

# ALLINPAYINTL API OATS – CNP Payment (for Merchant)

Allinpay International

## Jargons

| Jargons                          | Explanation  |
|----------------------------------|--|
| CNP Payment                      | CNP (card not present) abbreviation of payment service without bank card. Apply in the scenarios where face to face payment and payment by entity card don't exist.  |
| 3DS Authentication Service       | 3D – Secure (Three-Domain Secure) payment authentication service (hereinafter referred to as 3DS) is designed for credit card individual card owners and cardholders (hereinafter referred to as cardholders) by EMVCo organization, with the aims of improving the security of online credit card payment, thus securing the online payment of customers. |
| DM Risk Decision Management Tool | Decision Manager as risk decision management, is a tool of reducing payment frauds, which fulfils the function by technically collecting data on payment   |

|                              |   |
|------------------------------|---|
|                              | environment, order corresponding and cardholder's address and name etc. to initiate the screening of big data risk control model.   |
| API Integration Mode         | A mode of connecting payment system to apply payment service by means of payment gateway API.   |
| Gateway Forward Mode         | A mode of application in payment service by clicking the button of shopping cart settlement to forward to payment gateway cashier page.   |
| Access Code                  | 8-digits number, is uniformly assigned by Allinpay International.   |
| Merchant ID                  | The unique ID ,is uniformly assigned by Allinpay International.   |
| Merchant Order Number        | The unique ID for identifying products or services orders by merchants  |
| Transaction Voucher Number   | The unique ID for identifying transaction by payment gateway  |
| Token                        | It represent the target of carrying out some operational rights. It mainly refers to the request for submitting the information of cardholder's entity card. The payment token provided after authentication of the token service provider. |
| Token Verification Code TAVV | Token authentication verification value (TAVV) , token verification code, return with token number in   |

|              |   |
|--------------|---|
|              | the format of cipher text every time when applying for deriving token.  |
| Tokenization | The process of providing token by using tokenization technology to replace the sensitive information corresponding to bank cards. It is commonly called card binding or card on file (COF).   |
| XID          | The transaction swift code of 3DS authentication is in the format of character string. It is used to identify the specific transactions in 3DS directory server. The value of this character string should be consistent in the process of authentication.  |
| ECI          | E-Commerce security level indicator   |
| CVV          | It means card verification value which represents the security feature of credit cards and debit cards. The feature consists of 2 values or codes: one is in the code of magnetic stripe, another is printed on the card. CVV is usually a three-digit number on the back of the card, while for the American Express card, it is a 4-digit number on the front of the card. Card issuers utilize CVV as extra authentication for the prevention of illegal card using. |
| AVV          | It means account authentication value which is the token value of 32 characters in 3D security authentication transaction. To the MasterCard ID   |

|      |  |
|------|--|
|      | authentication, AAV is named as UCAF. To Visa security, AAV is named as CAVV.  |
| UCAF | It refers to Universal Cardholder Authentication Field. It is a character string encoded by base 64, identifying the transaction between card issuers and MasterCard exclusively. It is also a standard of collecting and sending AAV data for MasterCard 3DS ID authentication transaction.                 |
| CAVV | It refers to Cardholder Authentication Verification Value. As a character string encoded by base 64, CAVV will return with the card registered in Visa secure. Identifying the transaction between card issuers and Visa, CAVV is a standard of collecting and sending AAV data for Visa secure transaction. |

## 1. Interface Process

Adapting to security control and technology capabilities of merchants, the payment gateway offers API integration and gateway forward mode to help merchants complete technological integration tests rapidly.

### 1.1 Specifications of Risk Control Service

#### Application

For the sake of transaction security, reducing of fraud rate and chargeback rate, and cardholders' benefits, the DM risk management tool or 3DS security ID authentication service is recommended to merchants. They can be utilized in combination as per the situation. It should be noticed that the

application of risk management tool needs to collect the data of product orders, including products information, billing address, cardholders name, email and delivery address. The success rate of payment transaction and the accuracy of big data screening decision are dependent on the data of product orders.

### **1.1.1. DM & 3DS ID Authentication Service**

First, the data would be collected, including cardholders name, email address, product or service information, billing address, delivery address and device fingerprint etc. and after the screening by DM big data risk management engine.

- Approve-payment authorization transaction can be initiated
- Reject-rejected to transact after being judged to be a fraud risk
- Review-execute 3DS ID authentication.

3DS payment transaction will be launched after passing the ID Authentication.

### **1.1.2. 3DS Security ID Authentication**

3D – Secure (Three-Domain Secure) security authentication service (hereinafter referred to as 3DS) is designed for credit card individual card owners and cardholders (hereinafter referred to as cardholders) by EMVCo organization, with the aims of improving the security of online credit card payment, thus securing the online payment of customers. The service can be initiated independently for the security of merchants' and cardholders' benefits.

After the authentication by three parties including merchants and acquirers, card organizations, and issuers, 3 values will be returned, they are ECI (E-Commerce indicator), CAVV (Visa) / UCAF (MasterCard), XID (Exchange identifier). These 3 values will be inserted in transaction request to identify the transaction is a 3DS payment transaction. If this transaction experiences chargeback, transfer of risk responsibility can be used in the process of disputes solution. The specific rules are as below:

### **Visa, AMEX**

ECI=07 indicates that 3D security transaction without authentication and identification payment transaction (the application scale will be upgraded)

ECI=06 & CAVV indicates that card organizations replace the issuers without using 3DS 2.0 to provide authentication response. It is applicable to the transfer of transaction chargeback responsibility.

ECI=05 indicates that the CAVV authentication of the cardholder who has passed ID authentication is submitted. It is applicable to the transfer of transaction chargeback responsibility.

### **Mastercard**

ECI=01 & UCAF indicates that card organizations replace the issuers without using 3DS 2.0 to provide authentication response. It is applicable to the transfer of transaction chargeback responsibility.

ECI=02 indicates that indicates that the CAVV authentication of the cardholder who has passed ID authentication is submitted. It is applicable to the transfer of transaction chargeback responsibility.

## 1.2. API Integration Mode

It is a mode for the merchants who have PCI DSS security qualification authentication. The sensitive information such as cardholders' card numbers is allowed to be collected and saved safely in the merchant system. The processing of payment and settlement businesses is completed by using payment gateway API.

After the API integration request, solutions differ depending on whether the transaction combines with 3DS.

1.If transaction combines with 3DS/DM, it must redirect to the page appointed by payurl to complete the process and authorization.

2.If transaction does not combine with 3DS/DM, transaction results are confirmed in response message.

Notes: If transaction returns to payUrl, it means that the transaction will combine with 3DS and must redirect to the page where payurl is to complete the payment.

### 1.2.1. Collection Transaction Process (non-3DS/DM)

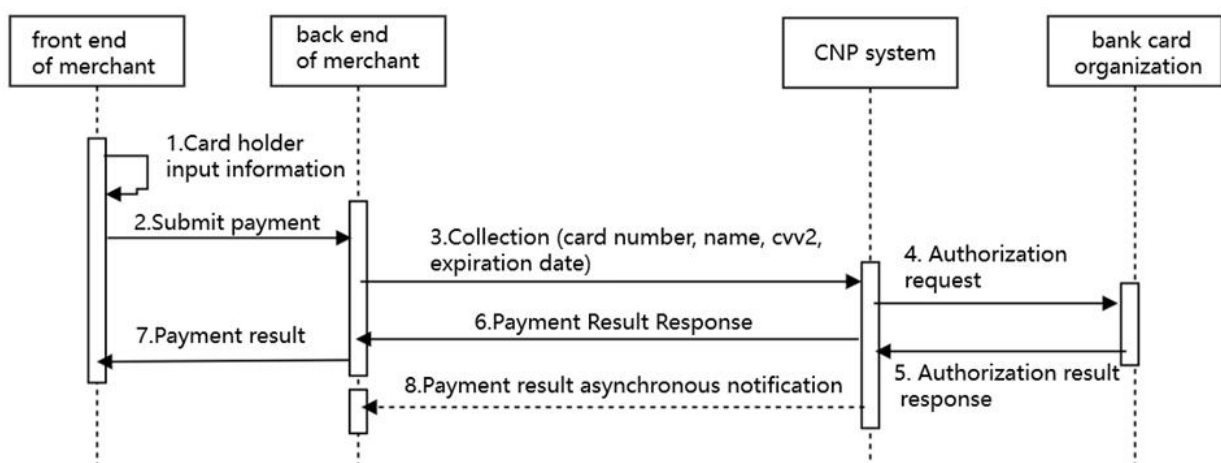


Figure 1: the non-3DS collection transaction timing in API integration mode

Process Description:

1. Merchant system submits a payment request (4.2.1 collect interface);
2. The transaction will be completed by the interaction with card organizations, after OATS CNP system receives a payment request;
3. OATS CNP system returns the payment result to merchant synchronously;
4. If submitting the asynchronous notifyUrl, OATS CNP system will push asynchronous notice of 4.1.1 transaction result to appointed URL.

