

原 FFmpeg API 变更记录

2014年11月11日 17:04:34 阅读数：24207

最近一两年内FFmpeg项目发展的速度很快，本来是一件好事。但是随之而来的问题就是其API（接口函数）一直在发生变动。这么一来基于旧一点版本的FFmpeg的程序的代码在最新的类库上可能就跑不通了。

例如一年前的程序中，获取媒体信息使用的函数是av_find_stream_info()。但是最近的版本中，av_find_stream_info()函数已经无法使用了，取而代之的是avformat_find_stream_info()。再比如，早一些的程序中，打开解码器可以使用avcodec_open()，但是新版本的程序中必须使用avcodec_open2()。而早期版本的FFmpeg中打开媒体的函数av_open_input_file()也已经被avformat_open_input()所取代。可以看出一些与libavformat相关的av_***()都变更为了avformat_***()，这一趋势也说明FFmpeg的API正在慢慢朝着“名称更加规范”的方向发展。

在FFmpeg的doc目录下碰巧看到了一个FFmpeg的API变更记录，记载了到今天为止FFmpeg所有的API变化情况，在这里记录一下。

整个文件中主要有三种记录：

Add：新增的

Change/Rename：修改的

Deprecate：过时的。以后很有可能删除。

Remove：删除的

文件位于doc/APIchanges，内容如下。

Never assume the API of libav* to be stable unless at least 1 month has passed since the last major version increase or the API was added.

The last version increases were:

libavcodec: 2014-08-09

libavdevice: 2014-08-09

libavfilter: 2014-08-09

libavformat: 2014-08-09

libavresample: 2014-08-09

libpostproc: 2014-08-09

libswresample: 2014-08-09

libswscale: 2014-08-09

libavutil: 2014-08-09

API changes, most recent first:

2014-11-xx - xxxxxxx - lavc 56.6.0 - vorbis_parser.h

Add a public API for parsing vorbis packets.

2014-10-xx - xxxxxxx - lavc 56.5.0 - avcodec.h

Replace AVCodecContext.time_base used for decoding with AVCodecContext.framerate.

2014-10-xx - xxxxxxx - lavc 56.4.0 - avcodec.h

Add AV_HWACCEL_FLAG_IGNORE_LEVEL flag to av_vdpau_bind_context().

2014-10-13 - xxxxxxx - lavc 56.03.0 - avcodec.h

Add AVCodecContext.initial_padding. Deprecate the use of AVCodecContext.delay for audio encoding.

2014-09-xx - xxxxxxx - lavu 54.04.0 - pixdesc.h

Add API to return the name of frame and context color properties.

2014-09-xx - xxxxxxx - lavc 56.2.0 - vdpau.h

Add av_vdpau_bind_context(). This function should now be used for creating (or resetting) a AVVDPAUContext instead of av_vdpau_alloc_context().

2014-10-02 - xxxxxxx - lavc 56.2.100 - avcodec.h

2014-10-02 - xxxxxxx - lavu 54.9.100 - frame.h

Add AV_FRAME_DATA_SKIP_SAMPLES. Add lavc CODEC_FLAG2_SKIP_MANUAL and AVOption "skip_manual", which makes lavc export skip information via AV_FRAME_DATA_SKIP_SAMPLES AVFrame side data, instead of skipping and discarding samples automatically.

2014-10-02 - xxxxxxx - lavu 54.8.100 - avstring.h

Add av_match_list()

2014-09-24 - xxxxxxx - libpostproc 53.1.100

Add visualization support

2014-09-xx - xxxxxxx - lavc 56.1.101 - dv_profile.h

deprecate avpriv_dv_frame_profile2(), which was made public by accident.

----- 8< ----- FFmpeg 2.4 was cut here ----- 8< -----

2014-08-28 - f30a815 / 9301486 - lavc 56.1.100 / 56.1.0 - avcodec.h

Add AV_PKT_DATA_STEREO3D to export container-level stereo3d information.

2014-08-25 - 215db29 / b263f8f - lavf 56.3.100 / 56.3.0 - avformat.h

Add AVFormatContext.max_ts_probe.

2014-08-23 - 8fc9bd0 - lavu 54.7.100 - dict.h

AV_DICT_DONT_STRDUP_KEY and AV_DICT_DONT_STRDUP_VAL arguments are now freed even on error. This is consistent with the behaviour all users of it we could find expect.

2014-08-21 - 980a5b0 - lavu 54.6.100 - frame.h motion_vector.h

Add AV_FRAME_DATA_MOTION_VECTORS side data and AVMotionVector structure

2014-08-16 - b7d5e01 - lswr 1.1.100 - swresample.h

Add AVFrame based API

2014-08-16 - c2829dc - lavu 54.4.100 - dict.h

Add av_dict_set_int helper function.

2014-08-13 - c8571c6 / 8ddc326 - lavu 54.3.100 / 54.3.0 - mem.h

Add av_strndup().

2014-08-13 - 2ba4577 / a8c104a - lavu 54.2.100 / 54.2.0 - opt.h

Add av_opt_get_dict_val/set_dict_val with AV_OPT_TYPE_DICT to support dictionary types being set as options.

2014-08-13 - afbd4b8 - lavf 56.01.0 - avformat.h

Add AVFormatContext.event_flags and AVStream.event_flags for signaling to the user when events happen in the file/stream.

2014-08-10 - 78eaaa8 / fb1ddcd - lavr 2.1.0 - avresample.h

Add avresample_convert_frame() and avresample_config().

2014-08-10 - 78eaaa8 / fb1ddcd - lavu 54.1.100 / 54.1.0 - error.h

Add AVERROR_INPUT_CHANGED and AVERROR_OUTPUT_CHANGED.

2014-08-08 - 3841f2a / d35b94f - lavc 55.73.102 / 55.57.4 - avcodec.h

Deprecate FF_IDCT_XVIDMMX define and xvidmmx idct option.

Replaced by FF_IDCT_XVID and xvid respectively.

2014-08-08 - 5c3c671 - lavf 55.53.100 - avio.h

Add avio_feof() and deprecate url_feof().

2014-08-07 - bb78903 - lsws 2.1.3 - swscale.h

sws_getContext is not going to be removed in the future.

2014-08-07 - a561662 / ad1ee5f - lavc 55.73.101 / 55.57.3 - avcodec.h

reordered_opaque is not going to be removed in the future.

2014-08-02 - 28a2107 - lavu 52.98.100 - pixelutils.h

Add pixelutils API with SAD functions

2014-08-04 - 6017c98 / e9abafc - lavu 52.97.100 / 53.22.0 - pixfmt.h

Add AV_PIX_FMT_YA16 pixel format for 16 bit packed gray with alpha.

2014-08-04 - 4c8bc6f / e96c3b8 - lavu 52.96.101 / 53.21.1 - avstring.h

Rename AV_PIX_FMT_Y400A to AV_PIX_FMT_YA8 to better identify the format.

An alias pixel format and color space name are provided for compatibility.

2014-08-04 - 073c074 / d2962e9 - lavu 52.96.100 / 53.21.0 - pixdesc.h

Support name aliases for pixel formats.

2014-08-03 - 71d008e / 1ef9e83 - lavc 55.72.101 / 55.57.2 - avcodec.h

2014-08-03 - 71d008e / 1ef9e83 - lavu 52.95.100 / 53.20.0 - frame.h

Deprecate AVCodecContext.dtg_active_format and use side-data instead.

2014-08-03 - e680c73 - lavc 55.72.100 - avcodec.h

Add `get_pixels()` to AVDCT

2014-08-03 - 9400603 / 9f17685 - lavc 55.71.101 / 55.57.1 - avcodec.h

Deprecate unused `FF_IDCT_IPP` define and `ipp` avcodec option.

Deprecate unused `FF_DEBUG_PTS` define and `pts` avcodec option.

Deprecate unused `FF_CODER_TYPE_DEFLATE` define and `deflate` avcodec option.

Deprecate unused `FF_DCT_INT` define and `int` avcodec option.

Deprecate unused avcodec option `scenechange_factor`.

2014-07-30 - ba3e331 - lavu 52.94.100 - frame.h

Add `av_frame_side_data_name()`

2014-07-29 - 80a3a66 / 3a19405 - lavf 56.01.100 / 56.01.0 - avformat.h

Add `mime_type` field to `AVProbeData`, which now **MUST** be initialized in order to avoid uninitialized reads of the `mime_type` pointer, likely leading to crashes.

Typically, this means you will do `'AVProbeData pd = { 0 };'` instead of `'AVProbeData pd;'`.

2014-07-29 - 31e0b5d / 69e7336 - lavu 52.92.100 / 53.19.0 - avstring.h

Make name matching function from `lavf` public as `av_match_name()`.

2014-07-28 - 2e5c8b0 / c5fca01 - lavc 55.71.100 / 55.57.0 - avcodec.h

Add `AV_CODEC_PROP_REORDER` to mark codecs supporting frame reordering.

2014-07-27 - ff9a154 - lavf 55.50.100 - avformat.h

New field `int64_t probesize2` instead of deprecated field `int probesize`.

2014-07-27 - 932ff70 - lavc 55.70.100 - avdct.h

Add `AVDCT` / `avcodec_dct_alloc()` / `avcodec_dct_init()`.

2014-07-23 - 8a4c086 - lavf 55.49.100 - avio.h

Add `avio_read_to_bprint()`

----- 8< ----- FFmpeg 2.3 was cut here ----- 8< -----

2014-07-14 - 62227a7 - lavf 55.47.100 - avformat.h

Add `av_stream_get_parser()`

2014-07-09 - c67690f / a54f03b - lavu 52.92.100 / 53.18.0 - display.h

Add `av_display_matrix_flip()` to flip the transformation matrix.

2014-07-09 - 1b58f13 / f6ee61f - lavc 55.69.100 / 55.56.0 - dv_profile.h

Add a public API for DV profile handling.

2014-06-20 - 0dceefc / 9e500ef - lavu 52.90.100 / 53.17.0 - imgutils.h

Add `av_image_check_sar()`.

2014-06-20 - 4a99333 / 874390e - lavc 55.68.100 / 55.55.0 - avcodec.h

Add `av_packet_rescale_ts()` to simplify timestamp conversion.

2014-06-18 - ac293b6 / 194be1f - lavf 55.44.100 / 55.20.0 - avformat.h

The proper way for providing a hint about the desired timebase to the muxers is now setting `AVStream.time_base`, instead of `AVStream.codec.time_base` as was done previously. The old method is now deprecated.

2014-06-11 - 67d29da - lavc 55.66.101 - avcodec.h

Increase `FF_INPUT_BUFFER_PADDING_SIZE` to 32 due to some corner cases needing it

2014-06-10 - xxxxxxx - lavf 55.43.100 - avformat.h

New field `int64_t max_analyze_duration2` instead of deprecated `int max_analyze_duration`.

2014-05-30 - 00759d7 - lavu 52.89.100 - opt.h

Add `av_opt_copy()`

2014-06-01 - 03bb99a / 0957b27 - lavc 55.66.100 / 55.54.0 - avcodec.h

Add `AVCodecContext.side_data_only_packets` to allow encoders to output packets with only side data. This option may become mandatory in the future, so all users are recommended to update their code and enable this option.

2014-06-01 - 6e8e9f1 / 8c02adc - lavu 52.88.100 / 53.16.0 - frame.h, pixfmt.h

Move all color-related enums (`AVColorPrimaries`, `AVColorSpace`, `AVColorRange`, `AVColorTransferCharacteristic`, and `AVChromaLocation`) inside `lavu`. And add `AVFrame` fields for them.

2014-05-29 - bdb2e80 / b2d4565 - lavr 1.3.0 - avresample.h

Add `avresample_max_output_samples`

2014-05-28 - d858ee7 / 6d21259 - lavf 55.42.100 / 55.19.0 - avformat.h

Add `strict_std_compliance` and related `AVOptions` to support experimental muxing.

2014-05-26 - xxxxxxx - lavu 52.87.100 - threadmessage.h

Add thread message queue API.

2014-05-26 - c37d179 - lavf 55.41.100 - avformat.h

Add `format_probesize` to `AVFormatContext`.

2014-05-20 - 7d25af1 / c23c96b - lavf 55.39.100 / 55.18.0 - avformat.h

Add `av_stream_get_side_data()` to access stream-level side data in the same way as `av_packet_get_side_data()`.

2014-05-xx - xxxxxxx - lavu 52.86.100 - fifo.h

Add `av_fifo_alloc_array()` function.

2014-05-19 - ef1d4ee / bddd8cb - lavu 52.85.100 / 53.15.0 - frame.h, display.h
Add AV_FRAME_DATA_DISPLAYMATRIX for exporting frame-level spatial rendering on video frames for proper display.

2014-05-19 - ef1d4ee / bddd8cb - lavc 55.64.100 / 55.53.0 - avcodec.h
Add AV_PKT_DATA_DISPLAYMATRIX for exporting packet-level spatial rendering on video frames for proper display.

2014-05-19 - 999a99c / a312f71 - lavf 55.38.101 / 55.17.1 - avformat.h
Deprecate AVStream.pts and the AVFrac struct, which was its only use case.
See use av_stream_get_end_pts()

2014-05-18 - 68c0518 / fd05602 - lavc 55.63.100 / 55.52.0 - avcodec.h
Add avcodec_free_context(). From now on it should be used for freeing AVCodecContext.

2014-05-17 - 0eec06e - lavu 52.84.100 - time.h
Add av_gettime_relative() av_gettime_relative_is_monotonic()

2014-05-15 - eacf7d6 / 0c1959b - lavf 55.38.100 / 55.17.0 - avformat.h
Add AVFMT_FLAG_BITEXACT flag. Muxers now use it instead of checking CODEC_FLAG_BITEXACT on the first stream.

2014-05-15 - 96cb4c8 - lswr 0.19.100 - swresample.h
Add swr_close()

2014-05-11 - 14aef38 / 66e6c8a - lavu 52.83.100 / 53.14.0 - pixfmt.h
Add AV_PIX_FMT_VDA for new-style VDA acceleration.

