

# mAdserve Android SDK Integration Guide 4.1.6

The following document provides detailed instructions on how to integrate the mAdserve Android SDK 4.1.6 into your Android Projects based on a simple Demo app. The mAdserve SDK is capable of displaying both traditional Banner Ads and (Rich Media) Interstitials.

## Step 1: Set Up your Application in your mAdserve Control Panel

- Log into your mAdserve Administration Control Panel
- Click on Inventory>Add Publications if you'd like to create a new Publication
- If you want to integrate an existing Publication, navigate to Inventory>Integration
- Once done you will be provided with a unique Placement ID (Publisher ID in code) and a Request URL

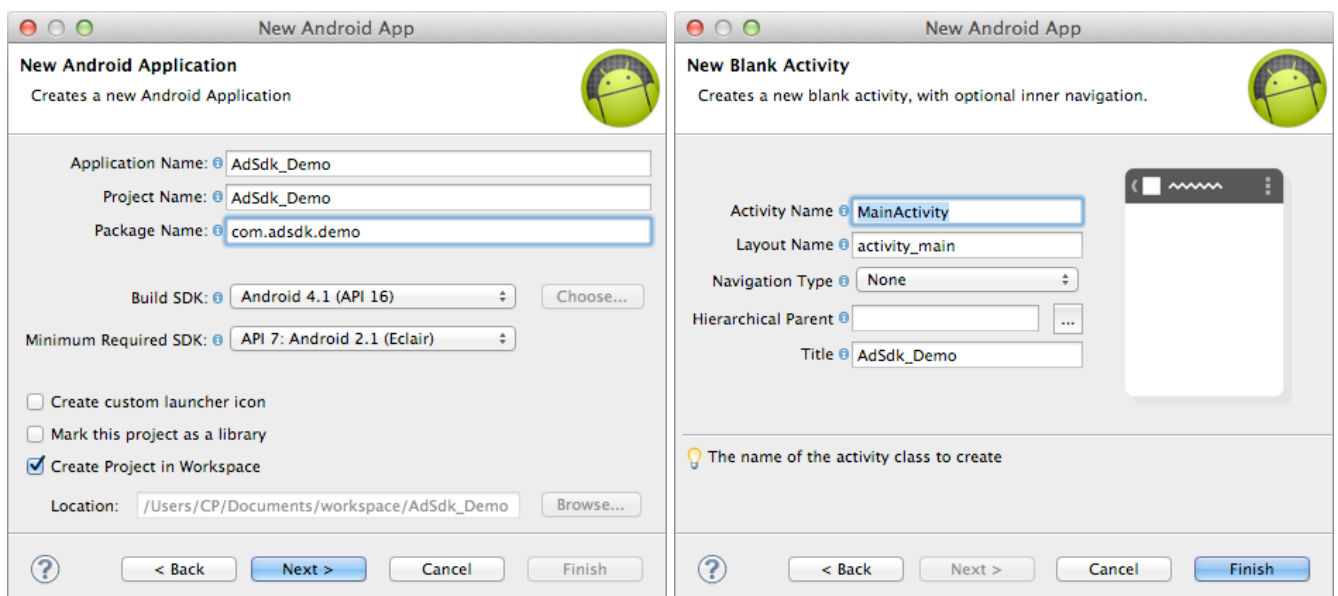
## Step 2: Download the SDK

The downloaded ZIP contains the following files:

- PDF Documentation "mAdserve Android SDK Setup Guide 4.1.6.pdf" (this document)
- The SDK Framework itself: AdSdk\_4.1.6.jar
- Demo Application "AdSdk\_Demo" folder showcasing:
  - Request of Banner Ads and Interstitial Ads with Buttons or using code
  - Based on Eclipse 4.2.2 with Android SDK Rev. 21.1, SDK Platform Android 4.2.2 Rev. 2 (API 17)
  - Some Coding and Customization options