## 1.2.2. Collection Transaction Process (3DS/DM)

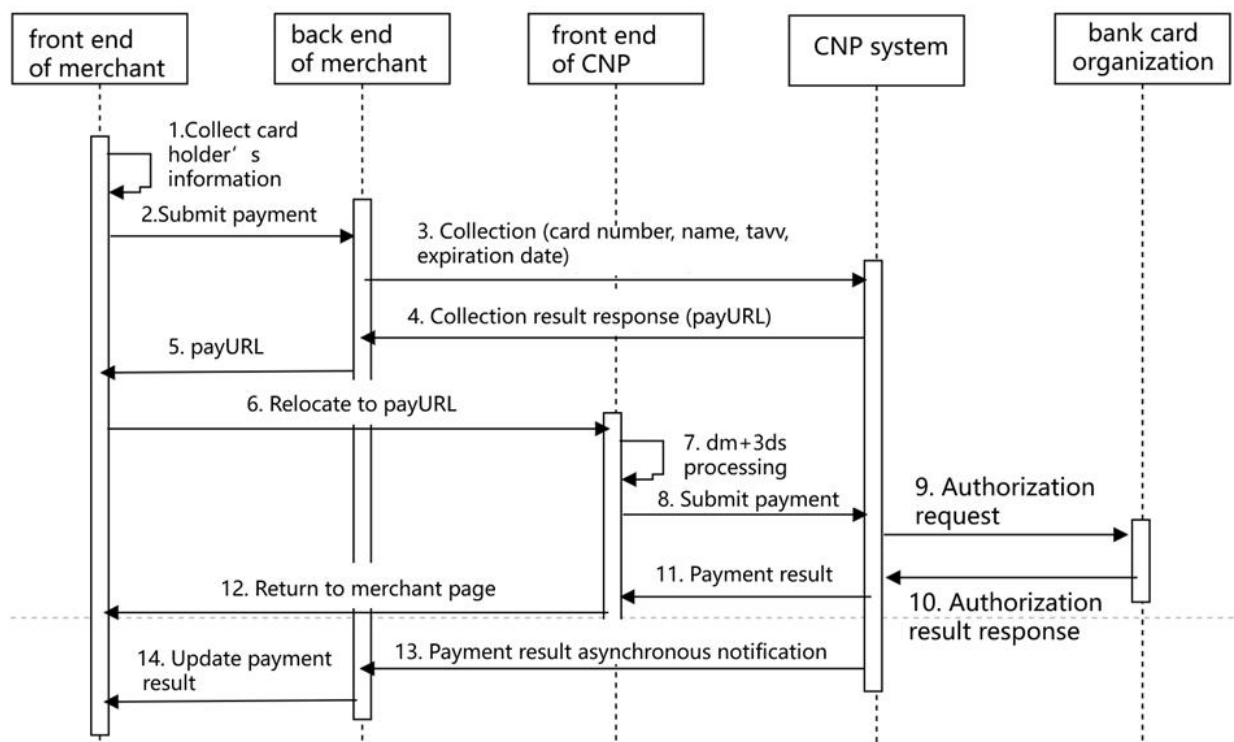


Figure 2: the integrated 3DS calling timing in API integration mode

Process Description:



1. Cardholders initiate the authorization transaction in the merchant system, merchants request OATS CNP system to make the payment (4.2.1 collection interface, please pay attention to submitting asynchronous notifyUrl);
2. Merchants system needs to relocate to the payUrl, that is, it forwards to CNP gateway cashier page;
3. Authorization will be completed by interacting with card organizations, after OATS CNP system finishes the processing of 3DS/DM.
4. CNP cashier will forward to the page appointed by returnUrl automatically after the transaction. If the URL is not uploaded by merchants, it will forward to CNP cashier payment result page by default;
5. OATS CNP system will push the asynchronous notice of 4.1.1 transaction result to appointed URL.

### 1.2.3. Refund Transaction Process

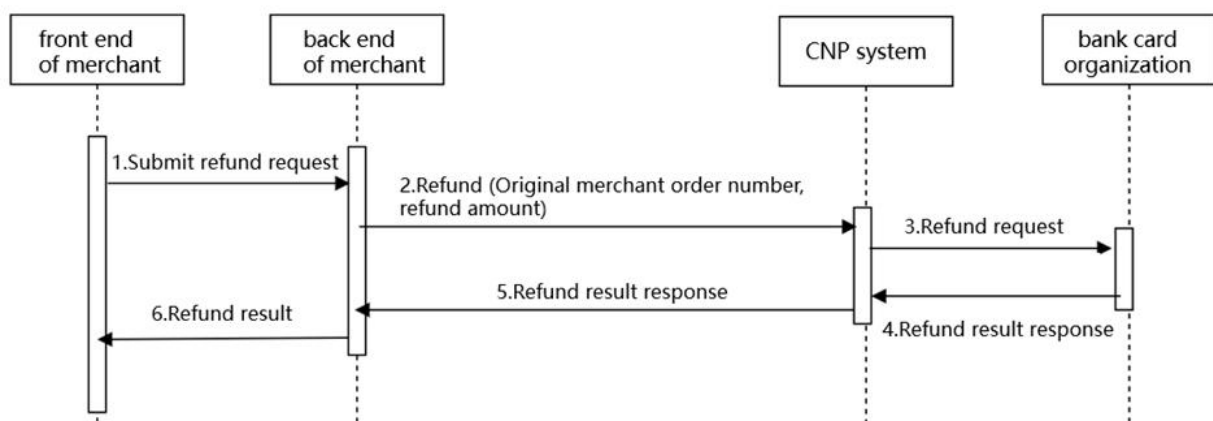


Figure 3: refund transaction timings

Partial refund and full refund are both available. Partial refund can be initiated several times for a transaction only if the total amount of partial refund cannot exceed the amount of original transaction.

Period of Refund: within 180 days after the transaction day.

Process Description:

1. After the confirmation of the transaction that needs to be refunded and the refund amount, merchants initiate refund request to the system. (4.1.3 Refund)

2. Refund is completed by the interaction between the system and card organizations.

3. The system returns the refund result to merchants.

## 1.2.4. Void Transaction Process

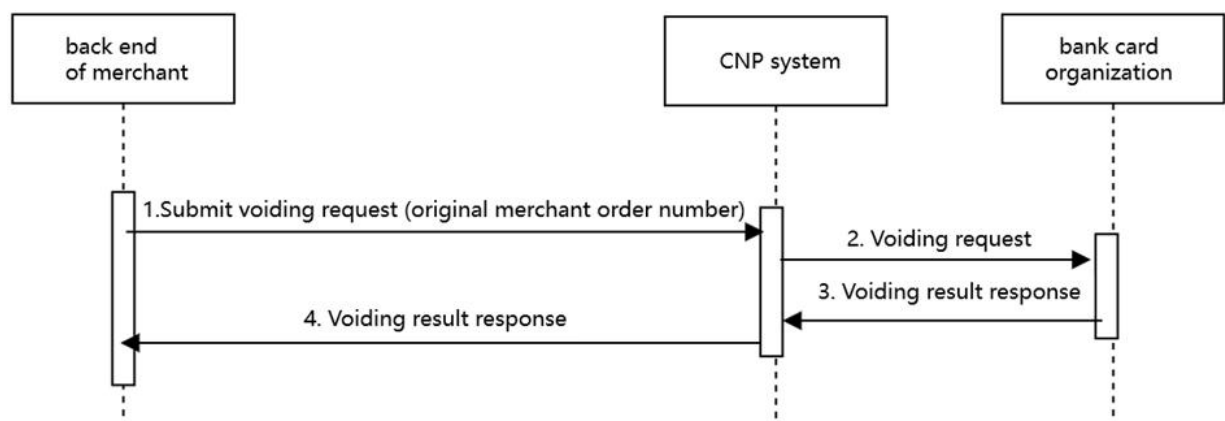


Figure 4: transaction voiding timings

Voiding is a special transaction. It is used to cancel the successful transaction result on the transaction day.

Process Description:

1. After the confirmation of the transaction that needs to be refunded and the refund amount, merchants initiate refund request to the system.

2. Voiding is completed by the interaction between the gateway and card organizations.

3.Voiding result is returned to merchants by payment gateway.