2014-05-xx - xxxxxxx - lavu 52.82.0 - fifo.h
Add av_fifo_freep() function.

2014-05-02 - ba52fb11 - lavu 52.81.0 - opt.h
Add av_opt_set_dict2() function.

2014-05-01 - e77b985 / a2941c8 - lavc 55.60.103 / 55.50.3 - avcodec.h
Deprecate CODEC_FLAG_MV0. It is replaced by the flag "mv0" in the "mpv_flags" private option of the mpegvideo encoders.

2014-05-01 - e40ae8c / 6484149 - lavc 55.60.102 / 55.50.2 - avcodec.h
Deprecate CODEC_FLAG_GMC. It is replaced by the "gmc" private option of the libxvid encoder.

2014-05-01 - 1851643 / b2c3171 - lavc 55.60.101 / 55.50.1 - avcodec.h
Deprecate CODEC_FLAG_NORMALIZE_AQP. It is replaced by the flag "naq" in the "mpv_flags" private option of the mpegvideo encoders.

2014-05-01 - cac07d0 / 5fcceda - avcodec.h

Deprecate CODEC_FLAG_INPUT_PRESERVED. Its functionality is replaced by passing reference-counted frames to encoders.

2014-04-29 - 1bf6396 - lavc 55.60.100 - avcodec.h
Add AVCodecDescriptor.mime_types field.

2014-04-29 - xxxxxxx - lavu 52.80.0 - hash.h
Add av_hash_final_bin(), av_hash_final_hex() and av_hash_final_b64().

2014-03-07 - 8b2a130 - lavc 55.50.0 / 55.53.100 - dxva2.h
Add FF_DXVA2_WORKAROUND_INTEL_CLEARVIDEO for old Intel GPUs.

2014-04-22 - 502512e / dac7e8a - lavu 53.13.0 / 52.78.100 - avutil.h
Add av_get_time_base_q().

2014-04-17 - a8d01a7 / 0983d48 - lavu 53.12.0 / 52.77.100 - crc.h
Add AV_CRC_16_ANSI_LE crc variant.

2014-04-XX - xxxxxxx - lavf xx.xx.1xx - avformat.h
Add av_format_inject_global_side_data()

2014-04-12 - 4f698be - lavu 52.76.100 - log.h
Add av_log_get_flags()

2014-04-11 - 6db42a2b - lavd 55.12.100 - avdevice.h
Add avdevice_capabilities_create() function.
Add avdevice_capabilities_free() function.

2014-04-07 - 0a1cc04 / 8b17243 - lavu 52.75.100 / 53.11.0 - pixfmt.h
Add AV_PIX_FMT_YVYU422 pixel format.

2014-04-04 - c1d0536 / 8542f9c - lavu 52.74.100 / 53.10.0 - replaygain.h
Full scale for peak values is now 100000 (instead of UINT32_MAX) and values may overflow.

2014-04-03 - c16e006 / 7763118 - lavu 52.73.100 / 53.9.0 - log.h
Add AV_LOG(c) macro to have 256 color debug messages.

2014-04-03 - eaed4da9 - lavu 52.72.100 - opt.h
Add AV_OPT_MULTI_COMPONENT_RANGE define to allow return multi-component option ranges.

2014-03-29 - cd50a44b - lavu 52.70.100 - mem.h
Add av_dynarray_add_nofree() function.

2014-02-24 - 3e1f241 / d161ae0 - lavu 52.69.100 / 53.8.0 - frame.h
Add av_frame_remove_side_data() for removing a single side data instance from a frame.

2014-03-24 - 83e8978 / 5a7e35d - lavu 52.68.100 / 53.7.0 - frame.h, replaygain.h

Add AV_FRAME_DATA_REPLAYGAIN for exporting replaygain tags.

Add a new header replaygain.h with the AVReplayGain struct.

2014-03-24 - 83e8978 / 5a7e35d - lavc 55.54.100 / 55.36.0 - avcodec.h

Add AV_PKT_DATA_REPLAYGAIN for exporting replaygain tags.

2014-03-24 - 595ba3b / 25b3258 - lavf 55.35.100 / 55.13.0 - avformat.h

Add AVStream.side_data and AVStream.nb_side_data for exporting stream-global side data (e.g. replaygain tags, video rotation)

2014-03-24 - bd34e26 / 0e2c3ee - lavc 55.53.100 / 55.35.0 - avcodec.h

Give the name AVPacketSideData to the previously anonymous struct used for AVPacket.side_data.

----- 8< ----- FFmpeg 2.2 was cut here ----- 8< -----

2014-03-18 - 37c07d4 - lsws 2.5.102

Make gray16 full-scale.

2014-03-16 - 6b1ca17 / 1481d24 - lavu 52.67.100 / 53.6.0 - pixfmt.h

Add RGBA64_LIBAV pixel format and variants for compatibility

2014-03-11 - 3f3229c - lavf 55.34.101 - avformat.h

Set AVFormatContext.start_time_realtime when demuxing.

2014-03-03 - 06fed440 - lavd 55.11.100 - avdevice.h

Add av_input_audio_device_next().

Add av_input_video_device_next().

Add av_output_audio_device_next().

Add av_output_video_device_next().

2014-02-24 - fff5262 / 1155fd0 - lavu 52.66.100 / 53.5.0 - frame.h

Add av_frame_copy() for copying the frame data.

2014-02-24 - a66be60 - lswr 0.18.100 - swresample.h

Add swr_is_initialized() for checking whether a resample context is initialized.

2014-02-22 - 5367c0b / 7e86c27 - lavr 1.2.0 - avresample.h

Add avresample_is_open() for checking whether a resample context is open.

2014-02-19 - 6a24d77 / c3ecd96 - lavu 52.65.100 / 53.4.0 - opt.h

Add AV_OPT_FLAG_EXPORT and AV_OPT_FLAG_READONLY to mark options meant (only) for reading.

2014-02-19 - f4c8d00 / 6bb8720 - lavu 52.64.101 / 53.3.1 - opt.h

Deprecate unused AV_OPT_FLAG_METADATA.

2014-02-xx - xxxxxxx - lavd 55.10.100 - avdevice.h
Add avdevice_list_devices() and avdevice_free_list_devices()

2014-02-16 - db3c970 - lavf 55.33.100 - avio.h
Add avio_find_protocol_name() to find out the name of the protocol that would be selected for a given URL.

2014-02-15 - a2bc6c1 / c98f316 - lavu 52.64.100 / 53.3.0 - frame.h
Add AV_FRAME_DATA_DOWNMIX_INFO value to the AVFrameSideDataType enum and downmix_info.h API, which identify downmix-related metadata.

2014-02-11 - 1b05ac2 - lavf 55.32.100 - avformat.h
Add av_write_uncoded_frame() and av_interleaved_write_uncoded_frame().

2014-02-04 - 3adb5f8 / d9ae103 - lavf 55.30.100 / 55.11.0 - avformat.h
Add AVFormatContext.max_interleave_delta for controlling amount of buffering when interleaving.

2014-02-02 - 5871ee5 - lavf 55.29.100 - avformat.h
Add output_ts_offset muxing option to AVFormatContext.

2014-01-27 - 102bd64 - lavd 55.7.100 - avdevice.h
lavf 55.28.100 - avformat.h
Add avdevice_dev_to_app_control_message() function.

2014-01-27 - 7151411 - lavd 55.6.100 - avdevice.h
lavf 55.27.100 - avformat.h
Add avdevice_app_to_dev_control_message() function.

2014-01-24 - 86bee79 - lavf 55.26.100 - avformat.h
Add AVFormatContext option metadata_header_padding to allow control over the amount of padding added.

2014-01-20 - eef74b2 / 93c553c - lavc 55.48.102 / 55.32.1 - avcodec.h
Edges are not required anymore on video buffers allocated by get_buffer2() (i.e. as if the CODEC_FLAG_EMU_EDGE flag was always on). Deprecate CODEC_FLAG_EMU_EDGE and avcodec_get_edge_width().

2014-01-19 - 1a193c4 - lavf 55.25.100 - avformat.h
Add avformat_get_mov_video_tags() and avformat_get_mov_audio_tags().

2014-01-19 - xxxxxxx - lavu 52.63.100 - rational.h
Add av_make_q() function.

2014-01-05 - 4cf4da9 / 5b4797a - lavu 52.62.100 / 53.2.0 - frame.h
Add AV_FRAME_DATA_MATRIXENCODING value to the AVFrameSideDataType enum, which identifies AVMatrixEncoding data.

2014-01-05 - 751385f / 5c437fb - lavu 52.61.100 / 53.1.0 - channel_layout.h

Add values for various Dolby flags to the AVMatrixEncoding enum.

2014-01-04 - b317f94 - lavu 52.60.100 - mathematics.h

Add av_add_stable() function.

2013-12-22 - 911676c - lavu 52.59.100 - avstring.h

Add av_strnlen() function.

2013-12-09 - 64f73ac - lavu 52.57.100 - openc1.h

Add av_openc1_benchmark() function.

2013-11-30 - 82b2e9c - lavu 52.56.100 - ffversion.h

Moves version.h to libavutil/ffversion.h.

Install ffversion.h and make it public.

2013-12-11 - 29c83d2 / b9fb59d,409a143 / 9431356,44967ab / d7b3ee9 - lavc 55.45.101 / 55.28.1 - avcodec.h

av_frame_alloc(), av_frame_unref() and av_frame_free() now can and should be used instead of avcodec_alloc_frame(), avcodec_get_frame_defaults() and avcodec_free_frame() respectively. The latter three functions are deprecated.

2013-12-09 - 7a60348 / 7e244c6- - lavu 52.58.100 / 52.20.0 - frame.h

Add AV_FRAME_DATA_STEREO3D value to the AVFrameSideDataType enum and stereo3d.h API, that identify codec-independent stereo3d information.

2013-11-26 - 625b290 / 1eaac1d- - lavu 52.55.100 / 52.19.0 - frame.h

Add AV_FRAME_DATA_A53_CC value to the AVFrameSideDataType enum, which identifies ATSC A53 Part 4 Closed Captions data.

2013-11-22 - 6859065 - lavu 52.54.100 - avstring.h

Add av_utf8_decode() function.

2013-11-22 - fb7d70c - lavc 55.44.100 - avcodec.h

Add HEVC profiles

2013-11-20 - c28b61c - lavc 55.44.100 - avcodec.h

Add av_packet_{un,}pack_dictionary()

Add AV_PKT_METADATA_UPDATE side data type, used to transmit key/value strings between a stream and the application.

2013-11-14 - 7c888ae / cce3e0a - lavu 52.53.100 / 52.18.0 - mem.h

Move av_fast_malloc() and av_fast_realloc() for libavcodec to libavutil.

2013-11-14 - b71e4d8 / 8941971 - lavc 55.43.100 / 55.27.0 - avcodec.h

Deprecate AVCodecContext.error_rate, it is replaced by the 'error_rate' private option of the mpegvideo encoder family.

2013-11-14 - 31c09b7 / 728c465 - lavc 55.42.100 / 55.26.0 - vdpau.h

Add av_vdpau_get_profile().

Add av_vdpau_alloc_context(). This function must from now on be

used for allocating AVVDPAUContext.

2013-11-04 - be41f21 / cd8f772 - lavc 55.41.100 / 55.25.0 - avcodec.h
lavu 52.51.100 - frame.h

Add ITU-R BT.2020 and other not yet included values to color primaries,
transfer characteristics and colorspace.

2013-11-04 - 85cabf1 - lavu 52.50.100 - avutil.h
Add av_fopen_utf8()

2013-10-31 - 78265fc / 28096e0 - lavu 52.49.100 / 52.17.0 - frame.h
Add AVFrame.flags and AV_FRAME_FLAG_CORRUPT.

----- 8< ----- FFmpeg 2.1 was cut here ----- 8< -----

2013-10-27 - dbe6f9f - lavc 55.39.100 - avcodec.h
Add CODEC_CAP_DELAY support to avcodec_decode_subtitle2.

2013-10-27 - d61617a - lavu 52.48.100 - parseutils.h
Add av_get_known_color_name().

2013-10-17 - 8696e51 - lavu 52.47.100 - opt.h
Add AV_OPT_TYPE_CHANNEL_LAYOUT and channel layout option handlers
av_opt_get_channel_layout() and av_opt_set_channel_layout().

2013-10-06 - ccf96f8 - libswscale 2.5.101 - options.c
Change default scaler to bicubic

2013-10-03 - e57dba0 - lavc 55.34.100 - avcodec.h
Add av_codec_get_max_lowres()

2013-10-02 - 5082fcc - lavf 55.19.100 - avformat.h
Add audio/video/subtitle AVCodec fields to AVFormatContext to force specific
decoders

2013-09-28 - 7381d31 / 0767bfd - lavfi 3.88.100 / 3.11.0 - avfilter.h
Add AVFilterGraph.execute and AVFilterGraph.opaque for custom slice threading
implementations.

2013-09-21 - 85f8a3c / e208e6d - lavu 52.46.100 / 52.16.0 - pixfmt.h
Add interleaved 4:2:2 8/10-bit formats AV_PIX_FMT_NV16 and
AV_PIX_FMT_NV20.

2013-09-16 - c74c3fb / 3feb3d6 - lavu 52.44.100 / 52.15.0 - mem.h
Add av_reallocp.

2013-09-04 - 3e1f507 - lavc 55.31.101 - avcodec.h

avcodec_close() argument can be NULL.

2013-09-04 - 36cd017a - lavf 55.16.101 - avformat.h

avformat_close_input() argument can be NULL and point on NULL.

2013-08-29 - e31db62 - lavf 55.15.100 - avformat.h

Add av_format_get_probe_score().

2013-08-15 - 1e0e193 - lsws 2.5.100 -

Add a sws_dither AVOption, allowing to set the dither algorithm used

2013-08-11 - d404fe35 - lavc 55.27.100 - vdpau.h

Add a render2 alternative to the render callback function.

