# SeekcyBeacon SDK for Android 集成指南

Seekcy官网上，有SeekcyBeacon相关的所有指南、API、教程等全部的文档。本文档的更新版本，都会及时地发布到该网站上。[下载链接](https://github.com/Seekcy/SeekcyBeacon_SDK_Android)

## 产品功能说明

目前我们的 Android SDK，主要提供以下功能：

1. 扫描周围的SeekcyBeacon
2. 连接、配置SeekcyBeacon
3. 区域监听SeekcyBeacon：进入、离开

## SDK集成

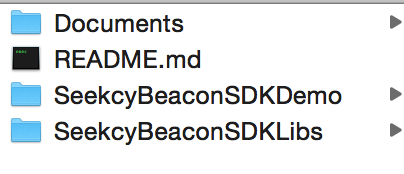
### SeekcyBeacon\_SKD\_Android-master.zip集成压缩包内容

SeekcyBeaconSDKLibs：so库、jar包

SeekcyBeaconSDKDemo：一个完整的Android项目，演示SeekcyBeacon SDK的基本用法，可以用作参考

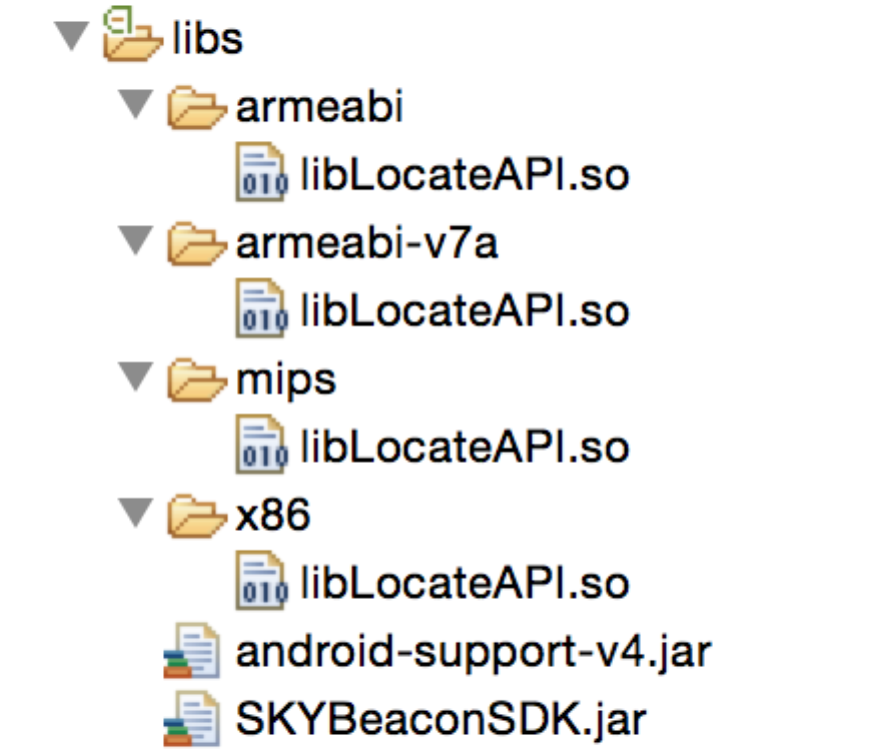
Documents：SDK API、SDK使用说明

README.md：版本更新信息



### 导入SDK开发包到工程

解压缩SeekcyBeacon\_SKD\_Android-master.zip，复制SeekcyBeaconSDKLibs文件夹下的文件到工程的libs目录下：



### 配置AndroidManifest.xml

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

<uses-permission android:name=*"android.permission.BLUETOOTH\_ADMIN"* />

<uses-permission android:name=*"android.permission.WAKE\_LOCK "* />

<uses-permission android:name=*"android.permission.ACCESS\_NETWORK\_STATE"* />

<uses-permission android:name=*"android.permission.ACCESS\_WIFI\_STATE"* />

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

<uses-permission android:name=*"android.permission.READ\_PHONE\_STATE"* />

<uses-permission android:name=*"android.permission.WRITE\_EXTERNAL\_STORAGE"* />

<uses-permission android:name=*"android.permission.GET\_TASKS "* />

<uses-permission android:name=*"android.permission.SENSOR\_INFO"* />

<uses-permission android:name=*"android.permission.SENSOR\_ENABLE"* />

<uses-permission android:name=*"android.permission.MOUNT\_UNMOUNT\_FILESYSTEMS"* />