## 1.2.5 Tokenization Process

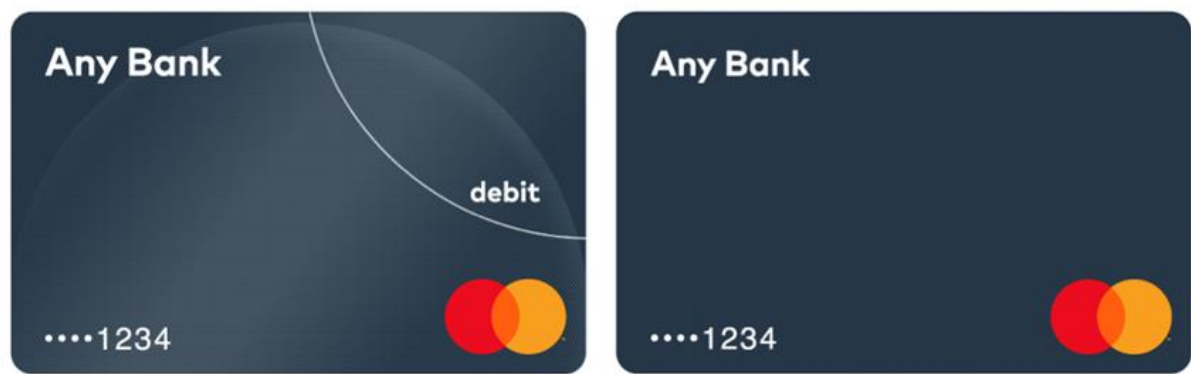
Tokenization, is commonly called as card binding or card on file. That is, cards are tokenized so that tokens can be obtained. Card numbers would be replaced by tokens during consumption. OATS CNP system provide tokenization and token collection interfaces which can be used independently or in combination. That is, binding the card before tokenization or binding and paying are completed at the same time.

Effective period management is available for token, including deriving, stop, start, delete, state adjustment or cards update.

Payment by card binding supports collecting, pre-authorization, voiding and refunding by the utilization of different transaction interfaces and transaction types.

### Tokenization UI Requirements

After tokenization, it can be shown in the modes of cards or characters in the application. The examples are as below:



---

FDNB Visa...1234

---

Visa...1234

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For card ID, the last 4 numbers must and only can be shown.

If logos need to be used, please make sure that they are clear enough, so that they can be distinguished from the background and be identified effectively.

For Visa and Mastercard, please pay attention to the correctness of capital letters and low case letters and there is no spacebar between letters.

Please contact the account manager for the image material.

#### Tokenization Process

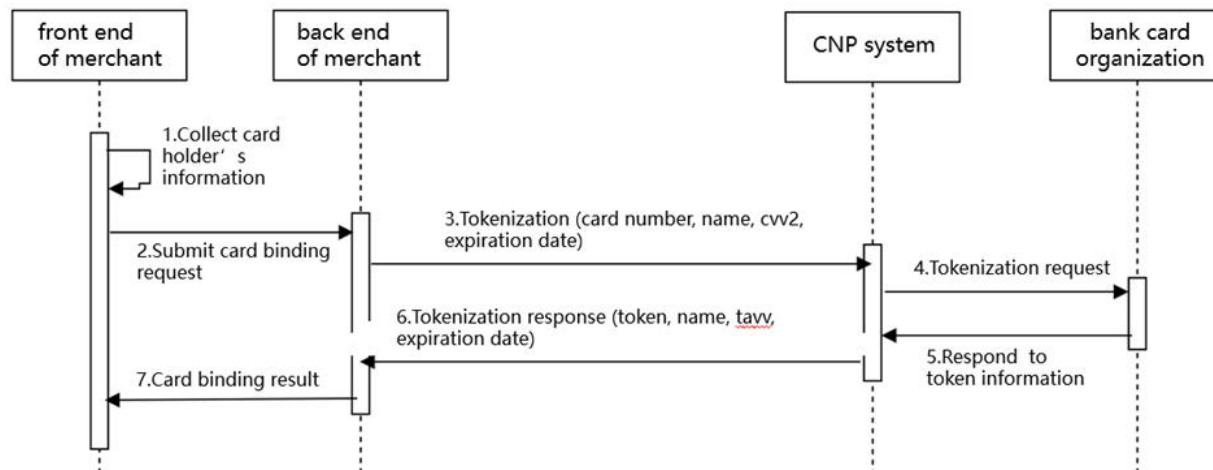


Figure 5: tokenization / card-binding calling timings

#### Process Description:

1. Merchants collect cardholders' information and submit the application for card binding (4.2.2 Tokenization);

- 2.The system interacts with card organizations by cardholders' information to generate a token;
- 3.The system return the token information to merchants and merchants retain the information for subsequent payment.

### 1.2.5.1 Tokenization and Token Payment (non- 3DS/DM)

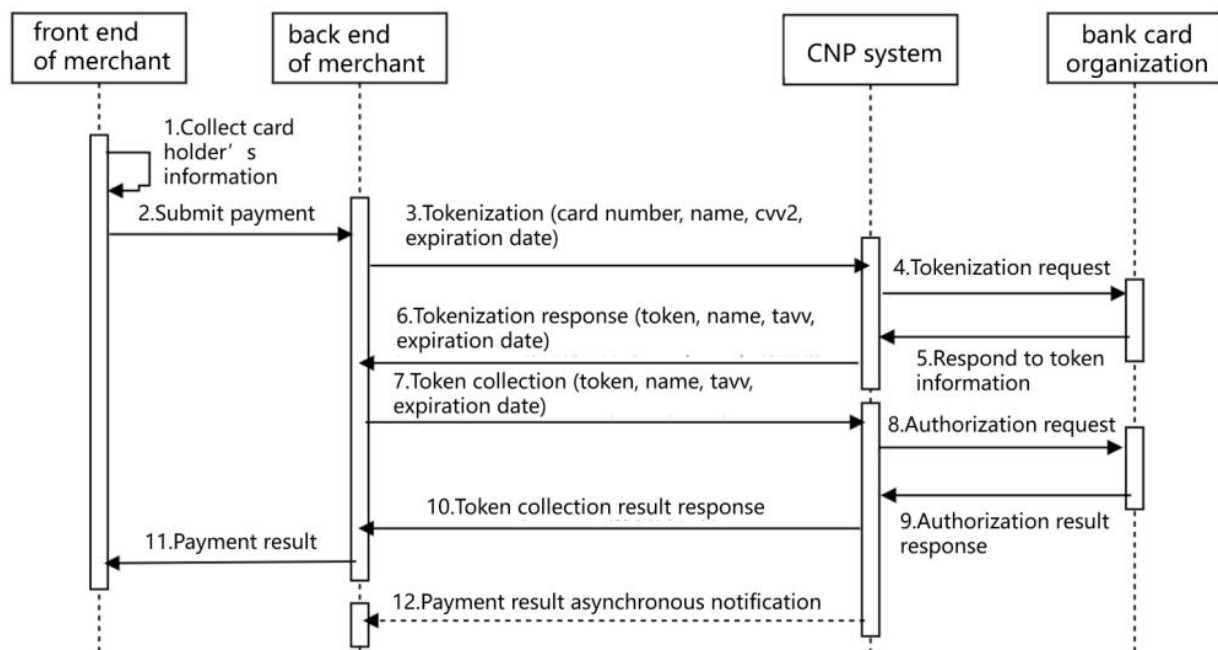


Figure 6: tokenization token payment calling timings (non-3DS/ non-DM)

Process description:

- 1.Merchants collect payment and cardholders' information;
- 2.Merchants submit the application for card binding; (4.2.2 Tokenization)
- 3.OATS CNP system interacts with card organizations to generate token and then return to the merchants;
- 4.Merchants use the token returned in step 3 and the collected payment information to submit the payment (4.2.1 Token consumption), and retain token information at the same time.

5.OATS CNP system interacts with card organizations to require authorization.

6.OATS CNP system returns the payment result to merchants.

7.If the asynchronous notifyUrl is submitted in step 4, OATS CNP system will push the transaction result asynchronous notice of 4.1.1to the appointed address.