2013-08-11 - af05edc - lavc 55.26.100 - vdpau.h

Add allocation function for AVVDPAUContext, allowing to extend it in the future without breaking ABI/API.

2013-08-10 - 67a580f / 5a9a9d4 - lavc 55.25.100 / 55.16.0 - avcodec.h

Extend AVPacket API with av_packet_unref, av_packet_ref, av_packet_move_ref, av_packet_copy_props, av_packet_free_side_data.

2013-08-05 - 9547e3e / f824535 - lavc 55.22.100 / 55.13.0 - avcodec.h

Deprecate the bitstream-related members from struct AVVDPAUContext. The bitstream buffers no longer need to be explicitly freed.

2013-08-05 - 3b805dc / 549294f - lavc 55.21.100 / 55.12.0 - avcodec.h

Deprecate the CODEC_CAP_HWACCEL_VDPAU codec capability. Use CODEC_CAP_HWACCEL and select the AV_PIX_FMT_VDPAU format with get_format() instead.

2013-08-05 - 4ee0984 / a0ad5d0 - lavu 52.41.100 / 52.14.0 - pixfmt.h

Deprecate AV_PIX_FMT_VDPAU_*. Use AV_PIX_FMT_VDPAU instead.

2013-08-02 - 82fdfe8 / a8b1927 - lavc 55.20.100 / 55.11.0 - avcodec.h

Add output_picture_number to AVCodecParserContext.

2013-07-23 - abc8110 - lavc 55.19.100 - avcodec.h

Add avcodec_chroma_pos_to_enum()

Add avcodec_enum_to_chroma_pos()

----- 8< ----- FFmpeg 2.0 was cut here ----- 8< -----

2013-07-03 - 838bd73 - lavfi 3.78.100 - avfilter.h

Deprecate avfilter_graph_parse() in favor of the equivalent avfilter_graph_parse_ptr().

2013-06-24 - af5f9c0 / 95d5246 - lavc 55.17.100 / 55.10.0 - avcodec.h

Add MPEG-2 AAC profiles

2013-06-25 - af5f9c0 / 95d5246 - lavf 55.10.100 - avformat.h
Add AV_DISPOSITION_* flags to indicate text track kind.

2013-06-15 - 99b8cd0 - lavu 52.36.100

Add AVRIPEDM:
av_ripemd_alloc()
av_ripemd_init()
av_ripemd_update()
av_ripemd_final()

2013-06-04 - 30b491f / fc962d4 - lavu 52.35.100 / 52.13.0 - mem.h
Add av_realloc_array and av_reallocp_array

2013-05-30 - 682b227 - lavu 52.35.100

Add AVSHA512:
av_sha512_alloc()
av_sha512_init()
av_sha512_update()
av_sha512_final()

2013-05-24 - 8d4e969 / 129bb23 - lavfi 3.10.0 / 3.70.100 - avfilter.h
Add support for slice multithreading to lavfi. Filters supporting threading are marked with AVFILTER_FLAG_SLICE_THREADS.
New fields AVFilterContext.thread_type, AVFilterGraph.thread_type and AVFilterGraph.nb_threads (accessible directly or through AVOptions) may be used to configure multithreading.

2013-05-24 - fe40a9f / 2a6eaea - lavu 52.12.0 / 52.34.100 - cpu.h
Add av_cpu_count() function for getting the number of logical CPUs.

2013-05-24 - 0c25c39 / b493847 - lavc 55.7.0 / 55.12.100 - avcodec.h
Add picture_structure to AVCodecParserContext.

2013-05-17 - 3a751ea - lavu 52.33.100 - opt.h
Add AV_OPT_TYPE_COLOR value to AVOptionType enum.

2013-05-13 - e398416 - lavu 52.31.100 - mem.h
Add av_dynarray2_add().

2013-05-12 - 1776177 - lavfi 3.65.100
Add AVFILTER_FLAG_SUPPORT_TIMELINE* filter flags.

2013-04-19 - 380cfce - lavc 55.4.100
Add AV_CODEC_PROP_TEXT_SUB property for text based subtitles codec.

2013-04-18 - 7c1a002 - lavf 55.3.100
The matroska demuxer can now output proper verbatim ASS packets. It will become the default starting lavf 56.0.100.

2013-04-10 - af0d270 - lavu 25.26.100 - avutil.h,opt.h

Add av_int_list_length()
and av_opt_set_int_list().

2013-03-30 - 5c73645 - lavu 52.24.100 - samplefmt.h

Add av_samples_alloc_array_and_samples().

2013-03-29 - ef7b6b4 - lavf 55.1.100 - avformat.h

Add av_guess_frame_rate()

2013-03-20 - 8d928a9 - lavu 52.22.100 - opt.h

Add AV_OPT_TYPE_DURATION value to AVOptionType enum.

2013-03-17 - 7aa9af5 - lavu 52.20.100 - opt.h

Add AV_OPT_TYPE_VIDEO_RATE value to AVOptionType enum.

----- 8< ----- FFmpeg 1.2 was cut here ----- 8< -----

2013-03-07 - 9767ec6 - lavu 52.18.100 - avstring.h,bprint.h

Add av_escape() and av_bprint_escape() API.

2013-02-24 - b59cd08 - lavfi 3.41.100 - buffersink.h

Add sample_rates field to AVABufferSinkParams.

2013-01-17 - a1a707f - lavf 54.61.100

Add av_codec_get_tag2().

2013-01-01 - 2eb2e17 - lavfi 3.34.100

Add avfilter_get_audio_buffer_ref_from_arrays_channels.

----- 8< ----- FFmpeg 1.1 was cut here ----- 8< -----

2012-12-20 - 34de47aa - lavfi 3.29.100 - avfilter.h

Add AVFilterLink.channels, avfilter_link_get_channels()
and avfilter_ref_get_channels().

2012-12-15 - 96d815fc - lavc 54.80.100 - avcodec.h

Add pkt_size field to AVFrame.

2012-11-25 - c70ec631 - lavu 52.9.100 - opt.h

Add the following convenience functions to opt.h:

av_opt_get_image_size

av_opt_get_pixel_fmt

av_opt_get_sample_fmt

av_opt_set_image_size

av_opt_set_pixel_fmt
av_opt_set_sample_fmt

2012-11-17 - 4cd74c81 - lavu 52.8.100 - bprint.h
Add av_bprint_strftime().

2012-11-15 - 92648107 - lavu 52.7.100 - opt.h
Add av_opt_get_key_value().

2012-11-13 - 79456652 - lavfi 3.23.100 - avfilter.h
Add channels field to AVFilterBufferRefAudioProps.

2012-11-03 - 481fdeee - lavu 52.3.100 - opt.h
Add AV_OPT_TYPE_SAMPLE_FMT value to AVOptionType enum.

2012-10-21 - 6fb2fd8 - lavc 54.68.100 - avcodec.h
lavfi 3.20.100 - avfilter.h
Add AV_PKT_DATA_STRINGS_METADATA side data type, used to transmit key/value strings between AVPacket and AVFrame, and add metadata field to AVCodecContext (which shall not be accessed by users; see AVFrame metadata instead).

2012-09-27 - a70b493 - lavd 54.3.100 - version.h
Add LIBAVDEVICE_IDENT symbol.

2012-09-27 - a70b493 - lavfi 3.18.100 - version.h
Add LIBAVFILTER_IDENT symbol.

2012-09-27 - a70b493 - libswr 0.16.100 - version.h
Add LIBSWRESAMPLE_VERSION, LIBSWRESAMPLE_BUILD
and LIBSWRESAMPLE_IDENT symbols.

----- 8< ----- FFmpeg 1.0 was cut here ----- 8< -----

2012-09-06 - 29e972f - lavu 51.72.100 - parseutils.h
Add av_small_strptime() time parsing function.

Can be used as a stripped-down replacement for strptime(), on systems which do not support it.

2012-08-25 - 2626cc4 - lavf 54.28.100
Matroska demuxer now identifies SRT subtitles as AV_CODEC_ID_SUBRIP instead of AV_CODEC_ID_TEXT.

2012-08-13 - 5c0d8bc - lavfi 3.8.100 - avfilter.h
Add avfilter_get_class() function, and priv_class field to AVFilter struct.

2012-08-12 - a25346e - lavu 51.69.100 - opt.h
Add AV_OPT_FLAG_FILTERING_PARAM symbol in opt.h.

2012-07-31 - 23fc4dd - lavc 54.46.100
Add channels field to AVFrame.

2012-07-30 - f893904 - lavu 51.66.100
Add av_get_channel_description()
and av_get_standard_channel_layout() functions.

2012-07-21 - 016a472 - lavc 54.43.100
Add decode_error_flags field to AVFrame.

2012-07-20 - b062936 - lavf 54.18.100
Add avformat_match_stream_specifier() function.

2012-07-14 - f49ec1b - lavc 54.38.100 - avcodec.h
Add metadata to AVFrame, and the accessor functions
av_frame_get_metadata() and av_frame_set_metadata().

2012-07-10 - 0e003d8 - lavc 54.33.100
Add av_fast_padded_mallocz().

2012-07-10 - 21d5609 - lavfi 3.2.0 - avfilter.h
Add init_opaque() callback to AVFilter struct.

2012-06-26 - e6674e4 - lavu 51.63.100 - imgutils.h
Add functions to libavutil/imgutils.h:
av_image_get_buffer_size()
av_image_fill_arrays()
av_image_copy_to_buffer()

2012-06-24 - c41899a - lavu 51.62.100 - version.h
version moved from avutil.h to version.h

2012-04-11 - 359abb1 - lavu 51.58.100 - error.h
Add av_make_error_string() and av_err2str() utilities to
libavutil/error.h.

2012-06-05 - 62b39d4 - lavc 54.24.100
Add pkt_duration field to AVFrame.

2012-05-24 - f2ee065 - lavu 51.54.100
Move AVPALETTE_SIZE and AVPALETTE_COUNT macros from
libavcodec/avcodec.h to libavutil/pixfmt.h.

2012-05-14 - 94a9ac1 - lavf 54.5.100
Add av_guess_sample_aspect_ratio() function.

2012-04-20 - 65fa7bc - lavfi 2.70.100
Add avfilter_unref_bufferp() to avfilter.h.

2012-04-13 - 162e400 - lavfi 2.68.100
Install libavfilter/asrc_abuffer.h public header.

2012-03-26 - a67d9cf - lavfi 2.66.100
Add avfilter_fill_frame_from_{audio_}buffer_ref() functions.

2013-05-15 - ff46809 / e6c4ac7 - lavu 52.32.100 / 52.11.0 - pixdesc.h
Replace PIX_FMT_* flags with AV_PIX_FMT_FLAG_*.

2013-04-03 - 6fc58a8 / 507b1e4 - lavc 55.7.100 / 55.4.0 - avcodec.h
Add field_order to AVCodecParserContext.

2013-04-19 - f4b05cd / 5e83d9a - lavc 55.5.100 / 55.2.0 - avcodec.h
Add CODEC_FLAG_UNALIGNED to allow decoders to produce unaligned output.

2013-04-11 - lavfi 3.53.100 / 3.8.0
231fd44 / 38f0c07 - Move all content from avfiltergraph.h to avfilter.h. Deprecate avfiltergraph.h, user applications should include just avfilter.h
86070b8 / bc1a985 - Add avfilter_graph_alloc_filter(), deprecate avfilter_open() and avfilter_graph_add_filter().
4fde705 / 1113672 - Add AVFilterContext.graph pointing to the AVFilterGraph that contains the filter.
710b0aa / 48a5ada - Add avfilter_init_str(), deprecate avfilter_init_filter().
46de9ba / 1ba95a9 - Add avfilter_init_dict().
16fc24b / 7cdd737 - Add AVFilter.flags field and AVFILTER_FLAG_DYNAMIC_{INPUTS,OUTPUTS} flags.
f4db6bf / 7e8fe4b - Add avfilter_pad_count() for counting filter inputs/outputs.
835cc0f / fa2a34c - Add avfilter_next(), deprecate av_filter_next().
Deprecate avfilter_uninit().

2013-04-09 - lavfi 3.51.100 / 3.7.0 - avfilter.h
0594ef0 / b439c99 - Add AVFilter.priv_class for exporting filter options through the AVOptions API in the similar way private options work in lavc and lavf.
44d4488 / 8114c10 - Add avfilter_get_class().
Switch all filters to use AVOptions.

2013-03-19 - 17ebef2 / 2c328a9 - lavu 52.20.100 / 52.9.0 - pixdesc.h
Add av_pix_fmt_count_planes() function for counting planes in a pixel format.

2013-03-16 - ecade98 / 42c7c61 - lavfi 3.47.100 / 3.6.0
Add AVFilterGraph.nb_filters, deprecate AVFilterGraph.filter_count.

2013-03-08 - Reference counted buffers - lavu 52.8.0, lavc 55.0.100 / 55.0.0, lavf 55.0.100 / 55.0.0, lavd 54.4.100 / 54.0.0, lavfi 3.5.0
36099df / 8e401db, 532f31a / 1cec062 - add a new API for reference counted buffers and buffer pools (new header libavutil/buffer.h).
2653e12 / 1afddbe - add AVPacket.buf to allow reference counting for the AVPacket data.
Add av_packet_from_data() function for constructing packets from av_malloc()ed data.
c4e8821 / 7ecc2d4 - move AVFrame from lavc to lavu (new header libavutil/frame.h), add

AVFrame.buf/extended_buf to allow reference counting for the AVFrame data. Add new API for working with reference-counted AVFrames.
80e9e63 / 759001c - add the refcounted_frames field to AVCodecContext to make audio and video decoders return reference-counted frames. Add get_buffer2() callback to AVCodecContext which allocates reference-counted frames. Add avcodec_default_get_buffer2() as the default get_buffer2() implementation.

Deprecate AVCodecContext.get_buffer() / release_buffer() / reget_buffer(), avcodec_default_get_buffer(), avcodec_default_reget_buffer(), avcodec_default_release_buffer().
Remove avcodec_default_free_buffers(), which should not have ever been called from outside of lavc.

