Menu

WeChat H5 Payment API Documentation V1.1

ID	000
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Name	WeChat Payment API Documentation
Version	V1.1

For any questions, please send to: weixinpay@tencent.com

1. Revision Notes

Revise Date	Revise Content	Revise Version	Revise Staff
2016/05/27	Release	V1.0	Leongui
2016/06/01	Chapter 3.2 Add signature tools Chapter 4.2 Add description of payment directory	V1.1	Leongui
2016/06/20	Chapter 4.4.2 Add guide for obtaining user's IP address	V1.2	Leongui
2016/06/30	Optimize some of the descriptions	V1.3	Leongui
2016/07/14	Add rules for field "body"	V1.4	Leongui

2. Introduction

2.1 Document Content

The main content includes:

- ✓ Use scenarios

- ✓ API rules

- ✓ Payment process

- ✓ Case introduction

- ✓ Input and output parameters

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✓ Error code

2.2 Readership

All product managers, developers, testers or approvers of WeChat Payment-H5 payment.

3. API Rules

3.1 Protocol Rules

◆ Use HTTPS for secure transactions, refund and cancel order API requires vendor certificate

◆ Use POST method for request

◆ Data submitted and returned is in XML format

◆ Use UTF-8 character encoding

◆ Interactions between vendors and WeChat (Especially Naitve callback and payment notification) requires signature verification

◆ Logic Judgment: Determine protocol field first, then service field and transaction status at last.

3.2 Signature Algorithm (Signature Tool)

General steps to create a signature:

Step 1: Presume all data sent and received is the set M. Sort non-empty values in M in ascending alphabetical order (i.e. lexicographical sequence), and join them into string A via the corresponding URL key-value format (e.g. key1=value1&key2=value2…).

Notes:

➢ Sort parameter names in ascending alphabetical order based on their ASCII encoded names (e.g. lexicographical sequence);

➢ Empty parameter values are excluded in the signature;

➢ Parameter names are case-sensitive;

➢ When checking returned data or a WeChat push notification signature, the transferred sign parameter is excluded in this signature as it is compared with the created signature.

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Step 2: Add "key= (API key value) to the end of stringA to get stringSignTemp, perform MD5 arithmetic on stringSignTemp, convert all result chars to upper case, thus get sign's value (signValue).

Example:

For the following transferred parameters:

appid：	**wxd930ea5d5a258f4f**
mch_id：	**10000100**
device_info：	**1000**
body：	**test**
nonce_str：	**ibuaiVcKdpRxkhJA**

(1) Sort ASCII code of parameter names by lexicographical sequence based on the format of "key=value"

stringA="appid=wxd930ea5d5a258f4f&body=test&device_info=1000&mch_id=10000100&nonce_str=ibuaiVcKdpRxkhJA";

(2) Join API keys

stringSignTemp="stringA&key=192006250b4c09247ec02edce69f6a2d"

sign=MD5(stringSignTemp).toUpperCase()="9A0A8659F005D6984697E2CA0A9CF3B7"

Obtain data to be transferred below:

```
<xml>

    <appid>wxd930ea5d5a258f4f</appid>
    <mch_id>10000100</mch_id>
    <device_info>1000<device_info>
    <body>test</body>
    <nonce_str>ibuaiVcKdpRxkhJA</nonce_str>
    <sign>9A0A8659F005D6984697E2CA0A9CF3B7</sign>
<xml>
```

3.3 Example

A test example to show the input and output parameters:

Data input:

```
<xml>

<appid>wx2421b1c4370ec43b</appid>

<attach><![CDATA[att1]]></attach>
```

```
<body><![CDATA[JSAPI 支付测试]]></body>

<device_info>1000</device_info>

<mch_id>10000100</mch_id>

<nonce_str>b927722419c52622651a871d1d9ed8b2</nonce_str>

<notify_url>http://wxpay.weixin.qq.com/pub_v2/pay/notify.php</notify_url>

<out_trade_no>1405713376</out_trade_no>

<spbill_create_ip>127.0.0.1</spbill_create_ip>

<total_fee>1</total_fee>

<trade_type>JSAPI</trade_type>

<sign><![CDATA[3CA89B5870F944736C657979192E1CF4]]></sign>

</xml>
```

Protocol error returned:

```
<xml>

<return_code><![CDATA[FAIL ]]></return_code>

<return_msg><![CDATA[SYSERR]]></return_msg>

</xml>
```

Correct returned data:

```
<xml>

<return_code><![CDATA[SUCCESS]]></return_code>

<return_msg><![CDATA[OK]]></return_msg>

<appid><![CDATA[wx2421b1c4370ec43b]]></appid>

<mch_id><![CDATA[10000100]]></mch_id>

<device_info><![CDATA[1000]]></device_info>

<nonce_str><![CDATA[FvYSnPuFFPkAr77M]]></nonce_str>

<sign><![CDATA[63238039D6E43634297CF2A6EB5F3B72]]></sign>

<result_code><![CDATA[SUCCESS]]></result_code>

<openid><![CDATA[oUpF8uN95-Ptaags6E_roPHg7AG0]]></openid>

<is_subscribe><![CDATA[Y]]></is_subscribe>

<trade_type><![CDATA[MICROPAY]]></trade_type>

<bank_type><![CDATA[CCB_CREDIT]]></bank_type>
```

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```
<total_fee>1</total_fee>

<coupon_fee>0</coupon_fee>

<fee_type><![CDATA[CNY]]></fee_type>

<transaction_id><![CDATA[1008450740201407220000058756]]></transaction_id>

<out_trade_no><![CDATA[1406033828]]></out_trade_no>

<attach><![CDATA[att]]></attach>

<time_end><![CDATA[20140722160655]]></time_end>

</xml>
```

Business error returned:

```
<xml>

<return_code><![CDATA[SUCCESS]]></return_code>

<return_msg><![CDATA[OK]]></return_msg>

<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><![CDATA[FAIL]]></result_code>