### 1.2.5.2 Token Payment (non-3DS/DM)

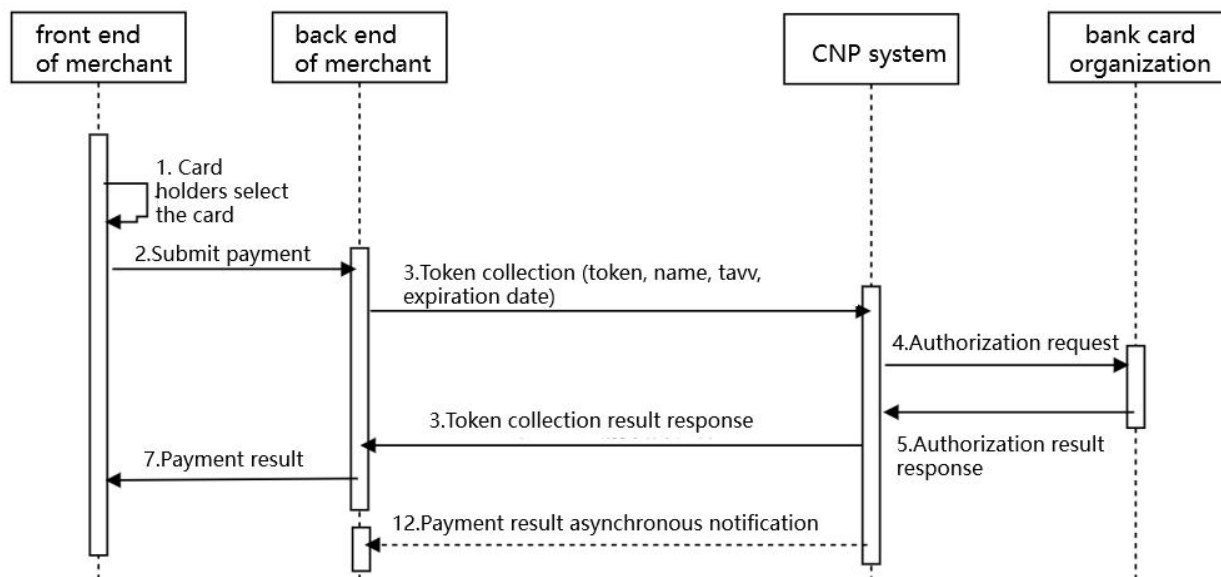


Figure 7: repeated payment interface calling timings (non-3DS and non-DM)

When cardholders have bound the cards, cardholders can choose the bound card to make the payment in the subsequent payment.

Process Description:

- 1.Cardholders choose a bound card to make the payment in the merchant application;
- 2.Merchants use the token information of bound cards to submit payment.  
(4.2.1 Token collection);

3. OATS CNP system interact with card organizations to require authorization;
4. OATS CNP system return the payment result to the merchant.
5. If the asynchronous notifyUrl is submitted, OATS CNP system will push the transaction result asynchronous notice to the appointed address.

### **1.2.5.3 Tokenization Payment (3DS/DM)**

Pay by token can reduce generation of chargeback greatly, but it does not mean there is no chargeback. If merchants had initiated 3DS and DM authentication, the responsibilities of funds related to transactions with chargeback will be assumed by card issuers, so that the benefits can be secured.

This part and the next part will show the process of transaction by card-binding.

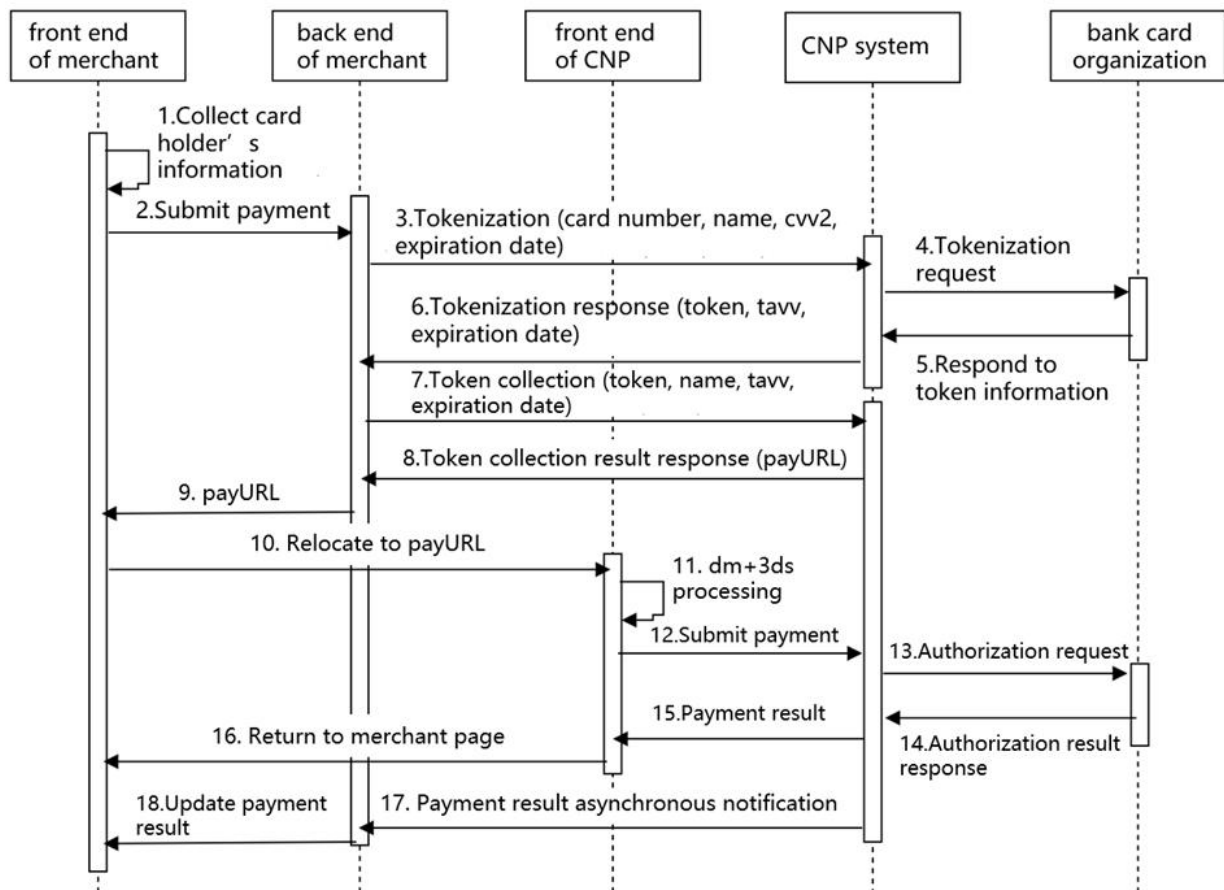


Figure 8: card-binding payment interface calling timings during collecting (with 3DS/DM)

#### Process Description:

1. Merchants collect payment and cardholders' information;
2. Merchants submit requirement of card-binding; (4.2.2 Tokenization, please pay attention to submitting asynchronous notifyUrl)
3. OATS CNP system interacts with card organizations to generate token, and then return it to the merchant;
4. Merchants submit payment by the returned token and collected payment information (4.2.1 TOKEN collecting), and retain token information at the same time;



5. Merchants system needs to relocate to the payment link returned by CNP system, that is, forward to CNP cashier;

6. OATS CNP system completes the authorization by interacting with card organizations after the processing of 3DS/DM;

7. CNP cashier forwards automatically to the page appointed by returnUrl after transaction completion. If the returnUrl was not submitted by merchants, the front-end payment result page of CNP will be presented.