<uses-feature

android:name=*"android.hardware.bluetooth\_le"*

android:required=*"true"* />

<application>

<service android:name=*"com.skybeacon.sdk.locate.BleScanService"* />

<service android:name=*"com.skybeacon.sdk.config.BluetoothLeService"* />

</application>

## 使用示例代码

### 扫描示例代码

1. SeekcyBeacon防蹭用

注意：

/\*

\* 设置SeekcyBeacon防蹭用密钥，若不是防蹭用iBeacon，可以不设置

\*/

SKYBeaconManager.getInstance().setBroadcastKey("AB11221498756731BCD7D8E239E765AD52B7139DE87654DAB27394BCD7D792A");

请在SDK启动前设置；防蹭用密钥必须为32bytes长度的十六进制String类型，密钥由Seekcy提供，并且配合支持防蹭用的SeekcyBeacon使用。

1. 扫描示例

**private** **static** **final** SKYRegion *ALL\_SEEKCY\_BEACONS\_REGION* = **new** SKYRegion("rid\_all", **null**, **null**, **null**, **null**);

@Override

**protected** **void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.*activity\_main*);

SKYBeaconManager.getInstance().init(this);

SKYBeaconManager.getInstance().setCacheTimeMillisecond(3000);//可选，不设置默认为5秒缓存

SKYBeaconManager.getInstance().setScanTimeIntervalMillisecond(2000);//可选，不设置默认为2秒返回一次数据

/\* 设置SeekcyBeacon防蹭用密钥，若不是防蹭用iBeacon，可以不设置\*/

SKYBeaconManager.getInstance().setBroadcastKey("AB11221498756731BCD7D8E239E765AD52B7139DE87654DAB27394BCD7D792A");

SKYBeaconManager.getInstance().setRangingBeaconsListener(**new** RangingBeaconsListener() {

@Override

**public** **void** onRangedBeaconsMultiIDs(SKYRegion arg0, List<SKYBeaconMultiIDs> arg1) {

// **TODO** Auto-generated method stub

// 多id beacons扫描结果处理

}

@Override

**public** **void** onRangedBeacons(SKYRegion arg0, List<SKYBeacon> arg1) {

// **TODO** Auto-generated method stub

// 单id beacons扫描结果处理

}

});

}

@Override

**protected** **void** onResume() {

// **TODO** Auto-generated method stub

**super**.onStart();

startRanging();

}

@Override

**protected** **void** onPause() {

// **TODO** Auto-generated method stub

**super**.onStop();

stopRanging();

}

**private** **void** startRanging() {

SKYBeaconManager.getInstance().startScanService(**new** ScanServiceStateCallback() {

@Override

**public** **void** onServiceDisconnected() {

// **TODO** Auto-generated method stub

}

@Override

**public** **void** onServiceConnected() {

// **TODO** Auto-generated method stub

SKYBeaconManager.getInstance().startRangingBeacons(*ALL\_SEEKCY\_BEACONS\_REGION*);

}

});

}

**private** **void** stopRanging() {

SKYBeaconManager.getInstance().stopScanService();

SKYBeaconManager.getInstance().stopRangingBeasons(*ALL\_SEEKCY\_BEACONS\_REGION*);

}

### 连接、配置示例代码

注意：建议连接Beacon前先调用skyBeaconManager.stopScanService()以及skyBeaconManager.stopRangingBeacons(Object)方法停止扫描；

