



Pyxpro Online Payment Integration Guide

(Wechat Official Account)

1 Introduction

1.1 Audience

The readers of this document would be technical engineers who will conduct integration work with Pyxpro payment platform, as well as people who want to learn the business scenarios of Pyxpro online payment services.

1.2 Change History

| Date | Version | Comments |
|------------|---------|---------------|
| 2019-02-10 | 1.0 | First edition |
| | | |
| | | |
| | | |
| | | |

2 Message Structure

2.1 Message Sample

All the messages communicated with Pyxpro must be sent over HTTPS with POST command and payload of the message is encoded by xml format. Message signature is required to secure the message transmission.



See example in below:

Request Message

```
<xml>

<service>pay.weixin.native.intl</service>

<charset>UTF-8</charset>

<version>2.0</version>

<sign_type>MD5</sign_type>

<mch_id>157590000059</mch_id>

<out_trade_no>Q3NL0000442503084402</out_trade_no>

<device_info>SN12345678</device_info>

<body><! [CDATA[iPhone] ]></body>

<total_fee>10</total_fee>

<mch_create_ip><! [CDATA[103.218.216.123]]></mch_create_ip>

<notify_url><! [CDATA[http://www.baidu.com] ]></notify_url>

<time_start>20180526202310</time_start>

<time_expire>20180527202310</time_expire>

<op_user_id>10001</op_user_id>

<product_id>123456789</product_id>

<nonce_str>ibuaiVcKdpRxkhJA</nonce_str>

<sign>2444D06685977A585F4C98D7C796BD92</sign>

</xml>
```

Response Message, 'status' field indicates the result.

0 - success

others - failure

Both 'status' and 'result_code' are 0 if success

```
<xml>
```



```
<status>0</status>

<appid>wx2006c4c3da91e7b1</appid>

<charset>UTF-8</charset>

<code_img_url>https://pay.wepayez.com/pay/qrcode?uuid=weixin%3A%2F%2Fwxpay%2Fbizpayurl%3Fpr%3DUWAhBq5</code_img_url>

<code_url>weixin://wxpay/bizpayurl?pr=UWAhBq5</code_url>

<device_info>SN12345678</device_info>

<mch_id>157590000059</mch_id>

<nonce_str>ibuaiVcKdpRxkhJA</nonce_str>

<result_code>0</result_code>

<sign>93AFEEB54BCF4825547761CCB6CBF241</sign>

<sign_type>MD5</sign_type>

<uuid>0d0ef3f2d344e2cc2fb679ed3aa19e71</uuid>

<version>2.0</version>

</xml>
```

Common error case 1:**Communication error, find details in 'message' field**

```
<xml>

<version>2.0</version>

<charset>UTF-8</charset>

<status>400</status>

<message>Signature error</message>

</xml>
```

Common error case 2:**Business processing error, find details in 'err_code_des' field**

```
<xml>
```



```
<status>0</status>

<message><! [CDATA[OK] ></message>
<appid><! [CDATA[wx2421b1c4370ec43b] ></appid>
<mch_id><! [CDATA[10000100]]></mch_id>
<device_info><! [CDATA[1000]]></device_info>
<nonce_str><! [CDATA[sthBJ9QyUG6vkrjJ]]></nonce_str>
<sign><! [CDATA[6277A96D7875D4FF23AA7B6A4C3046AB]]></sign>
<result_code>1</result_code>
<err_code><! [CDATA[AUTHCODE_EXPIRE]]></err_code>

<err_code_des><! [CDATA[QR code is expired, fresh QR Code]]></err_code_des>

</xml>
```

2.2 Test Information

Test server URL:

<https://pay.wepayez.com/pay/gateway>

Test merchant account:

157590000059

Signature key:

c43a467098af250171cd787e56d03979

3 Payment Interface Description

3.1 Official Account Payment

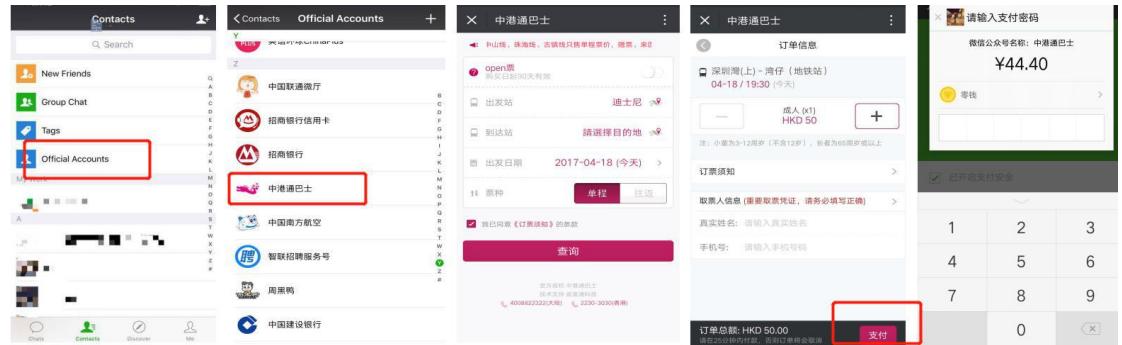
3.1.1 Scenario

Once a merchant has opened an Official Account and enabled the payment feature, users can pay for goods and services inside the Official Account. When the user visits the merchant's H5 page in the WeChat APP, the merchant invokes the WeChat payment module to complete the payment by calling the JSAPI interface provided by WeChat payment on the H5 page.

