

# UHF Reader Elf Android interface

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	Versition	Contents	Author	Date
1	V1.0.0	New interface document	Wang Zhongnan	2013-08-27

**Security levers: third lever ( limited shared documents)**

## **1. Interface description**

**2. IvrJackU1.jar** is a second development interface based on Android 2.1 and above platforms.

Interface is made up of:

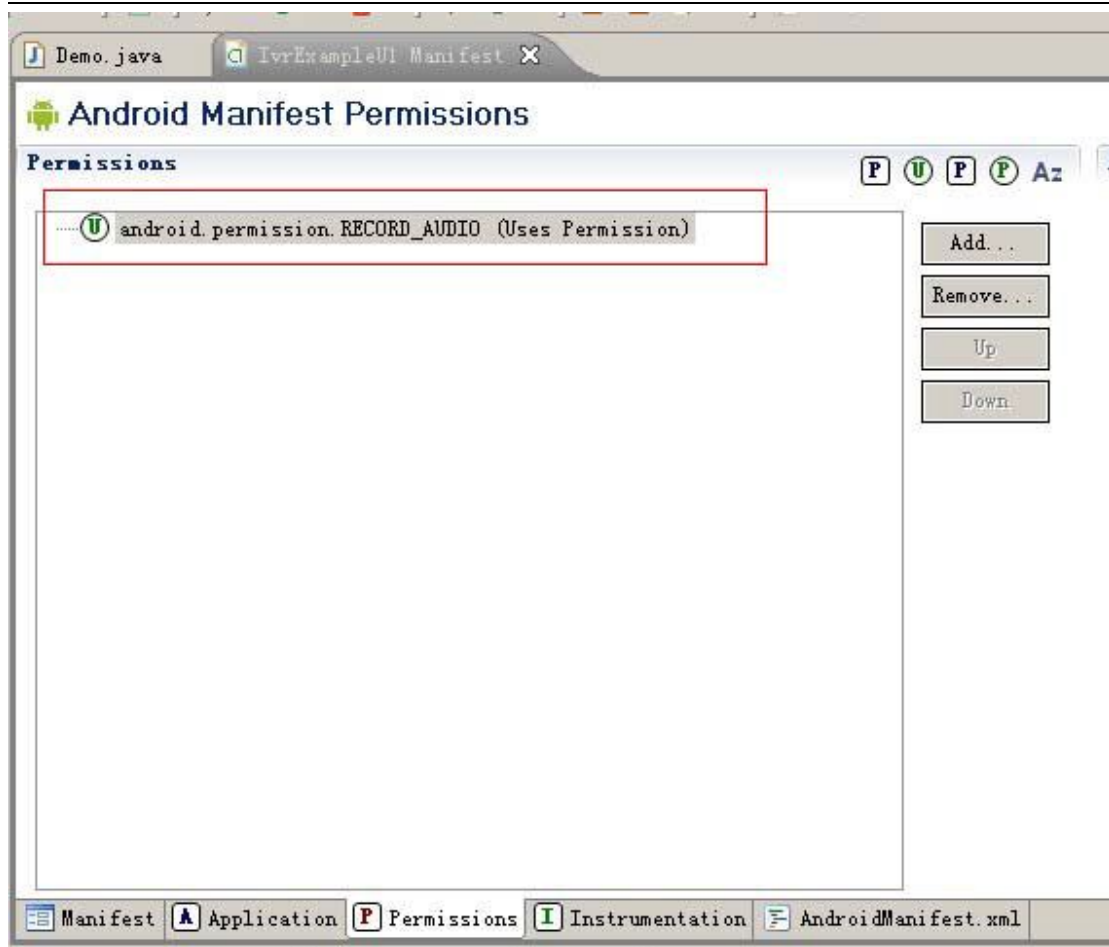
IvrJackService — communication control interface

IvrJackAdapter — event interface

IvrJackStatus — status

### **Notes:**

It need add *android.permission.RECORD\_AUDIO* right in reference program, as picture 1.



*Detailed usage method please see IvExampleU l example.*

## 2. Interface definition

### 2.1 Iv Jack Service

#### 1. Method : open

Definition:

```
public void open(Context context, IvJackAdapter adapter);
```

Notes:

- \* open reader card elf services
- \* @param context Activity example
- \* @param adapter used for event interface.

#### 2. Method: close

#### 3. Definition: public void close();

Notes:

\* Close reader card eld services

Method : stop Read EPC

Definition: public void stop Read EPC();

Notes:

\* Stop counting EPC, this method is called before exiting the program.

Method: read EPC

定义: public int read EPC(boolean bStart);

说明: \* start or stop read EPC data.开始或者停止读取EPC 数据

\* @return 0 success, not 0 failure, please see return value definition; Successfully when they read the label will trigger an event on inventory .

#### **4. Method: select Tag**

##### **5. Definition:**

public int select Tag(byte[] access Password, byte[] epc Data);

Notes:

\* Choose optional label

\* @param epc Data, choose label EPC data

\* @return back 0, not 0 is failure, please see return value definition.