Deprecate the following AVFrame fields:

- * base -- is now stored in AVBufferRef
- * reference, type, buffer_hints -- are unnecessary in the new API
- * hwaccel_picture_private, owner, thread_opaque -- should not have been accessed from outside of lavc
- * qscale_table, qstride, qscale_type, mbskip_table, motion_val, mb_type, dct_coeff, ref_index -- mpegvideo-specific tables, which are not exported anymore.

a05a44e / 7e35037 - switch libavfilter to use AVFrame instead of AVFilterBufferRef. Add av_buffersrc_add_frame(), deprecate av_buffersrc_buffer().

Add av_buffersink_get_frame() and av_buffersink_get_samples(), deprecate av_buffersink_read() and av_buffersink_read_samples().

Deprecate AVFilterBufferRef and all functions for working with it.

2013-03-17 - 6c17ff8 / 12c5c1d - lavu 52.19.100 / 52.8.0 - avstring.h

Add av_isdigit, av_isgraph, av_isspace, av_isxdigit.

2013-02-23 - 71cf094 / 9f12235 - lavfi 3.40.100 / 3.4.0 - avfiltergraph.h

Add resample_lavr_opts to AVFilterGraph for setting libavresample options for auto-inserted resample filters.

2013-01-25 - e7e14bc / 38c1466 - lavu 52.17.100 / 52.7.0 - dict.h

Add av_dict_parse_string() to set multiple key/value pairs at once from a string.

2013-01-25 - 25be630 / b85a5e8 - lavu 52.16.100 / 52.6.0 - avstring.h

Add av_strnstr()

2013-01-15 - e7e0186 / 8ee288d - lavu 52.15.100 / 52.5.0 - hmac.h

Add AVHMAC.

2013-01-13 - 8ee7b38 / 44e065d - lavc 54.87.100 / 54.36.0 - vdpau.h

Add AVVDPAUContext struct for VDPAU hardware-accelerated decoding.

2013-01-12 - dae382b / 169fb94 - lavu 52.14.100 / 52.4.0 - pixdesc.h

Add AV_PIX_FMT_VDPAU flag.

2013-01-07 - 249fca3 / 074a00d - lavr 1.1.0

Add avresample_set_channel_mapping() for input channel reordering, duplication, and silencing.

2012-12-29 - 2ce43b3 / d8fd06c - lavu 52.13.100 / 52.3.0 - avstring.h

Add `av_basename()` and `av_dirname()`.

2012-11-11 - 03b0787 / 5980f5d - lavu 52.6.100 / 52.2.0 - audioconvert.h
Rename `audioconvert.h` to `channel_layout.h`. `audioconvert.h` is now deprecated.

2012-11-05 - 7d26be6 / dfde8a3 - lavu 52.5.100 / 52.1.0 - intmath.h
Add `av_ctz()` for trailing zero bit count

2012-10-21 - e3a91c5 / a893655 - lavu 51.77.100 / 51.45.0 - error.h
Add `AVERROR_EXPERIMENTAL`

2012-10-12 - a33ed6b / d2fcb35 - lavu 51.76.100 / 51.44.0 - pixdesc.h
Add functions for accessing pixel format descriptors.
Accessing the `av_pix_fmt_descriptors` array directly is now deprecated.

2012-10-11 - f391e40 / 9a92aea - lavu 51.75.100 / 51.43.0 - aes.h, md5.h, sha.h, tree.h
Add functions for allocating the opaque contexts for the algorithms,

2012-10-10 - de31814 / b522000 - lavf 54.32.100 / 54.18.0 - avio.h
Add `avio_closet` to complement `avio_close`.

2012-10-08 - ae77266 / 78071a1 - lavu 51.74.100 / 51.42.0 - pixfmt.h
Rename `PixelFormat` to `AVPixelFormat` and all `PIX_FMT_*` to `AV_PIX_FMT_*`.
To provide backwards compatibility, `PixelFormat` is now `#defined` as `AVPixelFormat`.
Note that this can break user code that includes `pixfmt.h` and uses the 'PixelFormat' identifier. Such code should either `#undef PixelFormat` or stop using the `PixelFormat` name.

2012-10-05 - 55c49af / e7ba5b1 - lavr 1.0.0 - avresample.h
Data planes parameters to `avresample_convert()` and `avresample_read()` are now `uint8_t**` instead of `void**`.
`Libavresample` is now stable.

2012-09-26 - 3ba0dab7 / 1384df64 - lavf 54.29.101 / 56.06.3 - avformat.h
Add `AVFormatContext.avoid_negative_ts`.

2012-09-24 - 46a3595 / a42aada - lavc 54.59.100 / 54.28.0 - avcodec.h
Add `avcodec_free_frame()`. This function must now be used for freeing an `AVFrame`.

2012-09-12 - e3e09f2 / 8919fee - lavu 51.73.100 / 51.41.0 - audioconvert.h
Added `AV_CH_LOW_FREQUENCY_2` channel mask value.

2012-09-04 - b21b5b0 / 686a329 - lavu 51.71.100 / 51.40.0 - opt.h
Reordered the fields in `default_val` in `AVOption`, changed which `default_val` field is used for which `AVOptionType`.

2012-08-30 - 98298eb / a231832 - lavc 54.54.101 / 54.26.1 - avcodec.h

Add codec descriptor properties AV_CODEC_PROP_LOSSY and AV_CODEC_PROP_LOSSLESS.

2012-08-18 - lavc 54.26 - avcodec.h

Add codec descriptors for accessing codec properties without having to refer to a specific decoder or encoder.

f5f3684 / c223d79 - Add an AVCodecDescriptor struct and functions avcodec_descriptor_get() and avcodec_descriptor_next().

f5f3684 / 51efed1 - Add AVCodecDescriptor.props and AV_CODEC_PROP_INTRA_ONLY.

6c180b3 / 91e59fe - Add avcodec_descriptor_get_by_name().

2012-08-08 - f5f3684 / 987170c - lavu 51.68.100 / 51.38.0 - dict.h

Add av_dict_count().

2012-08-07 - 7a72695 / 104e10f - lavc 54.51.100 / 54.25.0 - avcodec.h

Rename CodecID to AVCodecID and all CODEC_ID_* to AV_CODEC_ID_*.

To provide backwards compatibility, CodecID is now #defined as AVCodecID.

Note that this can break user code that includes avcodec.h and uses the 'CodecID' identifier. Such code should either #undef CodecID or stop using the CodecID name.

2012-08-03 - e776ee8 / 239fdf1 - lavu 51.66.101 / 51.37.1 - cpu.h

lsws 2.1.1 - swscale.h

Rename AV_CPU_FLAG_MMX2 ---> AV_CPU_FLAG_MMXEXT.

Rename SWS_CPU_CAPS_MMX2 ---> SWS_CPU_CAPS_MMXEXT.

2012-07-29 - 7c26761 / 681ed00 - lavf 54.22.100 / 54.13.0 - avformat.h

Add AVFMT_FLAG_NOBUFFER for low latency use cases.

2012-07-10 - fbe0245 / f3e5e6f - lavu 51.65.100 / 51.37.0

Add av_malloc_array() and av_mallocz_array()

2012-06-22 - e847f41 / d3d3a32 - lavu 51.61.100 / 51.34.0

Add av_usleep()

2012-06-20 - 4da42eb / ae0a301 - lavu 51.60.100 / 51.33.0

Move av_gettime() to libavutil, add libavutil/time.h

2012-06-09 - 82edf67 / 3971be0 - lavr 0.0.3

Add a parameter to avresample_build_matrix() for Dolby/DPLII downmixing.

2012-06-12 - c7b9eab / 9baeff9 - lavfi 2.79.100 / 2.23.0 - avfilter.h

Add AVFilterContext.nb_inputs/outputs. Deprecate

AVFilterContext.input/output_count.

2012-06-12 - c7b9eab / 84b9fbe - lavfi 2.79.100 / 2.22.0 - avfilter.h

Add avfilter_pad_get_type() and avfilter_pad_get_name(). Those should now be used instead of accessing AVFilterPad members directly.

2012-06-12 - 3630a07 / b0f0dfc - lavu 51.57.100 / 51.32.0 - audioconvert.h

Add av_get_channel_layout_channel_index(), av_get_channel_name()
and av_channel_layout_extract_channel().

2012-05-25 - 53ce990 / 154486f - lavu 51.55.100 / 51.31.0 - opt.h

Add av_opt_set_bin()

2012-05-15 - lavfi 2.74.100 / 2.17.0

Add support for audio filters

61930bd / ac71230, 1cbf7fb / a2cd9be - add video/audio buffer sink in a new installed
header buffersink.h

1cbf7fb / 720c6b7 - add av_buffersrc_write_frame(), deprecate

av_vsrc_buffer_add_frame()

61930bd / ab16504 - add avfilter_copy_buf_props()

61930bd / 9453c9e - add extended_data to AVFilterBuffer

61930bd / 1b8c927 - add avfilter_get_audio_buffer_ref_from_arrays()

2012-05-09 - lavu 51.53.100 / 51.30.0 - samplefmt.h

61930bd / 142e740 - add av_samples_copy()

61930bd / 6d7f617 - add av_samples_set_silence()

2012-05-09 - 61930bd / a5117a2 - lavc 54.21.101 / 54.13.1

For audio formats with fixed frame size, the last frame
no longer needs to be padded with silence, libavcodec
will handle this internally (effectively all encoders
behave as if they had CODEC_CAP_SMALL_LAST_FRAME set).

2012-05-07 - 653d117 / 828bd08 - lavc 54.20.100 / 54.13.0 - avcodec.h

Add sample_rate and channel_layout fields to AVFrame.

2012-05-01 - 2330eb1 / 4010d72 - lavr 0.0.1

Change AV_MIX_COEFF_TYPE_Q6 to AV_MIX_COEFF_TYPE_Q8.

2012-04-25 - e890b68 / 3527a73 - lavu 51.48.100 / 51.29.0 - cpu.h

Add av_parse_cpu_flags()

2012-04-24 - 3ead79e / c8af852 - lavr 0.0.0

Add libavresample audio conversion library

2012-04-20 - 3194ab7 / 0c0d1bc - lavu 51.47.100 / 51.28.0 - audio_fifo.h

Add audio FIFO functions:

av_audio_fifo_free()

av_audio_fifo_alloc()

av_audio_fifo_realloc()

av_audio_fifo_write()

av_audio_fifo_read()

av_audio_fifo_drain()

av_audio_fifo_reset()

av_audio_fifo_size()

av_audio_fifo_space()

2012-04-14 - lavfi 2.70.100 / 2.16.0 - avfiltergraph.h

7432bcf / d7bcc71 Add avfilter_graph_parse2().

2012-04-08 - 6bfb304 / 4d693b0 - lavu 51.46.100 / 51.27.0 - samplefmt.h
Add av_get_packed_sample_fmt() and av_get_planar_sample_fmt()

2012-03-21 - b75c67d - lavu 51.43.100
Add bprint.h for bprint API.

2012-02-21 - 9cbf17e - lavc 54.4.100
Add av_get_pcm_codec() function.

2012-02-16 - 560b224 - libswr 0.7.100
Add swr_set_matrix() function.

2012-02-09 - c28e7af - lavu 51.39.100
Add a new installed header libavutil/timestamp.h with timestamp utilities.

2012-02-06 - 70ffda3 - lavu 51.38.100
Add av_parse_ratio() function to parseutils.h.

2012-02-06 - 70ffda3 - lavu 51.38.100
Add AV_LOG_MAX_OFFSET macro to log.h.

2012-02-02 - 0eaa123 - lavu 51.37.100
Add public timecode helpers.

2012-01-24 - 0c3577b - lavfi 2.60.100
Add avfilter_graph_dump.

2012-03-20 - 0ebd836 / 3c90cc2 - lavfo 54.2.0
Deprecate av_read_packet(), use av_read_frame() with
AVFMT_FLAG_NOPARSE | AVFMT_FLAG_NOFILLIN in AVFormatContext.flags

2012-03-05 - lavc 54.10.100 / 54.8.0
f095391 / 6699d07 Add av_get_exact_bits_per_sample()
f095391 / 9524cf7 Add av_get_audio_frame_duration()

2012-03-04 - 2af8f2c / 44fe77b - lavc 54.8.100 / 54.7.0 - avcodec.h
Add av_codec_is_encoder/decoder().

2012-03-01 - 1eb7f39 / 442c132 - lavc 54.5.100 / 54.3.0 - avcodec.h
Add av_packet_shrink_side_data.

2012-02-29 - 79ae084 / dd2a4bc - lavf 54.2.100 / 54.2.0 - avformat.h
Add AVStream.attached_pic and AV_DISPOSITION_ATTACHED_PIC,
used for dealing with attached pictures/cover art.

2012-02-25 - 305e4b3 / c9bca80 - lavu 51.41.100 / 51.24.0 - error.h

Add AERROR_UNKNOWN

NOTE: this was backported to 0.8

2012-02-20 - eadd426 / e9cda85 - lavc 54.2.100 / 54.2.0

Add duration field to AVCodecParserContext

2012-02-20 - eadd426 / 0b42a93 - lavu 51.40.100 / 51.23.1 - mathematics.h

Add av_rescale_q_rnd()

2012-02-08 - f2b20b7 / 38d5533 - lavu 51.38.101 / 51.22.1 - pixdesc.h

Add PIX_FMT_PSEUDOPAL flag.

2012-02-08 - f2b20b7 / 52f82a1 - lavc 54.2.100 / 54.1.0

Add avcodec_encode_video2() and deprecate avcodec_encode_video().

2012-02-01 - 4c677df / 316fc74 - lavc 54.1.0

Add av_fast_padded_malloc() as alternative for av_realloc() when aligned memory is required. The buffer will always have FF_INPUT_BUFFER_PADDING_SIZE zero-padded bytes at the end.

2012-01-31 - a369a6b / dd6d3b0 - lavf 54.1.0

Add avformat_get_riff_video_tags() and avformat_get_riff_audio_tags().

