

Android Library Release Notes

Version 6.0.0 of the Comscore library introduces public API changes. Upgrading existing implementations of older library versions will require a small amount of code changes, which are explained in an appendix of the implementation guides.

Library Version 6.0.0.191011

Release Date: October 14, 2019

Data Collection Model Version: 6.0

Supported OS Versions: 2.3 - 9.0 (Android API levels 9 - 28)

Feature changes:

1. (TAG-3628) Simplify and future-proof Streaming Tag implementation design and improve consistency of API naming and design of all library elements.

Description: Aside from applying internal redesign to remove the root causes of some difficult to reproduce bugs, the overall design of the solution is a few years old and can use an overhaul to apply new insights. Feature changes include:

- Integrate the `ReducedRequirementsStreamingAnalytics` solution into the 'standard' `StreamingAnalytics` solution to have a single Streaming Tag implementation.
- Provide Streaming Tag metadata objects with setters to allow developers to provide metadata without knowledge of label names. *Support for the use of hashmaps with labels from existing implementations is available (see appendix with update instructions in the implementation instructions).*
- Remove API elements which are no longer needed.

Resolution: Apply the changes and increment the major version number accordingly.

2. (TAGLANDR-187, TAG-3995) Compile the library with the *Position Independent Executable* (PIE) flag.

Description: Android 4.1 introduced the *Position Independent Executable* (PIE) flag. The minimum-supported Android version of previous library versions was 2.3.

Resolution: This major version of the library the minimum-supported Android version is 4.1 and deliverables are compiled with the PIE flag.

3. (TAG-4173) Drop support for Android versions below 4.1 (API level 16).

Description: To ensure library functionality is implemented appropriately and without unnecessary workarounds it is necessary to apply changes which require API level 16.

Resolution: Remove workarounds to have backwards compatibility with older Android versions and implement a safeguard mechanism to ensure the library fails silently when running on Android versions below 4.1.

4. (TAG-5090) Add Distributed Content Tagging functionality.

Description: Provide a simple solution for tagging distributed content in applications.

Resolution: Add the `notifyDistributedContentViewEvent` API method.

5. (TAG-5131) Make all transmission secure (HTTPS) by default.

Description: Transmission was non-secure by default which does align with contemporary practices.

Resolution: Let transmission be secure by default.

6. (TAGLANDR-188, TAG-4169) Drop support for *mips* and *mips64* architectures.

Description: The *mips* and *mips64* architectures are no longer supported by the Android NDK which is used by the library.

Resolution: Remove support for *mips* and *mips64* architectures.

Bug fixes:

1. (TAG-4965) Prevent crashes when `StreamingAnalytics` or `ReducedRequirementsStreamingAnalytics` API methods are called to notify of streaming events while the `Analytics` instance is already de-allocated.

Problem: When an application starts its termination routine it calls the destructor of all static instances. The library internally uses a static instance which could end up being referenced from other threads while it is being destroyed, causing a crash. While this issue was fixed in a previous library version not all use cases could be resolved.

Resolution: Apply internal design changes to resolve this for all use cases.

2. (TAG-5738) Correct per asset playback counter unique and largest-consecutive playback metrics collection.

Problem: The data for unique and largest-consecutive playback of the current asset playback counter is reset when an asset transitions into IDLE state. This means merging of intervals upon resuming playback — i.e., the playback counter is not incremented — occurs against an empty history.

Resolution: Ensure the data for unique playback and largest-consecutive playback per asset playback counter is reset only when the asset playback counter is incremented.

3. (TAG-5739) Improve elapsed time metrics collection.

Problem: There are use cases where elapsed time does not include time-spent outside of playback.

Resolution: Ensure the data for elapsed time is collected as soon as state changes from *idle*.

Known issues and limitations:

- There were no known issues for this release.