

# InMobi Android SDK

Version a300

Installation and Integration Guide for Developers



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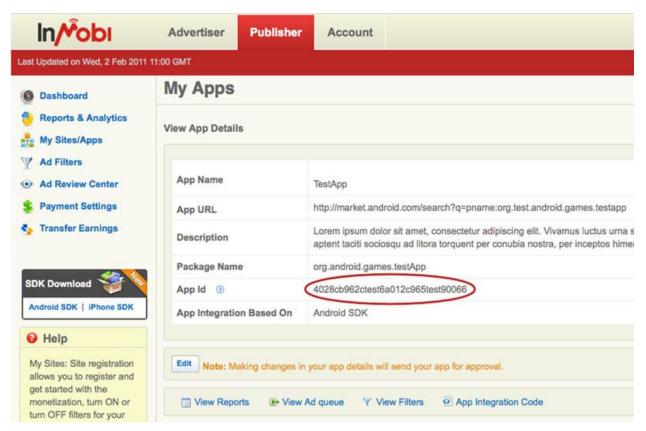
# 1 InMobi Android SDK Integration

The InMobi Android SDK contains the code necessary to integrate InMobi ads in your application. This SDK is designed to work across all Android platforms with a minimum OS version of 1.6.

# 1.1 Setting Up the Environment

Retrieve the App ID from the InMobi website by performing the following steps:

- 1. Login to your InMobi account at <a href="http://www.inmobi.com">http://www.inmobi.com</a>.
- 2. Click **My Sites/Apps** from the navigation bar.
- 3. Click the app name to retrieve your App ID.
- 4. Copy the App ID value and use it in either IMAdView or IMAdInterstitial.



**Note:** Developers are requested to enter their Android Market application URL in their InMobi Publisher Account.



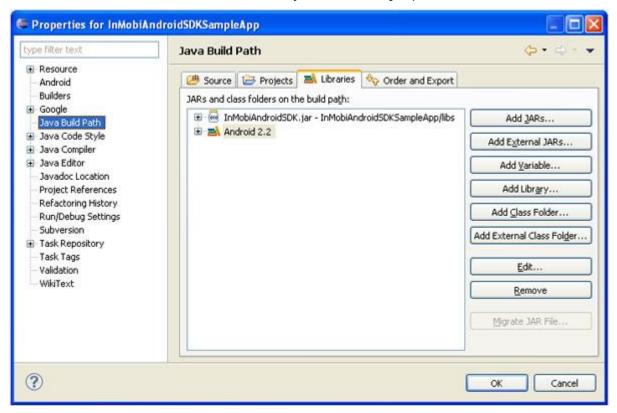
# 1.2 Step 1 – Including the InMobiAndroidSDK.jar lib

Copy the InMobiAndroidSDK.jar file to your project by performing the following steps:

- 1. Create a subdirectory named libs in the root directory of your project. This will already be done for you if you have used Android's **activityCreator** tool.
- 2. Copy the InMobiAndroidSDK.jar file into the libs directory.

In Eclipse, perform the following steps:

- 1. Right-click your project from the **Package Explorer** tab.
- 2. Select **Properties**.
- 3. Select **Java Build Path** from the left panel.
- 4. Select the **Libraries** tab from the main window.
- 5. Click Add JARs....
- 6. Select the InMobiAndroidSDK.jar file you copied earlier to the libs directory.
- 7. Click **OK** to add the InMobi SDK to your Android project.





# 1.3 Step 2 – Android Manifest Changes

Here, you are given instructions to make changes to your Android manifest file.

### 1.3.1 Mandatory Activity

Ensure that you add the <code>com.inmobi.androidsdk.IMBrowserActivity</code> activity to your <code>AndroidManifest.xml</code> within the <code><application></code> tag. This activity will be used to open ads in the embedded browser and to display interstitial ads.

### 1.3.2 Mandatory Permission

Ensure that you add the INTERNET permission to your AndroidManifest.xml file just before the closing </manifest> tag:

```
<uses-permission android:name="android.permission.INTERNET" />
```

#### 1.3.3 Optional Permissions

#### 1.3.3.1 Showing Geo-Targeted Ads

To allow InMobi to show geo-targeted ads, you need to add the ACCESS\_COARSE\_LOCATION and ACCESS FINE LOCATION permissions.

```
<uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION" />
<uses-permission android:name="android.permission.ACCESS FINE LOCATION" />
```

#### 1.3.3.2 Getting Network State

To get the network state for targeting purposes, you need to add the ACCESS\_NETWORK\_STATE permission.

```
<uses-permission android:name="android.permission.ACCESS NETWORK STATE" />
```

