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| **Open Interface Documentation of KUAISHOU** |
| Version 2.3.1 |
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**Zhejiang KuaiShou Information Technology Ltd.**

Version History:

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| --- | --- | --- | --- |
| Version | Modified Date | Modified By | Modified Content |
| 2.0.0 | 2015.8.20 | Wang, Yongchao | First Draft |
| 2.1.0 | 2015.10.26 | Zhang, Guangmu | JSON Messages and 3DES encryption is supported by the interface. |
| 2.1.3 | 2015.11.12 | Zhang, Guangmu | QQ Wallet Payment is supported by the interface. Appendix 3 is added/enhanced. New payment channel is added, i.e. 12 and 42. |
| 2.1.4 | 2015.11.23 | Zhang, Guangmu | XML format is not supported. |
| 2.1.8 | 2016.2.20 | Zhang, Guangmu | revocation interface add parameter opType |
| 2.1.9 | 2016.5.18 | Zhang, Guangmu | Add best pay channel |
| 2.2.0 | 2016.6.12 | Zhang, Guangmu | Add WeChat official account pay |
| 2.2.1 | 2016.7.01 | Zhang, Guangmu | Support alipay mobile web pay and union pay |
| 2.2.2 | 2016.9.5 | Zhang, GuangmuZhu,haodan | Add sequence diagram for online pay |
| 2.2.3 | 2016.9.13 | Wang, Yongchao | Add information for asynchronous notification interface |
| 2.2.4 | 2016.9.19 | Wang, Yongchao | Format optimization |
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2. Optimize part of Interface explanation and format
3. Remove the column of "Can be empty?" in returning parameter for interface
4. unify field type of CHANNEL\_TYPE and STATE to be Integer
 |
| 2.2.9 | 2017.05.15 | Wang, Yongchao | 1、Add "Ali pre-payment order-create" interface |
| 2.3.0 | 2017.06.20 | Wang, Yongchao | 1. Add "Query Refund" interface
 |
| 2.3.1 | 2017.07.31 | Wang, Yongchao | 1. Add h5 mobile interface
 |
| 2.3.1 | 2017.08.04 | Wang, Yongchao | 1. Add request parameter SPBILL\_CREATE\_IP for Mobile WAP Payment Interface
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## Overview

* Implementation is based on http/https
* Character set: UTF-8
* Short connection
* Message Format: JSON
* Signature Calculation
* Sign = MD5 (timestamp + Merchant Key + bodyContent) : timestamp
* When calculating the signature, please exclude the space and link breaks inside the bodyContent
* The Merchant Keys are allocated by SOUSHOU centrally

Reminder： The message that is sent must be the original, please do not send the message which excludes the space and link breaks for signature calculation to the interface servers.

* Message Encryption (encryption is not mandatory, and for http protocol communications, encryption is recommended)

Message encryption is supported.

According to the ‘encrypt’ parameter to determine, if it is empty, then encryption is not necessary. Currently, 3DES encryption is supported. And the encryption will be processed on the original message, and BASE64 should be leveraged to encode.

* Protocol Entrance:
	+ ProductionEnvironment https:

[https://www.sssyin.cn:7000/openGateway/openService/](https://sssyin.cn:7000/openGateway/openService/)

* + ProductionEnvironment http:

[http://www.sssyin.cn:9000/openGateway/openService/](http://sssyin.cn:9000/openGateway/openService/)

* + Test Environment:

<http://uat.sssyin.cn:9000/openGateway/openService/>

## Customer’s QR code is scanned by merchant to pay

1. Demo

1. Introduction of the Interface
* Entrance:

/preOrder?sign={sign}&\_type=json&encrypt=3DES&busiCode={busiCode }

* Invocation Mode: POST
* Format for requesting message：json
* Format for returning message: according ‘\_type’ parameter to determine: if it is not specified, then default format is xml, and if it is set as “json”, then the returning message will be in json format.
* Timeout duration is 80s: if the payment is not done within 80s, the trade order will be automatically revoked.

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| Table 2.2 equesting parameter for scanned interface |
| Parameters | Parameter Name | Type | Parameter Description | Can be empty? | Sample |
| sign | Result for signature | String | Sign=MD5(timestamp + Merchant Key +bodyContent):timestampWhen calculating the signature, please exclude the space and link breaks inside the bodyContentThe Merchant Keys are allocated by SOUSHOU centrally | No | 04391a005ac27298bbe09a0d83f0769a:1473431447 |
| \_type | Format for the returning message | String | Requirement for the format of the returning message:Json or xml，xml is the default format when this parameter is not set. | Yes | json |
| encrypt | Encryption algorithm | String | Currently can support DES encryption for the message content.The sequence of signing and encrypting algorithm is: signing first then encryption. Encrypted messages must be encoded by BASE64. | Yes | 3DES |
| busiCode | Merchant code | String | Merchant code | No | 01000001 |

1. Parameter List for requesting message

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| Table 2.3 Requesting parameter for scanned interface |
| Parameters | Parameter Name | Type | Parameter Description | Can be empty? | Sample |
| BUSI\_ID | Merchant ID | String | Merchant ID is assigned centrally by SOUSHOU | No | 0010000001 |
| OPER\_ID | Operator ID | String | Operator ID | No | oper01 |
| DEV\_ID | Device number | String | Device number | No | dev01 |
| MERCHANTPARA | User parameter | String | The user parameter is encoded using base64, and the interface will return it without any modification. | Yes | 01000001 |
| REGISTER\_ID | Store code | String | Store code | Yes | 02016 |
| AMT | The transaction amount | String | Unit is Yuan | No | 158.00 |
| CHANNEL\_TYPE | Payment Channel | Integer | Please refer to appendix 2 for detailed info. | No | 1 |
| DYNAMIC\_ID\_TYPE | Type of dynamic code for payment | Integer | 1 Barcode 2 Sonic 3 NFC | No | 1 |
| DYNAMIC\_ID | User code of whom made the payment | String | Customer’s Alipay or WeChat wallet dynamic code (obtained by merchant scanning customer’s QR/barcode code) | No | 284214903060794755 |
| CHARGE\_CODE | Trading up serial number | String | Merchants traded up serial number (need to be unique) | No | 20150324001069125999 |
| PAY\_SUBJECT | Payment description | String | Payment description | No | QR Code to pay |
| GOODS\_DETAIL | Product information description | List | The description for the product which can contain multiple items.For node information, please refer to the appendix 1 for detailed info. | Yes | Please refer to 2.4 for sample |

1. Sample requesting message

JSON format:

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| { "AMT": "0.01",  "BUSI\_ID": "0010000001",  "CHANNEL\_TYPE": "0",  "DYNAMIC\_ID\_TYPE": "1",  "DYNAMIC\_ID": "130730865806264036",  "PAY\_SUBJECT": "SOUSHOU product 2",  "OPER\_ID": "test1",  "CHARGE\_CODE": "1FD7DA99-997C-4C27-99F9-40C1EC170D5C",  "REGISTER\_ID": "02016",  "DEV\_ID": "Cash register 1",  "GOODS\_DETAIL": [ { "GOOD\_SUBJECT": "Product description",  "GOOD\_PRICE": "2.00",  "GOOD\_ID": "Product ID",  "GOOD\_SHOWURL": "WWW.\*\*\*\*.COM",  "GOOD\_NAME": "Product name",  "GOOD\_QUANTITY": "5",  "GOOD\_CLASS": "Product type" },  { "GOOD\_SUBJECT": "Product description",  "GOOD\_PRICE": "2.00",  "GOOD\_ID": "Product ID",  "GOOD\_SHOWURL": "WWW.\*\*\*\*.COM",  "GOOD\_NAME": "Product name",  "GOOD\_QUANTITY": "5",  "GOOD\_CLASS": "Product type" } ]} |