Method: writeTag

Definition:

public int writeTag(byte block, byte address, byte count, byte[] data);

Notes:

\*write label data

\* @param internal block (0-EPCarea、 1-user area、 2-reserved area)

\* @param start address

\* @param count block

\* @param data written

\* @return back 0 successfully, not 0 failure, please see return value definition.

#### **6. Method: readTag**

Definition:

```
public int readTag(byte block, byte address, byte count, byte[] data);
```

Notes:

- \* Read label data
- \* @param internal block . (0-EPC area、1- user area、2- reserved area、3-TID area)
- \* @param start address
- \* @param count block
- \* @param data return back.
- \* @return back 0 successfully, not 0 failure, please see return value definition.

## 7. Method: lock Tag

Definition:

```
public int lock Tag(byte[] access Password, byte lock Object, byte lock Action);
```

Notes:

- \*lock label
- \* @param access Password
- \* @param lock Object (0-EPC area 、1-user area、2- access password、3- destruction password)
- \* @param lock Action (0- unlock、1- temporarily locked、2- permanently locked)
- \* @return back 0 successfully , not 0 failure, please see return value definition.

## Method: kill Tag

Definition:

```
public int kill Tag(byte[] kill Password);
```

Notes:

- \* destructive tag
- \* @param kill Password
- \* @return back 0 successfully, not 0 failure, please see return value definition.

## 8. Method: get Battery Buzzer

Definition:

```
public int get Battery Buzzer(byte[] data);
```

Notes:

- \* get battery power and buzzer options

\* @param data [0] electricity percentage, data[1] buzzer option (0- close、 1-open)

\* @return back 0 successfully, not 0 failure, please see return value definition.

Method: set Buzzer

Definition:

```
public int set Buzzer(boolean bBeep);
```

Notes:

\* Whether buzzerhave voice when read label.

\* @param bBeep, whether buzzer have voice.

\* @return back 0 successfully, not 0 failure, please see return value definition.

Method: readEPCTID

Definition:

```
public int read EPC TID(byte[] access Password, byte[] tid Data, byte[] epc Data);
```

Notes:

\* read EPC+TID

\* @param access Password

\* @param tid Data returned.

\* @param epc Data , epc Data[0] means EPC data length.

\* @return back 0 successfully, not 0 failure, please see return value definition. \*/

## **9. Return value definition**

### **10. 0 success**

#### **1 communication failure**

2 unknown expectation error.

256 have no label

257 label locked258 label written failure

259 label read failure

260 label locked failure

261 label killed failure

262 label chosen failure

-1 low battery

-2 devices unconnected

-3 Being counted EPC, this operation can not be performed.

## **2.2 Ivr Jack Adapter**

### **1. Event : on Connect**

Definition:

void on Connect (String deviceSN);

Notes:

\*devices connected successfully.

\* @param device serial number.

### **2. Event : on Disconnect**

Definition:

void on Disconnect();

Notes:

**3. Triggered when the device is disconnected.**

### **4. Event : on Status Change**

Definition:

void on Status Change(Ivr Jack Status status);

Notes:

\*devices status change event.

\* @param status, please see Ivr Jack Status

### **5. on Inventory**

Definition:

void on Inventory(String epc);

Notes:

\* EPC label data inventory.

\* @param EPC data, separate between several labels' EPC.

## **2.3 Ivr Jack Status**

\* status: equipment is being identifying.