<err_code><![CDATA[PAYERROR]]></err_code>

<err_code_des><![CDATA[支付错误]]></err_code_des>

</xml>
```

3.4 Rules for field "body"

Some special standards are required for field "body" when calling the WeChat Payment APIs:

Scenario	Payment Method	Input Standard	Example	Remark
PC web site	Native Quick Pay	Web site title--Product description	Tencent recharge center—QQ member recharging	

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WeChat browser	In-App Web-based Payment	Merchat name--Product category	罗辑思维-图书	
QR code in stores	In-App Web-based Payment	Store name—Product category	天虹南山店-超市	Offline store payment
QR code in stores	Native Quick Pay	Store name—Product category	天虹南山店-超市	Offline store payment
Quick Pay in stores	Quick Pay	Store name—Product category	天虹南山店-超市	Offline store payment
Third party mobile browser	H5 Payment	Mobile web site title—Product description	Tencent recharge center—QQ member recharging	
Third party APP	In-App Payment	App name—Product description	天天爱消除-游戏充值	
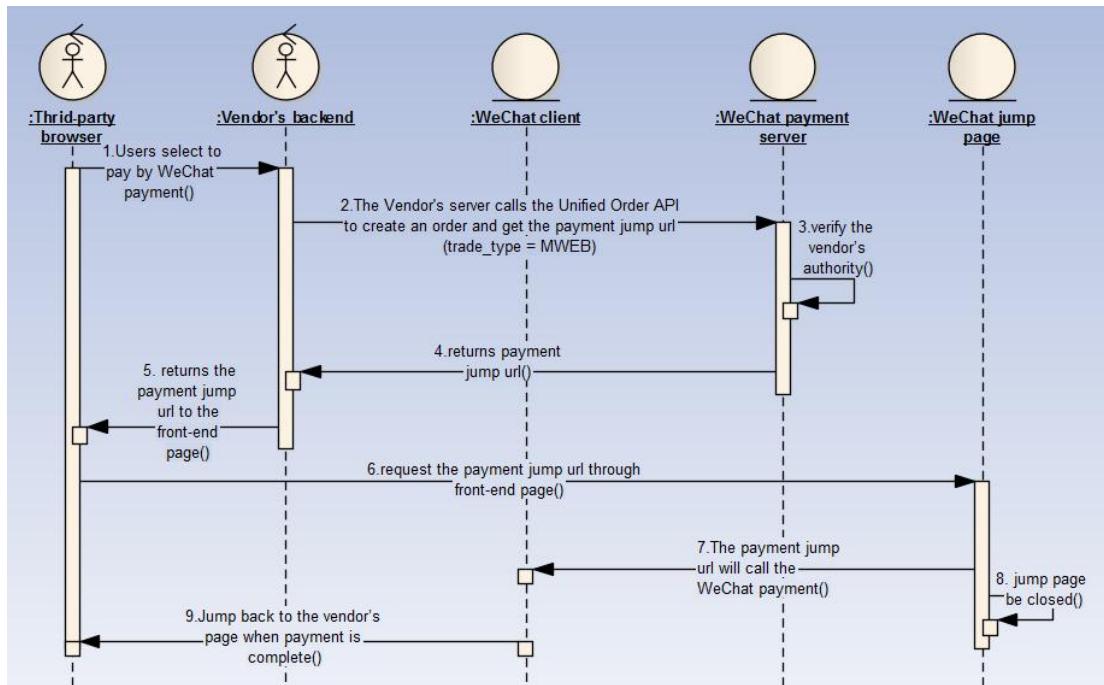
4. H5 APIs

4.1 Use Scenarios

H5 payment is to integrate WeChat payment in the third party browser outside of WeChat client. It will call the WeChat client to complete payment once the vendor requests the H5 payment service.
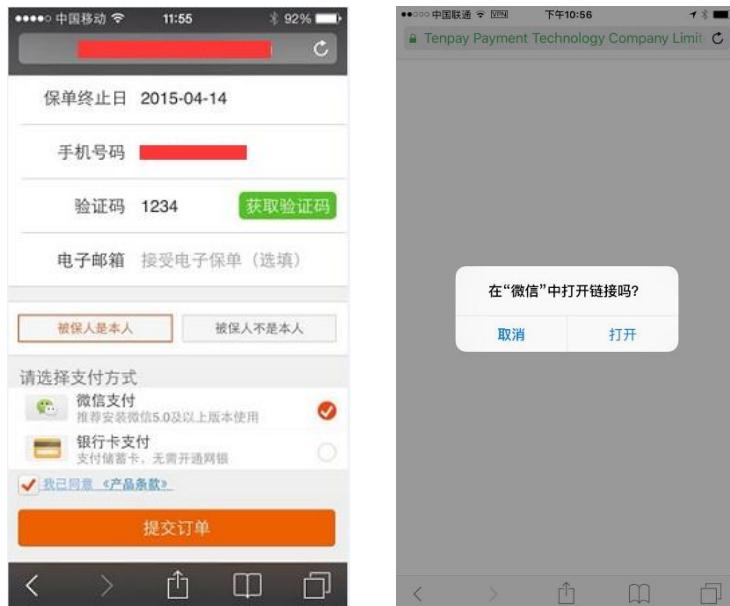
Note: Before starting development, please contact WeChat staff to configure H5 payment directory. For more details, please refer to chapter 4.2.

4.2 Payment Process

1.Users submit order on vendor's page and select to pay by WeChat payment

2.The Vendor's server calls the Unified Order API to create an order and get the payment jump url (trade_type = MWEB).

3.WeChat payment will verify the vendor's authority.

4.The WeChat payment server returns payment jump url to the vendor to call WeChat payment.

5.The vendor returns the payment jump url to the front-end page.

6.The vendor will request the payment jump url through front-end page (WeChat will verify the request source, which is the "payment directory", so please configure it in the WeChat backstage).

7.The payment jump url will call the WeChat payment.

8.The jump page will be closed when WeChat client is loaded.

9.Jump back to the vendor's page when payment is complete.

4.3 Case Introduction

a）The vendor's payment page   b）Different jump pages according to OS

c）Call WeChat payment   d）Input password   e）Complete payment

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4.4 Development Process

4.4.1 Unified Order API

URL: https://api.mch.weixin.qq.com/pay/unifiedorder

Description: Vendors need to call Unified Order API to get payment jump URL, which is used to call WeChat Payment.

Request Parameters:

Field Name	ID	Required	Type	Description
Official Account ID	appid	Yes	String(32)	Specifies Official Account ID assigned by WeChat
Vendor ID	mch_id	Yes	String(32)	Specifies vendor ID assigned by WeChat Payment
Sub Vendor ID	sub_mch_id	No	String(32)	Specifies vendor ID assigned by WeChat Payment, required in service provider or institution mode
Device ID	device_info	No	String(32)	Specifies the terminal device ID assigned by WeChat Payment. This field is defined by the Vendor.
Random String	nonce_str	Yes	String(32)	32 characters or fewer.
Signature	sign	Yes	String(32)	Specifies a signature, please refer to chapter 3.2
Sign type	sign_type	No	String(32)	Currently HMAC-SHA256 and MD5 are supported, default is MD5. This field is only required when sign_type is HMAC-SHA256.
Item Description	body	Yes	String(127)	Please refer to Chapter 3.4

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Item Details	detail	No	String(8192)	Displays detailed item list
Additional Data	attach	No	String(127)	Allow vendors an additional field to be returned in the payment notification after submitting a payment to the Query Order API
Vendor Order Number	out_trade_no	Yes	String(32)	32 alphanumeric characters or fewer.
Total Amount	total_fee	Yes	Int	Specifies the total order amount. The units are expressed in cents and must be an integer.
Currency Type	fee_type	No	String(8)	ISO-4217 standard compliant and be described by three characters based code. The list of currency types is as below: GBP: Great Britain pound HKD: Hong Kong dollar USD: United States dollar JPY: Japanese yen CAD: Canadian dollar AUD: Australian dollar EUR: Euro NZD: New Zealand Dollar KRW: South Korean won

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				THB: Thailand baht Note: Refund currency type must be the same with price currency type
Terminal IP	spbill_create_ip	Yes	String(16)	Specifies the machine IP that generate the order
Transaction Start Time	time_start	No	String(14)	Specifies the transaction creation time in the format yyyyMMddHHmmss, such as 20091225091010 for Dec 25, 2009 09:10:10 (UTC+08).
Transaction End Time	time_expire	No	String(14)	Specifies the transaction end time in the format yyyyMMddHHmmss, such as 20091227091010 for Dec 27, 2009 09:10:10 (UTC+08).
Item Label	goods_tag	No	String(32)	Specifies the label of goods, which is a parameter in the coupon feature for businesses. Keep it null if there is no value.
Notification URL	notify_url	Yes	String(256)	Specifies the callback address for receiving WeChat payment notifications
Transaction Type	trade_type	Yes	String(16)	Value: MWEB
Limit payment mothod	limit_pay	No	String(32)	Vendor can limit the payment mothod: no_credit—Credit card cannot be used

Data returned:

Field Name	ID	Required	Type	Description

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Return Status Code	return_code	Yes	String(16)	SUCCESS/FAIL Specifies communicating label instead of transaction label. The status of the transaction is determined by the value of the result_code field.
Return Data	return_msg	No	String(128)	If not empty, the returned info is the error description. Signature failure Parameter format checking error
If return_code is SUCCESS, return data will also include the following fields:				
Official Account ID	appid	Yes	String(32)	The Official Account ID submitted when calling the interface
Vendor ID	mch_id	Yes	String(32)	The Vendor ID submitted when calling the interface
Sub Vendor ID	sub_mch_id	No	String(32)	The Sub Vendor ID submitted when calling the interface, required in service provider or institution mode.
Device ID	device_info	No	String(32)	Specifies the terminal device ID assigned by WeChat Payment
Random String	nonce_str	Yes	String(32)	32 characters or fewer
Signature	sign	Yes	String(32)	Specifies a signature, please refer to chapter 3.2
Service Result	result_code	Yes	String(16)	SUCCESS/FAIL
Error Code	err_code	No	String(32)	For more information, please refer to
Error Code Description	err_code_des	No	String(128)	Describes result data
If return_code and result_code are SUCCESS, return data will also include the following fields:				

Transaction Type	trade_type	Yes	String(16)	MWEB
Advance Transaction ID	prepay_id	Yes	String(64)	Specifies the advance transaction ID created by WeChat. It is used to call the Wechat payment API later.
Payment Jump URL	mweb_url	Yes	String(64)	Mweb_url is used to call the WeChat payment, which will be loaded when requesting this url.

4.4.2 Call Payment

Requesting the payment jump url mweb_url will load the WeChat payment. The mweb_url is a transit page, which normally won't be shown to users. A short time waiting page might be shown if there is slow network.

WeChat Payment will verify the user's real IP address when jumping to the mweb_url, please make sure that the IP address submitted when calling Unified Order API is legal and correct. About how to obtain user's IP address, please refer to the following description:

a. Without Proxy:

Get "REMOTE_ADDR" directly if there is no proxy settings on the front level:

```
1.  function get_client_ip()
2.  {
3.      $cip = "unknown";
4.      if ($_SERVER['REMOTE_ADDR'])
5.      {
6.          $cip = $_SERVER['REMOTE_ADDR'];
7.      }
8.      elseif (getenv("REMOTE_ADDR"))
9.      {
10.         $cip = getenv("REMOTE_ADDR");
11.     }
12.     return $ip
13. }
```

b. With Proxy:

Please refer to the following code:

With nginx proxy:

Please add the following nginx settings:

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proxy_set_header Host $host;

proxy_set_header X-Real-IP $remote_addr;

proxy_set_header X-Real-Port $remote_port;

proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;

With Apache proxy:

vi /usr/local/apache/conf/httpd.conf

Include conf/extra/httpd-remoteip.conf

vi /usr/local/apache/conf/extra/httpd-remoteip.conf

LoadModule remoteip_module modules/mod_remoteip.so

RemoteIPHeader X-Forwarded-For

RemoteIPInternalProxy 127.0.0.1

Sample Code:

string GetClientIp(CgiInput poInput)*

{

string client_ip = "";

string strClientIPList;

GetHttpHeader("X-Forwarded-For", strClientIPList);

if (strClientIPList.empty())

{

GetHttpHeader("X-Real-IP", strClientIPList);

}

if (!strClientIPList.empty())

{

size_t iPos = strClientIPList.find(",");

if(iPos != std::string::npos)

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```
{
client_ip = strClientIPList.substr( iPos );
}
else
{
client_ip = strClientIPList;
}
}


if (client_ip.empty())
{
GetHttpHeader("PROXY_FORWARDED_FOR", strClientIPList);


if(strClientIPList.empty())
{
client_ip = getRemoteAddr();
}
else
{
size_t iPos = strClientIPList.find( "," );
if( iPos != std::string::npos )
{
client_ip = strClientIPList.substr( iPos );
}
else
{
client_ip = strClientIPList;
}
}
```

}

if(!MMPayCommFunc::IsIp(client_ip))

client_ip = getRemoteAddr();

return client_ip;

}

4.4.3 Error Code List

Name	Description	Reason	Solution
NOAUTH	Vendor doesn't have permission to use this API	Vendors hasn't enabled authorization for this API	The Vendor should apply for permission to use this API
NOTENOUGH	Insufficient balance	The Payer has an insufficient balance in their payment card	Inform the Payer to add funds to their account or or to try another payment card
ORDERPAID	Order is paid	Order is already paid and cannot be paid for again	The order has already been paid and no further action is required
ORDERCLOSED	Order is closed	The current order is closed and cannot be paid for again	The current order has already been closed. The Payer should be told to create a new order.
SYSTEMERROR	System error	System has timed out	A system exception has occurred. Call the API again using the same parameters.
APPID_NOT_EXIST	APPID DOES NOT EXIST	Provided APPID in this parameter does not exist	Check whether provided APPID is correct
MCHID_NOT_EXIST	MCHID DOES NOT EXIST	Provided MCHID in this parameter does not exist	Check whether provided MCHID is correct

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APPID_MCHID_NOT_MATCH	appid does not match mch_id	appid does not match mch_id	Check whether appid belongs to the associated mch_id
LACK_PARAMS	Missing parameter	Required parameter is missing	Check whether parameter is provided
OUT_TRADE_NO_USED	Duplicate vendor order number	The same transaction can't be submitted repeatedly	Check whether vendor's order number has already been submitted or used previously
SIGNERROR	Signature error	Incorrect signature result	Check whether signature parameter and method comply with signature algorithm requirements
XML_FORMAT_ERROR	INVALID XML FORMAT	INVALID XML FORMAT	Check whether XML parameters are in correct format
REQUIRE_POST_METHOD	Use post method	Data is not transferred by post	Check whether data is submitted via POST method
POST_DATA_EMPTY	post data is empty	post data can't be empty	Check whether post data is empty
NOT_UTF8	Invalid coding format	Specified coding format is not used	Use NOT_UTF8 coding format

5. PUBLIC APIs

The Public API serves as the common API interface to be called to access a variety of supplemental functions. Vendors can choose to integrate these functions based on their needs. The Public API includes the Unified Order, General Notification, Query Order, Close Order, Submit Refund, Refund Query, Download Transaction History and Short URL Conversion functions, which are elaborated in the following subsections.