1. Parameters for returning message

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| Table 2.5 Returning parameter for scanned interface |
| Parameters | Parameter Name | Type | Parameter Description | Sample |
| RESULT | Response code | Object | Response code of the interface. The sub-node of the node including:* CODE：Returned code. Please refer to appendix 5 for detailed info.
* INFO：Return information.
 | Please refer to “2.6 Returning sample “for detailed info. |
| CHANNEL\_TYPE | Payment channel | Integer | Please refer to appendix 2 for detailed info. | 1 |
| CHARGE\_CODE | Trading up serial number | String | Merchant trading up serial number | 20150324001069125999 |
| CHARGE\_DOWN\_CODE | Trading down serial number | String | Trading down serial number from SOUSHOU | 1435736619488 |
| CHARGE\_THIRD\_CODE | Serial number of pay channel | String | serial number of pay channel(alipay, wechat pay...) | 2088110245121545154 |
| MERCHANTPARA | User Parameter | String | The user parameter is encoded using base64, and the interface will return it without any modification. | 01000001 |
| FUND\_BILL\_LIST | Payment channel information | List | The payment channel information for this transaction and it can contain the information of the sub nodes for multiple channels, i.e. TRADEFUNDBILL, the parameters included by the node are: * AMOUNT：The trading amount which is paid via the specified payment channel, the unit is Yuan.
* FUND\_CHANNEL：Payment channel, please refer to appendix 3 for detailed info.
 | Please refer to “2.6 Sample for returning message“ |
| OPER\_ID | Operator ID | String | Operator ID | oper01 |
| DEV\_ID | Device number | String | Device number | dev01 |
| BEGIN\_TIME | The transaction date | Date | The transaction date | 2015-10-14 04:43:14 |
| AMT | The transaction amount | String | Unit is cent | 15800 |

1. Sample returning message

Json format

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| --- |
| {"ORDER\_RESP": { "RESULT": { "CODE": "SUCCESS", "INFO": "Requesting payment is successful!" }, "CHANNEL\_TYPE": 2, "CHARGE\_CODE": "E4E0D212-789B-4914-A4EB-19550F751066", "CHARGE\_DOWN\_CODE": "20151014100000000953", "CHARGE\_THIRD\_CODE": "2088110245121545154", "FUND\_BILL\_LIST": { "TRADEFUNDBILL": [ { "AMOUNT": "0.01", "FUND\_CHANNEL": "11" } ] }, "OPER\_ID": "TEST1", "BEGIN\_TIME": "2015-10-14 04:43:14", "AMT": 1, "DEV\_ID": "dev 1" }} |

## Customer scans merchant's QR code to pay

3.1 Demo

a) Offline pay



b) online pay

Payment process description:

1, The merchant generate payment message and send payment request to payment gateway(kuaishou).

2, The payment gateway(kuaishou) generate payment link to payment channel(alipay WeChat payment).

3, The user receives the payment link by the merchant to pay the page, through the input user account information to complete the payment.

 4, The payment channel inform the results of the payment to the user and payment gateway (kuaihou).The payment gateway (kuaihou)inform the results of the payment to merchant to complete the payment.

c) POS

3.2 Interface Introduction

* Entrance：

/order?sign={sign}&\_type=json&encrypt=3DES&busiCode={busiCode }

* Invocation Mode: POST
* Format for requesting message：json
* Format for returning message: according ‘\_type’ parameter to determine: if it is not specified, then default format is xml, and if it is set as “json”, then the returning message will be in json format.

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| Table 3.2 uesting parameter for scanning interface |
| Parameters | Parameter Name | Type | Parameter Description | Can be empty? | Sample |
| sign | Result for signature | String | Sign=MD5(timestamp + Merchant Key +bodyContent):timestampWhen calculating the signature, please exclude the space and link breaks inside the bodyContentThe Merchant Keys are allocated by SOUSHOU centrally | No | 04391a005ac27298bbe09a0d83f0769a:1473431447 |
| \_type | Format for the returning message | String | Requirement for the format of the returning message:Json or xml，xml is the default format when this parameter is not set. | Yes | json |
| encrypt | Encryption algorithm | String | Currently can support DES encryption for the message content.The sequence of signing and encrypting algorithm is: signing first then encryption. Encrypted messages must be encoded by BASE64. | Yes | 3DES |
| busiCode | Merchant code | String | Merchant code | No | 01000001 |

3.3 Parameter List for requesting message

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| Table 3.3 Requesting parameter for scanning interface |
| Parameter | Parameter name | Type | Parameter Description | Can be empty? | Sample |
| BUSI\_ID | Merchant ID | String | Merchant ID is allocated centrally by SOUSHOU | No | 0010000001 |
| OPER\_ID | Operator ID | String | Operator ID | No | Operator01 |
| DEV\_ID | Device number | String | Device number | No | Cash Register 01 |
| MERCHANTPARA | User parameter | String | The user parameter is encoded using base64, and the interface will return it without any modification. | Yes | 01000001 |
| REGISTER\_ID | Store code | String | Store code | Yes | 02016 |
| AMT | The transaction amount | String | Unit is Yuan | No | 158.00 |
| CHANNEL\_TYPE | Payment Channel | Integer | Please refer to appendix 2 for detailed info. | No | 1 |
| CHARGE\_CODE | Trading up serial number | String | Merchants traded up serial number (need to be unique) | No | 20150324001069125999 |
| NODIFY\_URL | Asynchronous notification address | String | The address that SOUSHOU can notify the merchant after a successful payment. 1，\_type: Requirement for the format of the returning message:Json or xml，xml is the default format when this parameter is not set.2，encrypt: Currently supports the 3DES encryption to the content of the message. When the parameter is empty, will not do any encryption. | Yes | http://221.12.11.172:8081/sosopayweb/sosopaytest? \_type=json&encrypt=3DES |
| PAY\_SUBJECT | Payment description | String | Payment description | No | QR Code to pay |
| GOODS\_DETAIL | Product information description | List | The description for the product is in XML format which can contain multiple items.For node information, please refer to the appendix 1 for detailed info. | Yes | Please refer to “3.4 Sample for requesting message “fordetailed info. |

3.4 Sample requesting message

JSON format

|  |
| --- |
| { "AMT": "0.1", "BUSI\_ID": "0010000001", "CHANNEL\_TYPE": "2", "DEV\_ID": " dev1", "PAY\_SUBJECT": "SOUSHOU product 1", "REGISTER\_ID": "02016", "NODIFY\_URL": "HTTP://221.12.11.172:8081/SOSOPAYWEB/SOSOPAYTEST", "OPER\_ID": " oper1", "MERCHANTPARA": "111111111111111111111111", "CHARGE\_CODE": "D3820833-F310-4658-BF98-52959454FCA0", "GOODS\_DETAIL": [ { "GOOD\_NAME": "Product name", "GOOD\_CLASS": "Product type", "GOOD\_QUANTITY": "5", "GOOD\_SUBJECT": "Product description", "GOOD\_ID": "Product ID", "GOOD\_PRICE": "2.00", "GOOD\_SHOWURL": "WWW.\*\*\*\*.COM" }, { "GOOD\_NAME": "Product name", "GOOD\_CLASS": "Product type", "GOOD\_QUANTITY": "5", "GOOD\_SUBJECT": "Product description", "GOOD\_ID": "Product ID", "GOOD\_PRICE": "2.00", "GOOD\_SHOWURL": "WWW.\*\*\*\*.COM" } ]} |