Ijs Detecting,

\*status: device identified. Ijs Recognized,

\*status: equipment is not being identified.Ijs UnRecognized,

\* Status: devices has been set aside

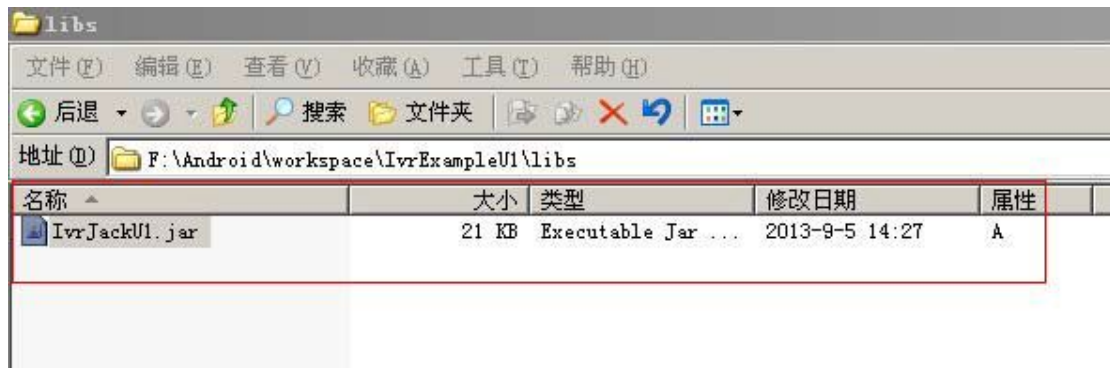
Ijs Plugout

## 3. Call progress

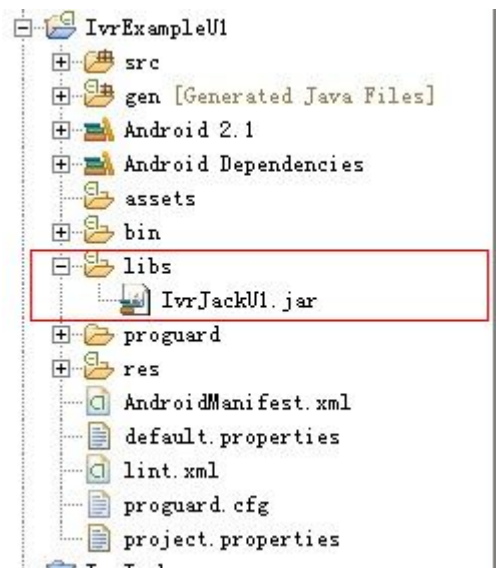
### 3.1 Interface call

3.1.1 Take IvrJackU1.jar document copy to program catalogues' libs, as picture 2 and

picture 3.



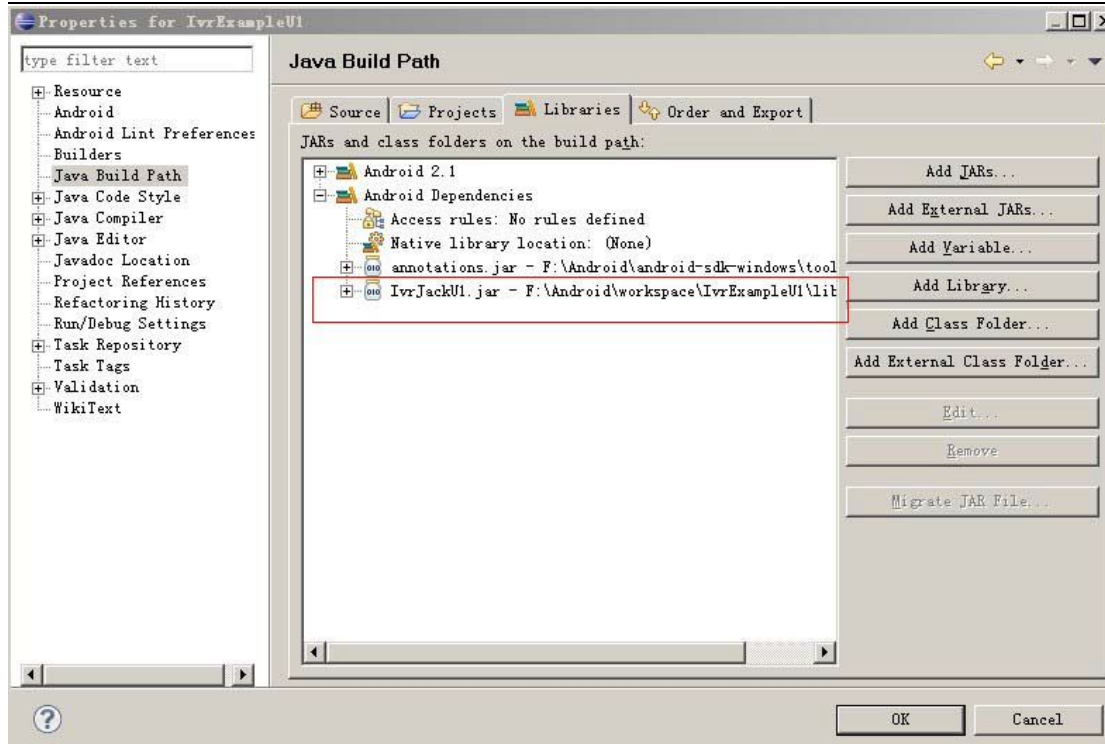
(picture 2)



(picture 3)

3.1.2 Refer libs' Ivr JackU1.jar, as picture 4





(picture 4)

3.1.3 In call interface Activity, cite the following kinds:

**import** com.xminnov.IvrJackAdapter;

**import** com.xminnov.IvrJackService;

**import** com.xminnov.IvrJackStatus;

3.1.4 Achieve Ivr Jack Adapter interfacemethod (implements Ivr Jack Adapter)

3.1.5 Create Ivr Jack Service example.

Others please see examples.

## 3.2 Label operation

**Operate labels' reading memory block, write memory block, lock and destruction etc, you need to call the selected label method, otherwise it will return a failure.**

Choose label

```
byte[] epc Data = convert Strig To Byte Array(EPC);
```

```
ret = Demo.reader.select Tag(access psw, epc Data);
```

```
if (ret == 0)
```

```
{ret = Demo.reader.readTag(block, address, count, data);
```