## Step 3: Create and define a new Android Project in Eclipse

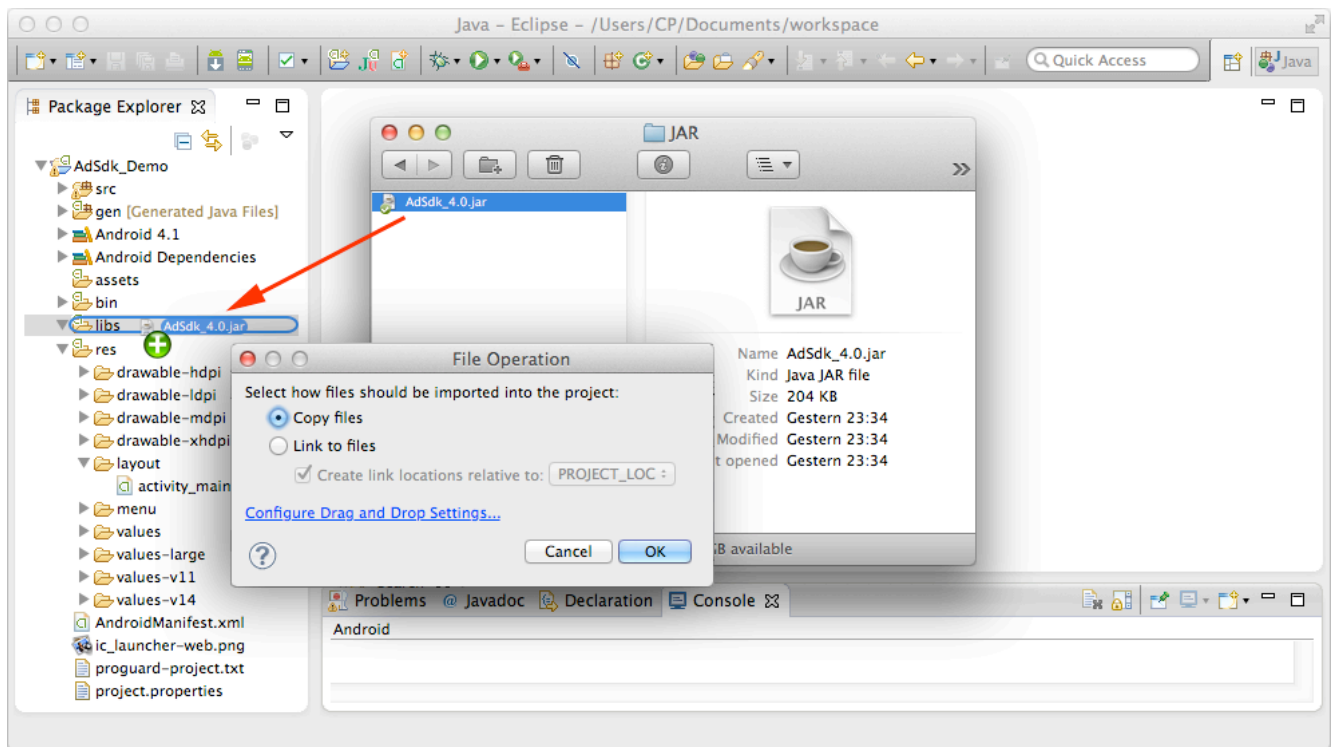
Download and open the latest version of Eclipse. Update the Android SDK Tools and Revisions listed at the Android SDK Manager. Now open the "Android Application Project" wizard and enter all needed fields as shown below. Set the minimum SDK to API 8 (Androids v2.2).



## Step 4: Add the SDK to your project "libs" folder

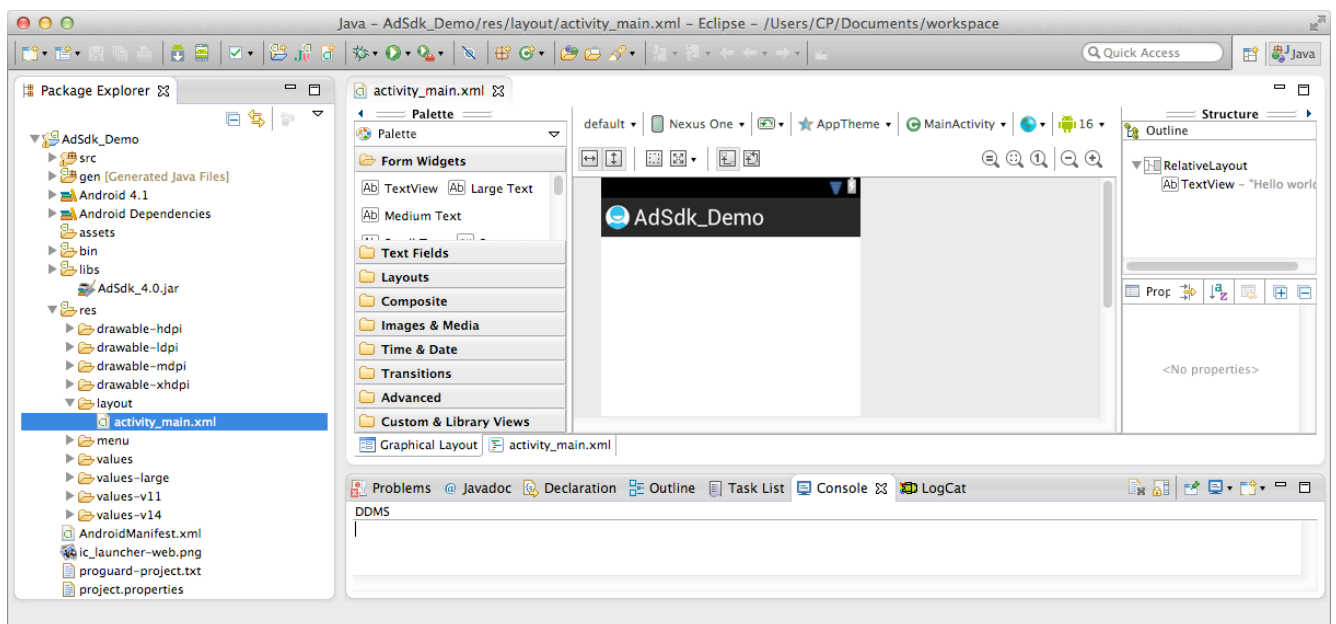
If you don't have a "libs" folder, create one by right clicking on the Project Root and select "New>Folder".