3.5 Parameter of returning message

|  |
| --- |
| Table 3.5 Returning parameter for scanning interface |
| Parameter | Parameter name | Type | Parameter Description | Sample |
| RESULT | Response code | Object | The sub-node including:* CODE：Response code, please refer to appendix 5 for detailed info.
* INFO：Return message
 | Please refer to the sample in section 3.6 for detailed info. |
| CHARGE\_DOWN\_CODE | Trading down serial number | String | The transaction serial number returned by SOUSHOU | 1435736619488 |
| CHARGE\_CODE | Tradingserialnumber | String | Merchants traded up serial number (need to be unique) | 20150324001069125999 |
| MERCHANTPARA | User parameters | String | User parameter is encoded by base64 and the interface return the data as returned. | 01000001 |
| BAR\_CODE | Payment links | String | Used to generate the QR code of the payment(alipay, WeChat pay)，or the payment link of other bank payments.  | https://qr.alipay.com/baidecagzveqxn6oe7 |

3.6 Sample returning message

JSON format

|  |
| --- |
| { "ORDER\_RESP": { "RESULT": { "CODE": "SUCCESS", "INFO": "Request was successful!" }, "prepayId": "wx201510141632085a42660ad90294184506", "CHARGE\_CODE": "D3820833-F310-4658-BF98-52959454FCA0", "CHARGE\_DOWN\_CODE": "20151014100000000950", "BAR\_CODE": "weixin://wxpay/bizpayurl?pr=59tFp8e" }} |
|  |

## WeChat official account pay

*Explanation: actually the interface WeChat official account pay invocated is scanning interface adress,* *parameters is based on scanning interface then add some parameters. See the red section below!*

4.1 Interface Introduction

* Entrance：

/order?sign={sign}&\_type=json&encrypt=3DES&busiCode={busiCode }

* Invocation Mode: POST
* Format for requesting message：json
* Format for returning message: according ‘\_type’ parameter to determine: if it is not specified, then default format is xml, and if it is set as “json”, then the returning message will be in json format.

|  |
| --- |
| Table 4.1 Requesting parameter for interface |
| Parameters | Parameter Name | Type | Parameter Description | Can be empty? | Sample |
| sign | Result for signature | String | Sign=MD5(timestamp + Merchant Key +bodyContent):timestampWhen calculating the signature, please exclude the space and link breaks inside the bodyContentThe Merchant Keys are allocated by SOUSHOU centrally | No | 04391a005ac27298bbe09a0d83f0769a:1473431447 |
| \_type | Format for the returning message | String | Requirement for the format of the returning message:Json or xml，xml is the default format when this parameter is not set. | Yes | json |
| encrypt | Encryption algorithm | String | Currently can support DES encryption for the message content.The sequence of signing and encrypting algorithm is: signing first then encryption. Encrypted messages must be encoded by BASE64. | Yes | 3DES |
| busiCode | Merchant code | String | Merchant code | No | 01000001 |

4.2 Parameter List for requesting message

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| --- |
| Table 4.2 Requesting parameter for interface |
| Parameter | Parameter name | Type | Parameter Description | Can be empty? | Sample |
| BUSI\_ID | Merchant ID | String | Merchant ID is allocated centrally by SOUSHOU | No | 0010000001 |
| OPER\_ID | Operator ID | String | Operator ID | No | Operator01 |
| DEV\_ID | Device number | String | Device number | No | Cash Register 01 |
| MERCHANTPARA | User parameter | String | The user parameter is encoded using base64, and the interface will return it without any modification. | Yes | 01000001 |
| REGISTER\_ID | Store code | String | Store code | Yes | 02016 |
| AMT | The transaction amount | String | Unit is Yuan | No | 158.00 |
| CHANNEL\_TYPE | Payment Channel | Integer | Please refer to appendix 2 for detailed info. | No | 1 |
| TRADE\_TYPE | Pay type | String | values：JSAPI，NATIVE，APPDefault is NATIVE  | Yes | JSAPI |
| subAppid | The appid of Sub merchant | String | The appid of Sub merchant distributed by WeChat,this param is required when you need obtain sub\_openid after payment completion | Yes | wx8888888888888888 |
| subOpenid | Sub openid under subappid | String | If trade\_type==JSAPI，this parameter can’t be empty,it is uniquely identify under the sub-merchant appid for user | Yes |  |
| CHARGE\_CODE | Tradingserialnumber | String | Merchants traded up serial number (need to be unique) | No | 20150324001069125999 |
| NODIFY\_URL | Asynchronous notification address | String | The address that SOUSHOU can notify the merchant after a successful payment. 1，\_type: Requirement for the format of the returning message:Json or xml，xml is the default format when this parameter is not set.2，encrypt: Currently supports the 3DES encryption to the content of the message. When the parameter is empty, will not do any encryption. | Yes | http://221.12.11.172:8081/sosopayweb/sosopaytest? \_type=json&encrypt=3DES |
| PAY\_SUBJECT | Payment description | String | Payment description | No | QR Code to pay |
| GOODS\_DETAIL | Product information description | List | The description for the product which can contain multiple items.For node information, please refer to the appendix 1 for detailed info. | Yes | Please refer to “4.3 Sample for requesting message “fordetailed info. |

4.3 Sample requesting message

JSON format

|  |
| --- |
| { "AMT": "0.1", "BUSI\_ID": "0010000001","CHANNEL\_TYPE": "2","TRADE\_TYPE": "JSAPI","subAppid": "wxb1c959c78e070e58","subOpenid": "oa58kwTYbuSGryFQKk8SOu-VMi-M", "DEV\_ID": " dev1", "PAY\_SUBJECT": "SOSO product1", "REGISTER\_ID": "02016", "NODIFY\_URL": "HTTP://221.12.11.172:8081/SOSOPAYWEB/SOSOPAYTEST", "OPER\_ID": " oper1", "MERCHANTPARA": "111111111111111111111111", "CHARGE\_CODE": "D3820833-F310-4658-BF98-52959454FCA0", "GOODS\_DETAIL": [ { "GOOD\_NAME": "product name", "GOOD\_CLASS": "product type", "GOOD\_QUANTITY": "5", "GOOD\_SUBJECT": "product description", "GOOD\_ID": "productID", "GOOD\_PRICE": "2.00", "GOOD\_SHOWURL": "WWW.\*\*\*\*.COM" }, { "GOOD\_NAME": "product name", "GOOD\_CLASS": "product type", "GOOD\_QUANTITY": "5", "GOOD\_SUBJECT": "product description", "GOOD\_ID": "productID", "GOOD\_PRICE": "2.00", "GOOD\_SHOWURL": "WWW.\*\*\*\*.COM" } ]} |

4.4 Parameter of returning message

|  |
| --- |
| Table 4.4 Returning parameter for interface |
| Parameter | Parameter name | Type | Parameter Description | Sample |
| RESULT | Response code | Object | The sub-node including:* CODE：Response code, please refer to appendix 5 for detailed info.
* INFO：Return message
 | Please refer to the sample in section 4.5 for detailed info. |
| CHARGE\_DOWN\_CODE | Trading down serial number | String | The transaction serial number returned by SOUSHOU | 1435736619488 |
| CHARGE\_CODE | Trading up serial number | String | Merchants traded up serial number (need to be unique) | 20150324001069125999 |
| appId | appId | String | appId |  |
| timeStamp | timeStamp | String | timeStamp |  |
| nonceStr | Random string | String | Random string |  |
| packageData | Order details extension string | String | Order details extension string |  |
| signType | signType | String | signType |  |
| sign | sign | String | sign |  |

4.5 Sample returning message

JSON format

|  |
| --- |
| { "ORDER\_RESP": { "RESULT": { "CODE": "SUCCESS", "INFO": " Request was successful!" }, "CHARGE\_CODE": "D3820833-F310-4658-BF98-52959454FCA0", "CHARGE\_DOWN\_CODE": "20151014100000000950", "appId": "wx77a451e8627239de", "timeStamp": "1465698073386", "nonceStr": "53f02f8bdb8942c382787e7ec0d09ab6", "packageData": "prepay\_id=wx2016061210212283e40a2ca90319983999", "signType": "MD5", "sign": "1C082A5DD99475AEED5938887F8AAC4D" }} |
|  |