Please see the most popular use cases in below:



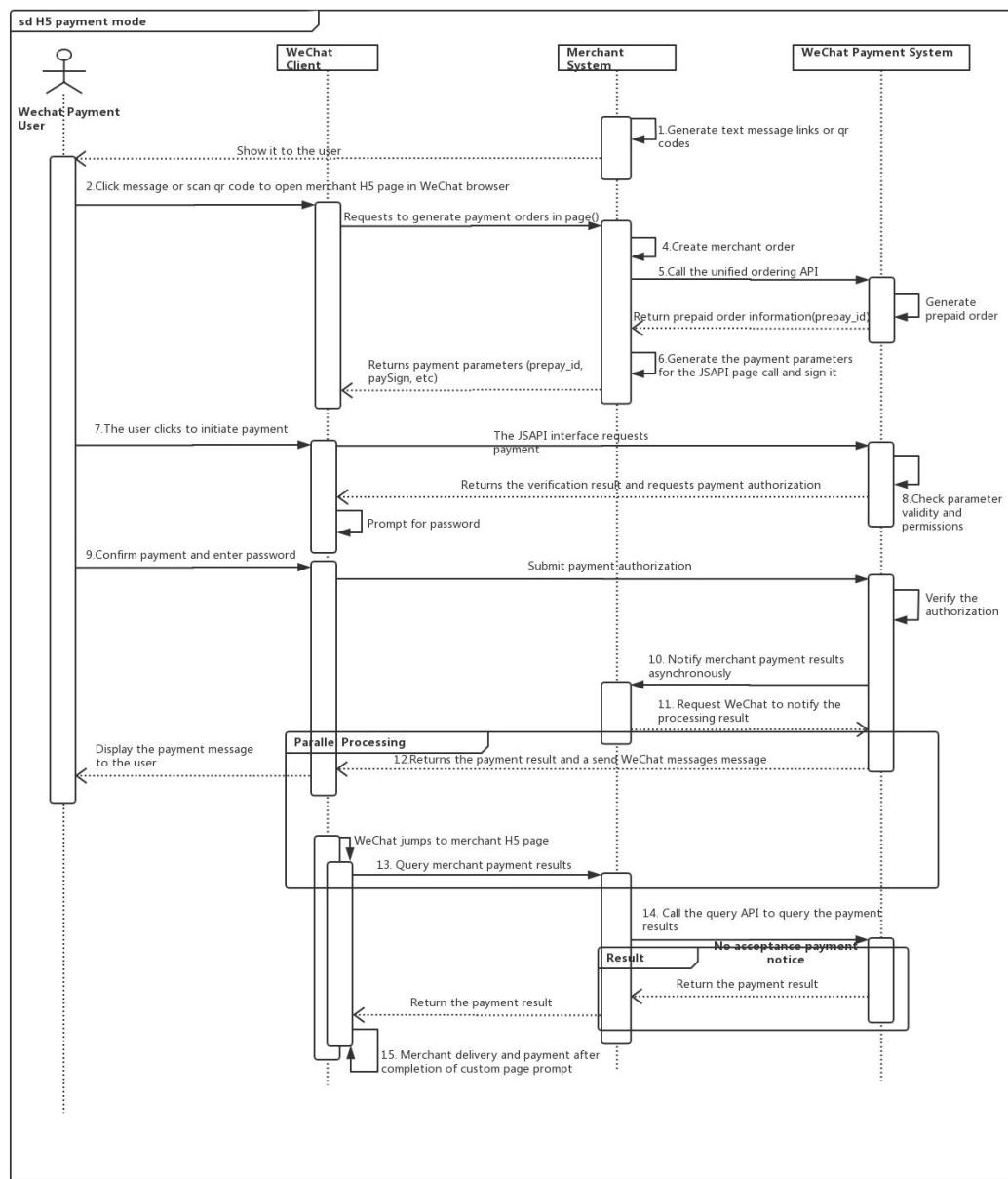
- a) An user visits the merchant Official Account and goes to a payment page.
- b) An user visits the payment page to make a payment, when their friends share the merchant online store link in the friends chat group.



