



Smart Connection Programming Guide

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Document Revision History

Revision	Date	Author	Description
0.1	2013-1-9	Arron.wang	Draft version
0.2	2013-1-28	Arron.wang	Add authentication mode description

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1 Introduction

This document shows how to use libSmartConnection.so.

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2 API of libSmartConnection

2.1 StartSmartConnection()

Prototype:

```
int StartSmartConnection(const char *SSID, const char *Password, char AuthMode);
```

Parameter IN		description
SSID		SSID of AP
Password		Password of AP
AuthMode		Authentication mode of AP. Authentication mode will show in table 1.

Return value		description
0		success
Others		error

Table 1 authentication mode description

Authentication mode	Value	description
OPEN	0x00	Password is null string
WEP	0x00	Password is not null string
SHARED-KEY	0x01	
AUTOSWITCH	0x02	
WPA	0x03	
WPA-PSK	0x04	
WPANONE	0x05	

Authentication mode	Value	description
WPA2	0x06	
WPA2-PSK	0x07	
WPA1WPA2	0x08	
WPA1PSK-WPA2PSK	0x09	

2.2 StopSmartConnection()

Prototype:

```
int StopSmartConnection(void);
```

Return value		description
0		success
Others		error

3 Sample code of android

3.1 Java level

3.1.1 SmartConnection.java

```
IoTManager = new IoTManagerNative();

Button.OnClickListener mButtonStartListener = new Button.OnClickListener() {

    public void onClick(View arg0) {
        String SSID = mEditSSID.getText().toString();
        String Password = mEditPassword.getText().toString();

        Log.d(TAG, "Smart connection with : ssid = " + SSID + " Password = " + P.
        IoTManager.StartSmartConnection(SSID, Password, (byte)mAuthMode);
    }
}
```

3.1.2 IoTManageNative.java

```
/**
 * Start SmartConnection with Home AP
 *
 * @SSID : SSID of Home AP
 * @Password : Password of Home AP
 * @Auth : Auth of Home AP
 */
public native int StartSmartConnection(String SSID, String Password, byte Auth);

/**
 * Stop SmartConnection by user
 *
 */
public native int StopSmartConnection();
```

3.2 JNI level

3.2.1 IoTManage_jni.cpp

```
static JNINativeMethod mehods[] = {
    { "StartSmartConnection", "(Ljava/lang/String;Ljava/lang/String;B)I",
      (void *) JNI_StartSmartConnection },
    { "StopSmartConnection", "()I", (void *) JNI_StopSmartConnection },
}
```



```
static jint JNI_StartSmartConnection(JNIEnv *env, jobject this, jstring
{
    int iRst = 0;
    const char *pSSID = NULL;
    const char *pPassword = NULL;

    pSSID = env->GetStringUTFChars(nSSID, 0);
    pPassword = env->GetStringUTFChars(nPassword, 0);

    iRst = StartSmartConnection(pSSID, pPassword, (char)nAuth);
    if (iRst != 0)
    {
        HWTEST_LOGD("StartSmartConnection error.");
    }
    HWTEST_LOGD("Leave JNI_StartSmartConnection.");
    return iRst;
}

jint JNI_StopSmartConnection(JNIEnv *env, jobject this)
{
    int iRst = 0;
    iRst = StopSmartConnection();
    if (iRst != 0)
    {
        HWTEST_LOGD("StopSmartConnection error.");
    }
    return iRst;
}
```