4.6 H5 invoke payment API

Invoke WeChat H5 payment api with these six parameters via above interface. WeChat H5 payment api reference below link:

https://pay.weixin.qq.com/wiki/doc/api/jsapi.php?chapter=7\_7&index=6

## Ali pre-payment order-create interface

1. Interface Introduction
* Entrance：

/creatOrder?sign={sign}&\_type=json&encrypt=3DES&busiCode={busiCode }

* Invocation Mode：post
* Format for requesting message：json
* Format for returning message: according ‘\_type’ parameter to determine: if it is not specified, then default format is xml, and if it is set as “json”, then the returning message will be in json format.

|  |
| --- |
| Table 5.1 Requesting parameters for interface |
| Parameter | Parameter name | Type | Parameter description | Sample | Parameter |
| sign | Result for signature | String | Sign=MD5(timestamp+ Merchant Key+bodyContent):timestampWhen calculating the signature, please exclude the space and link breaks inside the bodyContentThe Merchant Keys are allocated by SOUSHOU centrally | No | 04391a005ac27298bbe09a0d83f0769a:1473431447 |
| \_type | Format for the returning message | String | Requirement for the format of the returning message:Json or xml，xml is the default format when this parameter is not set. | Yes | json |
| encrypt | Encryption algorithm | String | Currently can support DES encryption for the message content.The sequence of signing and encrypting algorithm is: signing first then encryption. Encrypted messages must be encoded by BASE64. | Yes | 3DES |
| busiCode | Merchant code | String | Merchant code | No | 01000001 |

1. Parameter List for requesting message

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| --- |
| Table 5.3 Requesting parameter |
| Parameters | Parameter Name | Type | Parameter Description | Can be empty? | Sample |
| BUSI\_ID | Merchant ID | String | Merchant ID is assigned centrally by SOUSHOU | No | 0010000001 |
| OPER\_ID | Operator ID | String | Operator ID | No | oper01 |
| DEV\_ID | Device number | String | Device number | No | dev01 |
| MERCHANTPARA | User parameter | String | The user parameter is encoded using base64, and the interface will return it without any modification. | Yes | 01000001 |
| REGISTER\_ID | Store code | String | Store code | Yes | 02016 |
| AMT | The transaction amount | String | Unit is Yuan | No | 158.00 |
| CHANNEL\_TYPE | Payment Channel | Integer | Please refer to appendix 2 for detailed info. | No | 1 |
| TIME\_EXPIRE | Expired time | Integer | Unit is second，value must be equal to or bigger than 120 | Yes | 120 |
| buyerLogonId | Alipay account for buyer | String | The buyer's Alipay Account. Can't be both empty value between buyerLogonId and buyerId. |  | 123\*\*\*@qq.com |
| buyerId | Alipay user ID for buyer | String | Alipay ID for buyer（a long string that starts with "2088", 16 digits）, Can't be both empty value between buyerLogonId and buyerId.  |  | 2088\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*1 |
| CHARGE\_CODE | Trading up serial number | String | Merchants traded up serial number (need to be unique) | No | 20150324001069125999 |
| NODIFY\_URL | Asynchronous notification address | String | The address that SOUSHOU can notify the merchant after a successful payment. 1，\_type: Requirement for the format of the returning message:Json or xml，xml is the default format when this parameter is not set.2，encrypt: Currently supports the 3DES encryption to the content of the message. When the parameter is empty, will not do any encryption. | Yes | http://221.12.11.172:8081/sosopayweb/sosopaytest? \_type=json&encrypt=3DES |
| PAY\_SUBJECT | Payment description | String | Payment description | No | QR Code to pay |
| GOODS\_DETAIL | Product information description | List | The description for the product which can contain multiple items.For node information, please refer to the appendix 1 for detailed info. | Yes | Please refer to “4.3 Sample for requesting message “for detailed info. |

5.3 Sample requesting message

JSON format

|  |
| --- |
| { "AMT": "0.1", "BUSI\_ID": "0010000001","CHANNEL\_TYPE": "2","buyerLogonId":"123\*\*\*\*\*\*\*\*@qq.com","buyerId":"2088\*\*\*\*\*\*\*\*\*\*\*\*\*1", "DEV\_ID": " dev1", "PAY\_SUBJECT": "SOSO product", "REGISTER\_ID": "02016", "OPER\_ID": " oper1", "MERCHANTPARA": "111111111111111111111111","CHARGE\_CODE": "D3820833-F310-4658-BF98-52959454FCA0","NODIFY\_URL": "HTTP://221.12.11.172:8081/SOSOPAYWEB/SOSOPAYTEST", "GOODS\_DETAIL": [ { "GOOD\_NAME": "商品名称", "GOOD\_CLASS": "商品类型", "GOOD\_QUANTITY": "5", "GOOD\_SUBJECT": "商品描述", "GOOD\_ID": "商品ID", "GOOD\_PRICE": "2.00", "GOOD\_SHOWURL": "WWW.\*\*\*\*.COM" }, { "GOOD\_NAME": "商品名称", "GOOD\_CLASS": "商品类型", "GOOD\_QUANTITY": "5", "GOOD\_SUBJECT": "商品描述", "GOOD\_ID": "商品ID", "GOOD\_PRICE": "2.00", "GOOD\_SHOWURL": "WWW.\*\*\*\*.COM" } ]} |
|  |

1. Parameter of returning message

|  |
| --- |
| Table 5.4 Returning parameter for interface |
| Parameter | Parameter name | Type | Parameter Description | Sample |
| RESULT | Response code | Object | The sub-node including:* CODE：Response code, please refer to appendix 5 for detailed info.
* INFO：Return message
 | Please refer to the sample in section 4.5 for detailed info. |
| CHARGE\_DOWN\_CODE | Trading down serial number | String | The transaction serial number returned by SOUSHOU | 1435736619488 |
| CHARGE\_CODE | Trading up serial number | String | Merchants traded up serial number (need to be unique) | 20150324001069125999 |
| CHARGE\_THIRD\_CODE | Serial number of Alipay | String | Serial number of Alipa, Notify a trade by Alipay order NO When launch transaction. | 2015042321001004720200028594 |

1. Sample asynchronous message

JSON format

|  |
| --- |
| { "ORDER\_RESP": { "BEGIN\_TIME": "", "END\_TIME": "", "RESULT": { "CODE": "SUCCESS", "INFO": "请求成功!" }, "CHARGE\_CODE": "c5a8e893-593a-4f0e-bb8d-2d912d6dad59", "CHARGE\_DOWN\_CODE": "20170515100000234527", "CHARGE\_THIRD\_CODE": "2017051521001004510220799315" }} |
|  |

1. H5 call the Pay API

Online document for calling a payment trade by CreateOrder+JSAPI：

<https://doc.open.alipay.com/docs/doc.htm?&docType=1&articleId=105591>

## Mobile WAP Payment interface

1. Interface Introduction
* Entrance：

/wapOrder?sign={sign}&\_type=json&encrypt=3DES&busiCode={busiCode }

* Invocation Mode：post
* Format for requesting message：json
* Format for returning message: according ‘\_type’ parameter to determine: if it is not specified, then default format is xml, and if it is set as “json”, then the returning message will be in json format.