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5.1 Query Order

5.1.1 Use Case

This API allows inquiry of all payment orders made from WeChat. After receiving a status code using this API, vendors can proceed with the next step in service logic. The following are situations when to use the Query Order API:

1. The Vendor doesn't receive any payment due to an exception in the Vendor's backend, network or server;

2. A system error or unknown transaction status is returned after calling the payment interface;

USERPAYING status is returned after calling the Quick Pay API;

To confirm payment status before calling the Close Order API or Revoke Order API;

5.1.2 URL

https://api.mch.weixin.qq.com/pay/orderquery

5.1.3 Certificate Requirement

No certificate is required.

5.1.4 Request Parameters

Field Name	ID	Required	Type	Example	Description
Official Account ID	appid	Yes	String(32)	wx88888888 88888888	Specifies Official Account ID assigned by WeChat
Vendor ID	mch_id	Yes	String(32)	1900000109	Specifies vendor ID assigned by WeChat Payment
Sub Vendor ID	sub_mch_id	No	String(32)	1900000109	Specifies vendor ID assigned by WeChat Payment, required in service provider mode.
WeChat Order Number	transaction_id	Choose one to submit	String(32)	01346700704 5764	WeChat order number is preferred
Vendor Order Number	out_trade_no		String(32)	12177525012 01407033233 368018	Specifies an internal order number created by the Vendor's system. This field is required when transaction_id is not provided.
Random String	nonce_str	Yes	String(32)	C380BEC2B FD727A4B68	32 characters or fewer. For more information, see

				45133519F3AD6	Section 4.3.2 Random String Algorithm
Signature	sign	Yes	String(32)	5K8264ILTKCH16CQ2502SI8ZNMTM67VS	Specifies a signature. For more information, see Section 4.3.1 Signature Algorithm.
Sign type	sign_type	NO	String(32)	HMAC-SHA256	Currently support HMAC-SHA256 and MD5, default is MD5. This field is only required when sign_type is HMAC-SHA256

Example：

```
<xml>
  <appid>wx2421b1c4370ec43b</appid>
  <mch_id>10000100</mch_id>
  <nonce_str>ec2316275641faa3aacf3cc599e8730f</nonce_str>
  <transaction_id>1008450740201411110005820873</transaction_id>
  <sign>FDD167FAA73459FD921B144BAF4F4CA2</sign>
</xml>
```

5.1.5 Return Data

Field Name	ID	Required	Type	Example	Description
Return Status Code	return_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL Specifies communicating label instead of transaction label. The status of a transaction is determined by the value oftrade_state.
Return Data	return_msg	No	String(128)	Signature failure	If not empty, this is the error description Signature failure Parameter format checking error

If return_code is SUCCESS, return data will also include the following fields:

Field Name	ID	Required	Type	Example	Description
Official Account ID	appid	Yes	String(32)	wx8888888888888888	The Official Account ID submitted when calling the interface
Vendor ID	mch_id	Yes	String(32)	1900000109	The Vendor ID submitted when calling the interface
Sub Vendor ID	sub_mch_id	No	String(32)	1900000109	The Sub Vendor ID submitted when calling the interface, required in service provider mode.

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Random String	nonce_str	Yes	String(32)	5K8264ILTK CH16CQ250 2SI8ZNMTM 67VS	32 characters or fewer
Signature	sign	Yes	String(32)	C380BEC2B FD727A4B68 45133519F3 AD6	Specifies a signature. For more information, see Section 4.3.1 Signature Algorithm.
Service Result	result_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL
Error Code	err_code	No	String(32)	SYSTEMER ROR	For more information, see Section 5.5.6 Error Code.
Error Code Description	err_code_de s	No	String(12 8)	System error	Describes result data

If both return_code and result_code are SUCCESS, return data will also include the following fields:

Field Name	ID	Required	Type	Example	Description
Device ID	device_info	No	String(32)	01346700704 5764	Specifies the terminal device ID assigned by WeChat Payment
User Tag	openid	Yes	String(12 8)	wxd930ea5d5 a258f4f	Specifies the user id of the Payer provided by the WeChat system, it is unique to each appid instance
Follows Official Account or not	is_subscrib e	No	String(1)	Y	Specifies whether the payer follows the associated official account or not, with Y meaning 'follows' and N meaning 'not follows'.
Transaction Type	trade_type	Yes	String(16)	JSAPI	Set to JSAPI, NATIVE, MICROPAY or APP
Transaction Status	trade_state	Yes	String(32)	SUCCESS	SUCCESS: Payment successful

REFUND: Order to be refunded

NOTPAY: Order not paid

CLOSED: Order closed

REVOKED: Order revoked

USERPAYING: Awaiting user to pay

PAYERROR: Payment failed (payment status failed to be returned by bank or other reasons) |

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Payment Bank	bank_type	Yes	String(16)	CMC	String states bank_type
Total Amount	total_fee	Yes	Int	100	Specifies the total amount for a transaction. For more information, see Section 4.2. Payment Amount.
Currency Type	fee_type	No	String(8)	USD	ISO-4217 standard compliant and be described by three characters based code. For more information, see Section 4.2 Currency Type.
Cash Payment Amount	cash_fee	Yes	Int	100	Specifies the total cash payment amount of a transaction. For more information, see Section 4.2 Payment Amount.
Cash Type	cash_fee_type	No	String(16)	CNY	Complies with ISO 4217 standards and uses CNY (Chinese yuan) by default. For more information, see Section 4.2 Currency Type.
Mobile Coupon Amount	coupon_fee	No	Int	100	Coupon amount<total amount, total fee – coupon fee = cash fee
Specifies the number of a WeChat payment order	transaction_id	Yes	String(32)	1217752501201407033233368018	Specifies the WeChat payment order id number
Vendor Order Number	out_trade_no	Yes	String(32)	1217752501201407033233368018	Specifies an order number created by a Vendors' system, which is consistent with request.
Vendor's Data Package	attach	No	String(128)	123456	Specifies vendor's data package, which is returned as it is.
Payment End Time	time_end	Yes	String(14)	20141030133525	Specifies the transaction payment time in the format of yyyyMMddHHmmss, such as 20091225091010 for Dec 25, 2009 09:10:10. For more information, see Section 4.2 Time Protocol.
Description of Trade Status	trade_state_desc	Yes	String(256)	Payment failed, please create a new order	Description of the current transaction status and guild for the next step
Exchange Rate	rate	Yes	String(16)	650000000	The value is 10 to the 8th power times of the exchange rate from foreign currency to RMB.

				For example, the exchange rate from foreign currency to RMB is 6.5, the value will be 650000000

Example:

```xml
<xml>
  <return_code><![CDATA[SUCCESS]]></return_code>
  <return_msg><![CDATA[OK]]></return_msg>
  <appid><![CDATA[wx2421b1c4370ec43b]]></appid>
  <mch_id><![CDATA[10000100]]></mch_id>
  <device_info><![CDATA[1000]]></device_info>
  <nonce_str><![CDATA[TN55wO9Pba5yENl8]]></nonce_str>
  <sign><![CDATA[BDF0099C15FF7BC6B1585FBB1l0AB635]]></sign>
  <result_code><![CDATA[SUCCESS]]></result_code>
  <openid><![CDATA[oUpF8uN95-Ptaags6E_roPHg7AG0]]></openid>
  <is_subscribe><![CDATA[Y]]></is_subscribe>
  <trade_type><![CDATA[MICROPAY]]></trade_type>
  <bank_type><![CDATA[CCB_DEBIT]]></bank_type>
  <total_fee>1</total_fee>
  <fee_type><![CDATA[CNY]]></fee_type>
  <transaction_id><![CDATA[1008450740201411110005820873]]></transaction_id>
  <out_trade_no><![CDATA[1415757673]]></out_trade_no>
  <attach><![CDATA[Additional Order description]]></attach>
  <time_end><![CDATA[20141111170043]]></time_end>
  <trade_state><![CDATA[SUCCESS]]></trade_state>
</xml>
```

5.1.6 Error Code

Name	Description	Reason	Solution
ORDERNOTEXIST	This order does not exist	This order number does not exist in the query system	This API only helps query successfully paid transactions. The Vendor should check whether the provided transaction ID is correct.
SYSTEMERROR	System error	Exception occurs when data is returned from backend	This is caused by system error. Try to query again.

5.2 Close Order

5.2.1 Use Case

This API needs to be called before a vendor wants to create a new order due to the Payer failing to pay for an order. The original order will be closed in order to avoid repeat payment. After an order is created in the WeChat payment system, if the Payer doesn't pay within the required time, no further operation can be performed in the system. To prevent the Payer from proceeding with their order, this API is called to close the order.

For any questions, please send to: weixinpay@tencent.com

5.2.2 URL

https://api.mch.weixin.qq.com/pay/closeorder

5.2.3 Certificate Requirement

No certificate is required.

5.2.4 Request Parameters

Field Name	ID	Required	Type	Example	Description
Official Account ID	appid	Yes	String(32)	wx8888888 888888888	Specifies Official Account ID assigned by WeChat
Vendor ID	mch_id	Yes	String(32)	190000010 9	Specifies vendor ID assigned by WeChat Payment
Sub Vendor ID	sub_mch _id	No	String(32)	190000010 9	Specifies vendor ID assigned by WeChat Payment, required in service provider mode.
Vendor Order Number	out_trade _no	Yes	String(32)	121775250 120140703 323336801 8	Specifies an internal order number created by the Vendor's system
Random String	nonce_str	Yes	String(32)	5K8264ILT KCH16CQ2 502SI8ZNM TM67VS	32 alphanumeric characters or fewer. For more information, see Section 4.2 Vendor's Order Number.
Signature	sign	Yes	String(32)	C380BEC2 BFD727A4 B68451335 19F3AD6	Specifies the total order amount. The units are expressed in cents and must be an integer. For more information, see Section 4.2 Payment Amount.
Sign type	sign_type	NO	String(32)	HMAC-SHA256	Currently support HMAC-SHA256 and MD5, default is MD5. This field is only required when sign_type is HMAC-SHA256

Example:

```
<xml>
  <appid>wx2421b1c4370ec43b</appid>
  <mch_id>10000100</mch_id>
  <nonce_str>4ca93f17ddf3443ceabf72f26d64fe0e</nonce_str>
  <out_trade_no>1415983244</out_trade_no>
  <sign>59FF1DF214B2D279A0EA7077C54DD95D</sign>
</xml>
```