Copy the AdSdk\_4.1.6.jar into your "libs" folder and select "Copy files" as shown below.



**Note:** If you are using SDK Rev 16 or earlier, you must additionally right click on Project, then Properties, go to "Java Build Path", select "Add JARs...", browse to your libs folder and select the AdSdk\_4.1.6.jar. But we highly recommend to update your development tools to the latest version!

Please ensure the folder name is "libs". Your eclipse project should look as follows on SDK Rev 17 or later.



To display Banner Ads please continue with "Step 5".

To display Interstitial Ads please jump to "Step 6".

## Step 5: Request and display Banner Ads

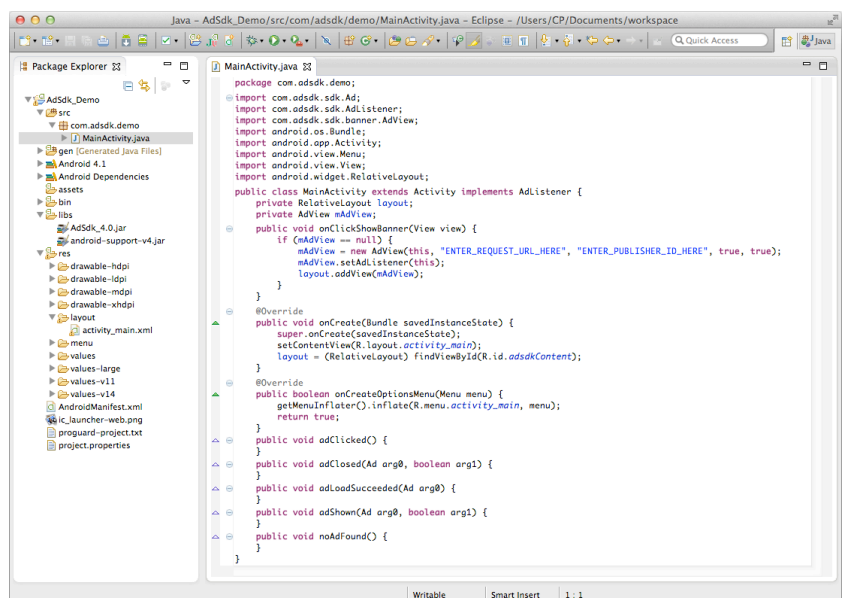
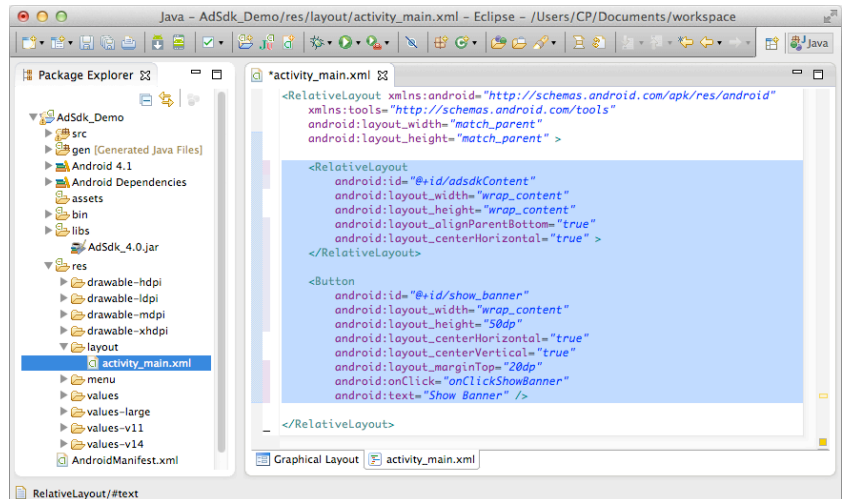
Open `activity_main.xml` and add the Banner without adding additional code as shown in `AdSdk_XML_Demo`.

