



Citcon Pay Android SDK Documentation

Version 2.5.3

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Version No.	Modify Activity	Modify Description	Editor	Modify Date
2.3.1	Creation	Alipay and WeChat Pay	Raymond Zhuang	
2.4.1	Update	Alipay HK, Dana, Kakao Pay and UnionPay added; Added currency type: IDR, HKD, KRW Added 'ext' for extra parameters; Added 'inquireOrderByRef' to query by reference id ; Use implementation to import Lib(Android); Use Cocapods to import Lib(iOS); Added new changes of infoplist for new payments(iOS);	Raymond Zhuang	
2.5.1	update	New Builder to initialize CPayOrder (Android); KCP added;	Raymond Zhuang	
2.5.2	update	CN pay accelerator added; SBPS added;	Raymond Zhuang	
2.5.3	update	Update to SDK API 31; Replaced Broadcast with LiveData;	Raymond Zhuang	

I. Introduction

Citcon's Android SDK was designed for online merchants to integrate Citcon payment solutions effortlessly into their own Android apps. By using the SDK, merchant developers can focus on business logics without having to understand the plumbing of payment transactions. The payment experience will be totally transparent and seamless to end consumers. This version of the SDK supports payments through Alipay, AlipayHK, WeChat Pay, Union Pay, KakaoPay, Dana.

The Citcon Android development SDK was developed in JAVA and targets Android 8 and above. The SDK is distributed as an Android Archive Library (aar) in Maven Center.

II. The Citcon Pay Framework

This section details the main components of the Citcon Pay Framework for Android development. The commonly used header files and their purposes will be listed here, and a step-by-step example of integrating the framework in a demo merchant app will be shown in the next section.

1. Library identity

- a. Package Name: citcon.sdk
- b. Current version: 2.5.3
- c. com.citcon.sdk:mobile:2.5.3

2. Required dependencies

- com.android.volley:volley:1.2.1
- com.citcon.sdk:alipay:15.8.03
- com.citcon.sdk:unionpay:3.3.0
- com.tencent.mm.opensdk:wechat-sdk-android-without-mta:6.7.9

3. Class references

a. **CPaySDK**

The CPaySDK class performs the most common payment related tasks: set up merchant token, send order to Citcon Pay and query the status of a specific transaction.

Name	Type	Description
mInquireResult	MutableLiveData<CPayInquireResult>	Observable CPayInquireResult

After the payment is completed, the Citcon SDK will automatically query immediately to ensure that the correct results are obtained(optional for AliPay and Wechat). Therefore, observe **mInquireResult** .

Method summary:

Name	Description
requestOrder	Sends order information to Citcon and initiates the payment transaction. Has an unique callback: gotOrder.
inquireOrder	Query the status of a specific payment transaction. Has an unique callback: inquiredOrder.
inquireOrderByRef	Query by reference id , currency and vendor
gotOrder	Callback of requestOrder. This method handles the outcome of the payment transaction initiation and continues the process by either Alipay or WeChat.
setMode	Set SDK running mode. If not set, default mode is CPayMode.PROD .

b. CPayOrder.Builder

Represents the order and payment information merchant wants to send to Citcon Pay for processing.

Builder Property summary

Type	Method	Description	Example
CPay-Launch-Type	setLaunchType	KCP/SBPS = URL Other payments = OTHERS	URL/OTHERS
String	setReferenceId	A reference merchant creates and assigns to the transaction.	123xyz
String	setSubject	A customer-defined description of the transaction	Gift for Mom

String	setBody	A more detailed customer-defined description of the transaction	A Blu-ray player and a few great movies
String	setAmount	Total charge amount of the transaction in cents.	245 (\$2.45)
String	setCurrency	The type of currency defined in a three-letter code	USD, CAD, CNY, HKD, KRW, IDR, JPY
String	setVendor	The name of vendor that will process the payment. Only "Alipay" is supported in this version of the SDK	alipay , wechatpay, alipay_hk, kakao-pay, dana, upop, card, payco, naver-pay, banktransfer
String	setIpnUrl	The URL of a page Citcon Pay should post transaction status to. Normally this should be a page on the merchant's website.	http://www.xyz.-com/notify.php
String	setCallbackUrl	The URL of a page Citcon Pay should redirect customer to after the payment transaction has completed.	http://xyz.com/confirm.php
boolean	setAllowDuplicate	Flag to control duplicate orders.	true / false
hashMap	setExt	Customized key, value <String, String>	"reference2", "123456789"
String	setCallbackFailUrl	New field for KCP/SBPS	
String	setCallbackCancelUrl	New field for KCP/SBPS	
Locale	setCountry	New field for KCP/SBPS	
String	setNote	New field for KCP/SBPS	
String	setSource	New field for KCP/SBPS	
boolean	setAutoCapture	New field for KCP/SBPS	

Goods	setGoods	New field for KCP/SBPS	
Con- sumer	setConsumer	New field for KCP/SBPS	
boolean	enableCNPayAcceleration	Use Chinese endpoint to accelerate connection(Alipay/UnionPay/WechatPay)	

c. Goods

Property summary

Name	Type	Description
name	String	Name of good
taxable_amount	Int	Taxable amount
tax_exempt_amount	Int	Tax exempt amount
total_tax_amount	Int	Total amount

d. Consumer

Property summary

Name	Type	Description
first_name	String	
last_name	String	
Phone	String	
Email	String	
Reference	String	

e. CPayOrderResult

Holds the status and message for a transaction returned by Citcon Pay service. An instance of the CPayOrderResult class can be inspected in the callback handler of the requestOrder method of CPaySDK.