This interface is mainly used in online payment scenarios, such as online malls and online ticket purchases on mobile.



3.1.2 System interaction flow



Step 5: The merchant system creates an order and query the order number by calling Pyxpro payment.

Step 10: The Pyxpro payment server asynchronously sends the payment status to the merchant's notify_url, after the user completes the payment by scanning the code.

Step 14: If the merchant system does not receive the asynchronous notification, it can actively call the order query interface to query the payment status.



3.1.3 Create Payment Order Interface

Request Message

| Parameter | Is Mandatory | Data Type | Description |
|---------------|--------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| service | Y | String(32) | Service type: pay.weixin.jspay |
| version | N | String(8) | Interface version, default is 2.0 |
| charset | N | String(8) | Message encoding charset, fixed value: UTF-8 |
| sign_type | N | String(8) | Signature algorithm fixed value: MD5 |
| mch_id | Y | String(32) | Unique merchant id allocated by Pyxpro |
| is_raw | N | String(1) | 1 - true 0 - false Default 0 |
| out_trade_no | Y | String(32) | Unique payment order id generated by merchant system. Maximum is 32 characters, only alphabet, digit and underscore and mixture. |
| device_info | N | String(32) | Terminal number |
| body | Y | String(127) | Product/service |
| sub_openid | Y | String(128) | The openId corresponding to the merchant Official Account that WeChat users follow (Note: This parameter needs to be passed only for official use, not for testing) |
| sub_appid | Y | String(32) | WeChat Official Account Platform AppID |
| attach | N | String(127) | Extension message for merchant system |
| total_fee | Y | Int | Value of payment amount Value unit is 1% of the currency. For example, If payment amount is HKD 10.00, the value of total_fee should be 1000 |
| mch_create_ip | Y | String(16) | IP address of the merchant system (client) |



| | | | |
|------------------|---|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| notify_url | Y | String(255) | Callback url provided by merchant system to receive asynchronous notification of payment result from Pyxpro platform. Less than 255 characters, URL format as http://wap.tenpay.com/tenpay.asp , can be accessed from public network |
| callback_url | N | String(255) | The merchant service address to which WeChat jumps after the transaction is completed, eg: http://wap.tenpay.com/callback.asp Note: This address serves only as a jump to the front page and requires the notify_url notification result as the final payment result. This parameter is valid only in a non-native form. |
| time_start | N | String(14) | Time to initial payment order, format: yyyyMMddHHmmss, e.g. 25 th Sept, 2009, 9:10:10 value: 20091225091010 Time Zone: GMT+8 beijing |
| time_expire | N | String(14) | Expiry of payment order Same format as time_start |
| goods_tag | N | String(32) | Promotion flag supported by Wechat |
| nonce_str | Y | String(32) | Random string less than 32 characters |
| limit_credit_pay | N | String(32) | If credit card is supported, 1 - not allowed, other - allowed |
| sign | Y | String(32) | Message signature with MD5 |

Response Message

| Parameter | Is Mandatory | Data Type | Description |
|-----------|--------------|-----------|--------------|
| version | Y | String(8) | Default 2.0. |
| charset | Y | String(8) | Fixed :UTF-8 |



| | | | |
|---------------------------------------------------------|---|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| sign_type | Y | String(8) | Fixed:MD5 |
| appid | Y | String(32) | The AppID of the official account of Pyxpro payment platform service provider |
| status | Y | String(16) | 0 - success other - failure this field indicates communication status of the request. Only 'result_code' 0 indicates request is successful. |
| message | N | String(128) | Error description of communication failure |
| Only return when 'status' is 0 | | | |
| result_code | Y | String(16) | Request status 0 - success other - failure |
| mch_id | Y | String(32) | Unique merchant id allocated by Pyxpro |
| device_info | N | String(32) | Terminal number |
| nonce_str | Y | String(32) | Random string, less than 32 characters |
| err_code | N | String(32) | Error code |
| err_msg | N | String(128) | Error description |
| sign | Y | String(32) | Message signature |
| Only returns when both 'status' and 'result_code' are 0 | | | |
| token_id | Y | String(64) | A platform-generated prepayment ID that is invoked in a subsequent interface |
| pay_info | Y | String | Returns a json format string when is_raw is 1, used for raw js payments |

Notes

After the message interaction between the follower and the WeChat



Official Account, the Official Account can get the openid of the follower. You can refer to the address to get the openid:

https://mp.weixin.qq.com/wiki?t=resource/res_main&id=mp1421140842&token=&lang=zh_CN

To use the test merchant number, you do not need to pass the user 'openid'. To switch the official merchant number, you need to get the 'openid', add the 'sub_openid' field in the request parameter, and pass the obtained 'openid' value to the 'sub_openid'. Before switching to the official merchant number to pass 'sub_openid', you need to provide the official merchant number and official account 'appid' to be configured by the Pyxpro payment platform. If there is no configuration, will throw a 'sub_appid and sub_openid not match' error.

