

# Android API Documentation

Version and modification history

Version	describe	date
V0.1	Created by Luke	2017-05-06

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## 1. Timer switch API description

1. Set the timer switch instructions, the required time format is: hour minute year month day (HH:mm:YY:MM:DD)

1>Set boot time

```
public void setPowerOn()
{
    if(mHourOn != -1 && mMinuteOn != -1 && mYearOn != -1 && mMonthOn != -1 &&
mDateOn != -1){

        String boottime = "1,0,0," + mHourOn + "," + mMinuteOn + "," + mYearOn +
"," + mMonthOn + "," + mDateOn;

        Intent bootintent = new Intent("com.example.jt.boottime");

        bootintent.putExtra("message", boottime);

        mContext.sendBroadcast(bootintent);

        Log.e("REASONS", "setPowerOn");

    }
}
```

2>Set shutdown time

```
public void setPowerOff()
{
    if(mHourOff != -1 && mMinuteOff != -1 && mYearOff != -1 && mMonthOff != -1 &&
mDateOff != -1){

        String shutdownTime = "1,0,0," + mHourOff + "," + mMinuteOff +
"," + mYearOff + "," + mMonthOff + "," + mDateOff;

        Intent shutdownintent = new Intent("com.example.jt.shutdowntime");

        shutdownintent.putExtra("message", shutdownTime);

        mContext.sendBroadcast(shutdownintent);

        Log.e("REASONS", "setPowerOff");

    }
}
```

```
}
```

### 3> Cancel the boot time

```
public void cancelPowerOn()

{

    Intent bootintent = new Intent("com.example.jt.boottime");

    bootintent.putExtra("message", "0,0,0,0,0,0,0,0");

    mContext.sendBroadcast(bootintent);

    Log.e("OKOK", "cancelPowerOn");

}
```

### 4> Cancel shutdown time

```
public void cancelPowerOff()

{

    Intent bootintent = new Intent("com.example.jt.shutdowntime");

    bootintent.putExtra("message", "cancel");

    mContext.sendBroadcast(bootintent);

    Log.e("OKOK", "cancelPowerOff");

    Log.e("OKOK", "cancelPowerOff");

}
```

## 2. Shutdown and restart call interface

### 1>Set shutdown

```
public void shutDown(){

    Intent intent = new Intent("android.intent.action.shutdown");

    mContext.sendBroadcast(intent);

}
```

### 2. Set restart

```
public void Reboot(){

    Intent intent = new Intent("android.intent.action.pubds_reboot");
```

```
mContext.sendBroadcast(intent);  
  
}
```

## 2. USB call API documentation

USB communication takes printer as an example, the reference code is as follows:

<http://blog.csdn.net/qiwenmingshiwo/article/details/50854688>

## 3. Uart serial port call API documentation

### 1. Serial port correspondence

hardware	software
Wart1	ttyS1
Uart2 (software debugging port, not open)	ttyS2
uart3	ttyS3
uart4	ttyS4

2. Android uses jni to directly read and write serial devices, and the serial read and write codes are as follows:

<http://gqdy365.iteye.com/blog/2188906>

## 4. Network port API documentation

### 1. Obtain Ethernet Mac address and IP address

#### Get Mac address

```
1. private void setEthernetMac() {  
2.     BufferedReader reader = null;  
3.     String ethernetMac = getResources()  
4.         .getString(R.string.text_default_mac);  
5.     try {  
6.         reader = new BufferedReader(new FileReader(  
7.             "sys/class/net/eth0/address"));  
8.         ethernetMac = reader.readLine();  
9.         Log.v(TAG, "ethernetMac: " + ethernetMac);  
10.        if (ethernetMac == null || ethernetMac.trim().length() == 0) {  
11.            ethernetMac = getResources().getString(  
12.                R.string.text_default_mac);  
13.            textMac.setTextColor(Color.parseColor("#ff0000"));  
14.        } else {  
15.            ethernetMac = ethernetMac  
16.                + getResources().getString(R.string.text_normal);  
17.            textMac.setTextColor(Color.parseColor("#00ff00"));  
18.        }  
19.        textMac.setText(ethernetMac);  
20.    } catch (Exception e) {  
21.        Log.e(TAG, "open sys/class/net/eth0/address failed : " + e);  
22.    } finally {  
23.        try {  
24.            if (reader != null)  
25.                reader.close();  
26.        } catch (IOException e) {  
27.            Log.e(TAG, "close sys/class/net/eth0/address failed : " + e);  
28.        }  
29.    }  
30.  
31. }
```

## get ip address

```
1. private String getEthernetIp() {
2.     String mEthIpAddress;
3.
4.     if (!isUsingStaticIp()) {
5.
6.         EthernetManager mEthManager = (EthernetManager) getSystemService(Context.ETHERNET_SERVICE);
7.
8.         String templpInfo;
9.         String iface = mEthManager.getEthernetInterfaceName();
10.
11.         templpInfo = SystemProperties.get("dhcp." + iface + ".ipaddress");
12.         if ((templpInfo != null) && (!templpInfo.equals(""))) {
13.             mEthIpAddress = templpInfo;
14.         } else {
15.             mEthIpAddress = getResources().getString(
16.                 R.string.text_default_ip);
17.         }
18.         return mEthIpAddress;
19.
20.     } else {
21.         return Settings.System.getString(getContentResolver(),
22.             Settings.System.ETHERNET_STATIC_IP);
23.     }
24. }
25.
26. private boolean isUsingStaticIp() {
27.     return Settings.System.getInt(getContentResolver(),
28.         Settings.System.ETHERNET_USE_STATIC_IP, 0) == 1 ? true : false;
29. }
```

## 5. API description of dual-screen different display

1. Get the screen on the device

```
DisplayManager mDisplayManager;//Screen management class
```

```
Display[] displays;//screen array
```

```
mDisplayManager =(DisplayManager)context.getSystemService(Context.DISPLAY_
SERVICE);
```

```
displays =mDisplayManager.getDisplays();
```

2. The distinction between main screen and secondary screen

```
main screen: displays[0]
```

```
Secondary screen: displays[1]
```

3. Display content on the secondary screen

It is realized through Presentation, which inherits Dialog. Suppose we write a

DifferentDisplay class, this class is to inherit the Presentation class. code:

```
privateclass DifferentDisplayextendsPresentation{

public DifferentDisplay(ContextouterContext, Display display) {

super(outerContext,display);

//TODOAuto-generated constructor stub

}

@Override

protectedvoid onCreate(Bundle savedInstanceState) {
```



```
super.onCreate(savedInstanceState);
```

```
setContentView(R.layout.differentdisplay_basket);
```

```
}
```

```
}
```

4. Turn on the secondary screen

```
DifferentDislay mPresentation =new DifferentDislay (context,displays[1]);//displays[1]
```

is the secondary screen

```
mPresentation.getWindow().setType(
```

```
WindowManager.LayoutParams.TYPE_SYSTEM_ALERT);
```

```
mPresentation.show();
```

## 6. Cash Drawer API Documentation

1. Open the cash drawer interface

```
Intent intent = new Intent("android.intent.action.CASHBOX");
```

```
intent.putExtra("cashbox_open", true);
```

```
mContext.sendBroadcast(intent);
```