

# SmartApLink Development Guide(Android)

V1.3.3

## 1. Permissions Required

Add the following android permissions into AndroidManifest.xml:

```
<uses-permission android:name="android.permission.ACCESS_WIFI_STATE"/>
<uses-permission android:name="android.permission.ACCESS_NETWORK_STATE"/>
<uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION"/>
<uses-permission android:name="android.permission.ACCESS_FINE_LOCATION"/>
<uses-permission android:name="android.permission.CHANGE_WIFI_STATE"/>
<uses-permission android:name="android.permission.CHANGE_NETWORK_STATE"/>
<uses-permission android:name="android.permission.INTERNET"/>
<uses-permission android:name="android.permission.WAKE_LOCK"/>
```

As we known, lots of permission are restrictive from Android 6.0. You should check whether the permission are granted or not in run-time.

## 2. Core Classes & Interfaces

ApLinker, OnLinkListener, LinkedModule, LinkingError, LinkingProgress

## 3. Programming Steps

### 3.1 Obtain ApLinker Instance

```
ApLinker mApLinker = ApLinker.getInstance(this);
```

### 3.2 Init ApLinker

```
mApLinker.init();
```

### 3.3 Set An OnLinkListener

```
mApLinker.setOnLinkListener(new OnLinkListener() {
    @Override
    public void onWifiConnectivityChangedBeforeLink(boolean connected, String ssid, WifiInfo wifiInfo) {
        //Invoked when wi-fi connectivity changed before smart ap link
    }
})
```

```
@Override
public void onLinked(LinkedModule module) {
    //invoked when smart ap link settings is finished and module is found.
}

@Override
public void onFinished() {
    //always invoked when smart ap link task is finished.
}

@Override
public void onTimeOut() {
    //invoked when smart ap link settings is finished but no module is found.
}

@Override
public void onError(LinkingError error) {
    //invoked when error occurred
}

@Override
public void onProgress(LinkingProgress progress) {
    //invoked when smart ap link progress updated
}

});
```

### 3.4 Set Wi-Fi SSID and Password

```
mApLinker.setSsid(ssid);
mApLinker.setPassword(ssid);
```

### 3.5 Start ApLinker

```
mApLinker.start();
```

### 3.6 Stop ApLinker

```
mApLinker.stop();
```

### 3.7 Destroy ApLinker

```
mApLinker.destroy();
```

## 4. Best Practise

## 4.1 Keep Phone Screen On

As the smart ap link takes a few seconds, it'd better to keep phone screen on.

```
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    getWindow().addFlags(WindowManager.LayoutParams.FLAG_KEEP_SCREEN_ON);
}
```