Alternatively create a button to call "onClickShowBanner" (copy/paste `activity_main.xml` in `AdSdk_Demo`)

Instead of using a button display a Banner directly in `MainActivity.java`:

```
if (mAdView == null) {
    mAdView = new AdView(this,
        "ENTER_REQUEST_URL_HERE",
        "ENTER_PUBLISHER_ID_HERE",
        true, true);
    mAdView.setAdListener(this);
    layout.addView(mAdView); }
```

Add some code now to your Activity (copy/paste from `MainActivity.java` provided in the `AdSdk_Demo` ZIP). This will initialize an instance of the Ad view with your Placement ID (called Publisher ID in code) and Request URL, init the button and set a listener on it to request an Ad. Listeners for the Ad view will handle events e.g. `adLoadSucceeded`,... Please note to edit both placeholders "ENTER\_REQUEST\_URL\_HERE" and "ENTER\_PUBLISHER\_ID\_HERE" with provided strings from your mAdserve control panel.



Add these Banner Ad specific lines to the Manifest (copy/paste from `AndroidManifest.xml`): (READ\_PHONE\_STATE and ACCESS\_FINE\_LOCATION are optional, but recommended)

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

<activity
    android:name="com.adsdk.sdk.banner.InAppWebView"
    android:configChanges="keyboard|keyboardHidden|orientation|screenLayout
        |uiMode|screenSize|smallestScreenSize" />

<activity
    android:name="com.adsdk.sdk.mraid.MraidActivity"
    android:configChanges="keyboard|keyboardHidden|orientation|screenLayout
        |uiMode|screenSize|smallestScreenSize" />
```

Add the following to your activity with the banner (see `.MainActivity` at the `AdSdk_Demo` ZIP):

