

## **C&C Android 3.13 Change List.**

### **New Features:**

The SDK now uses Firebase Cloud Messaging (FCM) instead of Google Cloud Messaging (GCM).

The SDK now supports Amazon Device Messaging (ADM).

Please see the Setting up Push Notifications section in the **CCClientDevelopersGuideAndroid.pdf**, that section provides details on what needs to be specified in the manifest. The SDK Demo application also shows how to implement and subclass the SDK components.

Support for the “Maximum Permitted Asset Downloads per Account” (MAD) rule. This rule is governed by the backplane. It can be read from the `com.penthera.virtuososdk.client.IBackplaneSettings` using the method `getMaxDownloadsPerAsset`. This rule controls the maximum number of times an asset can be downloaded across all devices associated with a user.

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The SDK now allows Segmented Assets to complete with Errored segments. You can access and modify the number of segments which are permitted to have errors through the `ISettings` interface. Look for the methods: `setMaxPermittedSegmentErrors` and `getMaxPermittedSegmentErrors`

The Client HTTP proxy for playing out Segmented files will by default return a HTTP OKAY (200) and a zero length file for segments which have errored out during download. Depending on your player you may need to return a different HTTP code for playout to continue; You can modify the code through the `ISettings` interface. Look for the methods: `setSegmentErrorHttpCode` and `getSegmentErrorHttpCode`.

### **API Changes:**

Class **`com.penthera.virtuososdk.client.Virtuoso`**

The startup method's signature has changed. The `GCMSenderId` parameter has been removed.

Interface **`com.penthera.virtuososdk.client.IPushRegistration`**

This interface is passed as a parameter into the startup method.

The `onRegisterSuccess` method has been removed.

The `onRegisterFailed` method has been removed.

The `onServiceAvailabilityResponse` method's signature has been modified. It now takes 2 integer parameters that specify the type of push service and an error code. Please look at the SDK Demo and java docs for full details.

Interface **`com.penthera.virtuososdk.client.IEngineObserver`**

There are now 2 types of setting change callbacks: One for settings provided by the backplane `backplaneSettingChanged` and the other for Settings configurable by the client `settingChanged`. A new set of flags `com.penthera.virtuososdk.Common.BackplaneSettingFlag` has been added for usage with the `backplaneSettingChanged` callback.

Interface **com.penthera.virtuososdk.client.IAssetManager**

Signature of the createFileAsset method has been modified: the expected size parameter has been removed.

Class **com.penthera.virtuososdk.Common.AssetStatus**

Three new constants have been added to describe the status of an Asset:

- **DOWNLOAD\_DENIED\_ACCOUNT:** Asset can not be downloaded due to the Max Downloads Per Account rule.
- **DOWNLOAD\_DENIED\_ASSET:** Asset can not be downloaded due to the Max Downloads Per Asset rule.
- **DOWNLOAD\_BLOCKED\_AWAITING\_PERMISSION:** Asset can not be downloaded until permission has been verified with Backplane.