Wrappers supported (even partially): GStreamer, MPlayer, VLC, xine

Parameters

- \leftarrow *type* Type of wrapper to load.
- ← *verbosity* Level of verbosity to set.
- ← *param* Parameters, NULL for default values.

Returns

Player controller, NULL otherwise.

5.1.4.41 void player_mrl_append (player_t * player, mrl_t * mrl, player_mrl_add_t when)

Append MRL object in the internal playlist.

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- $\leftarrow mrl$ MRL object to append.
- \leftarrow when Just append, or append and go to the end to play.

5.1.4.42 void player_mrl_continue (player_t * player)

Go to the next MRL object accordingly to the loop and shuffle.

The behaviour is the same that player_mrl_next() if the 'loop' or the 'shuffle' is not enabled and the playback mode is not AUTO.

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.43 mrl_t* player_mrl_get_current (player_t * player)

Get current MRL set in the internal playlist.

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

Returns

MRL object.

5.1.4.44 void player_mrl_next (player_t * player)

Go the the next MRL object in the internal playlist.

Playback is started if a next MRL object exists.

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.45 void player_mrl_previous (player_t * player)

Go the the previous MRL object in the internal playlist.

Playback is started if a previous MRL object exists.

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.46 void player_mrl_remove (player_t * player)

Remove current MRL object in the internal playlist.

Current MRL object is freed on the way.

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.47 void player_mrl_remove_all (player_t * player)

Remove all MRL objects in the internal playlist.

All MRL objects are freed on the way.

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.48 void player_mrl_set (player_t * player, mrl_t * mrl)

Set MRL object in the internal playlist.

If a MRL was already set in the playlist, then the current is freed and replaced by the new MRL object.

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

```
\leftarrow player Player controller.
```

 $\leftarrow mrl$ MRL object to set.

5.1.4.49 void player_osd_show_text (player_t * player, const char * text, int x, int y, int duration)

Show a text on the On-screen Display.

Coordinates are not usable with MPlayer wrapper. The text is always shown from the top-left corner.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *text* Text to show on the OSD.
- $\leftarrow x \; \text{X coordinate (pixel)}.$
- $\leftarrow y$ Y coordinate (pixel).
- \leftarrow *duration* Duration (millisecond).

5.1.4.50 void player_osd_state (player_t * player, int value)

Enable/disable On-screen Display.

With the MPlayer wrapper, this function must be called after every player_playback_start() if OSD must be disabled.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *value* Different of 0 to enable.

5.1.4.51 player_pb_state_t player_playback_get_state (player_t * player)

Get current playback state.

Warning

 $MT\text{-}Safe \ in \ multithreaded \ applications \ (see \ \underline{MT\text{-}Level}).$

Parameters

 \leftarrow *player* Player controller.

Returns

Playback state.

5.1.4.52 void player_playback_pause (player_t * player)

Pause and unpause playback.

Wrappers supported (even partially): MPlayer, VLC, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.53 void player_playback_seek (player_t * player, int value, player_pb_seek_t seek)

Seek in the stream.

Wrappers supported (even partially): MPlayer, VLC, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- ← *value* Value for seeking (millisecond or percent).
- \leftarrow seek Seeking mode.

5.1.4.54 void player_playback_seek_chapter (player_t * player, int value, int absolute)

Seek chapter in the stream.

Wrappers supported (even partially): MPlayer, VLC

Warning

MT-Safe in multithreaded applications (see MT-Level).

- \leftarrow *player* Player controller.
- ← *value* Value for seeking.
- \leftarrow *absolute* Mode, 0 for relative.

5.1.4.55 void player_playback_speed (player_t * player, float value)

Change playback speed.

This function can't be used to play in backward.

Wrappers supported (even partially): MPlayer, xine, VLC

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *value* Factor of playback speed to set.

5.1.4.56 void player_playback_start (player_t * player)

Start a new playback.

The playback is always started from the beginning.

Wrappers supported (even partially): GStreamer, MPlayer, VLC, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.57 void player_playback_stop (player_t * player)

Stop playback.

Wrappers supported (even partially): GStreamer, MPlayer, VLC, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.58 void player_radio_channel_next (player_t * player)

Select the next radio channel.

It stays on the same if no next channel exists.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.59 void player_radio_channel_prev (player_t * player)

Select the previous radio channel.

It stays on the same if no previous channel exists.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.60 void player_radio_channel_select (player_t * player, const char * channel)

Select radio channel.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

- \leftarrow *player* Player controller.
- \leftarrow *channel* Channel to select.

5.1.4.61 void player_set_framedrop (player_t * player, player_framedrop_t fd)

Set frame dropping with video playback.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *fd* Frame dropping type to set.

5.1.4.62 void player_set_loop (player_t * player, player_loop_t loop, int value)

Set loop mode and value.

Only enabled if playback mode is auto, see player_set_playback().

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- $\leftarrow loop$ Mode to use (one element or the whole playlist).
- ← *value* How many loops, negative for infinite.

5.1.4.63 void player_set_mouse_position (player_t * player, int x, int y)

Set the mouse position to the player.

The main goal is to select buttons in DVD menu. The coordinates are relative to the top-left corner of the root window. The root window is winid passed with player_init().