Native js payment interface

Interface needs attention, all request parameters are character types, so you need to pay attention to using JavaScript, PHP, etc.

Request Message:

| Parameter | Is Mandatory | Data Type | Description |
|-----------|--------------|-----------|-------------------------------------------------------------------|
| appId | Y | String | The information in pay_info returned from the initialized request |
| timeStamp | Y | String | The information in pay_info returned from the initialized request |
| nonceStr | Y | String | The information in pay_info returned from the initialized request |
| package | Y | String | The information in pay_info returned from the initialized request |
| signType | Y | String | The information in pay_info returned from the initialized request |
| paySign | Y | String | The information in pay_info returned from the initialized request |

Response Message:

| Parameter | Description |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| err_msg | get_brand_wcpay_request:ok (Payment successful) get_brand_wcpay_request:cancel (Cancel during payment) get_brand_wcpay_request:fail (Payment failed) |



Note: If the merchant implements the native payment interface, it must provide the payment authorization directory configured by the service provider, otherwise the payment cannot be adjusted on the WeChat Official Account (It can be conducted in the WeChat file transfer assistant of the mobile phone, during the test).

Refer to the following example:

```
WeixinJSBridge.invoke(  
    'getBrandWCPayRequest',  
    {  
  
        "appId" : "wx2421b1c4370ec43b",  
        "timeStamp": "1395712654",  
        "nonceStr" : "e61463f8efa94090b1f366cccfbbb444",  
        "package" : "prepay_id=u802345jgfjsdfgsdg888",  
        "signType" : "MD5",  
        "paySign" : "70EA570631E4BB79628FBCA90534C63FF7FADD89"  
    },function(res){  
  
        if(res.err_msg == "get_brand_wcpay_request:ok" ) {}  
  
        // You can use the above methods to determine payment results. The result of the WeChat  
        payment will return OK after the user has paid successfully, but it is not guaranteed to be  
        absolutely reliable.  
    });
```

3.1.4Official Account JS Payment Interface

Initialize the JSAPI request for delivery verification by generating the ‘token_id’ , which is recommended.

Request Message

Request URL:

<https://pay.wepayez.com/pay/jsIntl>

The request is made over HTTP.

Query string: https://pay.wepayez.com/pay/jsIntl?token_id=xxx,

eg: https://pay.wepayez.com/pay/jsIntl?token_id=9a0610bc519e782e6275e8c7dd94a445

Click the link in the Official Account to invoke the reply. (Users enter this link when they click the



WeChat pay button on the page. This approach requires the configuration of a fixed payment authorization directory :<https://pay.wepayez.com/pay/>, But unlike the native jsapi, which pays for subsequent operations to get parameters, the assembled link can be called in WeChat's file transfer assistant at test time.)

| Parameter | Is Mandatory | Date Type | Description |
|-----------|--------------|------------|---------------------------------------------------------|
| token_id | Y | String(64) | The pre-payment ID generated by Pyxpro payment platform |

3.1.5 Asynchronous Notification

Introduction

Asynchronous notification will be sent to 'notify_url' which is past by merchant system in request message. Pyxpro will send payment result to this URL after consumers complete the payment on mobile. Merchant system should response plain text 'success' to Pyxpro platform in less than 5 seconds once receiving the notification. Otherwise Pyxpro regards the failure of this notification and retry to send the same message in the regular frequency (0/15/15/30/180/1800/1800/1800/3600 unit: second) until receiving correct response.

Notes:

Merchant system should verify out_trade_no and total_fee to be same as request message before updating order status.

Notification message is sent by POST command to notify_url.

Callback message

| Parameter | Is Mandatory | Data Type | Description |
|--------------------------------|--------------|-------------|--------------------------------|
| version | Y | String(8) | Fixed:2.0 |
| charset | Y | String(8) | Fixed:UTF-8。 |
| sign_type | Y | String(8) | Fixed:MD5 |
| status | Y | String(16) | 0 - success other - failure |
| message | N | String(128) | Error message |
| Only return when 'status' is 0 | | | |