5.2.5 Return Data

For any questions, please send to: weixinpay@tencent.com

Field Name	ID	Required	Type	Example	Description
Return Status Code	return_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL
Return Data	return_msg	No	String(128)	Signature failure	If not empty, this is the error description Signature failure Parameter format checking error

If return_code is SUCCESS, return data will also include the following fields:

Field Name	ID	Required	Type	Example	Description
Official Account ID	appid	Yes	String(32)	wx8888888888888888	The Official Account ID submitted when calling the interface
Vendor ID	mch_id	Yes	String(32)	1900000109	The Vendor ID submitted when calling the interface
Sub Vendor ID	sub_mch_id	No	String(32)	1900000109	The Sub Vendor ID submitted when calling the interface, required in service provider mode.
Random String	nonce_str	Yes	String(32)	5K8264ILTKCH16CQ2502SI8ZNMTM67VS	32 characters or fewer
Signature	sign	Yes	String(32)	C380BEC2BFD727A4B6845133519F3AD6	Specifies a signature. For more information, see Section 4.3.1 Signature Algorithm.
Error Code	err_code	No	String(32)	SYSTEMERROR	For more information, see Section 5.5.6 Error Code
Error Code Description	err_code_des	No	String(128)	System error	Describes result data

Example:

```xml
<xml>
  <return_code><![CDATA[SUCCESS]]></return_code>
  <return_msg><![CDATA[OK]]></return_msg>
  <appid><![CDATA[wx2421b1c4370ec43b]]></appid>
  <mch_id><![CDATA[10000100]]></mch_id>
  <nonce_str><![CDATA[BFK89FC6rxKCOjLX]]></nonce_str>
  <sign><![CDATA[72B321D92A7BFA0B2509F3D13C7B1631]]></sign>
  <result_code><![CDATA[SUCCESS]]></result_code>
</xml>
```

5.2.6 Error Code

For any questions, please send to: weixinpay@tencent.com

Name	Description	Reason	Solution
ORDERPAID	Order is paid	Order is paid and cannot be closed	Order is already paid and cannot be closed. No further operation is required.
SYSTEMERROR	System error	System error	System exception has occurred. Call this API again.
ORDERNOTEXIST	Order does not exist	This order does not exist in the system	Don't attempt to close this order yet as it is still a pending transaction
ORDERCLOSED	Order is closed	Order is closed and cannot be done again.	Order is already closed and no further operation is required
SIGNERROR	Signature error	Incorrect signature result	Check whether signature parameter and method comply with signature algorithm requirements
REQUIRE_POST_METHOD	Use post method	Data is not transferred by post	Check whether data is submitted by POST method
XML_FORMAT_ERROR	INVALID XML FORMAT	INVALID XML FORMAT	Check whether XML parameters are in correct format

5.3 Submit Refund
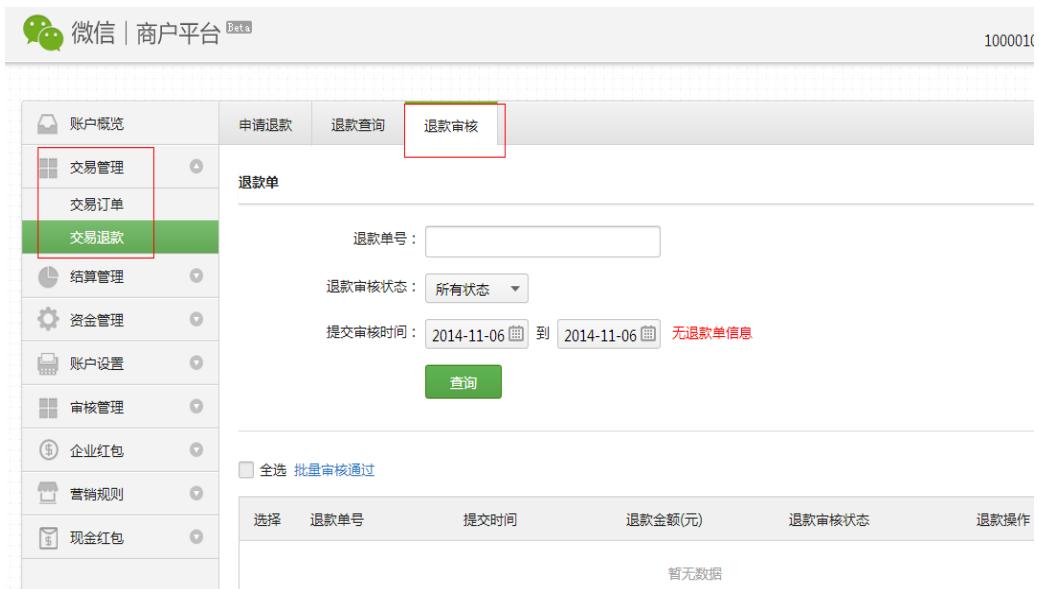
5.3.1 Use Case

For a period after a payment transaction has been completed and a refund is required by either the Payer or Vendor, the Vendor can refund the Payer via this API. After the WeChat payment system receives and verifies the refund request successfully, the Payer will be refunded with the original payment amount according to the refund rules.

Notes:

1. For any transaction completed more than 12 months prior, a refund is not supported;

2. A refund for a transaction can be processed in the form of multiple partial refunds. In this case, the original order number is required and multiple refund numbers must be set. The total refund amount cannot exceed the original payment amount.

The Vendor should review the following Submit Refund flowchart demonstrating when this API is called successfully:

5.3.2 URL

URL：https://api.mch.weixin.qq.com/secapi/pay/refund

5.3.3 Certificate Requirement

Two-way certificate is required

5.3.4 Request Parameters

Field Name	ID	Required	Type	Example	Description
Official Account ID	appid	Yes	String(32)	wx8888888888888888	Specifies Official Account ID assigned by WeChat
Vendor ID	mch_id	Yes	String(32)	1900000109	Specifies vendor ID assigned by WeChat Payment
Sub Vendor ID	sub_mch_id	No	String(32)	1900000109	Specifies vendor ID assigned by WeChat Payment, required in service provider mode.
Device ID	device_info	No	String(32)	013467007045764	Specifies the terminal device ID assigned by WeChat Payment. This field should match the value of device_info when the order was created.
Random String	nonce_str	Yes	String(32)	5K8264ILTKCH16CQ2502SI8ZNMTM67VS	32 characters or fewer. For more information, seeSection 4.3.2 Random String Algorithm.

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Signature	sign	Yes	String(32)	C380BEC2BFD727A4B6845133519F3AD6	Specifies a signature. For more information, see Section 4.3.1 Signature Algorithm.
Sign type	sign_type	NO	String(32)	HMAC-SHA256	This field is only required when sign_type is HMAC-SHA256
WeChat Order Number	transaction_id	Choose one to submit	String(32)	121775250120140703323336801 8	Specifies the WeChat payment order id number
Vendor Order Number	out_trade_no		String(32)	121775250120140703323336801 8	out_trade_no is an internal order number within the vendor's system. transaction_id will be used over out_trade_no if they are both provided by the vendor.
Vendor Refund Number	out_refund_no	Yes	String(32)	121775250120140703323336801 8	Specifies the internal refund number, which is unique in the system. A single transaction can be processed as multiple partial refunds, with the total sum of the partial refunds being equal to the original one.
Total Amount	total_fee	Yes	Int	100	Specifies the total order amount. The units are expressed in cents and must be an integer. For more information, see Section 4.2 Payment Amount.
Refund Amount	refund_fee	Yes	Int	100	Specifies the total refund amount for a transaction. The units are expressed in cents and shall be an integer.Section 4.2 Payment Amount.
Currency Type	refund_fee_type	No	String(8)	USD	ISO-4217 standard compliant and be described by three characters based code. The refund currency type must be same with the bid currency type. For more information, see Section 4.2 Currency Type.
Operator	op_user_id	Yes	String(32)	1900000109	Specifies the Operator ID. This field shows vendor's ID by default.

Example:

For any questions, please send to: weixinpay@tencent.com

```
<xml>
  <appid>wx2421b1c4370ec43b</appid>
  <mch_id>10000100</mch_id>
  <nonce_str>6cefdb308e1e2e8aabd48cf79e546a02</nonce_str>
  <op_user_id>10000100</op_user_id>
  <out_refund_no>1415701182</out_refund_no>
  <out_trade_no>1415757673</out_trade_no>
  <refund_fee>1</refund_fee>
  <total_fee>1</total_fee>
  <transaction_id></transaction_id>
  <sign>FE56DD4AA85C0EECA82C35595A69E153</sign>
</xml>
```

5.3.5 Return Data

Field Name	ID	Required	Type	Example	Description
Return Status Code	return_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL
Return Data	return_msg	No	String(128)	Signature failure	If not empty, this is the error description Signature failure Parameter format checking error

If return_code is SUCCESS, return data will also include the following fields:

Field Name	ID	Required	Type	Example	Description
Result Code	result_code	Yes	String(16)	SUCCESS	SUCCESS/FAIL SUCCESS: Receives refund application successfully. To get refund status, calling Query Refund API is required. FAIL: Submitting refund application failed.
Error Code	err_code	No	String(32)	SYSTEMERROR	For more information, see Section 9.6 Download Transaction History.
Error Code Description	err_code_des	No	String(128)	System timed out	Describes result data
Official Account ID	appid	Yes	String(32)	wx8888888888888888	The Official Account ID submitted when calling the interface
Vendor ID	mch_id	Yes	String(32)	1900000109	The Vendor ID submitted when calling the interface
Sub Vendor ID	sub_mch_id	No	String(32)	1900000109	The Sub Vendor ID submitted when calling the interface, required

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					in service provider mode
Device ID	device_info	No	String(32)	013467007045 764	Specifies the terminal device ID assigned by WeChat Payment. The value in this field must match the device_info value used when the order was created.
Random String	nonce_str	Yes	String(32)	5K8264ILTKC H16CQ2502SI 8ZNMTM67VS	32 characters or fewer
Signature	sign	Yes	String(32)	5K8264ILTKC H16CQ2502SI 8ZNMTM67VS	Specifies a signature. For more information, see Section 4.3.1 Signature Algorithm.
WeChat Order Number	transaction _id	Yes	String(32)	121775250120 140703323336 8018	Specifies the WeChat payment order id number
Vendor Order Number	out_trade_ no	Yes	String(32)	121775250120 140703323336 8018	Specifies an internal order number created by the Vendor's system
Vendor Refund Number	out_refund _no	Yes	String(32)	121775250120 140703323336 8018	Vendor Refund Number
WeChat Refund Number	refund_id	Yes	String(32)	121775250120 140703323336 8018	WeChat Refund Number
Refund Channels	refund_cha nnel	No	String(16)	ORIGINAL	ORIGINAL: Back to the original transaction card or balance. BALANCE: Back to balance.
Refund Amount	refund_fee	Yes	Int	100	Specifies the total refund amount expressed in cents and must be an integer. For more information, see Section 4.2 Payment Amount A refund can be processed as multiple partial refunds.
Currency Type	refund_fee _type	Yes	String(8)	USD	ISO-4217 standard compliant and be described by three characters based code. The refund currency type must be same with the bid currency type. For more information, see Section 4.2 Currency Type.