NOTE: this was backported to 0.8

2012-01-31 - a369a6b / af08d9a - lavc 54.1.0

Add avcodec_is_open() function.

NOTE: this was backported to 0.8

2012-01-30 - 151ecc2 / 8b93312 - lavu 51.36.100 / 51.22.0 - intfloat.h

Add a new installed header libavutil/intfloat.h with int/float punning functions.

NOTE: this was backported to 0.8

2012-01-25 - lavf 53.31.100 / 53.22.0

3c5fe5b / f1caf01 Allow doing av_write_frame(ctx, NULL) for flushing possible buffered data within a muxer. Added AVFMT_ALLOW_FLUSH for muxers supporting it (av_write_frame makes sure it is called only for muxers with this flag).

2012-01-15 - lavc 53.56.105 / 53.34.0

New audio encoding API:

67f5650 / b2c75b6 Add CODEC_CAP_VARIABLE_FRAME_SIZE capability for use by audio encoders.

67f5650 / 5ee5fa0 Add avcodec_fill_audio_frame() as a convenience function.

67f5650 / b2c75b6 Add avcodec_encode_audio2() and deprecate avcodec_encode_audio().

Add AVCodec.encode2().

2012-01-12 - b18e17e / 3167dc9 - lavfi 2.59.100 / 2.15.0

Add a new installed header -- libavfilter/version.h -- with version macros.

----- 8< ----- FFmpeg 0.9 was cut here ----- 8< -----

2011-12-08 - a502939 - lavfi 2.52.0

Add av_buffersink_poll_frame() to buffersink.h.

2011-12-08 - 26c6fec - lavu 51.31.0

Add av_log_format_line.

2011-12-03 - 976b095 - lavu 51.30.0

Add AERROR_BUG.

2011-11-24 - 573ffbb - lavu 51.28.1

Add av_get_alt_sample_fmt() to samplefmt.h.

2011-11-03 - 96949da - lavu 51.23.0

Add av_strcasecmp() and av_strncasecmp() to avstring.h.

2011-10-20 - b35e9e1 - lavu 51.22.0

Add av_strtok() to avstring.h.

2012-01-03 - ad1c8dd / b73ec05 - lavu 51.34.100 / 51.21.0

Add av_popcount64

2011-12-18 - 7c29313 / 8400b12 - lavc 53.46.1 / 53.28.1

Deprecate AVFrame.age. The field is unused.

2011-12-12 - 8bc7fe4 / 5266045 - lavf 53.25.0 / 53.17.0

Add avformat_close_input().

Deprecate av_close_input_file() and av_close_input_stream().

2011-12-09 - c59b80c / b2890f5 - lavu 51.32.0 / 51.20.0 - audioconvert.h

Expand the channel layout list.

2011-12-02 - e4de716 / 0eea212 - lavc 53.40.0 / 53.25.0

Add nb_samples and extended_data fields to AVFrame.

Deprecate AVCODEC_MAX_AUDIO_FRAME_SIZE.

Deprecate avcodec_decode_audio3() in favor of avcodec_decode_audio4().

avcodec_decode_audio4() writes output samples to an AVFrame, which allows audio decoders to use get_buffer().

2011-12-04 - e4de716 / 560f773 - lavc 53.40.0 / 53.24.0

Change AVFrame.data[4]/base[4]/linesize[4]/error[4] to [8] at next major bump.

Change AVPicture.data[4]/linesize[4] to [8] at next major bump.

Change AVCodecContext.error[4] to [8] at next major bump.

Add AV_NUM_DATA_POINTERS to simplify the bump transition.

2011-11-24 - lavu 51.29.0 / 51.19.0

92afb43 / bd97b2e - add planar RGB pixel formats

92afb43 / 6b0768e - add PIX_FMT_PLANAR and PIX_FMT_RGB pixel descriptions

2011-11-23 - 8e576d5 / bbb46f3 - lavu 51.27.0 / 51.18.0

Add `av_samples_get_buffer_size()`, `av_samples_fill_arrays()`, and `av_samples_alloc()`, to `samplefmt.h`.

2011-11-23 - 8e576d5 / 8889cc4 - lavu 51.27.0 / 51.17.0

Add planar sample formats and `av_sample_fmt_is_planar()` to `samplefmt.h`.

2011-11-19 - dbb38bc / f3a29b7 - lavc 53.36.0 / 53.21.0

Move some `AVCodecContext` fields to a new private struct, `AVCodecInternal`, which is accessed from a new field, `AVCodecContext.internal`.

- fields moved:

`AVCodecContext.internal_buffer` --> `AVCodecInternal.buffer`

`AVCodecContext.internal_buffer_count` --> `AVCodecInternal.buffer_count`

`AVCodecContext.is_copy` --> `AVCodecInternal.is_copy`

2011-11-16 - 8709ba9 / 6270671 - lavu 51.26.0 / 51.16.0

Add `av_timegm()`

2011-11-13 - lavf 53.21.0 / 53.15.0

New interrupt callback API, allowing per-`AVFormatContext`/`AVIOContext` interrupt callbacks.

5f268ca / 6aa0b98 Add `AVIOInterruptCB` struct and the `interrupt_callback` field to `AVFormatContext`.

5f268ca / 1dee0ac Add `avio_open2()` with additional parameters. Those are an interrupt callback and an options `AVDictionary`.

This will allow passing `AVOptions` to protocols after lavf 54.0.

2011-11-06 - 13b7781 / ba04ecf - lavu 51.24.0 / 51.14.0

Add `av_strcasecmp()` and `av_strncasecmp()` to `avstring.h`.

2011-11-06 - 13b7781 / 07b172f - lavu 51.24.0 / 51.13.0

Add `av_toupper()/av_tolower()`

2011-11-05 - d8cab5c / b6d08f4 - lavf 53.19.0 / 53.13.0

Add `avformat_network_init()/avformat_network_deinit()`

2011-10-27 - 6faf0a2 / 512557b - lavc 53.24.0 / 53.15.0

Remove `avcodec_parse_frame`.

Deprecate `AVCodecContext.parse_only` and `CODEC_CAP_PARSE_ONLY`.

2011-10-19 - d049257 / 569129a - lavf 53.17.0 / 53.10.0

Add `avformat_new_stream()`. Deprecate `av_new_stream()`.

2011-10-13 - 91eb1b1 / b631fba - lavf 53.16.0 / 53.9.0

Add `AVFMT_NO_BYTE_SEEK` `AVInputFormat` flag.

2011-10-12 - lavu 51.21.0 / 51.12.0

`AVOptions` API rewrite.

- f884ef0 / 145f741 FF_OPT_TYPE* renamed to AV_OPT_TYPE_*

- new setting/getting functions with slightly different semantics:

f884ef0 / dac66da av_set_string3 -> av_opt_set

av_set_double -> av_opt_set_double

av_set_q -> av_opt_set_q

av_set_int -> av_opt_set_int

f884ef0 / 41d9d51 av_get_string -> av_opt_get

av_get_double -> av_opt_get_double

av_get_q -> av_opt_get_q

av_get_int -> av_opt_get_int

- f884ef0 / 8c5dcaa trivial rename av_next_option -> av_opt_next

- f884ef0 / 641c7af new functions - av_opt_child_next, av_opt_child_class_next
and av_opt_find2()

2011-09-22 - a70e787 - lavu 51.17.0

Add av_x_if_null().

2011-09-18 - 645cebb - lavc 53.16.0

Add showall flag2

2011-09-16 - ea8de10 - lavfi 2.42.0

Add avfilter_all_channel_layouts.

2011-09-16 - 9899037 - lavfi 2.41.0

Rename avfilter_all_* function names to avfilter_make_all_*.

In particular, apply the renames:

avfilter_all_formats -> avfilter_make_all_formats

avfilter_all_channel_layouts -> avfilter_make_all_channel_layouts

avfilter_all_packing_formats -> avfilter_make_all_packing_formats

2011-09-12 - 4381bdd - lavfi 2.40.0

Change AVFilterBufferRefAudioProps.sample_rate type from uint32_t to int.

2011-09-12 - 2c03174 - lavfi 2.40.0

Simplify signature for avfilter_get_audio_buffer(), make it
consistent with avfilter_get_video_buffer().

2011-09-06 - 4f7dfe1 - lavfi 2.39.0

Rename libavfilter/vsink_buffer.h to libavfilter/buffersink.h.

2011-09-06 - c4415f6 - lavfi 2.38.0

Unify video and audio sink API.

In particular, add av_buffersink_get_buffer_ref(), deprecate

av_vsink_buffer_get_video_buffer_ref() and change the value for the
opaque field passed to the abuffersink init function.

2011-09-04 - 61e2e29 - lavu 51.16.0

Add av_asprintf().

2011-08-22 - dacd827 - lavf 53.10.0

Add av_find_program_from_stream().

2011-08-20 - 69e2c1a - lavu 51.13.0

Add av_get_media_type_string().

2011-09-03 - 1889c67 / fb4ca26 - lavc 53.13.0

lavf 53.11.0

lsws 2.1.0

Add {avcodec,avformat,sws}_get_class().

2011-08-03 - 1889c67 / c11fb82 - lavu 51.15.0

Add AV_OPT_SEARCH_FAKE_OBJ flag for av_opt_find() function.

2011-08-14 - 323b930 - lavu 51.12.0

Add av_fifo_peek2(), deprecate av_fifo_peek().

2011-08-26 - lavu 51.14.0 / 51.9.0

- 976a8b2 / add41de..976a8b2 / abc78a5 Do not include intfloat_readwrite.h, mathematics.h, rational.h, pixfmt.h, or log.h from avutil.h.

2011-08-16 - 27fbe31 / 48f9e45 - lavf 53.11.0 / 53.8.0

Add avformat_query_codec().

2011-08-16 - 27fbe31 / bca06e7 - lavc 53.11.0

Add avcodec_get_type().

2011-08-06 - 0cb233c / 2f63440 - lavf 53.7.0

Add error_recognition to AVFormatContext.

2011-08-02 - 1d186e9 / 9d39cbf - lavc 53.9.1

Add AV_PKT_FLAG_CORRUPT AVPacket flag.

2011-07-16 - b57df29 - lavfi 2.27.0

Add audio packing negotiation fields and helper functions.

In particular, add AVFilterPacking enum, planar, in_packings and out_packings fields to AVFilterLink, and the functions:

avfilter_set_common_packing_formats()

avfilter_all_packing_formats()

2011-07-10 - 3602ad7 / a67c061 - lavf 53.6.0

Add avformat_find_stream_info(), deprecate av_find_stream_info().

NOTE: this was backported to 0.7

2011-07-10 - 3602ad7 / 0b950fe - lavc 53.8.0

Add avcodec_open2(), deprecate avcodec_open().

NOTE: this was backported to 0.7

Add avcodec_alloc_context3. Deprecate avcodec_alloc_context() and avcodec_alloc_context2().

2011-07-01 - b442ca6 - lavf 53.5.0 - avformat.h

Add function av_get_output_timestamp().

2011-06-28 - 5129336 - lavu 51.11.0 - avutil.h

Define the AV_PICTURE_TYPE_NONE value in AVPictureType enum.

----- 8< ----- FFmpeg 0.7 was cut here ----- 8< -----

----- 8< ----- FFmpeg 0.8 was cut here ----- 8< -----

2011-06-19 - fd2c0a5 - lavfi 2.23.0 - avfilter.h

Add layout negotiation fields and helper functions.

In particular, add in_chlayouts and out_chlayouts to AVFilterLink, and the functions:

avfilter_set_common_sample_formats()

avfilter_set_common_channel_layouts()

avfilter_all_channel_layouts()

2011-06-19 - 527ca39 - lavfi 2.22.0 - AVFilterFormats

Change type of AVFilterFormats.formats from int * to int64_t *,

and update formats handling API accordingly.

avfilter_make_format_list() still takes a int32_t array and converts it to int64_t. A new function, avfilter_make_format64_list(), that takes int64_t arrays has been added.

2011-06-19 - 44f669e - lavfi 2.21.0 - vsink_buffer.h

Add video sink buffer and vsink_buffer.h public header.

2011-06-12 - 9fdf772 - lavfi 2.18.0 - avcodec.h

Add avfilter_get_video_buffer_ref_from_frame() function in libavfilter/avcodec.h.

2011-06-12 - c535494 - lavfi 2.17.0 - avfiltergraph.h

Add avfilter_inout_alloc() and avfilter_inout_free() functions.

2011-06-12 - 6119b23 - lavfi 2.16.0 - avfilter_graph_parse()

Change avfilter_graph_parse() signature.

2011-06-23 - 686959e / 67e9ae1 - lavu 51.10.0 / 51.8.0 - attributes.h

Add av_printf_format().

2011-06-16 - 2905e3f / 05e84c9, 2905e3f / 25de595 - lavf 53.4.0 / 53.2.0 - avformat.h

Add avformat_open_input and avformat_write_header().

Deprecate av_open_input_stream, av_open_input_file,

AVFormatParameters and av_write_header.

2011-06-16 - 2905e3f / 7e83e1c, 2905e3f / dc59ec5 - lavu 51.9.0 / 51.7.0 - opt.h

Add av_opt_set_dict() and av_opt_find().

Deprecate av_find_opt().

Add AV_DICT_APPEND flag.

2011-06-10 - 45fb647 / cb7c11c - lavu 51.6.0 - opt.h

Add av_opt_flag_is_set().

2011-06-10 - c381960 - lavfi 2.15.0 - avfilter_get_audio_buffer_ref_from_arrays

Add avfilter_get_audio_buffer_ref_from_arrays() to avfilter.h.

2011-06-09 - f9ecb84 / d9f80ea - lavu 51.8.0 - AVMetadata

Move AVMetadata from lavf to lavu and rename it to

AVDictionary -- new installed header dict.h.

All av_metadata_* functions renamed to av_dict_*.

2011-06-07 - d552f61 / a6703fa - lavu 51.8.0 - av_get_bytes_per_sample()

Add av_get_bytes_per_sample() in libavutil/samplefmt.h.

Deprecate av_get_bits_per_sample_fmt().