| | | | |
|--------------------------------------------------------|---|--------------|---------------------------------------------------------------------|
| result_code | Y | String(16) | Payment request processing result 0 - success other - failure |
| mch_id | Y | String(32) | Unique merchant id allocated by Pyxpro |
| device_info | N | String(32) | Terminal Number |
| nonce_str | Y | String(32) | Random string less than 32 characters |
| err_code | N | String(32) | Error code |
| err_msg | N | String (128) | Error description |
| sign | Y | String(32) | Message signature in MD5 |
| Only return when both ‘status’ and ‘result_code’ are 0 | | | |
| openid | Y | String(128) | Unique id of Wechat user |
| trade_type | Y | String(32) | pay.weixin.native.intl |
| is_subscribe | Y | String(1) | Y - subscribed N - not subscribed |
| pay_result | Y | Int | 0 - success Other - failure |
| pay_info | N | String(64) | Error message in failure case |
| transaction_id | Y | String(32) | Unique order id generated by Pyxpro |
| out_transaction_id | Y | String(32) | Unique order id generated by Wechat |
| sub_is_subscribe | N | String(1) | Y - subscribed N - not subscribed |
| sub_appid | N | String | Appid of the merchant |
| sub_openid | N | String(128) | Unique id of Wechat user associated with merchant Appid |
| out_trade_no | Y | String(32) | Unique order id generated by merchant system |



| | | | |
|---------------|---|-------------|-------------------------------------------------------------------------------------|
| total_fee | Y | Int | Amount of payment order |
| coupon_fee | N | Int | Consumer paid amount = total_fee - coupon fee, coupon fee<= total_fee |
| fee_type | Y | String(8) | Currency code of merchant collecting payment |
| attach | N | String(127) | Echo of the extension message added by merchant |
| bank_type | Y | String(16) | Bank name |
| bank_billno | N | String(32) | Bank order number |
| time_end | Y | String(14) | Transaction completed time, format: yyyyMMddHHmmss, time zone: GMT+8 beijing. |
| cash_fee | Y | Int | Amount paid by cash wallet, unit 1% of CNY |
| cash_fee_type | N | String(16) | Currency code of cash wallet, fixed CNY |
| rate | Y | String(16) | FX rate between CNY and merchant collecting currency |

Response to callback

Merchant should response plain text 'success' after receiving notification.

| Return Parameter | Description |
|----------------------|---------------------------------------------------------------------|
| success | Not case sensitive Pyxpro will stop sending notification. |
| Fail or other string | Pyxpro will continue to re-send notification in the regular period. |

3.1.6 Query Payment Order

Introduction

Merchant system can query order details by out_trade_no or Pyxpro transaction id.

Request message is sent over HTTPS POST command.



Request Message

| Parameter | Is Mandatory | Data Type | Description |
|----------------|--------------|------------|----------------------------------------------------------------------------------------------------|
| service | Y | String(32) | Service Type unified.trade.query |
| version | N | String(8) | Fixed: 2.0 |
| charset | N | String(8) | Fixed:UTF-8 |
| sign_type | N | String(8) | Fixed: MD5 |
| mch_id | Y | String(32) | Unique merchant id allocated by Pyxpro |
| out_trade_no | N | String(32) | Unique order id generated by merchant system |
| transaction_id | N | String(32) | Unique order id generated by Pyxpro. Either ‘out_trade_no’ or ‘transaction_id’ should be filled |
| nonce_str | Y | String(32) | Random string, less than 32 characters |
| sign | Y | String(32) | Message Signature in MD5 |
| | | | |

Response Message

| Parameter | Is Mandatory | Data Type | Description |
|-----------|--------------|-------------|-------------------------------------------------------------------------|
| version | Y | String(8) | Interface version Fixed:2.0. |
| charset | Y | String(8) | Fixed:UTF-8. |
| sign_type | Y | String(8) | Fixed:MD5 |
| status | Y | String(16) | Request message communication status. 0 - success other - failure |
| message | N | String(128) | Error message |



| Only return when ‘status’ is 0 | | | |
|--------------------------------------------------------|---|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| result_code | Y | String(16) | Request message processing status 0 – success other – failure |
| mch_id | Y | String(32) | Unique merchant id allocated by Pyxpro |
| device_info | N | String(32) | Terminal Number |
| nonce_str | Y | String(32) | Random string, less than 32 characters |
| err_code | N | String(32) | Error code |
| err_msg | N | String (128) | Error description |
| sign | Y | String(32) | Message signature in MD5 |
| Only return when both ‘status’ and ‘result_code’ are 0 | | | |
| trade_state | Y | String(32) | Payment order status: SUCCESS – success REFUND – payment is refunded NOTPAY – order is created but not paid CLOSED – payment order is closed PAYERROR – other errors, e.g. issuer bank reject |
| Only return when ‘trade_state’ is SUCCESS | | | |
| openid | Y | String(128) | Appid of Wechat user |
| appid | Y | String(32) | Payment SP Wechat official id |
| trade_type | Y | String(32) | pay.weixin.native.intl |
| is_subscribe | Y | String(1) | If subscribe Wechat official account Y – subscribed N – no subscribed |
| transaction_id | Y | String(32) | Unique payment order id generated by Pyxpro |
| out_transaction_id | Y | String(32) | Unique transaction id generated by Wechat |



