

# Broadcast Receiver

## Network connectivity example

```

public void onReceive(Context context, Intent intent) {
    if (intent.getAction().equals("android.net.conn.CONNECTIVITY_CHANGE")) {
        ConnectivityManager cm =
            (ConnectivityManager) context.getSystemService(Context.CONNECTIVITY_SERVICE);

        NetworkInfo activeNetwork = cm.getActiveNetworkInfo();
        boolean isConnected = activeNetwork != null &&
            activeNetwork.isConnected();
        if (isConnected) {
            boolean isWiFi = activeNetwork.getType() == ConnectivityManager.TYPE_WIFI;
            try {
                if (isWiFi) {
                    WifiManager mainWifi = (WifiManager) context.getSystemService(Context.WIFI_SERVICE);
                    WifiInfo currentWifi = mainWifi.getConnectionInfo();
                    String name = currentWifi.getSSID();
                    String m = currentWifi.getMacAddress();
                    //Toast.makeText(context, "connected to "+name, Toast.LENGTH_LONG).show();
                    txt.setText("connected to " + name + ". Mac@ is " + m);
                } else if (activeNetwork.getType() == ConnectivityManager.TYPE_MOBILE) {
                    //Toast.makeText(context, "connected to 3G", Toast.LENGTH_LONG).show();
                    txt.setText("Connected to 4G");
                }
            } catch (Exception e) {
                //Toast.makeText(context, "Exception:"+e.getMessage(), Toast.LENGTH_LONG).show();
                //e.printStackTrace();
            }
        } else {
            //Toast.makeText(context, "Disconnected from network", Toast.LENGTH_LONG).show();
        }
    }
}

```

- You may need to add some permissions to the manifest file

```
<manifest xmlns:android="http://schemas.android.com/apk/res/android" package="com.example.android.wifidirect"
    android:versionCode="1" android:versionName="1.0">

    <!-- runtime permission check API is on Android 6.0 or higher -->
    <uses-sdk android:minSdkVersion="23" />
    <uses-permission android:name="android.permission.ACCESS_WIFI_STATE" />
    <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.ACCESS_NETWORK_STATE" />
    <uses-permission android:name="android.permission.READ_PHONE_STATE" />
    <uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE" />
    <uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION" />

    <receiver
        android:name=".NetworkReceiver"
        android:enabled="true"
        android:exported="true">
        <intent-filter>
            <action android:name="android.net.conn.CONNECTIVITY_CHANGE" />
        </intent-filter>
    </receiver>
```