2011-06-05 - f956924 / b39b062 - lavu 51.8.0 - opt.h

Add av_opt_free convenience function.

2011-06-06 - 95a0242 - lavfi 2.14.0 - AVFilterBufferRefAudioProps

Remove AVFilterBufferRefAudioProps.size, and use nb_samples in avfilter_get_audio_buffer() and avfilter_default_get_audio_buffer() in place of size.

2011-06-06 - 0bc2cca - lavu 51.6.0 - av_samples_alloc()

Switch nb_channels and nb_samples parameters order in av_samples_alloc().

2011-06-06 - e1c7414 - lavu 51.5.0 - av_samples_*

Change the data layout created by av_samples_fill_arrays() and av_samples_alloc().

2011-06-06 - 27bcf55 - lavfi 2.13.0 - vsrc_buffer.h

Make av_vsrc_buffer_add_video_buffer_ref() accepts an additional flags parameter in input.

2011-06-03 - e977ca2 - lavfi 2.12.0 - avfilter_link_free()

Add avfilter_link_free() function.

2011-06-02 - 5ad38d9 - lavu 51.4.0 - av_force_cpu_flags()

Add av_cpu_flags() in libavutil/cpu.h.

2011-05-28 - e71f260 - lavu 51.3.0 - pixdesc.h

Add av_get_pix_fmt_name() in libavutil/pixdesc.h, and deprecate
avcodec_get_pix_fmt_name() in libavcodec/avcodec.h in its favor.

2011-05-25 - 39e4206 / 30315a8 - lavf 53.3.0 - avformat.h

Add fps_probe_size to AVFormatContext.

2011-05-22 - 5ecdfe0 - lavf 53.2.0 - avformat.h

Introduce avformat_alloc_output_context2() and deprecate
avformat_alloc_output_context().

2011-05-22 - 83db719 - lavfi 2.10.0 - vsrc_buffer.h

Make libavfilter/vsrc_buffer.h public.

2011-05-19 - c000a9f - lavfi 2.8.0 - avcodec.h

Add av_vsrc_buffer_add_frame() to libavfilter/avcodec.h.

2011-05-14 - 9fdf772 - lavfi 2.6.0 - avcodec.h

Add avfilter_get_video_buffer_ref_from_frame() to libavfilter/avcodec.h.

2011-05-18 - 75a37b5 / 64150ff - lavc 53.7.0 - AVCodecContext.request_sample_fmt

Add request_sample_fmt field to AVCodecContext.

2011-05-10 - 59eb12f / 188dea1 - lavc 53.6.0 - avcodec.h

Deprecate AVLPCType and the following fields in
AVCodecContext: lpc_coeff_precision, prediction_order_method,
min_partition_order, max_partition_order, lpc_type, lpc_passes.
Corresponding FLAC encoder options should be used instead.

2011-05-07 - 9fdf772 - lavfi 2.5.0 - avcodec.h

Add libavfilter/avcodec.h header and avfilter_copy_frame_props()
function.

2011-05-07 - 18ded93 - lavc 53.5.0 - AVFrame

Add format field to AVFrame.

2011-05-07 - 22333a6 - lavc 53.4.0 - AVFrame

Add width and height fields to AVFrame.

2011-05-01 - 35fe66a - lavfi 2.4.0 - avfilter.h

Rename AVFilterBufferRefVideoProps.pixel_aspect to
sample_aspect_ratio.

2011-05-01 - 77e9dee - lavc 53.3.0 - AVFrame

Add a sample_aspect_ratio field to AVFrame.

2011-05-01 - 1ba5727 - lavc 53.2.0 - AVFrame

Add a pkt_pos field to AVFrame.

2011-04-29 - 35ceaa7 - lavu 51.2.0 - mem.h

Add av_dynarray_add function for adding
an element to a dynamic array.

2011-04-26 - d7e5aeb / bebe72f - lavu 51.1.0 - avutil.h

Add AVPictureType enum and av_get_picture_type_char(), deprecate
FF_*_TYPE defines and av_get_pict_type_char() defined in
libavcodec/avcodec.h.

2011-04-26 - d7e5aeb / 10d3940 - lavfi 2.3.0 - avfilter.h

Add pict_type and key_frame fields to AVFilterBufferRefVideo.

2011-04-26 - d7e5aeb / 7a11c82 - lavfi 2.2.0 - vsrc_buffer

Add sample_aspect_ratio fields to vsrc_buffer arguments

2011-04-21 - 8772156 / 94f7451 - lavc 53.1.0 - avcodec.h

Add CODEC_CAP_SLICE_THREADS for codecs supporting sliced threading.

2011-04-15 - lavc 52.120.0 - avcodec.h

AVPacket structure got additional members for passing side information:
c407984 / 4de339e introduce side information for AVPacket
c407984 / 2d8591c make containers pass palette change in AVPacket

2011-04-12 - lavf 52.107.0 - avio.h

Avio cleanup, part II - deprecate the entire URLContext API:

c55780d / 175389c add avio_check as a replacement for url_exist

9891004 / ff1ec0c add avio_pause and avio_seek_time as replacements
for _av_url_read_fseek/fpause

d4d0932 / cdc6a87 deprecate av_protocol_next(), avio_enum_protocols
should be used instead.

c88caa5 / 80c6e23 rename url_set_interrupt_cb->avio_set_interrupt_cb.

c88caa5 / f87b1b3 rename open flags: URL_* -> AVIO_*

d4d0932 / f8270bb add avio_enum_protocols.

d4d0932 / 5593f03 deprecate URLProtocol.

d4d0932 / c486dad deprecate URLContext.

d4d0932 / 026e175 deprecate the typedef for URLInterruptCB

c88caa5 / 8e76a19 deprecate av_register_protocol2.

11d7841 / b840484 deprecate URL_PROTOCOL_FLAG_NESTED_SCHEME

11d7841 / 1305d93 deprecate av_url_read_seek

11d7841 / fa104e1 deprecate av_url_read_pause

434f248 / 727c7aa deprecate url_get_filename().

434f248 / 5958df3 deprecate url_max_packet_size().

434f248 / 1869ea0 deprecate url_get_file_handle().

434f248 / 32a97d4 deprecate url_fsize().

434f248 / e52a914 deprecate url_close().

434f248 / 58a48c6 deprecate url_seek().

434f248 / 925e908 deprecate url_write().

434f248 / dce3756 deprecate url_read_complete().
434f248 / bc371ac deprecate url_read().
434f248 / 0589da0 deprecate url_open().
434f248 / 62eaaea deprecate url_connect.
434f248 / 5652bb9 deprecate url_alloc.
434f248 / 333e894 deprecate url_open_protocol
434f248 / e230705 deprecate url_poll and URLPollEntry

2011-04-08 - lavf 52.106.0 - avformat.h

Minor avformat.h cleanup:

d4d0932 / a9bf9d8 deprecate av_guess_image2_codec
d4d0932 / c3675df rename avf_sdp_create->av_sdp_create

2011-04-03 - lavf 52.105.0 - avio.h

Large-scale renaming/deprecating of AVIOContext-related functions:

2cae980 / 724f6a0 deprecate url_fdopen
2cae980 / 403ee83 deprecate url_open_dyn_packet_buf
2cae980 / 6dc7d80 rename url_close_dyn_buf -> avio_close_dyn_buf
2cae980 / b92c545 rename url_open_dyn_buf -> avio_open_dyn_buf
2cae980 / 8978fed introduce an AVIOContext.seekable field as a replacement for AVIOContext.is_streamed and url_is_streamed()
1caa412 / b64030f deprecate get_checksum()
1caa412 / 4c4427a deprecate init_checksum()
2fd41c9 / 4ec153b deprecate udp_set_remote_url/get_local_port
4fa0e24 / 933e90a deprecate av_url_read_fseek/fpause
4fa0e24 / 8d9769a deprecate url_fileno
0fecf26 / b7f2fdd rename put_flush_packet -> avio_flush
0fecf26 / 35f1023 deprecate url_close_buf
0fecf26 / 83fddae deprecate url_open_buf
0fecf26 / d9d86e0 rename url_fprintf -> avio_printf
0fecf26 / 59f65d9 deprecate url_setbufsize
6947b0c / 3e68b3b deprecate url_ferror
e8bb2e2 deprecate url_fget_max_packet_size
76aa876 rename url_fsize -> avio_size
e519753 deprecate url_fgetc
655e45e deprecate url_fgets
a2704c9 rename url_ftell -> avio_tell
e16ead0 deprecate get_strz() in favor of avio_get_str
0300db8,2af07d3 rename url_fskip -> avio_skip
6b4aa5d rename url_fseek -> avio_seek
61840b4 deprecate put_tag
22a3212 rename url_fopen/fclose -> avio_open/close.
0ac8e2b deprecate put_nbyte
77eb550 rename put_byte -> avio_w8
put_[b/l]e<type> -> avio_w[b/l]<type>
put_buffer -> avio_write
b7effd4 rename get_byte -> avio_r8,
get_[b/l]e<type> -> avio_r[b/l]<type>
get_buffer -> avio_read
b3db9ce deprecate get_partial_buffer
8d9ac96 rename av_alloc_put_byte -> avio_alloc_context

2011-03-25 - 27ef7b1 / 34b47d7 - lavc 52.115.0 - AVCodecContext.audio_service_type

Add audio_service_type field to AVCodecContext.

2011-03-17 - e309fdc - lavu 50.40.0 - pixfmt.h

Add PIX_FMT_BGR48LE and PIX_FMT_BGR48BE pixel formats

2011-03-02 - 863c471 - lavf 52.103.0 - av_pkt_dump2, av_pkt_dump_log2
Add new functions av_pkt_dump2, av_pkt_dump_log2 that uses the source stream timebase for outputting timestamps. Deprecate av_pkt_dump and av_pkt_dump_log.

2011-02-20 - e731b8d - lavf 52.102.0 - avio.h
* e731b8d - rename init_put_byte() to ffio_init_context(), deprecating the original, and move it to a private header so it is no longer part of our public API. Instead, use av_alloc_put_byte().
* ae628ec - rename ByteIOContext to AVIOContext.

2011-02-16 - 09d171b - lavf 52.101.0 - avformat.h
lavu 52.39.0 - parseutils.h
* 610219a - Add av_ prefix to dump_format().
* f6c7375 - Replace parse_date() in lavf with av_parse_time() in lavu.
* ab0287f - Move find_info_tag from lavf to lavu and add av_prefix to it.

2011-02-15 - lavu 52.38.0 - merge libavcore
libavcore is merged back completely into libavutil

2011-02-10 - 55bad0c - lavc 52.113.0 - vbv_delay
Add vbv_delay field to AVCodecContext

2011-02-14 - 24a83bd - lavf 52.100.0 - AV_DISPOSITION_CLEAN_EFFECTS
Add AV_DISPOSITION_CLEAN_EFFECTS disposition flag.

2011-02-14 - 910b5b8 - lavfi 1.76.0 - AVFilterLink sample_aspect_ratio
Add sample_aspect_ratio field to AVFilterLink.

2011-02-10 - 12c14cd - lavf 52.99.0 - AVStream.disposition
Add AV_DISPOSITION_HEARING_IMPAIRED and AV_DISPOSITION_VISUAL_IMPAIRED.

2011-02-09 - c0b102c - lavc 52.112.0 - avcodec_thread_init()
Deprecate avcodec_thread_init()/avcodec_thread_free() use; instead set thread_count before calling avcodec_open.

2011-02-09 - 37b00b4 - lavc 52.111.0 - threading API
Add CODEC_CAP_FRAME_THREADS with new restrictions on get_buffer()/release_buffer()/draw_horiz_band() callbacks for appropriate codecs.
Add thread_type and active_thread_type fields to AVCodecContext.

2011-02-08 - 3940caa - lavf 52.98.0 - av_probe_input_buffer
Add av_probe_input_buffer() to avformat.h for probing format from a ByteIOContext.

2011-02-06 - fe174fc - lavf 52.97.0 - avio.h
Add flag for non-blocking protocols: URL_FLAG_NONBLOCK

2011-02-04 - f124b08 - lavf 52.96.0 - avformat_free_context()
Add avformat_free_context() in avformat.h.

2011-02-03 - f5b82f4 - lavc 52.109.0 - add CODEC_ID_PRORES
Add CODEC_ID_PRORES to avcodec.h.

2011-02-03 - fe9a3fb - lavc 52.109.0 - H.264 profile defines
Add defines for H.264 * Constrained Baseline and Intra profiles

2011-02-02 - lavf 52.95.0
* 50196a9 - add a new installed header version.h.
* 4efd5cf, dccbd97, 93b78d1 - add several variants of public
avio_{put,get}_str* functions. Deprecate corresponding semi-public
{put,get}_str*.

2011-02-02 - dfd2a00 - lavu 50.37.0 - log.h
Make av_dlog public.

2011-01-31 - 7b3ea55 - lavfi 1.76.0 - vsrc_buffer
Add sample_aspect_ratio fields to vsrc_buffer arguments

2011-01-31 - 910b5b8 - lavfi 1.75.0 - AVFilterLink sample_aspect_ratio
Add sample_aspect_ratio field to AVFilterLink.

2011-01-15 - a242ac3 - lavfi 1.74.0 - AVFilterBufferRefAudioProps
Rename AVFilterBufferRefAudioProps.samples_nb to nb_samples.

2011-01-14 - 7f88a5b - lavf 52.93.0 - av_metadata_copy()
Add av_metadata_copy() in avformat.h.

2011-01-07 - 81c623f - lavc 52.107.0 - deprecate reordered_opaque
Deprecate reordered_opaque in favor of pkt_pts/dts.

2011-01-07 - 1919fea - lavc 52.106.0 - pkt_dts
Add pkt_dts to AVFrame, this will in the future allow multithreading decoders
to not mess up dts.

2011-01-07 - 393cbb9 - lavc 52.105.0 - pkt_pts
Add pkt_pts to AVFrame.

2011-01-07 - 060ec0a - lavc 52.104.0 - av_get_profile_name()
Add av_get_profile_name to libavcodec/avcodec.h.