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Total Amount	total_fee	Yes	Int	100	Specifies the total order amount expressed in cents and must be an integer. For more information, see Section 4.2 Payment Amount
Order Currency Type	fee_type	No	String(8)	CNY	ISO-4217 standard compliant and be described by three characters based code. For more information, see Section 4.2 Currency Type.
Cash Payment Amount	cash_fee	Yes	Int	100	Specifies the cash payment amount expressed in cents and must be an integer. For more information, see Section 4.2 Payment Amount
Currency Type	cash_fee_type	Yes	String(8)	CNY	Complies with ISO 4217 standards and uses CNY (Chinese yuan) by default. For more information, see Section 4.2 Currency Type.
Cash Refund Amount	cash_refund_fee	Yes	Int	100	Specifies the cash refund amount expressed in cents and must be an integer. For more information, see Section 4.2 Payment Amount
Cash Refund Currency Type	cash_refund_fee_type	No	String(8)	CNY	Complies with ISO 4217 standards and uses CNY (Chinese yuan) by default. For more information, see Section 4.2 Currency Type.
Exchange Rate	rate	Yes	String(16)	650000000	The value is 10 to the 8th power times of the exchange rate from foreign currency to RMB. For example, the exchange rate from foreign currency to RMB is 6.5, the value will be 650000000

Example:

```
<xml>
  <return_code><![CDATA[SUCCESS]]></return_code>
  <return_msg><![CDATA[OK]]></return_msg>
  <appid><![CDATA[wx2421b1c4370ec43b]]></appid>
  <mch_id><![CDATA[10000100]]></mch_id>
```

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```
<nonce_str><![CDATA[NfsMFbUFpdbEhPXP]]></nonce_str>
<sign><![CDATA[B7274EB9F8925EB93100DD2085FA56C0]]></sign>
<result_code><![CDATA[SUCCESS]]></result_code>
<transaction_id><![CDATA[1008450740201411110005820873]]></transaction_id>
<out_trade_no><![CDATA[1415757673]]></out_trade_no>
<out_refund_no><![CDATA[1415701182]]></out_refund_no>
<refund_id><![CDATA[2008450740201411110000174436]]></refund_id>
<refund_channel><![CDATA[]]></refund_channel>
<refund_fee>1</refund_fee>
<coupon_refund_fee>0</coupon_refund_fee>
</xml>
```

5.3.6 Error Code

Name	Description	Reason	Solution
SYSTEMERROR	API return error	System timed out	Call this API again using the same parameters
INVALID_TRANSACTIONID	Invalid transaction_id	Requested parameters are not correct	Incorrect request parameters. Check whether the original transaction ID exists or whether data failed to be returned from the payment interface.
PARAM_ERROR	Parameter error	Requested parameters are not correct	Incorrect request parameters. Check the parameters and call the Submit Refund API again.
APPID_NOT_EXIST	APPID DOES NOT EXIST	No APPID in this parameter	Check whether the provided APPID is correct
MCHID_NOT_EXIST	MCHID DOES NOT EXIST	No MCHID in this parameter	Check whether the provided MCHID is correct
APPID_MCHID_NOT_MATCH	appid does not match mch_id	appid does not match mch_id	Check whether appid belongs to the associated mch_id
REQUIRE_POST_METHOD	Use post method	Data is not transferred by post	Check whether data is submitted by POST method
SIGNERROR	Signature error	Incorrect signature result	Check whether the signature parameter and method complies with signature algorithm requirements
XML_FORMAT_ERROR	INVALID XML FORMAT	INVALID XML FORMAT	Check whether XML parameters are in the correct format

5.4 Query Refund

5.4.1 Use Case

For any questions, please send to: weixinpay@tencent.com

After submitting Submit Refund, this API can be called to check the refund status. After submitting a refund, there may be a delay in processing the refund: 20 minutes for refunding to Balance and 3 working days for refunding to a bank card.

5.4.2 URL

URL：https://api.mch.weixin.qq.com/pay/refundquery

5.4.3 Certificate Requirement

No certificate is required.

5.4.4 Request Parameters

Field Name	ID	Required	Type	Example	Description
Official Account ID	appid	Yes	String(32)	wx8888888888888888	Specifies Official Account ID assigned by WeChat
Vendor ID	mch_id	Yes	String(32)	1900000109	Specifies vendor ID assigned by WeChat Payment
Sub Vendor ID	sub_mch_id	No	String(32)	1900000109	Specifies Sub Vendor ID assigned by WeChat Payment, required in service provider mode.
Device ID	device_info	No	String(32)	013467007045764	Specifies the terminal device ID assigned by WeChat Payment
Random String	nonce_str	Yes	String(32)	5K8264ILTKCH16CQ2502SI8ZNMTM67VS	32 characters or fewer. For more information, see Section 4.3.2 Random String Algorithm.
Signature	sign	Yes	String(32)	C380BEC2BFD727A4B6845133519F3AD6	Specifies a signature. For more information, see Section 4.3.1 Signature Algorithm.
Sign type	sign_type	NO	String(32)	HMAC-SHA256	Currently HMAC-SHA256 and MD5 are supported, default is MD5. This field is only required when sign_type is HMAC-SHA256
WeChat Order Number	transaction_id		String(28)	1217752501201407033233368018	Specifies the WeChat payment order id number
Vendor Order Number	out_trade_no		String(32)	1217752501201407033233368018	Specifies an internal order number created by the Vendor's system

For any questions, please send to: weixinpay@tencent.com

Vendor Refund Number	out_refund_no	Choose one to submit	String(32)	1217752501201407033233368018	Vendor Refund Number
WeChat Refund Number	refund_id		String(28)	1217752501201407033233368018	WeChat Refund Number This field will supply the refund_id, out_refund_no, out_trade_no, or transaction_id. Their priority is as shown below: refund_id>out_refund_no>transaction_id>out_trade_no

Example:

```
<xml>
  <appid>wx2421b1c4370ec43b</appid>
  <mch_id>10000100</mch_id>
  <nonce_str>0b9f35f484df17a732e537c37708d1d0</nonce_str>
  <out_refund_no></out_refund_no>
  <out_trade_no>1415757673</out_trade_no>
  <refund_id></refund_id>
  <transaction_id></transaction_id>
  <sign>66FFB727015F450D167EF38CCC549521</sign>
</xml>
```

5.4.5 Return Data

Field Name	ID	Required	Type	Example	Description
Return Status Code	return_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL
Return Data	return_msg	No	String(128)	Signature failure	If not empty, this is the error description Signature failure Parameter format checking error

If return_code is SUCCESS, return data will also include the following fields:

Field Name	ID	Required	Type	Example	Description
Service Result	result_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL SUCCESS indicates that Submit Refund is received successfully. The refund result can be queried via the Query Refund API. FAIL

For any questions, please send to: weixinpay@tencent.com

Error Code	err_code	Yes	String(32)	SYSTEMERROR	For more information, see Section 9.6 Download Transaction History.
Error Description	err_code_des	Yes	String(32)	System error	Describes result data
Official Account ID	appid	Yes	String(32)	wx8888888888888888	Specifies Official Account ID assigned by WeChat
Vendor ID	mch_id	Yes	String(32)	1900000109	Specifies vendor ID assigned by WeChat Payment
Sub Vendor ID	sub_mch_id	No	String(32)	1900000109	The Sub Vendor ID submitted when calling the interface, required in service provider mode.
Device ID	device_info	No	String(32)	013467007045764	Specifies the terminal device ID assigned by WeChat Payment. The value in this field must match the device_info value used when the order was created.
Random String	nonce_str	Yes	String(28)	5K8264ILTKCH16CQ2502SI8ZNMTM67VS	32 characters or fewer
Signature	sign	Yes	String(32)	C380BEC2BFD727A4B6845133519F3AD6	Specifies a signature. For more information, see Section 4.3.1 Signature Algorithm.
WeChat Order Number	transaction_id	Yes	String(32)	1217752501201407033233368018	Specifies the WeChat payment order id number
Vendor Order Number	out_trade_no	Yes	String(32)	1217752501201407033233368018	Specifies an internal order number created by the Vendor's system
Total Amount	total_fee	Yes	Int	100	Specifies the total order amount expressed in cents and must be an integer. For more information, see Section 4.2 Payment Amount
Order Currency Type	fee_type	Yes	String(8)	GBP	ISO-4217 standard compliant and be described by three characters based code. For more information, see Section 4.2 Currency Type.

For any questions, please send to: weixinpay@tencent.com

Cash Payment Amount	cash_fee	Yes	Int	100	Specifies the cash payment amount expressed in cents and must be an integer. For more information, see Section 4.2 Payment Amount
Payment Currency Type	cash_fee_type	Yes	String(8)	CNY	Complies with ISO 4217 standards and uses CNY (Chinese yuan) by default. For more information, see Section 4.2 Currency Type.
Refund Count	refund_count	Yes	Int	1	Specifies recorded refund counts
Vendor Refund Number	out_refund_no_$n	Yes	String(32)	1217752501 2014070332 33368018	Vendor Refund Number
WeChat Refund Number	refund_id_$n	Yes	String(32)	1217752501 2014070332 33368018	WeChat Refund Number
Refund Channel	refund_channel_$n	No	String(16)	ORIGINAL	ORIGINAL: Refund to original payment account BALANCE: Refund to Balance
Refund Amount	refund_fee_$n	Yes	Int	100	Specifies the total refund amount expressed in cents and must be an integer. For more information, see Section 4.2 Payment Amount A refund can be processed as multiple partial refunds.
Refund Status	refund_status_$n	Yes	String(16)	SUCCESS	Refund Status: SUCCESS: Refunded successfully FAIL: Refund failed PROCESSING: Refund is pending NOTSURE: Require the Vendor to call the Submit Refund API again with the original refund number CHANGE: Refund can't be processed as the Payer's bank card is either revoked or

					blocked. As a consequence, the refund will be transferred to the Vendor's cash account. In this case, the refund must be processed offline via the help of the vendor's customer support staff or by transferring the refund amount from the Vendor to the Payer via Tenpay.
Exchange Rate	rate	Yes	String(16)	650000000	The value is 10 to the 8th power times of the exchange rate from foreign currency to RMB. For example, the exchange rate from foreign currency to RMB is 6.5, the value will be 650000000

Example:

```
<xml>
  <appid><![CDATA[wx2421b1c4370ec43b]]></appid>
  <mch_id><![CDATA[10000100]]></mch_id>
  <nonce_str><![CDATA[TeqClE3i0mvn3DrK]]></nonce_str>
  <out_refund_no_0><![CDATA[1415701182]]></out_refund_no_0>
  <out_trade_no><![CDATA[1415757673]]></out_trade_no>
  <refund_count>1</refund_count>
  <refund_fee_0>1</refund_fee_0>
  <refund_id_0><![CDATA[2008450740201411110000174436]]></refund_id_0>
  <refund_status_0><![CDATA[PROCESSING]]></refund_status_0>
  <result_code><![CDATA[SUCCESS]]></result_code>
  <return_code><![CDATA[SUCCESS]]></return_code>
  <return_msg><![CDATA[OK]]></return_msg>
  <sign><![CDATA[1F2841558E233C33ABA71A961D27561C]]></sign>
  <transaction_id><![CDATA[1008450740201411110005820873]]></transaction_id>
</xml>
```

5.4.6 Error Code

Name	Description	Reason	Solution
SYSTEMERROR	API return error	System timed out	Try to call the API again
INVALID_TRANSACTIONID	Invalid transaction_id	Requested parameters are not correct	Incorrect request parameters. Check whether the original transaction ID exists or whether data failed to be returned from the payment interface.

For any questions, please send to: weixinpay@tencent.com

PARAM_ERROR	Parameter error	Requested parameters are not correct	Incorrect request parameters. Check parameters and call the Submit Refund API again.
APPID_NOT_EXIST	APPID DOES NOT EXIST	No APPID in this parameter	Check whether provided APPID is correct
MCHID_NOT_EXIST	MCHID DOES NOT EXIST	No MCHID in this parameter	Check whether provided MCHID is correct
APPID_MCHID_NOT_MATCH	appid does not match mch_id	appid does not match mch_id	Check whether appid belongs to the associated mch_id
REQUIRE_POST_METHOD	Use post method	Data is not transferred via POST method	Check whether data is submitted by POST method
SIGNERROR	Signature error	Incorrect signature result	Check whether signature parameter and method comply with signature algorithm requirements
XML_FORMAT_ERROR	INVALID XML FORMAT	INVALID XML FORMAT	Check whether XML parameters are in correct format

5.5 Download Transaction History

5.5.1 Use Case

This API is used to help the Vendors download their transaction record history including missing orders, and can be used to find unmatched data between vendors and WeChat caused by system error. By downloading transaction history and doing reconciliation, the Vendor can correct the status of their orders in a timely fashion.

Notes:

1. Transactions that are not ordered successfully are excluded in this reconciliation form, while orders that are revoked after successful payment will still be included. Included orders shall be consistent with the original payment bill number, that is, the value of bill_type will be set to REVOKED;

2. Each day's transaction history download is created at 9:00 AM the following day. Therefore, vendors can download the history after 10:00 AM (UTC+08);

3. The currency unit used in the reconciliation form is bid currency unit. (Like Chinese yuan, US dollar).

5.5.2 URL

https://api.mch.weixin.qq.com/pay/downloadbill

For any questions, please send to: weixinpay@tencent.com

5.5.3 Certificate Requirement

No certificate is required.

5.5.4 Request Parameters

Field Name	ID	Required	Type	Example	Description
Official Account ID	appid	Yes	String(32)	wx8888888888888888	Specifies Official Account ID assigned by WeChat
Vendor ID	mch_id	Yes	String(32)	1900000109	Specifies vendor ID assigned by WeChat Payment
Sub Vendor ID	sub_mch_id	No	String(32)	1900000109	Specifies sub vendor ID assigned by WeChat Payment. Required if needs to download transaction history of a specified sub vendor.
Device ID	device_info	No	String(32)	013467007045764	Specifies the terminal device ID assigned by WeChat Payment. This field specifies the transactions related to this device.
Random String	nonce_str	Yes	String(32)	5K8264ILTKCH16CQ2502SI8ZNMTM67VS	32 characters or fewer. For more information, see Section 4.3.2 Random String Algorithm.
Signature	sign	Yes	String(32)	C380BEC2BFD727A4B6845133519F3AD6	Specifies a signature. For more information, see Section 4.3.1 Signature Algorithm.
Sign type	sign_type	NO	String(32)	HMAC-SHA256	This field is only required when sign_type is HMAC-SHA256. Default is MD5.
Reconciliation Start Date	bill_date	Yes	String(8)	20140603	Specifies the date of the transactions to be downloaded in the format of yyyymmdd, such as 20140603 for June 3, 2014.
Bill Type	bill_type	No	String(8)	ALL	ALL: Return all order data from the specified date. bill_type is set to ALL by default. SUCCESS: Return successfully paid orders only REFUND: Return refunded orders only

<xml>

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```
<appid>wx2421b1c4370ec43b</appid>
<bill_date>20141110</bill_date>
<bill_type>ALL</bill_type>
<mch_id>10000100</mch_id>
<nonce_str>21df7dc9cd8616b56919f20d9f679233</nonce_str>
<sign>332F17B766FC787203EBE9D6E40457A1</sign>
</xml>
```

5.5.5 Return Data

If the request has failed, the following fields will be returned.

Field Name	ID	Required	Type	Example	Description
Return Status Code	return_code	Yes	String(16)	FAIL	FAIL
Return Data	return_msg	No	String(128)	Signature failure	If not empty, this is the error description Signature failure Parameter format checking error The order date is not created

When the query has succeeds, the returned data will include a header row containing the data fields of the subsequent rows.

The first row will be the header row, with the value based upon the Bill Type (as specified by bill_type) requested by the Vendor and containing the included data fields of the subsequent row.

Transaction records begin from the second row, and transaction fields are comma-separated values and begin with the ""'" character (to the right of the "1" key on a standard keyboard) and in the same order as the fields listed in the header row of the returned data.

The second to last row will contain descriptive headers of the transaction history statistics and the last row will contain the statistical values of the returned transactions:

Total transactions, Total order amount, Total refunded amount, Total mobile coupon amount, Total mobile coupon refunds

An example of returned data follows:

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Transaction time, Official account ID(appid), Vendor ID(mch_id), Sub vendor ID(sub_mch_id), Device ID(Device_info), Wechat order number(transaction_id), Vendor order number(out_transaction_id), User tag(openid), Transaction type(trade_type), Transaction status(trade_state), Payment bank(bank_type), Currency type(fee_type), Total amount(total_fee), Mobile coupon amount(coupon_fee), Refund apply time, Refund complete time, Wechat refund number(refund_id), Vendor refund number(out_refund_no), Refund amount(refund_fee), Cash coupon refund amount(coupon_refund_fee_$n), Refund type, Refund status(refund_status_$n), Product name, Vendor's data package(attach), Commission, Rate, Payment Currency type(Cash_fee_type), Cash payment amount(Cash_fee), Clearing currency type, Clearing currency amount, Exchange rate, Refund exchange rate, Payer's Refund amount, Payer's Refund currency type, Refund currency type, Refund clearing currency type, Refund clearing amount

2016-01-2812:09:57,`wx77f7fce3722c712b,`1277115701,`0,`1002200845,`1000221008201601282949658332,`2124120160125520751765,`orB2gVv8fX95-ghb8ws3Eunw,`MICROPAY,`SUCCESS,`GDB_CREDIT,`HKD,`198.00,`0.00,`0,`0,`0,`0,`,`,`商品,`,`1.19000,`0.60%,`CNY,`168.01,`HKD,`198.00,`84853800,`0,`0,`,`,`,`0

At the end of each transaction history form, there is the statistic information, please refer to the following fields for detailed information:

Total transaction count, Total transaction amount, Total refund amount, Total coupon refund amount, Total commission amount

An example is as following:

Total transaction count	Total transaction amount	Total refund amount	Total coupon refund amount	Total commission amount
`110	`6096.73	`0.00	`0.00	`152.45000

Error Code

Name	Description	Reason	Solution
SYSTEMERROR	API return error	System timed out	Try to query again
INVALID_TRANSACTIONID	Invalid transaction_id	Requested parameters are not correct	Parameter error. Check transaction_id and try again.
PARAM_ERROR	Parameter error	Requested parameters are not correct	Parameter error. Check parameters and try again.

5.6 General Payment Result Notification

5.6.1 Use Case

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After completing a payment, the WeChat payment system will send the relevant payment result and user information to the Vendor. When this happens, the Vendor's backend will need to receive the result and return a reply to the WeChat payment system.

When interacting with this API, if the WeChat payment system does not receive a notification from the Vendor backend indicating success or timeout, the WeChat payment system will consider it as an unreceived notification and initiate further payment result notifications at a regular interval, such as 8 times in 30 minutes, so as to ensure successful receipt. However, the WeChat payment system cannot ensure successful receipt of payment notifications in every case.

As payment result notifications may be sent from the WeChat payment system to the Vendor's backend multiple times, a single payment result might be notified to the Vendor's backend multiple times. For this reason, the Vendor's system must be able to handle duplicate notifications properly.

The best practices for dealing with such case: when a notification is received and processed, the enclosed payment data should be checked first to confirm whether the payment result has previously been processed or not. If so, return the processed result; if no, proceed with processing the result first before returning. Before checking the payment data, a transaction lock shall be used for concurrency to prevent data corruption caused by transaction race conditions.

Developers can log in to the WeChat payment system for vendors and join the API warning group.

5.6.2 URL

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This URL may be configured via notify_url, a parameter submitted via the 【Unified Order API】, If vendors can't open this URL, they will not be able to receive any notifications sent from the WeChat payment system.

5.6.3 Certificate Requirement

No certificate is required.