Wrappers supported (even partially): MPlayer, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

- \leftarrow *player* Player controller.
- $\leftarrow x \; \text{X coordinate (pixel)}.$
- $\leftarrow y \; \text{Y coordinate (pixel)}.$

5.1.4.64 void player_set_playback (player_t * player, player_pb_t pb)

Set playback mode.

If the playback mode is set to PLAYER_PB_AUTO, then loop and shuffle can be used with the internal playlist. By default, AUTO will just going to the next available MRL object in the playlist and start a new playback.

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- $\leftarrow pb$ Mode to use.

5.1.4.65 void player_set_shuffle (player_t * player, int value)

Shuffle playback in the internal playlist.

Only enabled if playback mode is auto, see player_set_playback().

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *value* Different of 0 to enable.

5.1.4.66 void player_set_verbosity (player_t * player, player_verbosity_level_t level)

Set verbosity level.

Wrappers supported (even partially): MPlayer, VLC, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

- \leftarrow *player* Player controller.
- \leftarrow *level* Level of verbosity to set.

5.1.4.67 void player_subtitle_next (player_t * player)

Select the next subtitle ID.

It stays on the same subtitle ID if no next subtitle exists.

Wrappers supported (even partially): MPlayer, VLC

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.68 void player_subtitle_prev (player_t * player)

Select the previous subtitle ID.

It stays on the same subtitle ID if no previous subtitle exists.

Wrappers supported (even partially): MPlayer, VLC

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.69 void player_subtitle_scale (player_t * player, int value, int absolute)

Set subtitle scale.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

- \leftarrow *player* Player controller.
- ← *value* Scale to set.
- \leftarrow *absolute* Mode, 0 for relative.

5.1.4.70 void player_subtitle_select (player_t * player, int sub_id)

Select subtitle ID.

Wrappers supported (even partially): MPlayer, VLC

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *sub_id* ID of the subtitle to select.

5.1.4.71 void player_subtitle_set_alignment (player_t * player, player_sub_alignment_t a)

Set subtitle alignment.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- $\leftarrow a$ Alignment to set.

5.1.4.72 void player_subtitle_set_delay (player_t * player, int value)

Set subtitle delay.

Only useful with video files to set delay between audio stream and the subtitles.

Wrappers supported (even partially): MPlayer, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

- \leftarrow *player* Player controller.
- \leftarrow *value* Delay to set (millisecond).

5.1.4.73 void player_subtitle_set_position (player_t * player, int value)

Set subtitle position.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *value* Position to set.

5.1.4.74 void player_subtitle_set_visibility (player_t * player, int value)

Set subtitle visibility.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *value* Different of 0 to view the subtitles.

5.1.4.75 void player_tv_channel_next (player_t * player)

Select the next TV channel.

It stays on the same if no next channel exists.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.76 void player_tv_channel_prev (player_t * player)

Select the previous TV channel.

It stays on the same if no previous channel exists.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

 \leftarrow *player* Player controller.

5.1.4.77 void player_tv_channel_select (player_t * player, const char * channel)

Select TV channel.

Wrappers supported (even partially): MPlayer

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *channel* Channel to select.

5.1.4.78 void player_uninit (player_t * player)

Uninitialization of a player controller.

All MRL objects in the internal playlist will be freed.

Wrappers supported (even partially): GStreamer, MPlayer, VLC, xine

Warning

Must be used only as the last player function for a controller.

Parameters

 \leftarrow *player* Player controller.

5.1.4.79 void player_vdr (player_t * player, player_vdr_t value)

VDR commands.

Wrappers supported (even partially): xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- ← value Command to send.

5.1.4.80 void player_video_set_aspect (player_t * player, player_video_aspect_t aspect, int8_t value, int absolute)

Set video aspect.

Wrappers supported (even partially): none

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow aspect Aspect to change.
- \leftarrow *value* Value for aspect to set.
- \leftarrow *absolute* Mode, 0 for relative.

5.1.4.81 void player_video_set_aspect_ratio (player_t * player, float value)

Set video aspect ratio.

Wrappers supported (even partially): MPlayer, VLC, xine

Warning

MT-Safe in multithreaded applications (see MT-Level).

- \leftarrow *player* Player controller.
- \leftarrow *value* Ratio to set.

5.1.4.82 void player_video_set_panscan (player_t * player, int8_t value, int absolute)

Set video panscan.

Wrappers supported (even partially): none

Warning

MT-Safe in multithreaded applications (see MT-Level).

Parameters

- \leftarrow *player* Player controller.
- \leftarrow *value* Value for panscan to set.
- \leftarrow *absolute* Mode, 0 for relative.

5.1.4.83 void player_x_window_set_properties (player_t * player, int x, int y, int w, int h, int flags)

Set properties of X11 window handled by libplayer.

Origin to the top-left corner.

Wrappers supported (even partially): MPlayer, xine

Warning

Only usable with video outputs X11 compliant. MT-Safe in multithreaded applications (see MT-Level).

- \leftarrow *player* Player controller.
- $\leftarrow x \; \text{X coordinate (pixel)}.$
- $\leftarrow y$ Y coordinate (pixel).
- $\leftarrow w$ Width (pixel).
- $\leftarrow h$ Height (pixel).
- \leftarrow *flags* Flags to select properties to change.

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