2010-12-27 - 0ccabee - lavfi 1.71.0 - AV_PERM_NEG_LINESIZES
Add AV_PERM_NEG_LINESIZES in avfilter.h.

2010-12-27 - 9128ae0 - lavf 52.91.0 - av_find_best_stream()
Add av_find_best_stream to libavformat/avformat.h.

2010-12-27 - 107a7e3 - lavf 52.90.0
Add AVFMT_NOSTREAMS flag for formats with no streams,

like e.g. text metadata.

2010-12-22 - 0328b9e - lavu 50.36.0 - file.h

Add functions `av_file_map()` and `av_file_unmap()` in `file.h`.

2010-12-19 - 0bc55f5 - lavu 50.35.0 - error.h

Add "not found" error codes:

`AVERROR_DEMUXER_NOT_FOUND`

`AVERROR_MUXER_NOT_FOUND`

`AVERROR_DECODER_NOT_FOUND`

`AVERROR_ENCODER_NOT_FOUND`

`AVERROR_PROTOCOL_NOT_FOUND`

`AVERROR_FILTER_NOT_FOUND`

`AVERROR_BSF_NOT_FOUND`

`AVERROR_STREAM_NOT_FOUND`

2010-12-09 - c61cdd0 - lavcore 0.16.0 - avcore.h

Move `AV_NOPTS_VALUE`, `AV_TIME_BASE`, `AV_TIME_BASE_Q` symbols from `avcodec.h` to `avcore.h`.

2010-12-04 - 16cfc96 - lavc 52.98.0 - CODEC_CAP_NEG_LINESIZES

Add `CODEC_CAP_NEG_LINESIZES` codec capability flag in `avcodec.h`.

2010-12-04 - bb4afa1 - lavu 50.34.0 - `av_get_pix_fmt_string()`

Deprecate `avcodec_pix_fmt_string()` in favor of `pixdesc.h/av_get_pix_fmt_string()`.

2010-12-04 - 4da12e3 - lavcore 0.15.0 - `av_image_alloc()`

Add `av_image_alloc()` to `libavcore/imgutils.h`.

2010-12-02 - 037be76 - lavfi 1.67.0 - `avfilter_graph_create_filter()`

Add function `avfilter_graph_create_filter()` in `avfiltergraph.h`.

2010-11-25 - 4723bc2 - lavfi 1.65.0 - `avfilter_get_video_buffer_ref_from_arrays()`

Add function `avfilter_get_video_buffer_ref_from_arrays()` in `avfilter.h`.

2010-11-21 - 176a615 - lavcore 0.14.0 - `audioconvert.h`

Add a public audio channel API in `audioconvert.h`, and deprecate the corresponding functions in `libavcodec`:

`avcodec_get_channel_name()`

`avcodec_get_channel_layout()`

`avcodec_get_channel_layout_string()`

`avcodec_channel_layout_num_channels()`

and the `CH_*` macros defined in `libavcodec/avcodec.h`.

2010-11-21 - 6bfc268 - lavf 52.85.0 - `avformat.h`

Add `av_append_packet()`.

2010-11-21 - a08d918 - lavc 52.97.0 - `avcodec.h`

Add `av_grow_packet()`.

2010-11-17 - 0985e1a - lavcore 0.13.0 - parseutils.h
Add av_parse_color() declared in libavcore/parseutils.h.

2010-11-13 - cb2c971 - lavc 52.95.0 - AVCodecContext
Add AVCodecContext.subtitle_header and AVCodecContext.subtitle_header_size fields.

2010-11-13 - 5aaea02 - lavfi 1.62.0 - avfiltergraph.h
Make avfiltergraph.h public.

2010-11-13 - 4fcb2a - lavfi 1.61.0 - avfiltergraph.h
Remove declarations from avfiltergraph.h for the functions:
avfilter_graph_check_validity()
avfilter_graph_config_links()
avfilter_graph_config_formats()
which are now internal.
Use avfilter_graph_config() instead.

2010-11-08 - d2af720 - lavu 50.33.0 - eval.h
Deprecate functions:
av_parse_and_eval_expr(),
av_parse_expr(),
av_eval_expr(),
av_free_expr(),
in favor of the functions:
av_expr_parse_and_eval(),
av_expr_parse(),
av_expr_eval(),
av_expr_free().

2010-11-08 - 24de0ed - lavfi 1.59.0 - avfilter_free()
Rename avfilter_destroy() to avfilter_free().
This change breaks libavfilter API/ABI.

2010-11-07 - 1e80a0e - lavfi 1.58.0 - avfiltergraph.h
Remove graphparser.h header, move AVFilterInOut and
avfilter_graph_parse() declarations to libavfilter/avfiltergraph.h.

2010-11-07 - 7313132 - lavfi 1.57.0 - AVFilterInOut
Rename field AVFilterInOut.filter to AVFilterInOut.filter_ctx.
This change breaks libavfilter API.

2010-11-04 - 97dd1e4 - lavfi 1.56.0 - avfilter_graph_free()
Rename avfilter_graph_destroy() to avfilter_graph_free().
This change breaks libavfilter API/ABI.

2010-11-04 - e15aeea - lavfi 1.55.0 - avfilter_graph_alloc()
Add avfilter_graph_alloc() to libavfilter/avfiltergraph.h.

2010-11-02 - 6f84cd1 - lavcore 0.12.0 - av_get_bits_per_sample_fmt()
Add av_get_bits_per_sample_fmt() to libavcore/samplefmt.h and
deprecate av_get_bits_per_sample_format().

2010-11-02 - d63e456 - lavcore 0.11.0 - samplefmt.h

Add sample format functions in libavcore/samplefmt.h:

av_get_sample_fmt_name(),

av_get_sample_fmt(),

av_get_sample_fmt_string(),

and deprecate the corresponding libavcodec/audioconvert.h functions:

avcodec_get_sample_fmt_name(),

avcodec_get_sample_fmt(),

avcodec_sample_fmt_string().

2010-11-02 - 262d1c5 - lavcore 0.10.0 - samplefmt.h

Define enum AVSampleFormat in libavcore/samplefmt.h, deprecate enum SampleFormat.

2010-10-16 - 2a24df9 - lavfi 1.52.0 - avfilter_graph_config()

Add the function avfilter_graph_config() in avfiltergraph.h.

2010-10-15 - 03700d3 - lavf 52.83.0 - metadata API

Change demuxers to export metadata in generic format and muxers to accept generic format. Deprecate the public conversion API.

2010-10-10 - 867ae7a - lavfi 1.49.0 - AVFilterLink.time_base

Add time_base field to AVFilterLink.

2010-09-27 - c85eef4 - lavu 50.31.0 - av_set_options_string()

Move av_set_options_string() from libavfilter/parseutils.h to libavutil/opt.h.

2010-09-27 - acc0490 - lavfi 1.47.0 - AVFilterLink

Make the AVFilterLink fields srcpad and dstpad store the pointers to the source and destination pads, rather than their indexes.

2010-09-27 - 372e288 - lavu 50.30.0 - av_get_token()

Move av_get_token() from libavfilter/parseutils.h to libavutil/avstring.h.

2010-09-26 - 635d4ae - lsws 0.12.0 - swscale.h

Add the functions sws_alloc_context() and sws_init_context().

2010-09-26 - 6ed0404 - lavu 50.29.0 - opt.h

Move libavcodec/opt.h to libavutil/opt.h.

2010-09-24 - 1c1c80f - lavu 50.28.0 - av_log_set_flags()

Default of av_log() changed due to many problems to the old no repeat detection. Read the docs of AV_LOG_SKIP_REPEATED in log.h before enabling it for your app!.

2010-09-24 - f66eb58 - lavc 52.90.0 - av_opt_show2()

Deprecate av_opt_show() in favor of av_opt_show2().

2010-09-14 - bc6f0af - lavu 50.27.0 - av_popcount()

Add av_popcount() to libavutil/common.h.

2010-09-08 - c6c98d0 - lavu 50.26.0 - av_get_cpu_flags()

Add av_get_cpu_flags().

2010-09-07 - 34017fd - lavcore 0.9.0 - av_image_copy()

Add av_image_copy().

2010-09-07 - 9686abb - lavcore 0.8.0 - av_image_copy_plane()

Add av_image_copy_plane().

2010-09-07 - 9b7269e - lavcore 0.7.0 - imgutils.h

Adopt hierarchical scheme for the imgutils.h function names,
deprecate the old names.

2010-09-04 - 7160bb7 - lavu 50.25.0 - AV_CPU_FLAG_*

Deprecate the FF_MM_* flags defined in libavcodec/avcodec.h in favor
of the AV_CPU_FLAG_* flags defined in libavutil/cpu.h.

2010-08-26 - 5da19b5 - lavc 52.87.0 - avcodec_get_channel_layout()

Add avcodec_get_channel_layout() in audioconvert.h.

2010-08-20 - e344336 - lavcore 0.6.0 - av_fill_image_max_pixsteps()

Rename av_fill_image_max_pixstep() to av_fill_image_max_pixsteps().

2010-08-18 - a6ddf8b - lavcore 0.5.0 - av_fill_image_max_pixstep()

Add av_fill_image_max_pixstep() in imgutils.h.

2010-08-17 - 4f2d2e4 - lavu 50.24.0 - AV_NE()

Add the AV_NE macro.

2010-08-17 - ad2c950 - lavfi 1.36.0 - audio framework

Implement AVFilterBufferRefAudioProps struct for audio properties,
get_audio_buffer(), filter_samples() functions and related changes.

2010-08-12 - 81c1eca - lavcore 0.4.0 - av_get_image_linesize()

Add av_get_image_linesize() in imgutils.h.

2010-08-11 - c1db7bf - lavfi 1.34.0 - AVFilterBufferRef

Resize data and linesize arrays in AVFilterBufferRef to 8.

This change breaks libavfilter API/ABI.

2010-08-11 - 9f08d80 - lavc 52.85.0 - av_picture_data_copy()

Add av_picture_data_copy in avcodec.h.

2010-08-11 - 84c0386 - lavfi 1.33.0 - avfilter_open()

Change avfilter_open() signature:

```
AVFilterContext *avfilter_open(AVFilter *filter, const char *inst_name) ->  
int avfilter_open(AVFilterContext **filter_ctx, AVFilter *filter, const char *inst_name);
```

This change breaks libavfilter API/ABI.

2010-08-11 - cc80caf - lavfi 1.32.0 - AVFilterBufferRef

Add a type field to AVFilterBufferRef, and move video specific properties to AVFilterBufferRefVideoProps.

This change breaks libavfilter API/ABI.

2010-08-07 - 5d4890d - lavfi 1.31.0 - AVFilterLink

Rename AVFilterLink fields:

```
AVFilterLink.srcpic  -> AVFilterLink.src_buf  
AVFilterLink.cur_pic -> AVFilterLink.cur_buf  
AVFilterLink.outpic  -> AVFilterLink.out_buf
```

2010-08-07 - 7fce481 - lavfi 1.30.0

Rename functions and fields:

```
avfilter_(un)ref_pic    -> avfilter_(un)ref_buffer  
avfilter_copy_picref_props -> avfilter_copy_buffer_ref_props  
AVFilterBufferRef.pic    -> AVFilterBufferRef.buffer
```

2010-08-07 - ecc8dad - lavfi 1.29.0 - AVFilterBufferRef

Rename AVFilterPicRef to AVFilterBufferRef.

2010-08-07 - d54e094 - lavfi 1.28.0 - AVFilterBuffer

Move format field from AVFilterBuffer to AVFilterPicRef.

2010-08-06 - bf176f5 - lavcore 0.3.0 - av_check_image_size()

Deprecate avcodec_check_dimensions() in favor of the function av_check_image_size() defined in libavcore/imgutils.h.

2010-07-30 - 56b5e9d - lavfi 1.27.0 - AVFilterBuffer

Increase size of the arrays AVFilterBuffer.data and AVFilterBuffer.linesize from 4 to 8.

This change breaks libavfilter ABI.

2010-07-29 - e7bd48a - lavcore 0.2.0 - imgutils.h

Add functions av_fill_image_linesizes() and av_fill_image_pointers(), declared in libavcore/imgutils.h.

2010-07-27 - 126b638 - lavcore 0.1.0 - parseutils.h

Deprecate av_parse_video_frame_size() and av_parse_video_frame_rate() defined in libavcodec in favor of the newly added functions av_parse_video_size() and av_parse_video_rate() declared in libavcore/parseutils.h.

2010-07-23 - 4485247 - lavu 50.23.0 - mathematics.h

Add the M_PHI constant definition.

2010-07-22 - bdab614 - lavfi 1.26.0 - media format generalization

Add a type field to AVFilterLink.

Change the field types:

enum PixelFormat format -> int format in AVFilterBuffer

enum PixelFormat *formats -> int *formats in AVFilterFormats

enum PixelFormat *format -> int format in AVFilterLink

Change the function signatures:

AVFilterFormats *avfilter_make_format_list(const enum PixelFormat *pix_fmts); ->

AVFilterFormats *avfilter_make_format_list(const int *fmts);

int avfilter_add_colorspace(AVFilterFormats **avff, enum PixelFormat pix_fmt); ->

int avfilter_add_format (AVFilterFormats **avff, int fmt);

AVFilterFormats *avfilter_all_colorspaces(void); ->

AVFilterFormats *avfilter_all_formats (enum AVMediaType type);

This change breaks libavfilter API/ABI.

2010-07-21 - aac6ca6 - lavcore 0.0.0

Add libavcore.

2010-07-17 - b5c582f - lavfi 1.25.0 - AVFilterBuffer

Remove w and h fields from AVFilterBuffer.

2010-07-17 - f0d77b2 - lavfi 1.24.0 - AVFilterBuffer

Rename AVFilterPic to AVFilterBuffer.

2010-07-17 - 57fe80f - lavf 52.74.0 - url_fskip()

Make url_fskip() return an int error code instead of void.

2010-07-11 - 23940f1 - lavc 52.83.0

Add AVCodecContext.lpc_type and AVCodecContext.lpc_passes fields.