5.6.4 Notification Parameters

Field Name	ID	Required	Type	Example	Description
Return Status Code	return_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL Specifies communicating label instead of transaction label. The status of a transaction is determined by the value of result_code.
Return Data	return_msg	No	String(128)	Signature failure	If not empty, this is the error description Signature failure Parameter format checking error

If return_code is SUCCESS, return data will also include the following fields:

Field Name	ID	Required	Type	Example	Description
Official Account ID	appid	Yes	String(32)	wx8888888888888888	Specifies Official Account ID assigned by WeChat
Vendor ID	mch_id	Yes	String(32)	1900000109	Specifies vendor ID assigned by WeChat Payment
Sub Vendor ID	sub_mch_id	Yes	String(32)	1900000109	Specifies vendor ID assigned by WeChat Payment
Device ID	device_info	No	String(32)	013467007045764	Specifies the terminal device ID assigned by WeChat Payment
Random String	nonce_str	Yes	String(32)	5K8264ILTKCH16CQ2502SI8ZNMTM67VS	32 characters or fewer
Signature	sign	Yes	String(32)	C380BEC2BFD727A4B6845133519F3AD6	Specifies a signature. For more information, see Section 4.3.1 Signature Algorithm.
Sign Type	sign_type	No	String(32)	HMAC-SHA256	Currently HMAC-SHA256 and MD5 are supported, default is MD5. This field is only required when sign_type is HMAC-SHA256.

Service Result	result_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL
Error Code	error_code	No	String(32)	SYSTEMERROR	The error code returned
Error Code Description	error_code_des	No	String(128)	System error	The detailed error description returned.
User Tag	openid	Yes	String(128)	wxd930ea5d5a258f4f	The user id of the Payer provided by the WeChat system in OpenID format as unique tag on vendor's appid. Also it is unique to each appid instance.
Follows Official Account or not	is_subscribe	Yes	String(1)	Y	Specifies whether the payer follows the associated official account or not, with Y meaning 'follows' and N meaning 'not follows'.
Transaction Type	trade_type	Yes	String(16)	JSAPI	Set as JSAPI, NATIVE, or APP
Payment Bank	bank_type	Yes	String(16)	CMC	Use strings for bank type. For more information, see attachments.
Total Amount	total_fee	Yes	Int	100	Specifies the total amount for a transaction in cents. For more information, see Section 4.2. Payment Amount.
Currency Type	fee_type	No	String(8)	CNY	ISO-4217 standard compliant and be described by three characters based code. For more information, see Section 4.2 Currency Type
Cash Payment Amount	cash_fee	Yes	Int	100	Specifies the total amount of a transaction. For more information, see Section 4.2 Payment Amount.
Cash Type	cash_fee_type	No	String(16)	CNY	Complies with ISO 4217 standards and uses CNY (Chinese yuan) by default. For more information, see Section 4.2 Currency Type
Specifies the number of a WeChat payment order	transaction_id	Yes	String(32)	1217752501201407033233368018	Specifies the WeChat payment order id number

Vendor Order Number	out_trade_no	Yes	String(32)	1212321211201407033568112322	Specifies an order number created by a Vendors' system, which is consistent with request.
Vendor's Data Package	attach	No	String(128)	123456	Specifies vendor's data package, which is returned as it is.
Payment End Time	time_end	Yes	String(14)	20141030133525	Specifies the time of completing payment in the format of yyyyMMddHHmmss, such as 20091225091010 for Dec 25, 2009 09:10:10. For more information, see Section 3.2 Time Protocol.
Exchange Rate	rate	Yes	String(16)	650000000	The value is 10 to the 8th power times of the exchange rate from foreign currency to RMB. For example, the exchange rate from foreign currency to RMB is 6.5, the value will be 650000000

Example:

```
<xml>
  <appid><![CDATA[wx2421b1c4370ec43b]]></appid>
  <attach><![CDATA[Payment Testing]]></attach>
  <bank_type><![CDATA[CFT]]></bank_type>
  <fee_type><![CDATA[CNY]]></fee_type>
  <is_subscribe><![CDATA[Y]]></is_subscribe>
  <mch_id><![CDATA[10000100]]></mch_id>
  <nonce_str><![CDATA[5d2b6c2a8db53831f7eda20af46e531c]]></nonce_str>
  <openid><![CDATA[oUpF8uMEb4qRXf22hE3X68TekukE]]></openid>
  <out_trade_no><![CDATA[1409811653]]></out_trade_no>
  <result_code><![CDATA[SUCCESS]]></result_code>
  <return_code><![CDATA[SUCCESS]]></return_code>
  <sign><![CDATA[B552ED6B279343CB493C5DD0D78AB241]]></sign>
  <sub_mch_id><![CDATA[10000100]]></sub_mch_id>
  <time_end><![CDATA[20140903131540]]></time_end>
  <total_fee>1</total_fee>
  <trade_type><![CDATA[JSAPI]]></trade_type>
  <transaction_id><![CDATA[1004400740201409030005092168]]></transaction_id>
</xml>
```

5.6.5 Return Data

Parameters returned to the WeChat payment system by the Vendor's backend immediately after the Vendor has processed the payment result notification:

Field Name	ID	Required	Type	Example	Description
Return Status Code	return_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL

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					SUCCESS indicates that Vendor has received payment result notification and has verified the payment successfully
Return Data	return_msg	No	String(128)	OK	If not empty, this is the error description： Signature failure Parameter format checking error

Example:

<xml>
  <return_code><![CDATA[SUCCESS]]></return_code>
  <return_msg><![CDATA[OK]]></return_msg>
</xml>

5.7 Report Speed Testing

5.7.1 Use Case

This API is used to assist the Vendors in improving overall service quality when they call the WeChat payment APIs. With this API, vendors obtain relevant returned data and response duration. Based on the Vendor's uplink network speed, the WeChat payment system optimizes its networking deployment, so as to continuously improve service reliability and speed.

5.7.2 URL

https://api.mch.weixin.qq.com/payitil/report

5.7.3 Certificate Requirement

No

5.7.4 Input Parameter

Field Name	ID	Required	Type	Example	Description
Official Account ID	appid	No	String(32)	wx8888888888888888	Specifies Official Account ID assigned by WeChat
Vendor ID	mch_id	Yes	String(32)	1900000109	Specifies vendor ID assigned by WeChat Payment
Sub Official Account ID	sub_appid	No	String(32)	wx8888888888888888	Specifies an Sub Official Account ID assigned by WeChat

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Sub Vendor ID	sub_mch _id	Yes	String(32)	1900000109	Specifies Sub Vendor ID assigned by WeChat Payment
Device ID	device_in fo	No	String(32)	013467007045764	Specifies the terminal device ID assigned by WeChat Payment. This field is defined by vendors.
Random String	nonce_st r	Yes	String(32)	5K8264ILTKCH16CQ2 502SI8ZNMTM67VS	32 characters or fewer. For more information, see Section 4.3.2 Random String Algorithm.
Signature	sign	Yes	String(32)	C380BEC2BFD727A4 B6845133519F3AD6	Specifies a signature. For more information, see Section 4.3.1 Signature Algorithm.
Sign Tyep	Sign_typ e	No	String(32)	HMAC-SHA256	Currently HMAC-SHA256 and MD5 are supported, default is MD5. This field is only required when sign_type is HMAC-SHA256.
Interface URL	interface _url	Yes	String(127)	https://api.mch.weixin. qq.com/pay/unifiedord er	Complete interface URL to be reported is similar to the following: https://api.mch.weixin.qq.com/pay/unifiedorder When Quick Pay is used, in order to analyze the overall duration of a single service with vendors, WeChat requires a report for each Quick Pay service call made in either mode 1 or mode 2. The report URL is as below: https://api.mch.weixin.qq.com/pay/micropay/total For more information about mode 2, see Section 5.4 Process for vendors. For other payment methods, calling and reporting is only required once.
API Execute Duration	execute_ time_	Yes	Int	1000	Specifies the duration for calling the API. The units

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					are expressed in milliseconds.
Return Status Code	return_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL Specifies communicating label instead of transaction label. The status of a transaction is determined by the value oftrade_state.
Return Data	return_msg	No	String(128)	Signature failure	If not empty, this is the error description Signature failure Parameter format checking error
Service Result	result_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL
Error Code	err_code	No	String(32)	SYSTEMERROR	ORDERNOTEXIST: Order does not exist SYSTEMERROR: System error
Error Code Description	err_code_des	No	String(128)	System error	Describes result data
Vendor Order Number	out_trade_no	No	String(32)	121775250120140703 3233368018	Specifies an order number created by the Vendor's system. The Vendor can report this order number to WeChat payment system in order to help improve payment services.
Access Interface IP	user_ip	Yes	String(16)	8.8.8.8	Specifies the machine IP used when calling this interface
Vendor Report Time	time	No	String(14)	20091227091010	Specifies system time in the format of yyyyMMddHHmmss, such as 20091227091010 for Dec 27, 2009 09:10:10. For more information, see Section4.2 Time Protocol.

5.7.5 Return Data

Field Name	ID	Required	Type	Example	Description
Return Status Code	return_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL Specifies communicating label instead of transaction

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					label. The status of a transaction is determined by the value of result_code.
Return Data	return _msg	No	String(12 8)	Signature failure	If not empty, this is the error description

Signature failure

Parameter format checking error |

If return_code is SUCCESS, return data will also include the following fields:

Field Name	ID	Required	Type	Example	Description
Service Result	result_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL

5.7.6 Error Code

None

5.8 Short URL Conversion

5.8.1 Use Case

This API is used for the URL embedded in a QR code when using native payment method 1 and converts it into short URL (weixin://wxpay/s/XXXXXX), so as to reduce data volume, speed up scanning, and improve accuracy.

5.8.2 URL

https://api.mch.weixin.qq.com/tools/shorturl

5.8.3 Certificate Requirement

No certificate is required.

5.8.4 Request Parameters

Field Name	ID	Required	Type	Example	Description
Official Account ID	appid	Yes	String(32)	wx8888888888888888	Specifies Official Account ID assigned by WeChat
Vendor ID	mch_id	Yes	String(32)	1900000109	Specifies vendor ID assigned by WeChat Payment

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Sub Official Account ID	sub_appid	No	String(32)	wx8888888888888888	Specifies an Sub Official Account ID assigned by WeChat
Sub Vendor ID	sub_mch_id	Yes	String(32)	1900000109	Specifies Sub Vendor ID assigned by WeChat Payment
Long URL	long_url	Yes	String(512)	weixin://wxpay/bizpayurl?sign=XXXXX&appid=XXXXX&mch_id=XXXXX&product_id=XXXXXX&time_stamp=XXXXXX&nonce_str=XXXXX	Specifies the URL to be converted. The signature keeps original string and uses URL encode for transferring data.
Random String	nonce_str	Yes	String(32)	5K8264ILTKCH16CQ2502SI8ZNMTM67VS	32 characters or fewer. For more information, see Section 4.3.2 Random String Algorithm.
Signature	sign	Yes	String(32)	C380BEC2BFD727A4B6845133519F3AD6	Specifies a signature. For more information, see Section 4.3.1 Signature Algorithm.
Sign type	sign_type	NO	String(16)	HMAC-SHA256	Currently HMAC-SHA256 and MD5 are supported, default is MD5. This field is only required when sign_type is HMAC-SHA256.