#### 1.3.3.3 Enabling Calls from Ads

To enable users to make calls from the ads, you need to add the CALL PHONE permission.

```
<uses-permission android:name="android.permission.CALL PHONE" />
```



# 1.3.4 Sample Manifest File

Your final AndroidManifest.xml file may look something like this:

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    package="com.inmobi.sample" android:versionCode="1"
   android:versionName="1.0">
    <application android:label="@string/app name" android:icon="@drawable/inmobi app new">
        <activity android:name=".InMobiAdActivity" android:label="@string/app_name">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
       </activity>
       <!-- Mandatory activity declaration to show the Ad in the embedded browser -->
        <activity android:name="com.inmobi.androidsdk.IMBrowserActivity"</pre>
            android:configChanges="keyboardHidden| orientation| keyboard" />
    </application>
    <!-- Internet is mandatory permission -->
    <uses-permission android:name="android.permission.INTERNET" />
    <!-- optional permissions to serve location based Ads -->
   <uses-permission android:name="android.permission.ACCESS COARSE LOCATION" />
   <uses-permission android:name="android.permission.ACCESS FINE LOCATION" />
   <!-- optional permission to enable the user to make calls from Ads -->
    <uses-permission android:name="android.permission.CALL PHONE" />
   <!-- optional permission to get the network state for targeting purposes -->
    <uses-permission android:name="android.permission.ACCESS NETWORK STATE" />
</manifest>
```



# 1.4 Step 3a – Option 1 – Inflating the IMAdView Instance from the Layout XML and Setting the Configuration

#### 1.4.1 Adding an IMAdView Instance to Layout XML

You can add an IMAdView to your activity through layout XML files. Add the XML snippet in your layout XML file to start receiving ads.

For example, if you want an ad with a 320x50 size, add the XML attribute shown below, to your parent ViewGroup:

When the activity is loaded, the auto Ad Refresh starts automatically.

**Note:** The Appid and Adslot attributes are mandatory, without which the IMAdview cannot be inflated.

Select an AdSlot from the following set of values declared in IMAdView.

```
* This ad slot will be deprecated in the future. Use ad slot 15 instead.
      static final int INMOBI AD UNIT 320X48 = 9;
* Medium Rectangle size for an InMobi ad, 300x250 pixels, designed for all device
sizes.
     static final int INMOBI AD UNIT 300X250 = 10;
* Leaderboard size for an InMobi ad, 728x90 pixels, designed for tablet screen
size.
* /
      static final int INMOBI AD UNIT 728X90 = 11;
* Full Banner size for an InMobi ad, 468x60 pixels, designed for tablet screen
size.
      static final int INMOBI AD UNIT 468X60 = 12;
* Skyscraper size for an InMobi ad, 120x600 pixels, designed for tablet screen
size.
* /
      static final int INMOBI AD UNIT 120X600 = 13;
* Standard rich media banner size for an InMobi ad, 320X50 pixels.
      static final int INMOBI AD UNIT 320X50 = 15;
```



/ \* \*

If you want to set configuration, use the ID provided in the XML to get the IMAdView instance.

```
IMAdView imAdView = (IMAdView) findViewById(R.id.imAdview);
```

#### 1.4.2 Setting Auto Refresh

After you add the IMAdView to the parent ViewGroup, the Ad Refresh will start automatically. The default refresh interval is 60 seconds.

To switch off the Auto Refresh feature, use the method shown here:

```
imAdView.setRefreshInterval(IMAdView.REFRESH_INTERVAL_OFF);
```

To manually load a new ad, use the method shown here:

```
imAdView.loadNewAd();
```

#### 1.4.3 Setting the Test Mode

When developing your app, set the Test Mode to true.

```
IMAdRequest adRequest = new IMAdRequest();
adRequest.setTestMode(true);
imAdView.setIMAdRequest(adRequest);
```

**Note:** Ensure that you set the Test Mode to false when distributing the app to users. By default, Test Mode is set to false.

# 1.4.4 Setting the Listener

If you need ad status notifications, you need to implement the IMAdListener interface and register the instance with IMAdView.