|  |
| --- |
| Table 6.1 Requesting parameters for interface |
| Parameters | Parameter Name | Type | Parameter Description | Can be empty? | Sample |
| sign | Result for signature | String | Sign=MD5(timestamp + Merchant Key +bodyContent):timestampWhen calculating the signature, please exclude the space and link breaks inside the bodyContentThe Merchant Keys are allocated by SOUSHOU centrally | No | 04391a005ac27298bbe09a0d83f0769a:1473431447 |
| \_type | Format for the returning message | String | Requirement for the format of the returning message:Json or xml，xml is the default format when this parameter is not set. | Yes | json |
| encrypt | Encryption algorithm | String | Currently can support DES encryption for the message content.The sequence of signing and encrypting algorithm is: signing first then encryption. Encrypted messages must be encoded by BASE64. | Yes | 3DES |
| busiCode | Merchant code | String | Merchant code | No | 01000001 |

1. Parameters of requesting message

|  |
| --- |
| Table 6.2 Requesting parameter for interface |
| Parameter | Parameter name | Type | Parameter Description | Can be empty? | Sample |
| BUSI\_ID | Merchant ID | String | Merchant ID is allocated centrally by SOUSHOU | No | 0010000001 |
| OPER\_ID | Operator ID | String | Operator ID | No | Operator01 |
| DEV\_ID | Device number | String | Device number | No | Cash Register 01 |
| MERCHANTPARA | User parameter | String | The user parameter is encoded using base64, and the interface will return it without any modification. | Yes | 01000001 |
| REGISTER\_ID | Store code | String | Store code | Yes | 02016 |
| AMT | The transaction amount | String | Unit is Yuan | No | 158.00 |
| CHANNEL\_TYPE | Payment Channel | Integer | Please refer to appendix 2 for detailed info. | No | 1 |
| TIME\_EXPIRE | Expired time | Integer | Unit is second，value must be equal to or bigger than 300 | Yes | 300 |
| CHARGE\_CODE | Tradingserialnumber | String | Merchants traded up serial number (need to be unique) | No | 20150324001069125999 |
| SCENE\_INFO | Trading scene | String | This field is used to upload the scene information of Payment. There are altogether 3 scenes for H5 Payment. Please use corresponding scene. H5 Payment is not suggested to be used on App. It's better to use app payment For scene 1 and scene 2.1，IOS APP{"h5\_info":  // fixed key name    {"type": "",  //scene type     "app\_name": "",  //     "bundle\_id": ""  //bundle\_id     }}2，Android App{"h5\_info": //fixed key name     {"type": "",  //scene type     "app\_name": "",  //application name      "package\_name": ""  //package name     }}3，WAP{"h5\_info": //fixed key name    {"type": "",  //scene type    "wap\_url": "",//WAP URL    "wap\_name": ""  //WAP name    }} | No | //IOS App {"h5\_info": {"type":"IOS","app\_name": "King of God","bundle\_id": "com.tencent.wzryIOS"}}//Android App{"h5\_info": {"type":"Android","app\_name": "King of God","package\_name": "com.tencent.tmgp.sgame"}}//WAP {"h5\_info": {"type":"Wap","wap\_url": "https://pay.qq.com","wap\_name": "Tecent Top up"}} |
| NODIFY\_URL | Asynchronous notification address | String | The address that SOUSHOU can notify the merchant after a successful payment. 1，\_type: Requirement for the format of the returning message:Json or xml，xml is the default format when this parameter is not set.2，encrypt: Currently supports the 3DES encryption to the content of the message. When the parameter is empty, will not do any encryption. | Yes | http://221.12.11.172:8081/sosopayweb/sosopaytest? \_type=json&encrypt=3DES |
| RETURN\_URL | Jump URL after pay success  | String | After App pay success, you will get an URL which can jump to a WAP page.(Please note: RETURN\_URL domain must be same with WeiXin authorized domain) | Yes | http://www.sssyin.cn |
| SPBILL\_CREATE\_IP | client WeChat IP | String  | Need to set the user mobile phone side IP | No | 192.168.1.100 |
| PAY\_SUBJECT | Payment description | String | Payment description | No | QR Code to pay |
| GOODS\_DETAIL | Product information description | List | The description for the product which can contain multiple items.For node information, please refer to the appendix 1 for detailed info. | Yes | Please refer to “4.3 Sample for requesting message “for detailed info. |

1. Sample requesting message

JSON format

|  |
| --- |
| { "AMT": "0.1", "BUSI\_ID": "0010000001","CHANNEL\_TYPE": "2", "DEV\_ID": " dev1", "PAY\_SUBJECT": "嗖嗖产品1", "REGISTER\_ID": "02016", "OPER\_ID": " oper1", "MERCHANTPARA": "111111111111111111111111","CHARGE\_CODE": "D3820833-F310-4658-BF98-52959454FCA0","NODIFY\_URL": "http://221.12.11.172:8081/SOSOPAYWEB/SOSOPAYTEST","RETURN\_URL": "http://221.12.11.172:8081/SOSOPAYWEB/SOSOPAYTEST","SCENE\_INFO":"{"h5\_info": {"type":"Wap","wap\_url": "https://pay.qq.com","wap\_name": "腾讯充值"}}", "GOODS\_DETAIL": [ { "GOOD\_NAME": "商品名称", "GOOD\_CLASS": "商品类型", "GOOD\_QUANTITY": "5", "GOOD\_SUBJECT": "商品描述", "GOOD\_ID": "商品ID", "GOOD\_PRICE": "2.00", "GOOD\_SHOWURL": "WWW.\*\*\*\*.COM" }, { "GOOD\_NAME": "商品名称", "GOOD\_CLASS": "商品类型", "GOOD\_QUANTITY": "5", "GOOD\_SUBJECT": "商品描述", "GOOD\_ID": "商品ID", "GOOD\_PRICE": "2.00", "GOOD\_SHOWURL": "WWW.\*\*\*\*.COM" } ]} |
|  |

1. Parameters of the returning message

|  |
| --- |
| Table 6.4 Returning parameters for interface |
| Parameter | Parameter name | Type | Parameter description | Sample |
| RESULT | Response code | String | The sub-node including: * CODE：Returning code, please refer to appendix 5 for detailed info.
* INFO：Return information
 | Please refer to section 6.5 for detailed sample. |
| CHARGE\_DOWN\_CODE | Trading down serial number | String | Trading down serial number from SOUSHOU | 1435736619488 |
| CHARGE\_CODE | Trading up serial number | String | Merchant trading up serial number | 20150324001069125999 |
| MERCHANTPARA | User Parameter | String | The user parameter is encoded using base64, and the interface will return it without any modification. | 01000001 |
| BAR\_CODE | Payment links | String | Used to generate the QR code of the payment (alipay, WeChat pay)，or the payment link of other bank payments.  | https://qr.alipay.com/baidecagzveqxn6oe7 |

1. Sample returning message

JSON format

|  |
| --- |
| { "ORDER\_RESP": { "RESULT": { "CODE": "SUCCESS", "INFO": "请求成功!" }, "CHARGE\_CODE": "D3820833-F310-4658-BF98-52959454FCA0", "CHARGE\_DOWN\_CODE": "20151014100000000950", "BAR\_CODE": "weixin://wxpay/bizpayurl?pr=59tFp8e" }} |
|  |

1. H5 calls App to Pay

While got the Payment link, the WAP page will open the it (BAR\_CODE) and call the App in mobile to process the payment flow.

## Asynchronous notification

7.1 Interface Introduction

* The asynchronous interface is applicable for returning payment result when customer scanning merchant’s QR code/bar code for payment.
* URL: Merchant’s address for receiving the asynchronous notification? \_type=json&encrypt=3DES&sign={sign}
* Invocation Mode：POST
* The asynchronous notification will stop when the response code of the http request is 200, otherwise will keep querying the notification interface for 30 times per 5 seconds.
* Format for notification message：according ‘\_type’ parameter to determine: if it is not specified, then default format is xml, and if it is set as “json”, then the returning message will be in json format.
* Whether to encrypt the returning message： according ‘encrypt’ to determine, if it is empty, then no encryption is applied. Currently, 3DES encryption is supported.

