

# Android Library Release Notes

As of version 5 the comScore libraries use a new public API.  
 Upgrading existing implementations of versions 2 and 3 of the comScore library will require a small amount of code changes.  
 These code changes are explained in an appendix of the implementation guides.

## Library Version 5.1.0.170220

**Release Date:** February 24, 2017

**Application Tag Data Collection Model Version:** 2.11

**Streaming Tag Data Collection Model Version:** 5.7

**Supported OS Versions:** 2.3 – 7.1 (Android API levels 9 – 25)

### New features and improvements:

1. [TAGLANDR-11] Added API methods for clearing all stored data and clearing the offline cache without flushing it to support advanced implementation scenarios.
2. [TAG-2937] Improve collection of automatically calculated Streaming Tag positions and unique playing time for players which support changing the playback rate. The library will now account for playback speed using the values provided for playback rate change notification method calls (if these calls appear in the implementation).  
*Please note that playback rates can be **negative** to indicate reverse playback. The library uses the playback rate to calculate the current position in between playback state change notifications. Depending on the player's exact reverse playback capabilities, the playback scenario and execution timings, reverse playback past position 0 could cause the calculated position be a negative value.*
3. [TAG-2938] Implement system clock jump detection to mitigate the effect of clock jumps on Streaming Tag collected positions, playing time and unique playback.
4. [TAG-2947] Add an API method to disable internal updates of the Streaming Tag current position and position-related metrics based on the progress of natural time.

### Bug fixes:

1. [TAGCPPS-6] Prevent seeking while a stream is paused from being counted as playback in Streaming Tag measurement requests.
2. [TAGLANDR-4] Improve the solution implemented for version 5.0.6.161223.
3. [TAG-2985] Ensure Streaming Tag asset load counter is reset when a new [Asset](#) is provided to the [StreamingAnalytics](#) API.

### Known issues and limitations:

- There were no known issues for this release.

## Library Version 5.0.6.161223

**Release Date:** January 16, 2017

**Application Tag Data Collection Model Version: 2.11**

**Streaming Tag Data Collection Model Version: 5.7**

**Supported OS Versions: 2.3 – 7.1 (Android API levels 9 – 25)**

**New features and improvements:**

1. [TAGLANDR-2] Improved the build process to generate an alternative library deliverable which contains all the available Android processor architectures next to the existing library deliverable which contains a base mix of architect.
2. [TAGQA-1114] Changed the approach for using web views within the vCE component to prevent issues with other libraries.

**Bug fixes:**

1. [TAG-2876] Prevent unhandled exceptions when a `StreamingAnalytics` instance is simultaneously used from different threads.
2. [TAG-2879, TAG-2911] Ensure all provided configuration settings are consumed according to their specifications when the configuration window closes.
3. [TAG-2888] Ensure the foreground transitions delta is correctly populated in the collected data.
4. [TAG-2889] Prevent measurements from being transmitted when no client configurations are provided as the configuration window closes.
5. [TAGLANDR-4] Ensure the `c12` label is included correctly for partner stacks when an implementation uses a `PublisherConfiguration` as well as a `PartnerConfiguration`.
6. [TAGLANDR-6] Ensure persistent labels which are modified on an existing configuration are properly collected.
7. [TAGLANDR-8, TAGQA-1102] Prevent the vCE component from keeping a strong reference to `WebViewClient` objects from *IMA/Kaltura* after these objects are destroyed.
8. [TAGLCPPS-1] Prevent label values which represent numerical values beyond 999999 from being collected in scientific notation.
9. [TAGLCPPS-3] Ensure calls to `notifyBufferStop` to transition from *buffering during playback* state to *playing* state resume the collection of playing time.
10. [TAGQA-1070] Ensure the vCE component builds valid JSON strings.
11. [TAGQA-1113] Ensure the vCE component timely unbinds its listeners on a `WebView` when the `WebView` is destroyed.

**Known issues and limitations:**

- There were no known issues for this release.