**private** SKYBeaconCommunication skyBeaconCommunication;

**private** SKYBeacon skyBeacon;

@Override

**protected** **void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.*activity\_test1*);

// 获取扫描到的需要配置的iBeacon

skyBeacon = (SKYBeacon) getIntent().getSerializableExtra("skyBeacon");

skyBeaconCommunication = **new** SKYBeaconCommunication(**this**);

}

ConnectionStateCallback connectionStateCallback = **new** ConnectionStateCallback() {

@Override

**public** **void** onDisconnected() {

// **TODO** Auto-generated method stub

}

@Override

**public** **void** onConnectedSuccess(SKYBeaconMultiIDs arg0) {

// **TODO** Auto-generated method stub

}

@Override

**public** **void** onConnectedSuccess(SKYBeacon arg0) {

// **TODO** Auto-generated method stub

// arg0为连接后获取的beacon详细信息

configBeacon();

}

@Override

**public** **void** onConnectedFailed(SKYBeaconConfigException arg0) {

// **TODO** Auto-generated method stub

}

};

**private** **boolean** configBeacon(){

**boolean** result = **false**;

SKYBeaconConfig skyBeaconConfig = **new** SKYBeaconConfig();

skyBeaconConfig.setProximityUUID("00000000-0000-0000-0000-000000000000");

skyBeaconConfig.setMajor(0);

skyBeaconConfig.setMinor(0);

result = skyBeaconCommunication.configSKYBeacon(skyBeaconConfig, **new** ConfigCallback() {

@Override

**public** **void** onConfigSuccess() {

// **TODO** Auto-generated method stub

}

@Override

**public** **void** onConfigFailed(SKYBeaconConfigException arg0) {

// **TODO** Auto-generated method stub

}

});

**return** result;

}

@Override

**protected** **void** onResume() {

// **TODO** Auto-generated method stub

**super**.onResume();

skyBeaconCommunication.connect(skyBeacon, connectionStateCallback);

}

@Override

**protected** **void** onDestroy() {

// **TODO** Auto-generated method stub

**super**.onDestroy();

skyBeaconCommunication.disconnect();

}

### 区域监听示例代码

**private** **static** **final** SKYRegion *MONITOR\_REGION\_TEST* = **new** SKYRegion("rid\_test", **null**, "00000000-0000-0000-0000-000000000000", 0, 0);

@Override

**protected** **void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.*activity\_test1*);

SKYBeaconManager.getInstance().setMonitoringBeaconsListener(monitoringBeaconsListener);

}

MonitoringBeaconsListener monitoringBeaconsListener = **new** MonitoringBeaconsListener() {

@Override

**public** **void** onExitedRegion(SKYRegion arg0, List<SKYBeacon> arg1) {

// **TODO** Auto-generated method stub

}

@Override

**public** **void** onEnteredRegion(SKYRegion arg0, List<SKYBeacon> arg1) {

// **TODO** Auto-generated method stub

}

};

@Override

**protected** **void** onResume() {

// **TODO** Auto-generated method stub

**super**.onStart();

startMonitoring();

}

@Override

**protected** **void** onPause() {

// **TODO** Auto-generated method stub

**super**.onStop();

stopMonitoring();

}

**private** **void** startMonitoring() {

SKYBeaconManager.getInstance().startScanService(**new** ScanServiceStateCallback() {

@Override

**public** **void** onServiceDisconnected() {

// **TODO** Auto-generated method stub

}

@Override

**public** **void** onServiceConnected() {

// **TODO** Auto-generated method stub

SKYBeaconManager.getInstance().startMonitoringBeacons(*MONITOR\_REGION\_TEST*);

}

});

}

**private** **void** stopMonitoring() {

SKYBeaconManager.getInstance().stopScanService();

SKYBeaconManager.getInstance().stopMonitoringBeacons(*MONITOR\_REGION\_TEST*);

}

## 总结

至此，您已完成SDK整合进您项目的全部工作。更多技术细节，请参考完整的[SKD API](http://seekcy.github.io/SeekcyBeacon_SDK_Android)文档，以及我们的[示例工程](https://github.com/Seekcy/SeekcyBeacon_SDK_Android/tree/master/SeekcyBeaconSDKDemo)