| | | | |
|---------------|---|-------------|---------------------------------------------------------------------------------------------------------------|
| out_trade_no | Y | String(32) | Unique payment order id generated by merchant system, only including alphabet, digit , underscore and mixture |
| total_fee | Y | Int | Total value of the payment Unit is 1% of the currency For example in HKD: 1000 indicates HKD 10.0, |
| coupon_fee | N | Int | Coupon amount Coupon amount <= total_fee Cash paid = total_fee - coupon amount |
| fee_type | Y | String(8) | Merchant payment collecting currency. Currency code compliant with ISO 4217 standard |
| attach | N | String(127) | Echo data from request message filled by merchant system |
| bank_type | Y | String(16) | Bank name |
| bank_billno | N | String(32) | bank bill number if available |
| time_end | Y | String(14) | Completed time of payment transaction Format: yyyyMMddHHmmss, Time Zone: GMT+8 beijing |
| cash_fee | Y | Int | Amount is paid by cash wallet, unit is 1% of the currency |
| cash_fee_type | N | String(16) | Currency code, Fixed: CNY |
| rate | Y | String(16) | FX rate between CNY and merchant payment collecting currency |
| | | | |
| | | | |



3.1.7 Close Order

Introduction

Merchant system can close the unpaid order to prevent double pay.

Notes:

Payment order can only be closed at least 5 minutes after it is created.

Request Message

| Parameter | Is Mandatory | Data Type | Description |
|--------------|--------------|------------|------------------------------------------------------|
| service | Y | String(32) | Service Name: unified.trade.close |
| version | N | String(8) | Fixed: 2.0 |
| charset | N | String(8) | Fixed: UTF-8 |
| sign_type | N | String(8) | Fixed: MD5 |
| mch_id | Y | String(32) | Unique merchant id allocated by Pyxpro |
| out_trade_no | Y | String(32) | Unique payment order id generated by merchant system |
| nonce_str | Y | String(32) | Random string, less than 32 characters |
| sign | Y | String(32) | Message signature in MD5 |

Response Message

| Parameter | Is Mandatory | Data Type | Description |
|-----------|--------------|-----------|--------------|
| version | Y | String(8) | Fixed: 2.0 |
| charset | Y | String(8) | Fixed: UTF-8 |
| sign_type | Y | String(8) | Fixed: MD5 |



| | | | |
|--------------------------------|---|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| status | Y | String(16) | Message communication status: 0 - success other - failure |
| message | N | String(128) | Error message |
| Only return when 'status' is 0 | | | |
| result_code | Y | String(16) | Request processing status: 0 - success, payment order in closed status cannot be paid anymore. Other - failure, close payment order failed, you need try again |
| mch_id | Y | String(32) | Unique merchant id allocated by Pyxpro |
| nonce_str | Y | String(32) | Random string, less than 32 characters |
| err_code | N | String(32) | Error code |
| err_msg | N | String (128) | Error description |
| sign | Y | String(32) | Message signature in MD5 |

3.1.8 Refund

Introduction

Consumers may request to refund transactions if he/she does not satisfy goods and service merchants provide. And funds paid will be returned to the consumers' Alipay/Wechat pay wallet or bankcard linked to the wallets if merchants refund the original transactions.

Transaction status will be updated in 1-2 minutes once the refund call is completed.

Notes:

1. Refund should be initiated before 90 days of the completed time of the original transaction.



2. Funds may not return back to consumers' wallets or the linked bank accounts immediately and time of delay depends on business process of each bank. Usually, 1-3 days delay after the refund call is completed.

3. Input parameter 'out_refund_no' generated by merchant system should be unique.

Retry with the same 'out_refund_no' for unsuccessful refunds calls.

Partial refund is allowed unless the total refund amount reaches the original transaction amount. And coupon cannot be refunded.

4. Most banks in China allow refund transactions, but few banks may not support. Merchants have to find other way to return money back to consumers.

Request Message

| Parameter | Is Mandatory | Data Type | Description |
|----------------|--------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| service | Y | String(32) | Interface type: unified.trade.refund |
| version | N | String(8) | Default is 2.0 |
| charset | N | String(8) | Fixed: UTF-8 |
| sign_type | N | String(8) | Fixed:MD5 |
| mch_id | Y | String(32) | Merchant ID allocated by Pyxpro platform |
| out_trade_no | Y | String(32) | Unique id of the original transaction generated by merchant system, less than 32 characters |
| transaction_id | N | String(32) | Unique transaction id generated by Pyxpro platform transaction_id has high priority if both 'out_trade_no' and 'transaction_id' are provided |