8. Push the 4.1.1 transaction result asynchronous notice.

#### 1.2.5.4 Token Payment (with 3DS/DM)

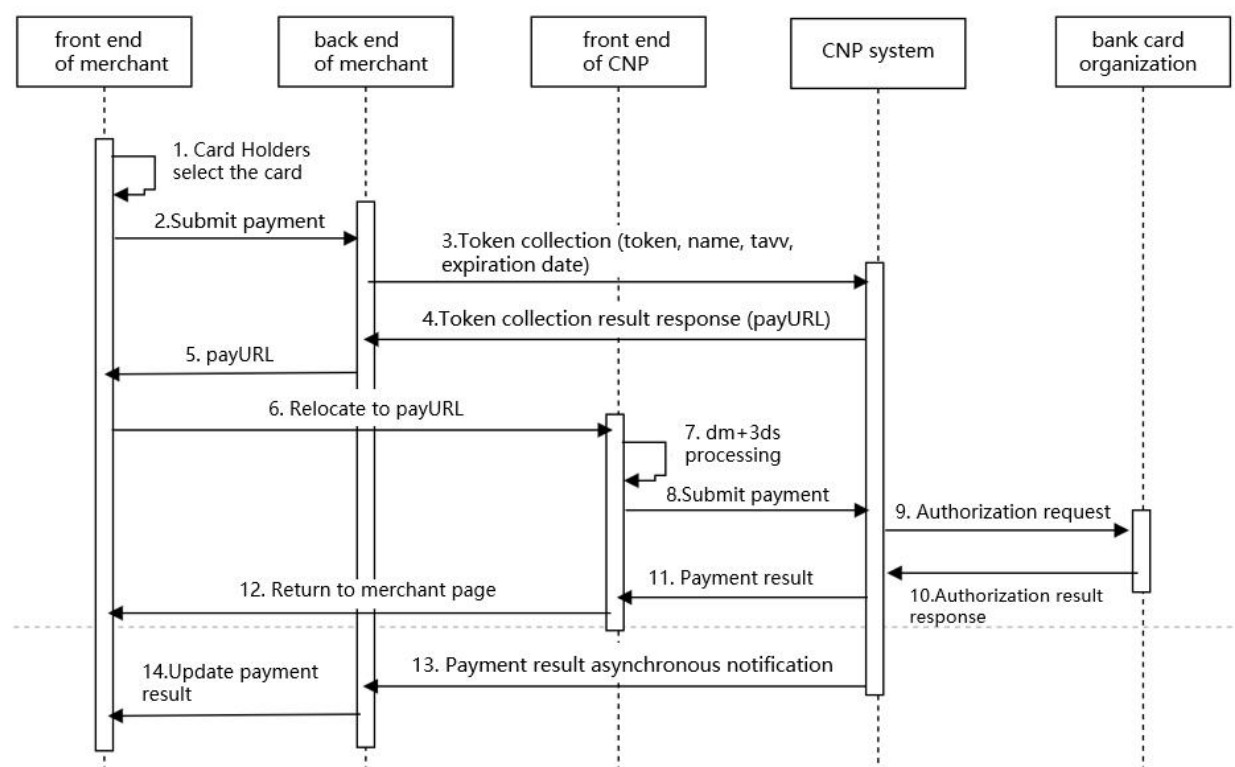


Figure 9: interface calling timings of repeated payment

Process Description:

- 1.Cardholders choose a bound card to make the payment in the merchants application;
- 2.Merchants submit the payment by the bound card (4.2.1 TOKEN collecting, please pay attention to submitting asynchronous notifyUrl);
3. Merchants system relocates to the payment link returned by CNP system, that is, forward to CNP cashier;
- 4.OATS CNP system completes the authorization by interacting with card organizations after the processing of 3DS/DM;
- 5.CNP cashier forwards automatically to the page appointed by returnUrl after transaction completion. If the returnUrl was not submitted by merchants, the front-end payment result page of CNP will be presented;
- 6.Push the 4.1.1 transaction result asynchronous notice.

### 1.2.5.5 Token Effective Period Management

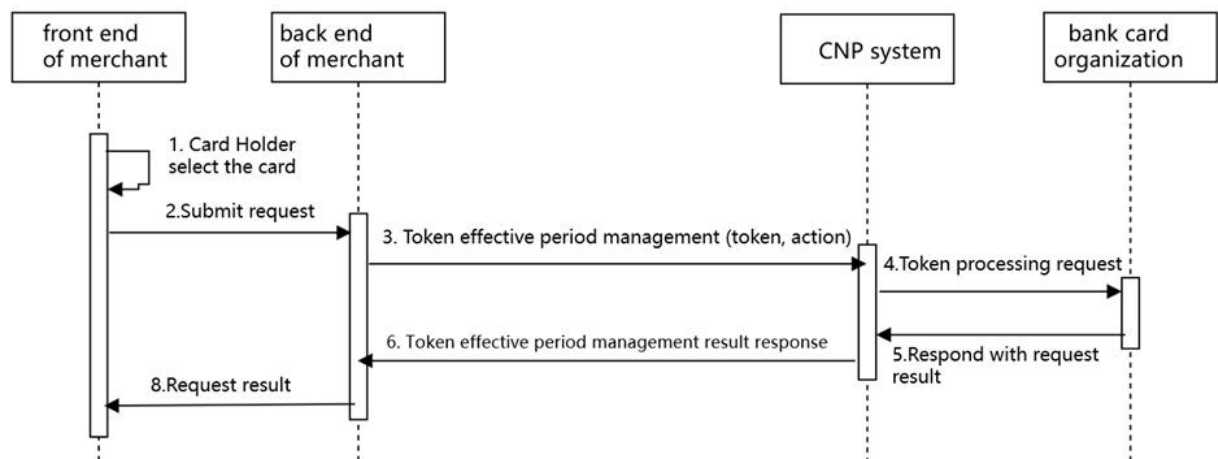


Figure 10: bank cards calling timings

- 1.After binding, merchants or cardholders can make requests for unbinding, stopping or resuming the use of cards;

- 2.The merchants use effective period management interface of Token to set ‘action’ as corresponding value according to business scenarios. (4.1.5 effective period management of TOKEN);
- 3.CNP system interacts with the card organization to process the request;
- 4.CNP system return the result to the merchant. It is advised to delete the corresponding information of token when deleting the card.

### 1.2.5.6 Cards Update

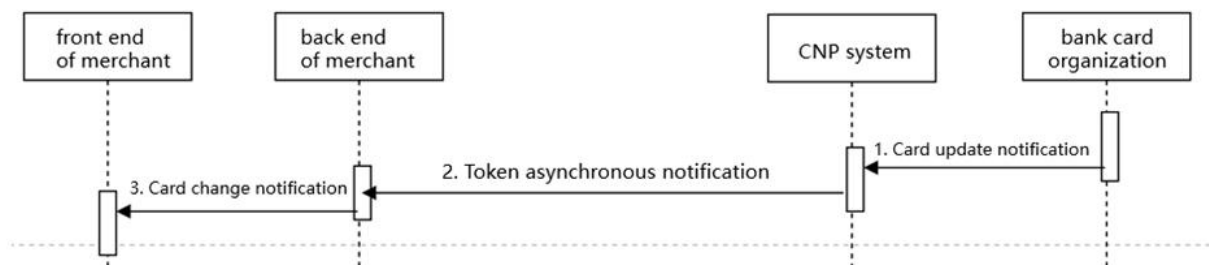


Figure 11: cards update interface calling description

1. There is no asynchronous notice for the card management requests which are initiated by merchants. It exists in the cards state change initiated by issuers and the establishment of token in the gateway forward mode.

(4.1.6 TOKEN asynchronous notice)

2. If the state is SUSPEMDED, the token is ineffective temporarily. To the form of cards, it is advised to represent the unavailability of card state by turning the card grey or not showing card number; if the state is ACTIVED, the token is effective. It is advised to check tavn, validity date, and tokenmetadata. If the card represents in the form of unavailability, it is advised to change the card into the form of availability; if the state is UPDATE, the token updates. It is advised to check tavn, validity date and tokenmetadata; if the state is DELETED, the token is ineffective. To the form of cards, it is advised to represent the unavailability of card

state by turning the card grey or not showing card number, and let the cardholder delete it.

## **1.3 Gateway Forward Mode**

This mode is commonly for the merchants who haven't passed the PCIDSS security qualification authentication temporarily. The cardholders' sensitive information (such as card number, name, cvv, validity etc. ) would not be recorded or saved in the part of merchants.

Merchants need to make the cardholders page forward to the AllinpayIntl CNP payment Gateway page, cardholders enter the basic information like card numbers in the AllinpayIntl gateway page and submit it. After the success of transaction, the gateway notify merchants of payment result asynchronously.

### **1.3.1. The Process of Collection Transaction**

In the collection of gateway forward mode, cardholders order in the merchant website. Merchant system generates the order and make the cardholders page forward to the payment gateway page of the OATS CNP system. Cardholders complete the payment by inserting basic information such as card number etc. The OATS CNP system would send the payment result asynchronously to the merchant after making the payment successfully.

Voiding ingateway forward mode and integration mode of refunding and API, please refer to 2.2.3 refund and 2.2.4 void.