Property summary

Name	Type	Description	Example
mRedirectUrl	String	Variable used in the WeChat sequence. Will only be populated when paying by WeChat.	
mOrderId	String	ID of the Order from the payment process.	123xyz
mOrder	CPayOrder	The actual Order object.	
mSigned-String	String	Variable returned by the Order initiation process. Used in the Alipay sequence.	
mOrder-Spec	String	Variable returned by the Order initiation process. Used in the Alipay sequence.	
mMessage	String	Detailed description of the status of a transaction	Transaction succeeded
mStatus	String	The status code for the result	0 (refer to 4.Status Code)
mCurrency	String	Order currency.	USD, CAD, CNY, HKD, KRW, IDR, JPY

d. CPayInquireResult

Holds the detailed status information for a transaction. An instance of the CPayInquireResult class can be inspected in the callback handler of the inquireOrder method of CPaySDK.

Property summary

Name	Type	Description	Example
mId	String	An unique identifier of the transaction. This ID is generated by Citcon Pay.	123456679
mReference	String	A reference identifying the transaction. This ID is generated by merchant	Abc123
mType	String	The type of the transaction: "charge" or "refund"	charge
mAmount	String	The total amount of the transaction in cents	225 (\$2.45)
mCurrency	String	The name the of the currency in a three-letter code	USD or CAD or CNY
mTime	String	The timestamp for the transaction	2017/06/22 1:23:12 PM
mStatus	String	The status of the transaction	success
mNote	String	The note of the transaction.	

4. Status code

Status Code	Description
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0	Success
-1	Bad signature, unregistered AppId, wrong AppId, mismatched AppId or some other error.
-2	The customer cancels the payment, switches back to the app, the customer cannot pay, and so on.
8000	Order is being processed
4000	Payment failed
5000	Duplicate request
6001	The customer cancels the payment
6002	Network connection error
6004	Unknown payment result
others	Other payment error

III. Example

In this section, a demo merchant app making Alipay payments through Citcon Pay is demonstrated step-by-step using JAVA. The source code of this demo app is also provided as part of the SDK distribution package.

1. Create a new Android Studio Application project.
2. Modify the AndroidManifest.xml of your project, add the following for wechat pay:

```
<application ...>
```

```
<activity-alias
```

```

        android:name=".wxapi.WXPayEntryActivity"
        android:exported="true"
        android:targetActivity="sdk.PaymentActivity" />
</application>

```

```
<uses-permission android:name="android.permission.INTERNET" />
```

```
<uses-permission android:name="android.permission.MODIFY_AUDIO_SETTINGS"/>
```

3. Modify the app-level build.gradle:

```

dependencies {
    implementation 'com.citcon.sdk:mobile:2.5.3'
}

```

4. In your calling activity, add the following:

```

@Override
public void onResume()
{
    super.onResume();
    CPaySDK.getInstance(MainActivity.this, AUTH_TOKEN).onResume();
    CPaySDK.setMode(CPayMode.PROD);
}

```

The AUTH_TOKEN is the merchant token and needs to be populated accordingly.

5. Initiate a payment transaction after the lifecycle phase at step 5 has run:

```

CPayOrder order = new CPayOrder("1ZLLJULOCRW3LAU",
    "Test",
    "This is a test transaction",
    "200",
    "USD",
    "alipay",
    "http://www.xyz.com/listen.php",
    "http://www.xyz.com/confirmation.php",
    true);
CPaySDK.getInstance().requestOrder(order, new OrderResponse<CPayOrderResult>()
{

```

```

@Override
public void gotOrderResult(final CPayOrderResult orderResult)
{
    if(orderResult != null)
    {
        // TODO: add your codes
    }
}
};

```

This is still available for legacy code, but strongly suggest use new Builder mode:

```

CPayOrder order = new CPayOrder.Builder()
    .setLaunchType(CPayLaunchType.URL)
    .setReferenceId(1ZLLJULOCRW3LAU)
    .setSubject("Test")
    .setBody("This is a test transaction")
    .setAmount("200")
    .setCurrency("KRW")
    .setVendor("payco")
    .setIpUrl("http://www.xyz.com/listen.php")
    .setCallbackUrl("http://www.xyz.com/confirmation.php")
    .setAllowDuplicate(true)
    .setSource("app_h5")
    .setAutoCapture(true)
    .setCountry(Locale.KOREA)
    .setNote("note dddd")
    .setCallbackFailUrl("https://exampe.com/fail")
    .setCallbackCancelUrl("https://exampe.com/cancel")
    .setConsumer("John", "Doe", "6145675309",
        "test.sam@test.com", "consumer-reference-000")
    .setGoods("Battery Power Pack", 0,0,0)
    .build();

```

6. Call CPaySDK onResume () in onResume () of the activity of you app to ensure that Citcon SDK can callback your app correctly.

```
@Override
```

```
public void onResume() {  
    ...  
    CPaySDK.getInstance(Activity.this, TOKEN).onResume();  
}
```

7. Observe **mInquireResult** to receive the result of inquire:

// optional if only use WeChatPay and Alipay.

```
CPaySDK.mInquireResult.observe(this, new Observer<CPayInquireResult> {  
    ..... your code  
}
```

)