| | | | |
|----------------|---|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| out_refund_no | Y | String(32) | Unique id of the refund transaction generated by merchant system. One refund for multiple refund calls with the same 'out_refund_no'. Please retry with the same 'out_refund_no' for unsuccessful refund calls. |
| total_fee | Y | Int | Amount of the original order, unit is 1% of the currency, e.g. if collecting currency is EUR, 100 indicates 1EUR |
| refund_fee | Y | Int | Amount of the refund call, unit is 1% of the currency. Partial refund is supported, and the summary of the all refund transactions cannot exceed the original amount |
| op_user_id | Y | String(32) | Casher id |
| refund_channel | N | String(16) | ORIGINAL- refund to the same funds source of the original transaction Default value: ORIGINAL |
| nonce_str | Y | String(32) | Random string, less than 32 characters |
| sign | Y | String(32) | MD5 signature |

Response Message, XML encoding

| Parameter | Is Mandatory | Data Type | Description |
|-----------|--------------|------------|-----------------------------------------------------------------|
| version | Y | String(8) | Fixed: 2.0 |
| charset | Y | String(8) | Fixed: UTF-8 |
| sign_type | Y | String(8) | Fixed: MD5 |
| status | Y | String(16) | Message communication status: 0 - success other - failure |



| | | | |
|---------------------------------------------------|---|--------------|--------------------------------------------------------------------------|
| message | N | String(128) | Error message, return when status is not 0 |
| Only return when status is 0 | | | |
| result_code | Y | String(16) | 0 - success other - failure, please retry |
| mch_id | Y | String(32) | Merchant ID allocated by Pyxpro platform |
| device_info | N | String(32) | Device number |
| nonce_str | Y | String(32) | Random string, less than 32 characters |
| err_code | N | String(32) | Error code |
| err_msg | N | String (128) | Error description |
| sign | Y | String(32) | MD5 signature |
| Only return when both status and result_code is 0 | | | |
| transaction_id | Y | String(32) | Order id generated by Pyxpro platform |
| out_trade_no | Y | String(32) | Unique order id of the original transaction generated by merchant system |
| out_refund_no | Y | String(32) | Unique refund transaction id generated by merchant system |
| refund_id | Y | String(32) | Refund transaction id generated by Pyxpro platform |
| refund_channel | Y | String(16) | Only support: ORIGINAL |
| refund_fee | Y | Int | Amount of this refund request, unit is 1% of the currency |
| coupon_refund_fee | N | Int | Amount of the coupon refunded, reserved. |

3.1.9 Query Refund Order

Introduction

Merchant system can query refund order status after calling refund interface. The status of the refund transaction will delay several minutes and funds will return back in around 3 days.



Request Message

| Parameter | Is Mandatory | Date Type | Description |
|---------------|--------------|------------|------------------------------------------------------------------------------------------------------------------------------------|
| service | Y | String(32) | Interface Type: unified.trade.refundquery |
| version | N | String(8) | Fixed: 2.0 |
| charset | N | String(8) | Fixed: UTF-8 |
| sign_type | N | String(8) | Fixed: MD5 |
| mch_id | Y | String(32) | Merchant ID allocated by Pyxpro platform |
| out_refund_no | N | String(32) | Unique ID of the refund transaction generated by merchant system |
| refund_id | N | String(32) | Unique ID of the refund transaction generated by Pyxpro platform. Refund_id has high priority if out_refund_no is provided either. |
| nonce_str | Y | String(32) | Random string, less than 32 characters |
| sign | Y | String(32) | MD5 signature |

Response Message

| Parameter | Is Mandatory | Data Type | Description |
|-------------------------------|--------------|-------------|-----------------------------------------------------------------|
| version | Y | String(8) | Interface version, fixed: 2.0. |
| charset | Y | String(8) | Fixed: UTF-8. |
| sign_type | N | String(8) | Fixed: MD5 |
| status | Y | String(16) | Message communication status: 0 - success other - failure |
| message | N | String(128) | Error message |
| Only returns when status is 0 | | | |
| result_code | Y | String(16) | 0 - success other - failure |
| mch_id | Y | String(32) | Merchant ID allocated by Pyxpro Platform |
| device_info | N | String(32) | Device number |



| | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| nonce_str | Y | String(32) | Random string , less than 32 characters |
| err_code | N | String(32) | Error code |
| err_msg | N | String (128) | Error message |
| sign | Y | String(32) | MD5 signature |
| Only return when status and result_code is 0 | | | |
| transaction_id | Y | String(32) | Unique id of the original transaction generated by Pyxpro platform |
| out_trade_no | Y | String(32) | Unique id of the original transaction generated by merchant system |
| refund_count | Y | Int | Refund counts |
| out_refund_no_\$n | Y | String(32) | Unique id of the refund transaction generated by merchant system |
| refund_id_\$n | Y | String(32) | Unique id of the refund transaction generated by Pyxpro platform |
| refund_channel_\$n | Y | String(16) | Only support:ORIGINAL |
| refund_fee_\$n | Y | Int | Amount of this refund request, unit is 1% of the currency |
| coupon_refund_fee_\$n | N | Int | Reserved, refund amount of coupon |
| refund_time_\$n | N | String(14) | yyyyMMddHHmmss |
| refund_status_\$n | Y | String(16) | Refund transaction status: SUCCESS FAIL PROCESSING NOTSURE— unknown status, please retry CHANGE— consumer's bank rejected refund and funds remain in merchant account, should find other refund means |
| \$n index of the refund transaction number in case of multi-refund requests, value from 0 to (\$refund_count-1), e.g if refund_count has value:2, it means there are two partial refund transactions, 0 for 1 st refund, “1” for 2 nd refund | | | |



3.1.10 Get Open Id

Introduction

Get the openId for the WeChat payment, access within WeChat.

Interface Url

<https://wechat.easyeuro.eu/ops/api/auth/openid>

Request Method

GET

Request Message

| Parameter | Is Mandatory | Data Type | Description |
|-------------|--------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| merchantId | Y | String | Unique merchant id allocated by Pyxpro |
| timestamp | Y | String | Timestamp |
| redirectUri | Y | String | Callback url provided by merchant system to receive asynchronous notification of payment result from Pyxpro platform. (The url should be encode by UrlEncoder.) |
| sign | Y | String | Message signature with MD5(See example) |

Response Message

| Parameter | Is Mandatory | Data Type | Description |
|-----------|--------------|-----------|---------------------------------|
| openId | Y | String | 'openid' return by callback url |



| | | | |
|------------|---|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| resultCode | Y | String | 'resultCode' return by callbakck url S0000: Success S1001: Systme error S1002: Signature error S1003: Duplicate request S1003: Merchant key is error S2001: Failed to get WeChat code S2002: Failed to get WeChat openId |
|------------|---|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Demo

Encode URL

```
encodeUri = UrlEncoder.encode(uri);
```

Signature Algorithm

Step 1:

place all data sent or received into dataset M, then sort all non-null parameters in ascending order according to their ASCII codes, then assembling in key-value pair format (i.e. key1=value1&key2=value2...) and set as stringA.

Step 2: Signature with MD5

```
sign = MD5(merchantId=124500000001&merchantKey=abc321e32ef8g9bc  
&redirectUri= https%3A%2F%2Fwww.baidu.com &timestamp=1573438677456)
```

Request Demo

<https://wechat.easyeuro.eu/ops/api/auth/openid?merchantId=124500000001×tamp=1573438677456&redirectUri=https%3A%2F%2Fwww.baidu.com&sign=0B77F2137064885C2455AD86501845D1>

Response Demo

<https://www.baidu.com/?openId=o3rlC09-GuhhveDTI5emilskcG2o&resultCode=S0000>

4 Signature Algorithm

Step 1:

place all data sent or received into dataset M, then sort all non-null parameters in ascending order according to their ASCII codes, then assembling in key-value pair format (i.e. key1=value1&key2=value2...) and set as stringA. Keep key and value in raw value without URL encoding.

Notes:

1. 'Sign' and null-value parameters should be excluded from signature string
2. Additional parameters may be introduced in later upgrading release, please consider this case in your design



For example:

```
stringA="body=iPhone&charset=UTF-8&device_info=SN12345678&mch_create_ip=103.218.216.123&mch_id=157590000059&nonce_str=ibuaiVcKdpRxkhJA&notify_url=http://www.baidu.com&op_user_id=10001&out_trade_no=Q3NL0000442503084402&product_id=123456789&service=pay.weixin.native.intl&sign_type=MD5&time_expire=20180527202310&time_start=20180526202310&total_fee=10&version=2.0 ";
```

Step 2:

Append “key=” + <merchant signature key> to stringA and then sign the new string in MD5 algorithm and convert the signed string in uppercase Hex format.

For example:

Merchant signature Key: c43a467098af250171cd787e56d03978,

stringB=stringA + “&key= c43a467098af250171cd787e56d03978”, then you get:

```
“body=iPhone&charset=UTF-8&device_info=SN12345678&mch_create_ip=103.218.216.123&mch_id=157590000059&nonce_str=ibuaiVcKdpRxkhJA&notify_url=http://www.baidu.com&op_user_id=10001&out_trade_no=Q3NL0000442503084402&product_id=123456789&service=pay.weixin.native.intl&sign_type=MD5&time_expire=20180527202310&time_start=20180526202310&total_fee=10&version=2.0&key=c43a467098af250171cd787e56d03978”;
```

Sign in MD5:

Final Signature=MD5(stringSignTemp).toUpperCase()="2444D06685977A585F4C98D7C796BD92"