5.8.5 Return Data

Field Name	ID	Required	Type	Example	Description
Return Status Code	return_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL Specifies communicating label instead of transaction label. The status of a transaction is determined by the value of result_code.
Return Data	return_msg	No	String(128)	Signature failure	If not empty, this is the error description Signature failure Parameter format checking error

If return_code is SUCCESS, return data will also include the following fields:

Field Name	ID	Required	Type	Example	Description

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Official Account ID	appid	Yes	String(32)	wx8888888888888888	Specifies Official Account ID assigned by WeChat
Vendor ID	mch_id	Yes	String(32)	1900000109	Specifies vendor ID assigned by WeChat Payment
Sub Official Account ID	sub_appid	No	String(32)	wx8888888888888888	Specifies an Sub Official Account ID assigned by WeChat
Sub Vendor ID	sub_mch_id	Yes	String(32)	1900000109	Specifies Sub Vendor ID assigned by WeChat Payment
Random String	nonce_str	Yes	String(32)	5K8264ILTKCH16CQ2502SI8ZNMTM67VS	32 characters or fewer. For more information, see Section 4.3.2 Random String Algorithm.
Signature	sign	Yes	String(32)	C380BEC2BFD727A4B6845133519F3AD6	Specifies a signature. For more information, see Section 4.3.1 Signature Algorithm.
Service Result	result_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL
Error Code	err_code	No	String(32)	SYSTEMERROR	SYSTEMERROR: System error URLFORMATERROR: Incorrect URL format
Short URL	short_url	Yes	String(64)	weixin://wxpay/s/XXXXXX	Specifies the converted URL

5.8.6 Error Code

Name	Description	Reason	Solution
SIGNERROR	Signature error	Incorrect signature result	Check whether the signature parameter and method comply with signature algorithm requirements
REQUIRE_POST_METHOD	Use post method	Data is not transferred by post	Check whether data is submitted by POST method
APPID_NOT_EXIST	APPID DOES NOT EXIST	No APPID in this parameter	Check whether provided APPID is correct
MCHID_NOT_EXIST	MCHID DOES NOT EXIST	No MCHID in this parameter	Check whether provided MCHID is correct
APPID_MCHID_NOT_MATCH	appid does not match mch_id	appid does not match mch_id	Check whether appid belongs to the associated mch_id

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LACK_PARAMS	Missing parameter	Required parameter is missing	Check whether parameter is provided
XML_FORMAT_ERROR	INVALID XML FORMAT	INVALID XML FORMAT	Check whether XML parameters are in correct format
POST_DATA_EMPTY	post data is empty	post data can't be empty	Check whether POST data is empty

5.9 Querying Settled Funds

5.9.1 Use Case

This API helps query the details of settled funds.

5.9.2 URL Entry

https://api.mch.weixin.qq.com/pay/settlementquery

5.9.3 Request Parameters

Note: If sub vendors need to call this API, mch_id could be set as their sub vendor ID. And appid could be set as either the sub official account ID or official account ID.

Field Name	ID	Type	Required	Example	Description
Official Account ID	appid	String(32)	Yes	Wx1378acui7865dt65	Specifies Official Account ID assigned by WeChat.
Vendor ID	mch_id	String(10)	Yes	12567876549	Specifies vendor ID assigned by WeChat Pay
Settlement Status	usetag	Int	Yes	1	Indicates the fund has been settled or is still outstanding: 1 - settled 2 - outstanding
Random String	nonce_str	String(32)	Yes	Uihu276jjghxlehu38764409322	A random string of less than 32 chars
Offset	offset	Int	Yes	1	Returned query data starts from this offset value

Max Records	limit	Int	Yes	10	The number of returned records (generally less than 10)
Start Date	date_start	String(14)	Yes	20150807	In the format of yyyyMMdd. For example, December 25, 2009 is expressed as 20091225 in the time zone (GMT+8).
End Date	date_end	String(14)	Yes	20150807	In the format of yyyyMMdd. For example, December 25, 2009 is expressed as 20091225 in the time zone (GMT+8).
Signature	sign	String(32)	Yes	8439EBD 8AE7422 590E2004 D0C5EBF FBC	For details about signature, see Section 3.2

5.9.4 Return Parameters

Field Name	ID	Required	Type	Description
Return Status Code	return_code	Yes	String(16)	SUCCESS/FAIL Specifies communicating label (not transaction label). The status of a transaction is determined by the value of result_code.
Return Data	return_msg	No	String(128)	If returned data is not empty, the returned data is the error description of the following: - Signature Failure - Parameter format checking error
If return_code is SUCCESS, the return data also includes the following fields:				

Official Account ID	appid	Yes	String(32)	Specifies Official Account ID assigned by WeChat
Vendor ID	mch_id	Yes	String(32)	Specifies vendor ID assigned by WeChat Pay
Random String	nonce_str	Yes	String(32)	Indicates a random string of less than 32 chars
Service Result	result_code	Yes	String(16)	SUCCESS/FAIL
Error Code	err_code	No	String(32)	fail
Error Code Description	err_code_des	No	String(128)	Describes result data
Return Data Lines	record_num	Yes	String(10)	Indicates number of lines of return data
The following fields will be returned when result_code is **SUCCESS**. In case of multiple records, the data will be repeated.				
Foreign Payment Batch Number	fbatchno	Yes	String(32)	Indicates the batch number of foreign payment
Settlement Date	date_settlement	Yes	String(14)	In the format of yyyyMMdd. For example, December 25, 2009 is expressed as 20091225 in the time zone (GMT+8).
Transaction Start Date	date_start	Yes	String(14)	In the format of yyyyMMdd. For example, December 25, 2009 is expressed as 20091225 in the time zone (GMT+8).
Trasanction End Date	date_end	Yes	String(14)	In the format of yyyyMMdd. For example, December 25, 2009 is expressed as 20091225 in the time zone (GMT+8).
Remit Amount	settlement_fee	Yes	String(32)	Priced in foreign currency at the minimum trading unit

Non-Remit Amount	unsettlement_fee	Yes	String(32)	Priced in foreign currency at the minimum trading unit
Settlement Currency	settlementfee_type	Yes	String(8)	Comply with ISO 4217 standards and use CNY for Chinese currency by default. Description: CNY：Chinese yuan GBP: Great Britain pound HKD: Hong Kong dollar USD: United States dollar JPY: Japanese yen CAD: Canadian dollar AUD: Australian dollar EUR: Euro cent Notes: The currency type for payment and refund shall be the same.
Payment Amount	pay_fee	Yes	Int	Priced in foreign currency at the minimum trading unit
Refund Amount	refund_fee	Yes	Int	Priced in foreign currency at the minimum trading unit
Net Payment Amount	pay_net_fee	Yes	Int	Priced in foreign currency at the minimum trading unit
Charge Amount	poundage_fee	Yes	Int	Priced in foreign currency at the minimum trading unit

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5.10 Query Exchange Rate API

5.10.1 Use Case

The interface could inquiry the exchange rate which Wechat Payment used in real time. The rate is updated once each day at 10 a.m. in the time zone (GMT+8).

5.10.2 URL

https://api.mch.weixin.qq.com/pay/queryexchagerate

5.10.3 Certificate Requirement

No certificate is required.

5.10.4 Request Parameters

Field Name	ID	Required	Type	Example	Description
Official Account ID	appid	Yes	String(32)	wx8888888888888888	Specifies Official Account ID assigned by WeChat
Vendor ID	mch_id	Yes	String(32)	1900000109	Specifies Vendor ID assigned by WeChat
Sub Vendor ID	sub_mch_id	No	String(32)	1230000100	Specifies Sub Vendor ID assigned by WeChat
Currency Type	fee_type	Yes	String(10)	USD	Foreign currency type. ISO-4217 standard compliant and be described by three characters based code.
Date	date	Yes	String(14)	20150807	In the format of yyyyMMdd. For example, December 25, 2009 is expressed as 20091225 in the time zone (GMT+8).
Signature	sign	Yes	String(32)	C380BEC2BFD727A4B6845133519F3AD6	Specifies a signature. For more information, see Section 4.3.1 Signature Algorithm.

Example:

```
<xml>
   <appid>wx2421b1c4370ec43b</appid>
   <mch_id>10000100</mch_id>
   <fee_type>CNY</fee_type>
   <date>20150807</date>
   <sign>FDD167FAA73459FD921B144BAF4F4CA2</sign>
</xml>
```

5.10.5 Return Data

Field Name	ID	Required	Type	Example	Description
Return Status Code	return_code	Yes	String(16)	SUCCESS	SUCCESS or FAIL Specifies communicating label instead of transaction label. The status of a transaction is determined by the value of result_code.
Return Data	return_msg	No	String(128)	Signature failure	If not empty, this is the error description Signature failure Parameter format checking error

If return_code is SUCCESS, return data will also include the following fields:

Field Name	ID	Required	Type	Example	Description
Official Account ID	appid	Yes	String(32)	wx8888888888888888	The Official Account ID submitted when calling the interface
Vendor ID	mch_id	Yes	String(32)	1900000109	The Vendor ID submitted when calling the interface
Sub Vendor ID	sub_mch_id	No	String(32)	1230000100	The Sub Vendor ID submitted when calling the interface
Currency Type	fee_type	Yes	String(10)	USD	Foreign currency type. ISO-4217 standard compliant and be described by three characters based code.
Exchange Rate Time	rate_time	Yes	String(14)	20150807	In the format of yyyyMMdd. For example, December 25, 2009 is expressed as 20091225 in the time zone (GMT+8).
Exchange Rate	rate	Yes	String(32)	650000000	The value is 10 to the 8th power times of the exchange rate from foreign currency to RMB. For example, the exchange rate from foreign currency to RMB is 6.5, the value will be 650000000
Signature	sign	Yes	String(32)	C380BEC2BFD727A4B6845133519F3AD6	Specifies a signature. For more information, see Section 4.3.1 Signature Algorithm.

Example:

```
<xml>
  <appid>wx2421b1c4370ec43b</appid>
  <mch_id>10000100</mch_id>
  <fee_type>USD</fee_type>
  <rate_time>20150807</rate_time>
  <rate>650000000</rate>
  <sign>FDD167FAA73459FD921B144BAF4F4CA2</sign>
</xml>
```

For any questions, please send to: weixinpay@tencent.com