Adobe® Primetime

PSDK 1.2 for iOS Release Notes

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Contents

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New features for 1.2

- **Video Analytics integration**

  Video Analytics is Adobe's video-tracking solution, which is available to you through the Primetime SDK.

  The Adobe Video Analytics feature encompasses two aspects of video tracking:

  - *Primetime Player Monitoring* - This is provided with the PSDK. It provides real-time metrics about the quality of streaming, including the buffer rate, error rate, average bit rate, active streams, and startup time.
  - Adobe Analytics Video Essentials - This is an add-on service. It provides video engagement metrics after the fact (non real-time), including video views, video completes, ad impressions, time spent on video, and more. For more information, contact your Adobe representative.

- **On-the-fly transcoding or creative repackaging**

  Some third-party ads (creatives) might be available only as a progressive download MP4 video, in which case they cannot be stitched into the HLS content stream. Primetime Ad Insertion and the iOS PSDK provide an option called third-party creative repackaging, which addresses this situation.

  On the fly ad transcoding is supported through Adobe Ad Serving. The Adobe Ad Server account must be configured for creative repackaging on the Ad Server and then repackaging is seamlessly handled through the PSDK.

- **Full-event replay (FER)**

  Full-event replay (FER) is a VOD asset that acts, in terms of ad insertion, as a live/DVR asset. Your application can now ensure that ads are placed correctly by selecting the ad-signaling mode.

- **General playback stability**

  Improved start-up time, failover, and playback performance.

- **Pre-roll playback improvement for live streams**

  Playback of pre-roll ads is now separated from the playback of the main content for live streams. This will improve the startup time by loading the mid-roll ads and initializing DRM workflow pre-hand while the pre-roll is still playing. Seeking back in the content won't return the user to the pre-roll ad.again.

- **iOS 7 and armv7s support**
- **Ad Optimization**

  Optimized playback startup time of DVR LIVE and VOD FER streams by making a single ad server call instead of making individual requests per ad cue point.

- **Support for EVENT playlist**

  PSDK iOS build supports EVENT type HLS playlists. Fixes issues with Ad Tracking.

- **Support for ad signaling mode**

  PSDK advertising workflow can be split in 3 phases:

  1. Opportunity detection - PSDK will use stream information to detect the possible/desired locations for ads

2. Ad resolution - PSDK will communicate with an advertisement server to retrieve the ads which need to be spliced into the content
3. Ad placement - PSDK will load specified ads and place them on the content timeline at the specified locations

There are two ways in which the PSDK can obtain the possible locations for ad placement:

1. Manifest metadata/cues

   This is a common scenario for live/linear streams. The PSDK is responsible for detecting such metadata/cues, extracting the necessary information from them and communicating with an advertising server to obtain the corresponding ads.

   The resolved ads are spliced in by replacing main content at the location indicated by the metadata/cues. Otherwise the client will drop further and further than the actual live point.

2. Advertising server map

   This is a common scenario for video-on-demand streams. Metadata information about these streams are registered into the advertising server prior to playback. The PSDK is responsible for retrieving the ad timeline from the server and corresponding ads. The resolved ads are spliced by insertions into the main content as indicated by the server map.

By default, PSDK uses manifest cues for live and linear streams and an advertising server map for VOD streams. This works well for simple playback scenarios, but we can complete live streams using the metadata/cues presented in the manifest. For HLS, once the EXT-X-ENDLIST tag is appended to a live manifest, the stream becomes a VOD stream and there is no way to differentiate it from a normal VOD stream. The PSDK can correctly identify these streams and play them only if it is instructed to do this by the application. Use *PTAdSignalingMode* to control this behavior. The PSDK assumes that the application will obtain the actual signaling mode that should be used from external sources (vCMS, etc.).

- **DVR support for ad insertion**

  The PSDK provides you with the option to load all ads for the stream when the user begins viewing or to resolve only the ads that occur after the user's current live point.

- **LBA support for live streams**

  PSDK 1.2 enhances LBA support to include the ability to have a live stream with multiple audio tracks.

  For more information about LBA support, refer to the *PSDK for iOS API Reference*.

- **Ad signaling mode**

  The application developers must set the PTAdSignalingMode in *PTAdMetadata* to define the ad signaling mode.

  These are the types of signaling modes:

  - PTAdSignalingModeDefault
  - PTAdSignalingModeManifestCues
  - PTAdSignalingModeServerMap

- **Added volume and muted properties in iOS 7**

  The properties volume(float) and muted(BOOL) were added to PTMediaPlayer to set/get the volume of the playback for iOS 7.

- **Support for using registered custom Ad Cue markers to splice ads content**

Client can register custom ad cue markers for the PSDK to use in addition to the default ad markers it always checks for. This can be done by using the class method setAdTags: in the *PTSDKConfig* class.

- **Support for exposing subscribed custom tags** within the HLS manifest to the application.

  Clients can register with the PSDK to be notified about a custom tag within the HLS manifest. This can be done by using the class method setSubscribedTags: in the *PTSDKConfig* class.

Resolved issues in 1.2

- Video with VOD Streams using PTSignalingModeManifestCues signaling mode freezes while playing the mid rolls.
- Ad markers are not displayed intermittently for VOD streams using PTSignalingModeManifestCues signaling mode.
- Issue with live stream freezing before playing the mid roll ad.
- Live stream was not playing with no/empty ads.
- Ad Insertion is based on a cue's id property in the manifest instead of relying on sequence number synchronization across all the bitrate renditions. However, if the cues don't have an id property, the media sequence numbers need to be in sync for correct ad insertion.
- HTTPS manifest support.
- Fixed issues with Ad resolving error scenarios.
- Fixed memory leaks with live playback.
- PSDK not dispatching PTMediaError when turning off wifi in middle of the playback.
- LBA stream does not always request audio ts files until the 2nd audio manifest request.
- Changed constant names to prevent symbol collision.
- Pre-roll ads getting truncated intermittently.

Known issues in 1.2

Bug #	Description and Workaround
3605126	Encrypted ads are not supported with VOD content which has WEBVTT subtitles. **Workaround:** None.
3646224	Playback after the pre-roll ad break does not start at the live point when DVR ads are enabled on phones or tablets with larger screens. **Workaround:** None.
3654140	Loading time (up to four to five seconds) for the main content is expected after the pre-roll ad break is complete.
3674742	There is a delay of approximately six seconds after pre-roll ads complete and the program content starts. This happens with a very long (e.g., 13 hours) FER stream that includes 200+ ad cue points. **Workaround:** None.

Bug #	Description and Workaround
3681708	Mid-roll ad notifications for Live/VOD unmuxed streams (using PTSignalingModeManifestCues) might be slightly out of sync if the start time (based on segment durations) of the cue points don't match perfectly with the video and audio play lists. **Workaround:** None.
	Intermittently the playback stalls after the pre-roll ad break. **Workaround:** The user can restart playback by seeking within the stream.
VA-724	During buffering periods, no tracking calls are issued.
VA-779	The bit-rate change event heartbeat is not sent.
VA-785	Total duration is not reset when the same ad replays.
VA-851	When ad resolver initialization fails, two start calls are sent for the main asset.
	Buffer events are not tracked.