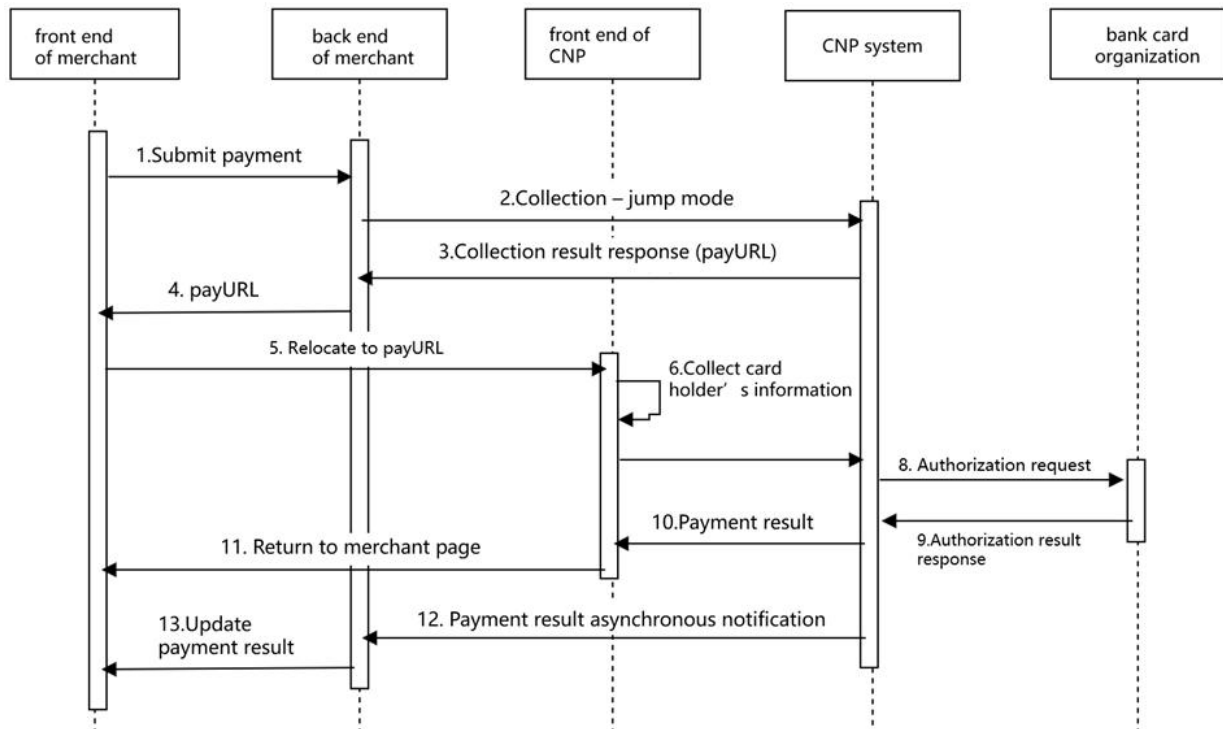


Figure 12: gateway forward mode calling timings

Process description:

- 1.Merchant system initiate payment request (4.4.1 collection, the transaction type must be appointed as collection – gateway forward );
- 2.Merchant system relocates to the payment link returned by the OATS CNP system (The cashier page can reference ‘Figure 13 Cashier’);
- 3.Cardholders entry the bank card information in the payment gateway page of OATS CNP system;
- 4.The cashier page of OATS CNP system completes the processing of authentication and authorization in the gateway forward mode;
- 5.The cashier page of OATS CNP system presents payment result;
- 6.The system push transaction results asynchronously to merchant system. (4.1.1 Asynchronous Notification)

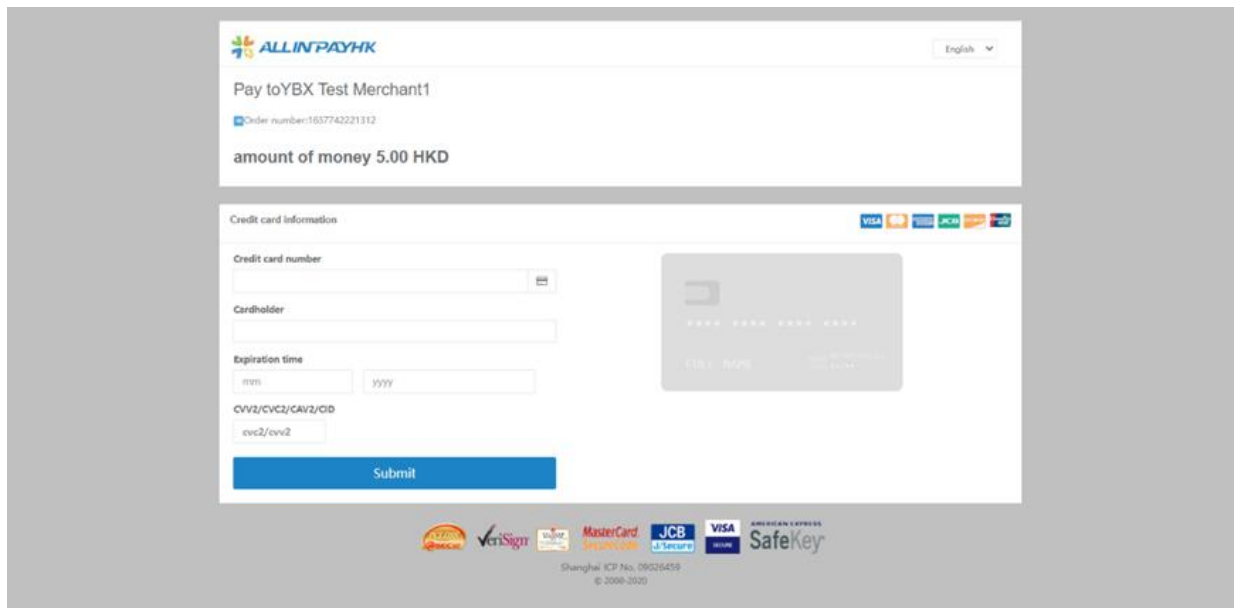


Figure 13 cashier

### 1.3.2. Tokenization Processing

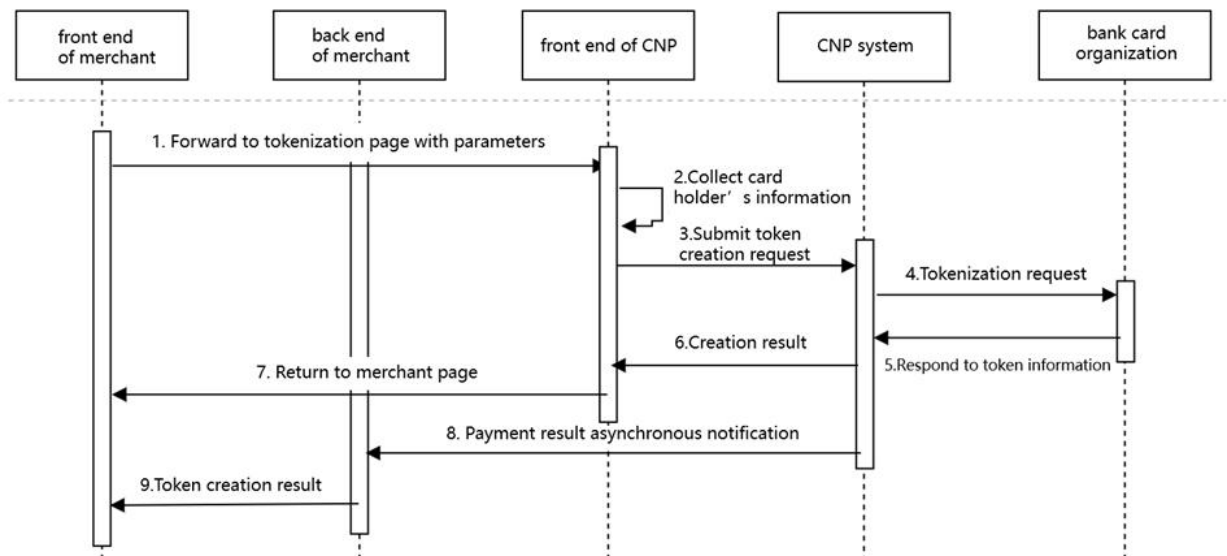


Figure 14: page creation of token timings

Process Description:

1. Merchants forward to the Tokenization page of CNP with parameters;  
(4.3.2 Tokenization)

2. The system collects cardholders' information and interacts with card organization to complete the creation of token;
3. The CNP page presents the creation result and returns to the merchant page;
4. The system notifies the merchant of token creation result by the asynchronous notification interface;(4.1.6 TOKEN asynchronous notification)
5. To check token. (4.1.10 query token creation orders. To check the information of token creation order by original orders)

## 2. Access Specifications

### 2.1. Data Format and Signature

Request Method: HTTP Post

Data format: use the standard coding format; character code used UTF-8 altogether.

HTTP head: application/x-www-form-urlencoded; charset=UTF-8

Time: Time in this document is generally set by GMT+8 without particular indicating.

Sign Digitally: The system requires you to sign digitally in the data of payment orders, and upload the data with the signature and the transaction to the server. The algorithms which generate digital signature are as below:

- a. All the fields involved in digital signature, are combined into strings by applying URL key-value pairs format (that is, key1=value1&key2=value2), after being sequenced from the smallest to the largest as per ASCLL code of

the fields. **Note:** Empty fields do not need to be signed, and the values participating in the signature need to remove the leading and trailing spaces.

b. The two choices of signType are MD5 or RSA2. If choose MD5, sign=md5(string); if choose RSA2, signing algorithm: SHA256WithRSA;

c. The way of generating RSA private key and public key:

Private key: openssl>genrsa -out rsa\_private\_key.pem 2048

Public key: openssl>rsa -in rsa\_private\_key.pem -pubout -out  
rsa\_public\_key.pem

**Notes:** To secure robustness of interface, all the fields must be processed by access system for the prevention of the verification failure caused by interface upgrade.