Add AVLPCType enum.

Deprecate AVCodecContext.use_lpc.

2010-07-11 - e1d7c88 - lavc 52.82.0 - avsubtitle_free()

Add a function for free the contents of a AVSubtitle generated by

avcodec_decode_subtitle.

2010-07-11 - b91d08f - lavu 50.22.0 - bswap.h and intreadwrite.h

Make the bswap.h and intreadwrite.h API public.

2010-07-08 - ce1cd1c - lavu 50.21.0 - pixdesc.h
Rename read/write_line() to av_read/write_image_line().

2010-07-07 - 4d508e4 - lavfi 1.21.0 - avfilter_copy_picref_props()
Add avfilter_copy_picref_props().

2010-07-03 - 2d525ef - lavc 52.79.0
Add FF_COMPLIANCE_UNOFFICIAL and change all instances of
FF_COMPLIANCE_INOFFICIAL to use FF_COMPLIANCE_UNOFFICIAL.

2010-07-02 - 89eec74 - lavu 50.20.0 - lfg.h
Export av_lfg_init(), av_lfg_get(), av_mlfm_get(), and av_bmg_get() through
lfg.h.

2010-06-28 - a52e2c3 - lavfi 1.20.1 - av_parse_color()
Extend av_parse_color() syntax, make it accept an alpha value specifier and
set the alpha value to 255 by default.

2010-06-22 - 735cf6b - lavf 52.71.0 - URLProtocol.priv_data_size, priv_data_class
Add priv_data_size and priv_data_class to URLProtocol.

2010-06-22 - ffb289 - lavf 52.70.0 - url_alloc(), url_connect()
Add url_alloc() and url_connect().

2010-06-22 - 9b07a2d - lavf 52.69.0 - av_register_protocol2()
Add av_register_protocol2(), deprecating av_register_protocol().

2010-06-09 - 65db058 - lavu 50.19.0 - av_compare_mod()
Add av_compare_mod() to libavutil/mathematics.h.

2010-06-05 - 0b99215 - lavu 50.18.0 - eval API
Make the eval API public.

2010-06-04 - 31878fc - lavu 50.17.0 - AV_BASE64_SIZE
Add AV_BASE64_SIZE() macro.

2010-06-02 - 7e566bb - lavc 52.73.0 - av_get_codec_tag_string()
Add av_get_codec_tag_string().

----- 8< ----- FFmpeg 0.6 was cut here ----- 8< -----

2010-06-01 - 2b99142 - lsws 0.11.0 - convertPalette API
Add sws_convertPalette8ToPacked32() and sws_convertPalette8ToPacked24().

2010-05-26 - 93ebfee - lavc 52.72.0 - CODEC_CAP_EXPERIMENTAL
Add CODEC_CAP_EXPERIMENTAL flag.
NOTE: this was backported to 0.6

2010-05-23 - 9977863 - lavu 50.16.0 - av_get_random_seed()
Add av_get_random_seed().

2010-05-18 - 796ac23 - lavf 52.63.0 - AVFMT_FLAG_RTP_HINT
Add AVFMT_FLAG_RTP_HINT as possible value for AVFormatContext.flags.
NOTE: this was backported to 0.6

2010-05-09 - b6bc205 - lavfi 1.20.0 - AVFilterPicRef
Add interlaced and top_field_first fields to AVFilterPicRef.

2010-05-01 - 8e2ee18 - lavf 52.62.0 - probe function
Add av_probe_input_format2 to API, it allows ignoring probe results below given score and returns the actual probe score.

2010-04-01 - 3dd6180 - lavf 52.61.0 - metadata API
Add a flag for av_metadata_set2() to disable overwriting of existing tags.

2010-04-01 - 0fb49b5 - lavc 52.66.0
Add avcodec_get_edge_width().

2010-03-31 - d103218 - lavc 52.65.0
Add avcodec_copy_context().

2010-03-31 - 1a70d12 - lavf 52.60.0 - av_match_ext()
Make av_match_ext() public.

2010-03-31 - 1149150 - lavu 50.14.0 - AVMediaType
Move AVMediaType enum from libavcodec to libavutil.

2010-03-31 - 72415b2 - lavc 52.64.0 - AVMediaType
Define AVMediaType enum, and use it instead of enum CodecType, which is deprecated and will be dropped at the next major bump.

2010-03-25 - 8795823 - lavu 50.13.0 - av_strerror()
Implement av_strerror().

2010-03-23 - e1484eb - lavc 52.60.0 - av_dct_init()
Support DCT-I and DST-I.

2010-03-15 - b8819c8 - lavf 52.56.0 - AVFormatContext.start_time_realtime
Add AVFormatContext.start_time_realtime field.

2010-03-13 - 5bb5c1d - lavfi 1.18.0 - AVFilterPicRef.pos
Add AVFilterPicRef.pos field.

2010-03-13 - 60c144f - lavu 50.12.0 - error.h

Move error code definitions from libavcodec/avcodec.h to the new public header libavutil/error.h.

2010-03-07 - c709483 - lavc 52.56.0 - avfft.h
Add public FFT interface.

2010-03-06 - ac6ef86 - lavu 50.11.0 - av_stristr()
Add av_stristr().

2010-03-03 - 4b83fc0 - lavu 50.10.0 - av_tree_enumerate()
Add av_tree_enumerate().

2010-02-07 - b687c1a - lavu 50.9.0 - av_compare_ts()
Add av_compare_ts().

2010-02-05 - 3f3dc76 - lsws 0.10.0 - sws_getCoefficients()
Add sws_getCoefficients().

2010-02-01 - ca76a11 - lavf 52.50.0 - metadata API
Add a list of generic tag names, change 'author' -> 'artist', 'year' -> 'date'.

2010-01-30 - 80a07f6 - lavu 50.8.0 - av_get_pix_fmt()
Add av_get_pix_fmt().

2010-01-21 - 01cc47d - lsws 0.9.0 - sws_scale()
Change constness attributes of sws_scale() parameters.

2010-01-10 - 3fb8e77 - lavfi 1.15.0 - avfilter_graph_config_links()
Add a log_ctx parameter to avfilter_graph_config_links().

2010-01-07 - 8e9767f - lsws 0.8.0 - sws_isSupported{In,Out}put()
Add sws_isSupportedInput() and sws_isSupportedOutput() functions.

2010-01-06 - c1d662f - lavfi 1.14.0 - avfilter_add_colorspace()
Change the avfilter_add_colorspace() signature, make it accept an (AVFilterFormats **) rather than an (AVFilterFormats *) as before.

2010-01-03 - 4fd1f18 - lavfi 1.13.0 - avfilter_add_colorspace()
Add avfilter_add_colorspace().

2010-01-02 - 8eb631f - lavf 52.46.0 - av_match_ext()
Add av_match_ext(), it should be used in place of match_ext().

2010-01-01 - a1f547b - lavf 52.45.0 - av_guess_format()
Add av_guess_format(), it should be used in place of guess_format().

2009-12-13 - a181981 - lavf 52.43.0 - metadata API

Add `av_metadata_set2()`, `AV_METADATA_DONT_STRDUP_KEY` and `AV_METADATA_DONT_STRDUP_VAL`.

2009-12-13 - 277c733 - lavu 50.7.0 - avstring.h API
Add `av_d2str()`.

2009-12-13 - 02b398e - lavc 52.42.0 - AVStream
Add `avg_frame_rate`.

2009-12-12 - 3ba69a1 - lavu 50.6.0 - `av_bmg_next()`
Introduce the `av_bmg_next()` function.

2009-12-05 - a13a543 - lavfi 1.12.0 - `avfilter_draw_slice()`
Add a `slice_dir` parameter to `avfilter_draw_slice()`.

2009-11-26 - 4cc3f6a - lavfi 1.11.0 - AVFilter
Remove the `next` field from AVFilter, this is not anymore required.

2009-11-25 - 1433c4a - lavfi 1.10.0 - `avfilter_next()`
Introduce the `avfilter_next()` function.

2009-11-25 - 86a60fa - lavfi 1.9.0 - `avfilter_register()`
Change the signature of `avfilter_register()` to make it return an `int`. This is required since now the registration operation may fail.

2009-11-25 - 74a0059 - lavu 50.5.0 - `pixdesc.h` API
Make the `pixdesc.h` API public.

2009-10-27 - 243110f - lavfi 1.5.0 - AVFilter.`next`
Add a `next` field to AVFilter, this is used for simplifying the registration and management of the registered filters.

2009-10-23 - cccd292 - lavfi 1.4.1 - AVFilter.`description`
Add a `description` field to AVFilter.

2009-10-19 - 6b5dc05 - lavfi 1.3.0 - `avfilter_make_format_list()`
Change the interface of `avfilter_make_format_list()` from `avfilter_make_format_list(int n, ...)` to `avfilter_make_format_list(enum PixelFormat *pix_fmts)`.

2009-10-18 - 0eb4ff9 - lavfi 1.0.0 - `avfilter_get_video_buffer()`
Make `avfilter_get_video_buffer()` recursive and add the `w` and `h` parameters to it.

2009-10-07 - 46c40e4 - lavfi 0.5.1 - AVFilterPic
Add `w` and `h` fields to AVFilterPic.

2009-06-22 - 92400be - lavf 52.34.1 - AVFormatContext.`packet_size`
This is now an unsigned `int` instead of a signed `int`.

2009-06-19 - a4276ba - lavc 52.32.0 - AVSubtitle.pts

Add a pts field to AVSubtitle which gives the subtitle packet pts in AV_TIME_BASE. Some subtitle de-/encoders (e.g. XSUB) will not work right without this.

2009-06-03 - 8f3f2e0 - lavc 52.30.2 - AV_PKT_FLAG_KEY

PKT_FLAG_KEY has been deprecated and will be dropped at the next major version. Use AV_PKT_FLAG_KEY instead.

2009-06-01 - f988ce6 - lavc 52.30.0 - av_lockmgr_register()

av_lockmgr_register() can be used to register a callback function that lavc (and in the future, libraries that depend on lavc) can use to implement mutexes. The application should provide a callback function that implements the AV_LOCK_* operations described in avcodec.h. When the lock manager is registered, FFmpeg is guaranteed to behave correctly in a multi-threaded application.

2009-04-30 - ce1d9c8 - lavc 52.28.0 - av_free_packet()

av_free_packet() is no longer an inline function. It is now exported.

2009-04-11 - 80d403f - lavc 52.25.0 - deprecate av_destruct_packet_nofree()

Please use NULL instead. This has been supported since r16506 (lavf > 52.23.1, lavc > 52.10.0).

2009-04-07 - 7a00bba - lavc 52.23.0 - avcodec_decode_video/audio/subtitle

The old decoding functions are deprecated, all new code should use the new functions avcodec_decode_video2(), avcodec_decode_audio3() and avcodec_decode_subtitle2(). These new functions take an AVPacket *pkt argument instead of a const uint8_t *buf / int buf_size pair.

2009-04-03 - 7b09db3 - lavu 50.3.0 - av_fifo_space()

Introduce the av_fifo_space() function.

2009-04-02 - fabd246 - lavc 52.23.0 - AVPacket

Move AVPacket declaration from libavformat/avformat.h to libavcodec/avcodec.h.

2009-03-22 - 6e08ca9 - lavu 50.2.0 - RGB32 pixel formats

Convert the pixel formats PIX_FMT_ARGB, PIX_FMT_RGBA, PIX_FMT_ABGR, PIX_FMT_BGRA, which were defined as macros, into enum PixelFormat values. Conversely PIX_FMT_RGB32, PIX_FMT_RGB32_1, PIX_FMT_BGR32 and PIX_FMT_BGR32_1 are now macros.

avcodec_get_pix_fmt() now recognizes the "rgb32" and "bgr32" aliases.

Re-sort the enum PixelFormat list accordingly.

This change breaks API/ABI backward compatibility.

2009-03-22 - f82674e - lavu 50.1.0 - PIX_FMT_RGB5X5 endian variants

Add the enum PixelFormat values:

PIX_FMT_RGB565BE, PIX_FMT_RGB565LE, PIX_FMT_RGB555BE, PIX_FMT_RGB555LE, PIX_FMT_BGR565BE, PIX_FMT_BGR565LE, PIX_FMT_BGR555BE, PIX_FMT_BGR555LE.

2009-03-21 - ee6624e - lavu 50.0.0 - av_random*

The Mersenne Twister PRNG implemented through the av_random* functions was removed. Use the lagged Fibonacci PRNG through the av_lfg* functions instead.

2009-03-08 - 41dd680 - lavu 50.0.0 - AVFifoBuffer

av_fifo_init, av_fifo_read, av_fifo_write and av_fifo_realloc were dropped and replaced by av_fifo_alloc, av_fifo_generic_read, av_fifo_generic_write and av_fifo_realloc2.

In addition, the order of the function arguments of av_fifo_generic_read was changed to match av_fifo_generic_write.

The AVFifoBuffer/struct AVFifoBuffer may only be used in an opaque way by applications, they may not use sizeof() or directly access members.

2009-03-01 - ec26457 - lavf 52.31.0 - Generic metadata API

Introduce a new metadata API (see av_metadata_get() and friends).

The old API is now deprecated and should not be used anymore. This especially includes the following structure fields:

- AVFormatContext.title
- AVFormatContext.author
- AVFormatContext.copyright
- AVFormatContext.comment
- AVFormatContext.album
- AVFormatContext.year
- AVFormatContext.track
- AVFormatContext.genre
- AVStream.language
- AVStream.filename
- AVProgram.provider_name
- AVProgram.name
- AVChapter.title

版权声明：本文为博主原创文章，未经博主允许不得转载。<https://blog.csdn.net/leixiaohua1020/article/details/41013567>

文章标签： [FFmpeg](#) [API](#) [变更](#) [开发](#)

个人分类： [FFMPEG](#)

所属专栏： [FFmpeg](#)

此PDF由[spygg](#)生成, 请尊重原作者版权!!!

我的邮箱: liushidc@163.com