7.2 Parameters for notification

|  |
| --- |
| Table 7.2 Parameters for asynchronous interface |
| Parameter | Parameter name | Type | Parameter description | Can be empty? | Sample |
| BUSI\_ID | Merchant ID | String | Merchant ID is assigned by SOUSHOU | No | 0010000001 |
| OPER\_ID | Operator ID | String | Operator ID | No | Cash register 01 |
| DEV\_ID | Device number | String | Device number | No | Cash register 01 |
| AMT | Trading amount | String | Unit is Cent | No | 15800 |
| CHANNEL\_TYPE | Payment channel | Integer | Please refer to appendix 2 for detailed info. | No | 1 |
| CHARGE\_CODE | Trading serial number | String | Merchants trading up serial number (need to be unique) | No | 20150324001069125999 |
| CHARGE\_DOWN\_CODE | Trading down serial number | String | Trading down serial number returned by SOUSHOU | No | 1435736619488 |
| CHARGE\_THIRD\_CODE | Serial number of pay channel | String | serial number of pay channel(alipay, wechat pay...) | No | 2088110245121545154 |
| PAY\_SUBJECT | Description for payment information | String | Description for payment information | No | QR code products |
| GOODS\_DETAIL | Product details | List | The product information which can contain multiple products.For node information, please refer to appendix 1 for detailed info. | Yes | Please refer to 5.3 for sample. |
| STATE | Order status | Integer | Please refer to appendix 4 for detailed info. | No | 1 |
| MERCHANTPARA | User parameter | String | The user parameter is encoded using base64, and the interface will return it without any modification. | Yes | 01000001 |
| FUND\_BILL\_LIST | Information for Payment channel | List | The payment channel information for this transaction, and it can contain the information of the sub-node (<TRADEFUNDBILL>) for multiple channels, the parameters included by the node are: * AMOUNT：The trading amount which is paid via the specified payment channel, and the unit is Yuan.
* FUND\_CHANNEL：Payment channel, please refer to appendix 3 for detailed info.
 | No | Please refer to 5.3 for sample |

7.3 Sample asynchronous message

JSON format

|  |
| --- |
| { "PAY\_NODIFY": { "BUSI\_ID": "0010000001", "CHARGE\_CODE": "1C88FADB-75D2-4517-9C38-F273D423FFF3", "CHARGE\_DOWN\_CODE": "20151123100000095182", "CHANNEL\_TYPE": 1, "STATE": 1, "AMT": 1, "OPER\_ID": "TEST1", "PAY\_SUBJECT": "SOSO product 1", "FUND\_BILL\_LIST": { "TRADEFUNDBILL": [ { "FUND\_CHANNEL": "10", "AMOUNT": "0.01" } ] }, "DEV\_ID": "QQQQ", "MERCHANTPARA": "111111111111111111111111" }} |

7.4 Notification introduction

Notification will stop once receiving response code 200 of the http request .If the merchant do not receive the result of payment, the merchant need request the query interface to get the result of the payment.

## Refund Interface

* 1. Interface Introduction
		+ Entrance：

/refund?sign={sign}&\_type=json&encrypt=3DES&busiCode={busiCode }

* + - Invocation Mode：POST
		- Format for requesting message：json
		- Format for returning message: according ‘\_type’ parameter to determine: if it is not specified, then default format is xml, and if it is set as “json”, then the returning message will be in json format.
	1. Parameters of requesting message

|  |
| --- |
| Table 8.2 Requesting parameters for refund interface |
| Parameter | Parameter name | Type | Parameter description | Can be empty? | Sample |
| BUSI\_ID | Merchant ID | String | Merchant ID is assigned by SOUSHOU | No | 0010000001 |
| OPER\_ID | Operator ID | String | Operator ID | No | oper01 |
| DEV\_ID | Device number | String | Device number | No | dev01 |
| CHARGE\_REFUND\_FEE | Amount of the refund | String | The refund amount cannot be greater than the principal amount. The unit is Yuan. | No | 158.00 |
| REFUND\_SUBJECT | Description for refund | String | Description for refund | No | Merchant refunds |
| CHARGE\_CODE | Trading up serial number | String | Trading up serial number (need to be unique) | No | 20150324001069125999 |
| CHARGE\_DOWN\_CODE | Trading down serial number | String | The trading down serial number retuned by SOUSHOU (either trading up or trading down serial number will be leveraged. And the trading down serial number will take priority when both numbers are available.) | Yes | 1435736619488 |
| OUT\_REFUND\_NO | Serial number for refunding | String | Merchant refund serial number (need to be unique) | Yes | 20150324001069125999 |

* 1. Sample requesting message

JSON format

|  |
| --- |
| { "BUSI\_ID": "0010000001", "CHARGE\_CODE": "B67B2AEF-058B-45D1-9397-85DD9B1BD84E", "DEV\_ID": "dev01", "CHARGE\_REFUND\_FEE": "0.01", "REFUND\_SUBJECT": "Refund", "OUT\_REFUND\_NO": "BBB10898-4D12-4109-8AFD-D0EB1C37C998", "OPER\_ID": "oper01"} |

* 1. Parameters of the returning message

|  |
| --- |
| Table 8.4 Returning parameters for refund interface |
| Parameter | Parameter name | Type | Parameter description | Sample |
| RESULT | Response code | String | The sub-node including: * CODE：Returning code, please refer to appendix 5 for detailed info.
* INFO：Return information
 | Please refer to section 6.5 for detailed sample. |
| FUND\_BILL\_LIST | Refund channel | List | The refund channel information of the transaction, which can contain the information of the sub nodes for multiple channels, i.e. TRADEFUNDBILL, the node contains below parameters:* AMOUNT： The trading amount which is paid via the specified payment channel, and the unit is Yuan.
* FUND\_CHANNEL：

Payment channel, please refer to appendix 3 for detailed info. | Please refer to section 6.5 for detailed sample. |
| CHANNEL\_TYPE | channelType | Integer | please refer to appendix 2 for detailed info. | 1 |

* 1. Sample returning message

JSON format

|  |
| --- |
| { "REFUND\_RESP": { "RESULT": { "INFO": "Revocation is successful!", "CODE": "SUCCESS" }, "FUND\_BILL\_LIST": { "TRADEFUNDBILL": [ { "FUND\_CHANNEL": "10", "AMOUNT": "0.01" } ] }, "CHANNEL\_TYPE": 1 }} |

## Query Interface

* 1. Interface Introduction
		+ Entrance：

/query/{CHARGE\_CODE}/{BUSICODE}?\_type=json&encrypt=3DES&serType=1

* + - Invocation Mode：GET
		- Format for returning message: according ‘\_type’ parameter to determine: if it is not specified, then default format is xml, and if it is set as “json”, then the returning message will be in json format.
		- Whether to encrypt the returning message：according ‘encrypt’ to determine, if it is empty, then no encryption is applied. Currently, 3DES encryption is supported.
		- Trading serial number, i.e. CHARGE\_CODE type： when serType=0 or is null, it represents the serial number of the merchant; and when serType=1, then it’s the serial number of SOUSHOU.
	1. Parameter of the returning message