Samples of Signature:

Request Parameters:

1. accessOrderId=1640222101
2. mchtId=065702058120006
3. oriAccessOrderId=1640221906
4. signType=RSA2
5. transType=Query
6. version=V2.0.0

Message to be signed (in the sequence of dictionary)

1. accessOrderId=1640222101&mchtId=065702058120006&oriAccessOrderId=1640221906&signType=RSA2&transType=Query&version=V2.0.0



Signature secret key: the public key is sent to the account manager to complete the configuration, after merchants generate public and secret key pairs independently.

Signature result:

1. AhSnrfmbp0c5fQeiicZwwapZRUCYeVnzbNaNqpfQVu7lRX8m1Mfjh7gS+fIjsklEII20Bc+C  
laJorJwrsWaK54PH9u0366VRXM3X0TQFuoV/4BBMysdlrGvAfnmFivRplsoigvMkl86JpeBe  
dTkgVHoz0TYrT0QGhgszL1lZSR0cYvfuxlCyT779x2Djk52cySpb+58T1HuJgIlcH4Bz0J4E  
yJSSttORwNWggCOPnDca0aGXoyM5Ts j03HS1XXtKl/kvxft7GTJPFxDDRp/+4dbe5aFzJsYW/  
CMBL35UCfCt8uP8ZyRdYqIh3fzLzsilodMWZ9y4RzQwW6rUWRDt9fw==

## 2.2. Access Parameters

Testing Environment:

Gateway Address: <https://test.allinpayhk.com/gateway>

H5 Address: <https://test.allinpayhk.com/pay-web-h5>

Signature secret key: merchants generate public and secret key pairs independently or Provided by Allinpay Tech team.

Please send the asynchronous notification address & public key to [support@allinpayintl.com](mailto:support@allinpayintl.com) to complete the configuration and ask the account manager for Merchant testing parameters, such as MID.

## 3. API List

### 3.1. Public Interface

#### 3.1.1. Asynchronous Notification of Transaction

##### Result

When the payment state of the same merchant order changes, payment gateway would asynchronously send the order state to the URL where merchants receive asynchronous notification. (This URL is appointed by notifyUrl fields in 4.2.1 & 4.3.1 interface when the order is submitted.)

Merchants need to process the request of result asynchronous notification correctly, response to Http Status Code 200, and return “SUCCESS” character string. If our system fails to receive merchants’ response, our system would notify repeatedly no more than 7 times and the time gap is 30s, 30s, 60s, 60s, 1800s, 1800s, 1800s respectively.

List of Request Parameters:

| Field Name | Field Description          | Length | Required | Remarks                                      |
|------------|----------------------------|--------|----------|--|
| resultCode | Result Code                | 4      | Yes      | Refer to Appendix D:<br>Result Code          |
| resultDesc | Result Code<br>Description | 100    | Yes      | Wrong description in<br>detail               |
| instNo     | Access Code                | 8      | No       | 8-digits number, is<br>uniformly assigned by |

|               |                       |    |     |   |
|---------------|-----------------------|----|-----|---|
|               |                       |    |     | Allinpay International.<br>Don't use the access code of merchant. Each institution / merchant has a unique access code. |
| mchtId        | Merchant ID           | 15 | Yes | The merchant ID that you applied  |
| accessOrderId | Merchant Order Number | 32 | Yes | The unique identification of merchant demand  |
| orderId       | System Order Number   | 32 | Yes |   |
| cardNo        | Card Number           | 18 | Yes | The first sixth and the last fourth numbers are not disclosed   |
| cardOrgn      | Card Organization     | 32 | No  | Appendix G: List of Card Organization   |
| currency      | Payment Currency      | 3  | Yes | Be consistent in the requirement  |
| amount        | Order Amount          | 12 | Yes | Be consistent in the requirement  |
| LocalCurrency | Local Currency        | 3  | No  | Require to fill in when resultCode is 0000  |

|             |                       |    |     |  |
|-------------|-----------------------|----|-----|--|
| LocalAmount | Local Amount          | 12 | No  | Require to fill in when resultCode is 0000 |
| transTime   | Transaction Time      | 14 | No  | YYYYMMDDhhmmss, time zone is GMT+8         |
| sign        | Signature Information |    | Yes |  |
| signType    | Signature Type        | 16 | Yes | MD5/ RSA2                                  |

### 3.1.2. Transaction Result Query

For a timeout or in-process transaction that requires query results, the interval between each query should not be less than 10 seconds.

Request Address: {gateway address}/cnp/quickpay

List of Request Parameters:

| Field Name | Field Description | Length | Required | Remarks  |
|------------|-------------------|--------|----------|--|
| version    | Version Number    | 8      | Yes      | V2.0.0, please refer to Appendix F for the instructions of the former versions |
| mchtId     | Merchant ID       | 15     | Yes      | The merchant ID that you applied   |
| transType  | Transaction       | 20     | Yes      | Please refer to  |

|                  |                                      |    |     |   |
|------------------|--------------------------------------|----|-----|---|
|                  | Type                                 |    |     | Appendix A:<br>Transaction Type                   |
| oriAccessOrderId | Original<br>Merchant Order<br>Number | 32 | Yes | Merchant Order<br>required by original<br>payment |
| sign             | Signing<br>Information               |    | Yes |   |
| signType         | Signing Type                         | 16 | Yes | MD5/ RSA2<br><br>MD5/ RSA2                        |

Response Result:

After submitting correct parameters successfully, the interface will send back Http response code 200 and response message.

The format of response message is JSON and the definition is as below:

| Field Name | Field<br>Description  | Length | Required | Remarks                                       |
|------------|-----------------------|--------|----------|---|
| resultCode | Result Code           | 4      | Yes      | Please refer to<br>Appendix D: result<br>code |
| resultDesc | Result<br>Description | 100    | Yes      | Description of inquiry<br>result              |
| mchtId     | Merchant ID           | 15     | Yes      |   |

|                  |                       |    |     |   |
|------------------|-----------------------|----|-----|---|
| oriAccessOrderId | Merchant Order Number | 32 | No  | It will not be sent back if the transaction is abnormal.                              |
| orderId          | Order Number          | 32 | No  |   |
| currency         | Transaction Currency  | 3  | Yes | Be consistent in the requirement  |
| amount           | Order Amount          | 12 | Yes | Be consistent in the requirement  |
| LocalCurrency    | Local Currency        | 3  | No  | Require to fill in when resultCode is 0000.   |
| LocalAmount      | Local Amount          | 12 | No  | Require to fill in when resultCode is 0000.   |
| status           | Order Status          | 16 | No  | Please refer to Appendix E: order status. Require to fill in when resultCode is 0000. |
| statusDesc       | Order Desc            | 16 | No  | The incorrect description of original payment   |

|           |  |    |     |   |
|-----------|--|----|-----|---|
|           |  |    |     | transaction, which is required to fill in when resultCode is 0000.          |
| transTime | Transaction Time                       | 14 | No  | YYYYMMDDhhmmss, time zone is GMT+8  |
| cardOrgn  | International Credit Card Organization | 32 | No  | Please refer to Appendix G: List of International Credit Card Organizations |
| sign      | Signing                                |    | Yes |   |
| signType  | Signing Type                           | 16 | Yes | MD5/ RSA2   |

### 3.1.3. Refund

Request Address: {gateway address}/cnp/quickpay

List of Request Parameters:

| Field Name | Field Description | Length | Required | Remarks  |
|------------|-------------------|--------|----------|--|
| version    | Version Number    | 8      | Yes      | V2.0.0, please refer to Appendix F for the instructions of the former versions |
| mchtId     | Merchant          | 15     | Yes      | The merchant ID that   |

|                  |                                |    |     |  |
|------------------|--------------------------------|----|-----|--|
|                  | Number                         |    |     | you applied and Merchant Number which is used in refund must be consistent in the original transaction merchant.   |
| transType        | Transaction Type               | 20 | Yes | Please refer to Appendix A: Transaction Type   |
| accessOrderId    | Merchant Order                 | 32 | Yes | The unique identification of merchant demand   |
| refundAmount     | Refund Amount                  | 12 | Yes | e. g. 100.12   |
| oriAccessOrderId | Original Merchant Order Number | 32 | Yes | Merchant Order required by original payment  |
| timeZone         | Time Zone                      | 2  | No  | Please input statistics. The time difference between UTC time is as the example shows: the time zone in Beijing is 8 and the time zone in eastern America is -5. |



|          |              |    |     |           |
|----------|--------------|----|-----|-----------|
| sign     | Signing      |    | Yes |           |
| signType | Signing type | 16 | Yes | MD5/ RSA2 |

Response Result:

After submitting correct parameters successfully, the interface will send back Http response code 200 and response message.