## Library Version 5.0.4.1601104

**Release Date:** November 4, 2016

**Data Collection Model Version:** 2.11

**Supported OS Versions:** 2.3 – 7.1 (Android API levels 9 – 25)

**New features and improvements:**

1. [TAG-2802] Ensure the vCE component is immediately disabled – or not started – as soon as a provided `PublisherConfiguration` disables the vCE component.

**Bug fixes:**

1. [TAG-2820] Prevent compiler warnings referring to the use of API methods which are not recommended to be used.
2. [TAG-2849] Prevent calls to the `Aggregate` method from interpreting labels which are not provided in the arguments of the calls.
3. [TAG-2861] Rename the `notifyBufferEnd` method on the `StreamingAnalytics` class to `notifyBufferStop` to align with implementation documents and the API on other platforms.
4. [TAG-2863] Provide the `notifyCustomEvent` method on the `StreamingAnalytics` class.

**Known issues and limitations:**

- There were no known issues for this release.

## Library Version 5.0.3.161102

**Release Date:** November 2, 2016**Data Collection Model Version:** 2.11**Supported OS Versions:** 2.3 – 7.1 (Android API levels 9 – 25)

[TAG-2852] Rebuild the deliverables for version 5.0.3 of the comScore library with different compiler settings to prevent unnecessary *lint* warnings from appearing when an application project is built with the comScore library for the first time.

*There were no code changes in this release.*

## Library Version 5.0.3.160921

**Release Date:** October 28, 2016**Data Collection Model Version:** 2.11**Supported OS Versions:** 2.3 – 7.1 (Android API levels 9 – 25)**New features and improvements:**

1. First public release of comScore library version 5.x.
2. [TAG-2202] Include instrumentation for mobile in-application ad viewability for campaigns tagged with a comScore vCE tag by introducing a vCE component.  
*This feature Android 4.0.3 (API level 15) or higher to function properly. If the application is running on devices with Android 4.0.2 (API level 14) or lower then this feature will not be enabled/available.*
3. [TAG-2238, TAG-2242, TAG-2506, TAG-2645] Refactor and re-implement the public API and underlying internal logic. This includes changes like:
  - Rename most public API methods to introduce a new naming scheme as well as adherence to platform-specific naming conventions.
  - Implement improvements for performance and stability as well as for futureproofing the public API for implementations for combinations of different comScore products.
  - Implement a new approach to configuring the library, including support for multiple partner and/or client configurations while collecting data only once.
4. [TAG-2250] Include data collection model version label `ns_ap_smv` in the collected data.
5. [TAG-2291] Enable *Usage Properties Auto Update* by default.

6. [TAG-2444] Deliver the library as an AAR file instead of a JAR file.
7. [TAG-2491, TAG-2527, TAG-2596] Implement streaming analytics v5 API and data collection model features. This includes a completely new API for streaming analytics implementations.
8. [TAG-2738] Include label `ns_st_li=1` for live media types when using the streaming tag wrapper class for reduced requirements implementations.

**Bug fixes:**

1. [TAG-2553] Ensure that any label that is overridden by setting its value as a persistent label makes it into the measurement request.

**Known issues and limitations:**

- There were no known issues for this release.

## Library Version 3.1608.19

**Release Date:** August 22, 2016**Supported OS Versions:** 1.6 – 6.0**New features and improvements:**

- No feature requests were included in this release.

**Bug fixes:**

1. [TAG-2685] Fixed an issue which could randomly cause null pointer exception in the `Task.java` class to be thrown when the library tries to access storage.

**Known issues and limitations:**

- There were no known bugs prior to this release.

## Library Version 3.1607.05

**Release Date:** July 14, 2016**Supported OS Versions:** 1.6 – 6.0**New features and improvements:**

- No feature requests were included in this release.

**Bug fixes:**

1. [TAG-2553] Fixed an issue which prevented the implementation from being able to override `c12` and `ns_ak` as *persistent labels*.

**Known issues and limitations:**

- There were no known bugs prior to this release.

*Releases from 2015 and earlier have been removed from the release notes.*