|  |
| --- |
| Table 9.2 The returning parameters for querying interface |
| Parameter | Parameter name | Type | Parameter description | Sample |
| RESULT | Response code | Object | The sub-node including:* CODE：Response code, please refer to appendix 5 for detailed info.
* INFO：Return message
 | Please refer to sample returning message for detailed info. |
| BUSI\_ID | Merchant ID | String | Merchant ID is assigned by SOUSHOU | 0010000001 |
| OPER\_ID | Operator ID | String | Operator ID | oper 01 |
| DEV\_ID | Device number | String | Device number | oper 01 |
| MERCHANTPARA | User parameter | String | User parameter is encoded by base64 and the interface return the data as returned. | 01000001 |
| AMT | Transaction amount | String | Unit is Cent | 15800 |
| CHANNEL\_TYPE | Payment channel | Integer | Please refer to appendix 2 for detailed info. | 1 |
| CHARGE\_CODE | Transaction serial number | String | Merchant trading up serial number  | 20150324001069125999 |
| PAY\_SUBJECT | Payment informationdescription | String | Payment information description | QR code products |
| STATE | Order status | Integer | Please refer to appendix 4 for detailed info. | 1 |
| GOODS\_DETAIL | Product details | List | Product informationfor the transaction. The message can contain multiple products. Please refer to appendix 1 for detailed node information. | Please refer to sample for detailed info. |
| BEGIN\_TIME | The transaction begin date | Date | The transaction begin date | 2015-10-14 04:43:14 |
| END\_TIME | The transaction end date | Date | The transaction end date | 2015-10-14 04:43:14 |
| REGISTER\_ID | Store id | String | Store id | 02016 |
| FUND\_BILL\_LIST | Payment channels information | List | The payment channel information involved in the transaction, it can contain the sub-nodes information for multiple channels <TRADEFUNDBIL>, the parameters included in the node are: * AMOUNT：The payment amount that was paid using the designated payment channel, and the unit is Yuan.
* FUND\_CHANNEL：

Payment channel, please refer to appendix 3 for detailed info. | Please refer to sample for detailed info. |

* 1. Sample returning message

JSON format

|  |
| --- |
| { "QUERY\_RESP": { "RESULT": { "CODE": "SUCCESS",  "INFO": "The query was successful" },  "dynamic\_ID\_TYPE\_STR": "",  "realAMT": 0.01,  "BUSI\_ID": "0010000001",  "CHANNEL\_TYPE": 2,  "CHARGE\_CODE": "1FD7DA99-997C-4C27-99F9-40C1EC170D5C",  "GOODS\_DETAIL": [ { "GOOD\_SHOWURL": "WWW.\*\*\*\*.COM",  "GOOD\_QUANTITY": 5,  "GOOD\_CLASS": "product type",  "GOOD\_ID": "product ID",  "GOOD\_PRICE": 2,  "GOOD\_SUBJECT": "product description",  "GOOD\_NAME": "product name" },  { "GOOD\_SHOWURL": "WWW.\*\*\*\*.COM",  "GOOD\_QUANTITY": 5,  "GOOD\_CLASS": "product type",  "GOOD\_ID": "product ID",  "GOOD\_PRICE": 2,  "GOOD\_SUBJECT": "product description",  "GOOD\_NAME": "product name" } ],  "DYNAMIC\_ID": "130730865806264036",  "END\_TIME": "2015-10-14 04:43:29",  "REGISTER\_ID": "02016",  "CHARGE\_DOWN\_CODE": "20151014100000000952",  "FUND\_BILL\_LIST": { "TRADEFUNDBILL": [ { "AMOUNT": "0.01",  "FUND\_CHANNEL": "11" } ] },  "PAY\_SUBJECT": "SOUSHOU product 2",  "STATE": 1,  "OPER\_ID": "TEST1",  "BEGIN\_TIME": "2015-10-14 04:38:25",  "AMT": 1,  "DEV\_ID": "Cash Register 1" }}  |

## Query Refund Interface

1. Interface Introduction
	* + Entrance：

/refundQuery/{TRADE\_NO}/{BUSICODE}?\_type=json&encrypt=3DES&serType=1

* + - Invocation Mode：GET
		- Format for returning message: according ‘\_type’ parameter to determine: if it is not specified, then default format is xml, and if it is set as “json”, then the returning message will be in json format.
		- Whether to encrypt the returning message：according ‘encrypt’ to determine, if it is empty, then no encryption is applied. Currently, 3DES encryption is supported.
		- Trading serial number, i.e. CHARGE\_CODE type： when serType=0 or is null, it represents the serial number of the merchant; and when serType=1, then it’s the serial number of SOUSHOU.
1. Parameter of the returning message

|  |
| --- |
| Table 10.2 The returning parameters for interface |
| Parameter | Parameter name | Type | Parameter description | Sample |
| RESULT | Response code | Object | The sub-node including:* CODE：Response code, please refer to appendix 5 for detailed info.
* INFO：Return message
 | Please refer to sample returning message for detailed info. |
| BUSI\_ID | Merchant ID | String | Merchant ID is assigned by SOUSHOU | 0010000001 |
| OPER\_ID | Operator ID | String | Operator ID | oper 01 |
| DEV\_ID | Device number | String | Device number | oper 01 |
| AMT | Transaction amount | String | Unit is Cent | 15800 |
| REFUND\_AMT | Refunded amount | String  | Unit is Cent | 15000 |
| CHANNEL\_TYPE | Payment channel | Integer | Please refer to appendix 2 for detailed info. | 1 |
| CHARGE\_CODE | Transaction serial number | String | Merchant trading up serial number  | 20150324001069125999 |
| CHARGE\_DOWN\_CODE | Trading down serial number | String | Trading down serial number from SOUSHOU | 20150324001069125999 |
| STATE | Order status | Integer | Please refer to appendix 4 for detailed info. | 1 |
| BEGIN\_TIME | The transaction begin date | Date | The transaction begin date | 2015-10-14 04:43:14 |
| END\_TIME | The transaction end date | Date | The transaction end date | 2015-10-14 04:43:14 |
| REGISTER\_ID | Store id | String | Store id | 02016 |
| REFUND\_COUNT | Numbers of refund records | String | Numbers of refund records. | 1 |
| REFUND\_TRADE\_LIST | Refund order list | List | It is a list that may contains multiple channels. For parameter introduction of REFUND\_TRADE, please refer to table 10.2. | Please refer to sample for detailed info. |
| Table 10.2 REFUND\_TRADE fields  |
| Parameter | Parameter name | Type | Parameter description | Sample |
| REFUND\_CODE | Refund transaction serial number of Merchant | String | Refund transaction serial number of Merchant | 20150324001069125999 |
| REFUND\_DOWN\_CODE | Refund transaction serial number of KuaiShou | String | Refund transaction serial number of KuaiShou | 20150324001069125999 |
| OPER\_ID | Operator ID | String | Operator ID | oper01 |
| DEV\_ID | Device number | String | Device number | dev01 |
| REFUND\_AMT | Refunded amount | String  | Unit is Cent | 15800 |
| STATE | Order status | Integer | Please refer to appendix 4 for detailed info. | 1 |
| BEGIN\_TIME | The transaction begin date | Date | The transaction begin date | 2015-10-14 04:43:14 |
| END\_TIME | The transaction end date | Date | The transaction end date | 2015-10-14 04:43:14 |
| REFUND\_BILL\_LIST | Refund channels information | List | The payment channel information involved in the transaction, it can contain the sub-nodes information for multiple channels <TRADEFUNDBIL>, the parameters included in the node are: * AMOUNT：The payment amount that was paid using the designated payment channel, and the unit is Yuan.
* FUND\_CHANNEL：

Payment channel, please refer to appendix 3 for detailed info. | Please refer to sample for detailed info. |