```
imAdView.setIMAdListener(imAdListener);
```

# 1.4.5 Hashing of UDID (Unique Device Identifier)

By default, to protect user privacy, the UDID (Android ID) is encrypted by the SDK using MD5 hashing, which is a standard method of "one way" encryption. You can disable this as shown here:

```
IMAdRequest adRequest = new IMAdRequest();
adRequest.setUDIDHashingAllowed(false);
imAdView.setIMAdRequest(adRequest);
```



# 1.5 Step 3b – Option 2 – Creating the IMAdView Instance and Setting the Configuration

To create the IMAdView instance programmatically, perform the following steps:

1. Import the com.inmobi.androidsdk package in your activity. Then create an instance of IMAdView by providing the Activity, Ad Slot, and Site ID.

**Note:** InMobi cannot serve ads if the following are invalid:

- activity
- adSlot (One of the adSlot constant given in the IMAdView)
- appld (Ensure that your app is in the **Activated** state in your InMobi account)
- 2. Based on the chosen ad slot, convert the pixel size to the dp (density independent) format. For a 320x50 ad slot, you can use:

```
final float scale = getResources().getDisplayMetrics().density;
int width = (int) (320 * scale + 0.5f);
int height = (int) (50 * scale + 0.5f);
```

3. Set the layout parameter size of the IMAdView. The layout parameter changes with the kind of parent layout to which the IMAdView is being added.

```
imAdView.setLayoutParams(new LinearLayout.LayoutParams(width, height));
```

4. Get the parent layout where the IMAdView must be added.

```
LinearLayout parent = (LinearLayout) findViewById(R.id.linearLayoutParent);
```

5. Add the IMAdView to the parent view.

```
parent.addView(imAdView);
```

After the IMAdview instance is created, configurations such as Testing Mode, Auto Refresh control, setting the listener, and so on, can be done as described in <u>Step 3a – Option 1 – Inflating the IMAdView Instance from the Layout XML and Setting the Configuration</u>.



# 1.6 Integrating Interstitial Ads

The IMAdInterstitial class is used to load Interstitial Ads. This type of ad occupies the full screen and is modal in nature. Interstitial Ads can be used during scenarios such as loading an app in the background or between level changes of a game app, and so on.

#### 1.6.1 Interstitial State Flow

An Interstitial Ad can be in one of the following states: init, loading, ready, or active. The first time IMAdInterstitial is instantiated, an ad will be in the init state. When a request for loading the ad is made, the ad moves to the loading state, and when the ad is ready to be displayed, the ad state changes to ready. At this point, a request for displaying the ad can be made. The ad moves to the active state when it is displayed to the user. When the user closes the ad, the ad moves back to the init state. You will need to invoke the loadNewAd() method again before making a call to show().

First, import the com.inmobi.androidsdk package in your activity.

Then create an instance of IMAdInterstitial by providing the Activity and site ID.

## 1.6.2 Setting the Interstitial Listener

If you need ad status notification, you need to implement the IMInterstitialAdListener interface and register the instance with IMAdInterstitial.

```
imAdInterstitial.setImAdInterstitialListener(mIMAdInListener);
```

On getting the callback on the <code>onAdRequestLoaded()</code> method, an Interstitial Ad can be displayed, as shown below. Ideally, you will need to check that the current state of the Interstitial Ad is <code>ready</code> before making the call. Otherwise, an <code>IllegalStateException</code> is generated.

```
if(IMAdInterstitial.State.READY.equals(imAdInterstitial.getState())) {
    imAdInterstitial.show();
}
```



# 2 Troubleshooting

#### I am not able to see ads. What do I do?

Check if you have provided a valid App ID. For integration purposes, you can make a request for ads in Test Mode. If you are not using Test Mode, check if the App ID is in the **Activated** status by logging into your InMobi Publisher Account.

#### What attributes should I verify before submitting my app to the Android Market?

First, check if your requests have been set with Test Mode set to false.

Next, verify that the App ID provided is exactly the same as it appears in your Publisher section on *www.inmobi.com*.

# I get 'No Fill' response when I make a request for ads in the Test or Non-Test Mode. What should I do?

In both the Test and Non-Test modes, depending on various parameters such as server load, non-availability of targeted ads, and so on, the Ad Server may send a **No Fill** response.

Try reloading the ad after some time to keep receiving the ads. Although a **No Fill** is common in the advertising space, you can write to us with your queries.

#### Why am I being served only test ads and not live ads?

Live ads will be served only after your site or app is approved by InMobi Administrators. You can use the time until approval, to test your integration using our test Ad Server.

**Note:** Testing must only be done through a mobile device browser. Ads will not be served to non-mobile device browsers from PCs and laptops.

To start testing your Android app before it gets certified, and even before you register it with us, use the following Test App ID:

#### 4028cba631d63df10131e1d3818b00cc

# 3 More Information

You can find more information in the Java Docs and sample project within the ZIP file.

For any SDK integration queries, please send an email along with your Login ID to <a href="mailto:helpdesk@inmobi.com">helpdesk@inmobi.com</a>.