```
android:configChanges="keyboard|keyboardHidden|orientation|screenLayout
    |uiMode|screenSize|smallestScreenSize"
```

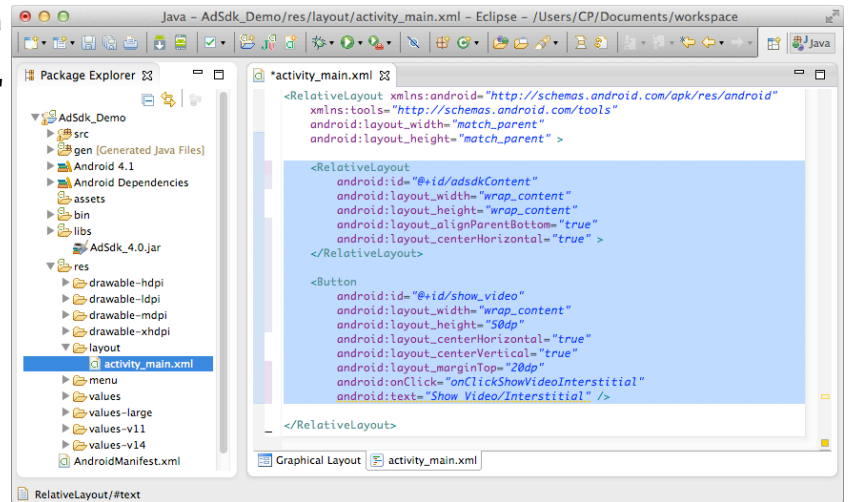
If you don't want to add Interstitial Ads please jump to "Step 7".

## Step 6: Request and display Interstitial Full-Screen Ads

Open `activity_main.xml` and create a button which calls when pressed the method `"onClickShowVideoInterstitial"` (copy/paste from `activity_main.xml`)

Instead of using a button display an ad directly in `MainActivity.java`:

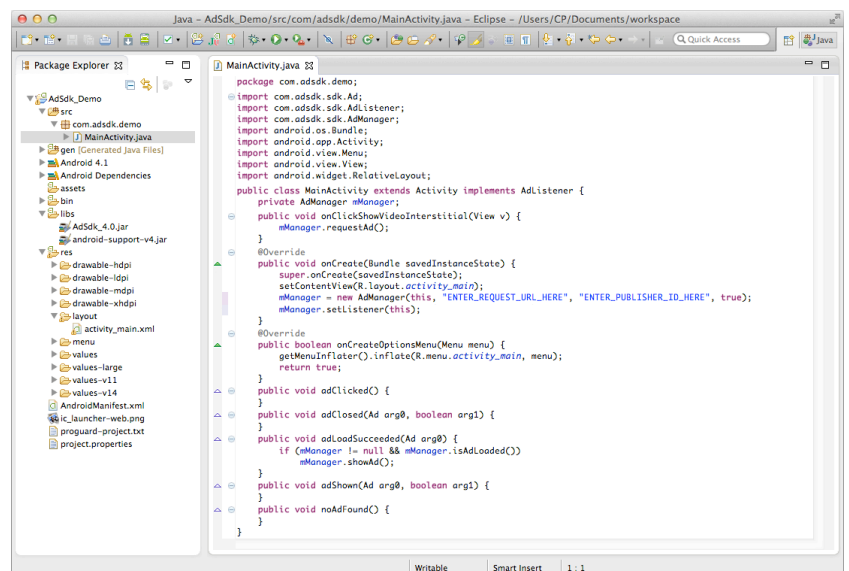
```
mManager = new AdManager(this,
    "ENTER_REQUEST_URL_HERE",
    "ENTER_PUBLISHER_ID_HERE",
    true);
mManager.setListener(this);
mManager.requestAd();
```



Add some code now to your Activity (copy/paste from `MainActivity.java` provided in the `AdSdk_Demo` ZIP).

The `AdManager` initialized with your Placement ID (Publisher ID in code) and Request URL and a listener will request an Ad. Listeners for the Ad view will handle events e.g. `adLoadSucceeded`,...

Make sure to edit both placeholders `"ENTER_REQUEST_URL_HERE"` and `"ENTER_PUBLISHER_ID_HERE"` with provided strings from your `mAdserve` control panel.



Add these Interstitial Ad specific lines to the Manifest (copy/paste from `AndroidManifest.xml`): (`READ_PHONE_STATE` and `ACCESS_FINE_LOCATION` are optional, but recommended)

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

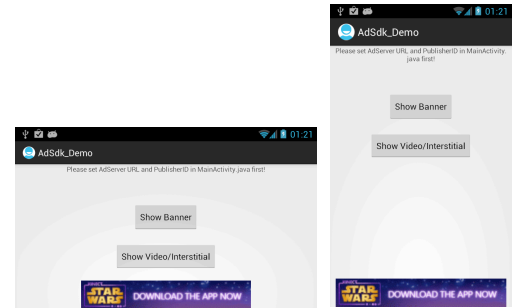
<activity
    android:name="com.adsdk.sdk.video.RichMediaActivity"
    android:configChanges="keyboard|keyboardHidden|orientation|screenLayout|
        uiMode|screenSize|smallestScreenSize"
    android:hardwareAccelerated="false" />
```

Optional and for Interstitial Ads only you can create an `"anim"` folder within your `"res"` folder. This will enable animations defined by the Ad Server. Uncompress `animations.zip`, drag and drop the files to an `"anim"` folder and select `"Copy files"`.

## Step 7: Finished!

If you already created a campaign in your mAdserve Dashboard, you should now see the ad.

**Note:** Please always clear the heap before showing Ads and restore your apps orientation after an Ad is shown.



## Explanation of Manifest

**Internet Access Permission (mandatory and needed for the SDK to work)**

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

**Read Phone State Permission (optional but highly recommended)**

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

**Network State Permission (to identify the connection type and improve your app's user experience)**

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

**Location Permissions (to target ads for better customer experience)**

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

## Explanation of Methods

The Banner Ad constructor argument "Location" let's the SDK use the current location for better targeting Ads and "animation" enables transition animations between Banner Ads:

```
AdView(Context, "REQUEST_URL", "PUBLISHER_ID", Location, animation);
```

The Interstitial Ad constructor argument "Location" let's the SDK use the current location for better targeting Ads:

```
AdManager(Context, "REQUEST_URL", "PUBLISHER_ID", Location);
```

Once a new Ad has loaded, this AdListener method will be called on the main User Interface thread.

```
public void adLoadSucceeded(Ad advertisement) {}
```

If the Ad couldn't load, this AdListener method will be called and your can proceed to the next screen.

```
public void noAdFound() {}
```

For Interstitials you will be notified when the RichMediaActivity has finished to resume your activity.

```
public void adClosed(Ad advertisement, boolean completed) {}
```

After the Interstitial has shown and your activity has been paused, you will also be notified.

```
public void adShown(Ad advertisement, boolean succeeded) {}
```