1. Sample returning message

JSON format

|  |
| --- |
| { "REFUND\_QUERY\_RESP": { "BEGIN\_TIME": "2017-06-22 17:48:48", "END\_TIME": "2017-06-22 17:50:37", "BUSI\_ID": "0010000001", "CHARGE\_CODE": "7ea6c9d54c0b4bcb90c2a1212798e74d", "CHANNEL\_TYPE": 1, "REFUND\_COUNT": 3, "REFUND\_AMT": 3, "REFUND\_TRADE\_LIST": { "REFUND\_TRADE": [ { "BEGIN\_TIME": "2017-06-22 17:49:54", "END\_TIME": "2017-06-22 17:49:54", "REFUND\_DOWN\_CODE": "20170622100000235525", "REFUND\_BILL\_LIST": { "TRADEFUNDBILL": [ { "FUND\_CHANNEL": "10", "AMOUNT": 0.01 } ] }, "REFUND\_AMT": 1, "STATE": 11, "OPER\_ID": "oper01", "REFUND\_CODE": "20170622100000235525", "DEV\_ID": "dev01" }, { "BEGIN\_TIME": "2017-06-22 17:50:33", "END\_TIME": "2017-06-22 17:50:33", "REFUND\_DOWN\_CODE": "20170622100000235526", "REFUND\_BILL\_LIST": { "TRADEFUNDBILL": [ { "FUND\_CHANNEL": "10", "AMOUNT": 0.01 } ] }, "REFUND\_AMT": 1, "STATE": 11, "OPER\_ID": "oper01", "REFUND\_CODE": "20170622100000235526", "DEV\_ID": "dev01" }, { "BEGIN\_TIME": "2017-06-22 17:50:37", "END\_TIME": "2017-06-22 17:50:37", "REFUND\_DOWN\_CODE": "20170622100000235527", "REFUND\_BILL\_LIST": { "TRADEFUNDBILL": [ { "FUND\_CHANNEL": "10", "AMOUNT": 0.01 } ] }, "REFUND\_AMT": 1, "STATE": 11, "OPER\_ID": "oper01", "REFUND\_CODE": "20170622100000235527", "DEV\_ID": "dev01" } ] }, "STATE": 4, "OPER\_ID": "oper01", "RESULT": { "CODE": "SUCCESS", "INFO": "查询成功" }, "CHARGE\_DOWN\_CODE": "20170622100000235524", "AMT": 5, "DEV\_ID": "dev01" }} |

## Revocation Interface

1. Introduction
	* Entrance：

/cancelTrade/{chargeCode}/{busiCode}?sign={sign}&\_type=json&encrypt=3DES&opType=ACO

* + Invocation Mode：GET
	+ Revocation interface，the signature ‘sign’ is different from other interfaces. sign=MD5(timestamp+ Merchant Key+ incoming parameter):timestamp
	+ Incoming parameter：

 chargeCode={chargeCode}&busiCode={busiCode}

* + Do apply revocation while parameter opType is equals ‘ACO’,and do revocation real-time while parameter opType is null or not equals ‘ACO’
	+ Format for returning message：Please refer to ‘\_type’ to determine the format, default is XML if no ‘\_type’ is set, and if it is set as “json”, then the message format is json.
1. Parameters of the returning message

|  |
| --- |
| Table 11.2 The returning parameter for revoking interface |
| Parameter | Parameter name | Type | Parameter description | Sample |
| RESULT | Response code | Object | The sub-node including:* CODE：Returning code, please refer to appendix 5 for detailed info.
* INFO：Returning message
 | 1 |

1. Sample returning message

JSON format

|  |
| --- |
| { "CANCELTRADE\_RESP": { "RESULT": { "CODE": "SUCCESS", "INFO": "Revocation is successful" } }} |

## Appendix

### Appendix 1 Definition of ProductInformation

|  |
| --- |
| Table 9.1 Product information GOODS\_DETAIL |
| Parameter | Parameter name | Type | Parameter Description | Can be empty? | Sample |
| GOOD\_ID | Product ID | String | Product ID | No | 2010 |
| GOOD\_NAME | Product name | String | Product name | No | IPhone |
| GOOD\_CLASS | Classification of products | String | Device code | No | Mobile phone |
| GOOD\_PRICE | Amount of the product | String | Unit is Yuan | No | 4999.00 |
| GOOD\_SUBJECT | Product description | String | Please refer to appendix 2 for detailed info. | No | Digital products |
| GOOD\_QUANTITY | The number of products | String | Need to be unique | No | 1 |
| GOOD\_SHOWURL | Exhibition address for the product | String | The address of the goods | Yes | www.sssyin.cn |

### Appendix 2 Payment Channel Data Dictionary (CHANNEL\_TYPE)

|  |
| --- |
| Table 9.2 Payment channel CHANNEL\_TYPE |
| Code of payment code | Payment channel |
| 0 | when Customer’s QR code is scanned by merchant to pay,we will automatic determination channels if set 0. |
| 1 | Alipay |
| 2 | WeChat pay |
| 3 | China Merchants Bank |
| 5 | China Construction Bank |
| 9 | Agricultural Bank |

|  |  |
| --- | --- |
| 10 | Shanghai Pudong Development Bank |
| 24 | Baidu wallet |
| 27 | Telecom best payment |
| 31 | QQWallet |
| 32 | Union pay  |
|  34 |  Alipay mobile web pay |

### Appendix 3 Payment Channel Data Dictionary (FUND\_BILL\_LIST)

|  |
| --- |
| Table 9.3 Payment channels FUND\_BILL\_LIST |
| Code of payment channel | Payment channel |
| 00 | Alipay bonus |
| 10 | Alipay balance |
| 60 | Alipay prepaid card |
| 30 | Alipay Ji Fenbao |
| 70 | Payment by Alipay credit |
| 40 | Discount vouchers |
| 80 | Prepaid card |
| 90 | Payment by credit(consumer loan) |
| 11 | Payment by WeChat |
| 12 | Payment by QQ Wallet |
| 13 | Payment by Baidu Wallet |
| 14 | Payment by Best Pay |
| 41 | Payment by WeChat cash coupon |
| 42 | Payment by QQ Wallet cash coupon |
| 43 | Payment by Baidu Wallet cash coupon |
| 44 | Payment by Best Pay cash coupon |
| 100 | Alipay financial accounts |
| 101 | Merchant store card |
| 102 | Merchant coupons |
| 103 | Bank card (via Alipay) |
| 104 | Merchant bonus |
| 9001 | Bank card (via Bank, including debit and credit cards) |
| 9002 | Random discount |
| 9003 | Free |
| 9004 | Apply corresponding discount when transaction amount meet the pre-set discounting amount by the merchant |
| 9005 | The discount of single item. |
| 9006 | Send goods while the order amount reach the specific amount. |

### Appendix 4 Order Status Dictionary

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| --- |
| Table 9.4 The order status |
| Order status | Description |
| 0  | Pending payment |
| 1 | Paid |
| 2 | Revoked |
| 3 | Application for revocation |
| 4 | Partial refund |
| 5 | Refunded |
| 6 | Transaction closed |
| 7 | Reserved state(used in query ,query refund and revocation records at the same time) |
| 8 | Refunding(Platform did not return a result of refund) |
| 9 | Refund failed |

### Appendix 5 Return Code Data Dictionary

|  |
| --- |
| Table 9.5 Return code |
| Return code | Description |
| SUCESS | Success |
| FAIL | Fail |
| ILLEGAL\_PARAMETER | Parameter error |
| INVALID\_SIGN  | Signature error |
| AMT\_ERROR | Amount error |
| DATABASE\_ERROR | Database connection exception |
| INVALID\_CONTRACT | Invalid contract status |
| UNREGISTERED\_BUSI | Unregistered merchant |
| EXCEPTION | Unknown exception |
| CHARGE\_NONEXISTENT | The transaction does not exist |
| SERVICE\_UNAVAILABLE | Service is not available |
| HTTP\_EXCEPTION | HTTP requesting exception |
| IO\_EXCEPTION | IO exception |
| CREATE\_SECURITY\_CONNECTION\_ERROR | Failed to create secure links! |
| AREADY\_REVOKED | The order has been revoked |
| SERIAL\_REPEAT | The serial number is duplicated with the existing record in the system. |