

iBKS SDK for Android Quick Start

ABSTRACT

This document explains how to setup all tools needed to start using iBKS SDK.

AUDIENCE

This document is primarily focused for Android software developers with basic knowledge of beacon configuration

IMPORTANT

SO Requirements: **Android 5.0** or higher

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Revision 0 | July 2016

1. Before you start

This SDK will help you to manage iBKS Beacons with your own Android APP in a few easy steps.

All you need:

- Android Studio
- Android device with 5.0 version or above.
- At least one iBKS Beacon with FW version **"EDSTEID V5.2016.06.29.1"** or above.

2. Let's play

1 Create project

First of all, create a new Android Studio project and add the iBKS SDK to the build.gradle (Module:app) declaring the following dependency (check the last version [here](#)):

```
compile 'com.accent_systems.ibks-sdk:ibks-sdk:1.0.0'
```

The **minSdkVersion** of the app should be **21** or higher because there are some Bluetooth functions that don't work for older Android SDK versions.

2 App permissions

In order to manage Bluetooth in Android it's necessary to request some permissions at user.

Location

If the Android version is 6.0 or higher it's necessary to request location permission. To do this, it's necessary to add permission in AndroidManifest.xml

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

Bluetooth

In order To use Bluetooth in Android device, the first thing to do is check if the device that runs the app has Bluetooth Low Energy (beacons work with this type of Bluetooth) and if it is enabled. To enable Bluetooth it's necessary to add permission in AndroidManifest.xml

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

Internet

In order to use some functions that request access to internet, it's necessary to add permissions on AndroidManifest.xml

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

3 EID registration

If you would like to use the EID registration in your APP, follow these steps:

- 1 Log in to **Google Console Developers**
- 2 Enable **Proximity Beacon API**
- 3 Create the **Credentials** for your APP:
 - **Android API key** for your package.
 - **OAuth Client ID** for your package.

It's possible that you may wait some minutes or hours to grant the access to the API.

The users of your APP don't need to create Credentials but they should also enable the **Proximity Beacon API** on their account.

4 Compile your project

Now, compile your project and you are ready for playing with iBKS-SDK.

We recommend to have a look at "iBKS SDK Sample Project" before starting with your own project in order to get used to iBKS-SDK.

5 Get started with a sample project

From the iBKS SDK github documentation, you will find the “iBKS SDK Sample Project”. This example shows how to do the main tasks on a Bluetooth APP such as:

- Scan devices
- Connect devices
- Read/Write characteristics
- Set/Get Eddystone Slots
- Register EID beacon
- Get EID in Clear
- Set/Get iBeacon Slots
- Set/Get Characteristics of Global service
- Get client account and Google project Id
- Parse advertising data

The “iBKS SDK Sample Project” App starts with a scan of Bluetooth devices. When an item of the list is clicked, the app establishes the connection with the beacon that allows you to do any of the tasks mentioned above. Follow the next steps to start playing:

- 1** Download the project
- 2** Open the project with Android Studio
- 3** Compile the project
- 4** Try the example on your mobile device

Revision History

The following revision history table summarizes changes contained in this document.

Revision Number	Revision Date	Description of Changes
Rev 0	07/2016	Initial Release



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