

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 5.0.6.161223

Release Date: January 16, 2017

Data Collection Model Version: 2.11

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.

Library Version 3.1508.28

Release Date: September 2, 2015

Supported OS Versions: 1.6 – 6.0

New features and improvements:

1. [TAG-1500, TAG-1606, TAG-1636] Added Android Build Serial '01234567890ABCEDF' to the list of unusable source values for unique device IDs.
This source value was determined to be shared by a large number of Android devices in Asia. When the application cold starts and the unique device ID is determined to be based on this unusable source value then it will be regenerated automatically.
2. [TAG-1400] Extracted Streaming Tag plugin classes for `MediaPlayer` and `VideoView` from the library as a first step towards improving these plugins and releasing them separately.
3. [TAG-1666] Expanded wrapper class with new media change notification methods (`playVideoContentPart`, etc.). The new methods add an enum parameter for the media type into the method signature. The implementation documentation has been updated to use these new methods. The previously existing methods have been marked as deprecated and will be removed in a future update.
4. [TAG-1668] Expanded the new media check in the wrapper class its media change notification methods (`playVideoContentPart`, etc.) to be able to include extra metadata labels as part of the detection mechanism.

Bug fixes:

1. [TAG-1597] Minor coding improvements.
2. [TAG-1661] Modified some of the synchronised blocks of code. The involved logic is using the internal task executor and no longer needs synchronisation. This change also prevents a potential deadlock from occurring.

Known issues and limitations:

- There were no known bugs prior to this release.

Library Version 3.1502.26

Release Date: March 3, 2015

Supported OS Versions: 1.6 – 5.0

New features and improvements:

1. [TAG-1314] Cleaned up the example projects by removing obsolete settings files.

Bug fixes:

1. [TAG-1310] Modified the logic to remove expired cache files to prevent a potential issue where measurement cache files could be removed without being flushed.
2. [TAG-1323] Improved the internal task executor – which runs queued tasks on a background thread – to also handle all timed tasks instead of using a timer to fix an issue that could sporadically cause an ANR (*application not responding*) to be reported.
3. [TAG-1270] Added handling for sporadic cases where the *Connectivity Change Broadcast Receiver* cannot be unregistered and an exception is thrown.
4. [TAG-1361] Improved the logic used in the Streaming Tag classes to throttle rapidly recurring *play* and *pause* event notifications.
5. [TAG-1367] Corrected the logic used for triggering the *keep-alive* event to be able to properly handle scenarios that have live transmission initially turned off (like scenarios with an *opt-in wall*).

Known issues and limitations:

- There were no known bugs prior to this release.

Library Version 3.1412.08

Release Date: December 15, 2014**Supported OS Versions:** 1.6 – 5.0**New features and improvements:**

1. [TAG-844] Added support for non-`String` label values in `setLabels` and `setLabel` API method calls.
2. [TAG-1101] Improved the resolution of [TAG-799] released in version 2.1407.11 to control the behavior on a per-connection basis and only for the connections created by the comScore library.
3. [TAG-1122] Added logic to collect the processor architecture in label `ns_ap_ar`.
4. [TAG-1171, TAG-1257, TAG-1262] Modified the `StreamingTag` wrapper class used by the *Reduced Requirements Video Metrix* implementation to include new API methods `playVideoAdvertisement`, `playAudioAdvertisement`, `playVideoContentPart` and `playAudioContentPart` to differentiate between *video+audio* and *audio-only* media consumption. The `playVideoAdvertisement` and `playAudioAdvertisement` methods accept a metadata object.
5. [TAG-1204] Added a *BroadcastReceiver* class which can be used for capturing the *referrer* on the `com.android.vending.INSTALL_REFERRER` intent.
6. [TAG-1230] Integrated the Streaming Tag library classes into the Application Tag.

Bug fixes:

1. [TAG-1157] Fixed an issue that could caused calls to `setEnabled(false)` to causes a crash.

Known issues and limitations:

- There were no known bugs prior to this release.

Releases prior to version 3.x have been removed from the release notes due to their age.