The format of response message is JSON and the definition is as below:

| Field Name       | Field Description              | Length | Required | Remarks  |
|------------------|--------------------------------|--------|----------|--|
| resultCode       | Result code                    | 4      | Yes      | Please refer to Appendix D: result code                  |
| resultDesc       | Result description             | 100    | Yes      | Incorrect descriptions in detail.                        |
| mchtId           | Merchant ID                    | 15     | Yes      |  |
| accessOrderId    | Merchant Order Number          | 50     | Yes      | Same to the requirement                                  |
| oriAccessOrderId | Original Merchant Order Number | 32     | No       | It will not be sent back if the transaction is abnormal. |
| orderId          | Order Number                   | 32     | No       |  |
| refundCurrency   | Payment                        | 3      | No       | Require to fill in when                                  |

|               |                  |    |     |   |
|---------------|------------------|----|-----|---|
|               | Currency         |    |     | resultCode is 0000.                         |
| refundAmount  | Refund Amount    | 12 | Yes | Be consistent in the requirement            |
| LocalCurrency | Local Currency   | 3  | No  | Require to fill in when resultCode is 0000. |
| LocalAmount   | Local Amount     | 12 | No  | Require to fill in when resultCode is 0000. |
| transTime     | Transaction Time | 14 | No  | YYYYMMDDhhmmss, time zone is GMT+8          |
| sign          | Signing          |    | Yes |   |
| signType      | Signing Type     | 16 | Yes | MD5/ RSA2                                   |

### 3.1.4. Void

Request Address: {Gateway Address}/cnp/quickpay

List of Request Parameters:

| Field Name | Field Description | Length | Required | Remarks  |
|------------|-------------------|--------|----------|--|
| version    | Version Number    | 8      | Yes      | V2.0.0, please refer to Appendix F for the instructions of the former versions |

|                  |                                |    |     |  |
|------------------|--------------------------------|----|-----|--|
| mchtId           | Merchant ID                    | 15 | Yes | The merchant ID you applied  |
| transType        | Transaction Type               | 20 | Yes | Please refer to Appendix A: Transaction Type   |
| timeZone         | Time Zone                      | 2  | No  | Integer. The time difference between UTC time is as the example shows: the time zone in Beijing is 8 and the time zone in eastern America is -5. |
| accessOrderId    | merchant order number          | 32 | Yes | The unique identification of merchant demand   |
| oriAccessOrderId | Original merchant order number | 32 | Yes | Merchant Order required by original payment  |
| sign             | Signing Information            |    | Yes |  |
| signType         | Signing Type                   | 16 | Yes | MD5/ RSA2  |

Response Result:

After submitting correct parameters successfully, the interface will send back Http response code 200 and response message.

The format of response message is JSON and the definition is as below:

| Field Name       | Field Description              | Length | Required | Remarks  |
|------------------|--------------------------------|--------|----------|--|
| resultCode       | Result Code                    | 4      | Yes      | Please refer to Appendix D: Result Code                  |
| resultDesc       | Result Description             | 100    | Yes      | Incorrect descriptions in detail.                        |
| mchtId           | Merchant ID                    | 15     | Yes      |  |
| accessOrderId    | Merchant Order Number          | 50     | Yes      | Be consistent in the requirement                         |
| oriAccessOrderId | Original merchant order number | 32     | No       | It will not be sent back if the transaction is abnormal. |
| orderId          | Order Number                   | 32     | No       |  |
| currency         | Currency                       | 3      | No       | Require to fill in when resultCode is 0000               |
| amount           | Amount                         | 12     | No       | Require to fill in                                       |

|               |                |    |     |  |
|---------------|----------------|----|-----|--|
|               |                |    |     | when resultCode is 0000                    |
| LocalCurrency | Local Currency | 3  | No  | Require to fill in when resultCode is 0000 |
| LocalAmount   | Local Amount   | 12 | No  | Require to fill in when resultCode is 0000 |
| sign          | Signing        | 32 | Yes |  |
| signType      | Signing Type   | 16 | Yes | MD5/ RSA2                                  |

### 3.1.5. Token Effective Period Management

Request Address: {Gateway Address}/token/manager

List of Request Parameters:

| Field Name | Field Description | Length | Required | Remarks  |
|------------|-------------------|--------|----------|--|
| version    | Version Number    | 8      | Yes      | V2.0.0, please refer to Appendix F for the instructions of the former versions |
| mchtId     | Merchant ID       | 15     | Yes      | The merchant ID you applied  |

|               |                       |    |     |  |
|---------------|-----------------------|----|-----|--|
| transType     | Transaction Type      | 20 | Yes | Please refer to Appendix A: Transaction Type     |
| accessOrderId | Merchant Order Number | 32 | Yes | The unique identification of merchant demand     |
| token         | Token Value           | 32 | Yes |  |
| action        | Operation             | 16 | Yes | SUSPEND<br><br>ACTIVE<br><br>DELETE<br><br>QUERY |
| sign          | Signing Information   |    | Yes |  |
| signType      | Signing Type          | 16 | Yes | MD5/ RSA2  |

Response Result:

| Field Name | Field Description  | Length | Required | Remarks                                 |
|------------|--------------------|--------|----------|---|
| resultCode | Result Code        | 4      | Yes      | Please refer to Appendix D: Result Code |
| resultDesc | Result Description | 100    | Yes      | Incorrect descriptions in detail.       |

|               |                       |      |     |   |
|---------------|-----------------------|------|-----|---|
| mchtId        | Merchant ID           | 15   | Yes |   |
| accessOrderId | Merchant order number | 32   | Yes | Be consistent in the requirement                        |
| tokenMeta     | Token Displaying Data | 2048 | No  | Please refer to Appendix L                              |
| token         | Token Value           | 32   | No  |   |
| state         | Token State           | 16   | No  | SUSPENDED<br><br>ACTIVED<br><br>INACTIVE<br><br>DELETED |
| sign          | Signing               |      | Yes |   |
| signType      | Signing Type          | 16   | Yes | MD5/ RSA2   |

### 3.1.6 Token Asynchronous Notification

Explanation: When token state changes, customers will be informed by Asynchronous Notification. Merchants need to process the request of result asynchronous notification correctly, response to Http Status Code 200, and return “SUCCESS” character string. If our system fails to receive merchants’ response, our system would notify repeatedly no more than 7 times and the time gap is 30s, 30s, 60s, 60s, 1800s, 1800s, 1800s respectively.

Please contact account manager to complete configuration of token asynchronous notification address.

| Field Name    | Field Description     | Length | Required | Remarks  |
|---------------|-----------------------|--------|----------|--|
| mchtId        | Merchant ID           | 15     | Yes      |  |
| cardNo        | Card number           | 20     | Yes      |  |
| token         | Token value           | 32     | Yes      |  |
| accessOrderId | Merchant Order Number | 32     | No       | It will be sent back when the state is ACTIVATED.                          |
| orderId       | System Order Number   | 32     | No       | It will be sent back when the state is ACTIVATED.                          |
| tavv          | tavv                  | 128    | No       | It will be sent back when the state is ACTIVATED.                          |
| expDate       | Expiry date           | 6      | No       | It will be sent back when the YYYYMM state is ACTIVATED.                   |
| cardOrgn      | Card Organization     | 32     | No       | Please refer to Appendix G: List of International Credit Card Organization |



|            |                       |      |     |   |
|------------|-----------------------|------|-----|---|
| cardHolder | Cardholder's Name     | 128  | No  |   |
| state      | Token State           | 16   | No  | SUSPENDED<br><br>ACTIVED<br><br>INACTIVE<br><br>DELETED<br><br>UPDATE   |
| tokenMeta  | Token Displaying Data | 2048 | No  | The data are required to fill in when the state is UPDATE.<br><br>Please refer to Appendix K: TokenMeta example |
| sign       | Signing               |      | Yes |   |
| signType   | Signing Type          | 16   | Yes | MD5/ RSA2   |

### 3.1.7. Token Pre-authorization Completion

Request Address: {Gateway Address}/cnp/quickpay

List of Request Parameters:

| Field Name | Field Description | Length | Required | Remarks |
|------------|-------------------|--------|----------|---------|
|------------|-------------------|--------|----------|---------|

|                  |  |     |     |   |
|------------------|--|-----|-----|---|
| version          | Version Number                         | 8   | Yes | V2.0.0, please refer to Appendix F for the instructions of the former versions              |
| mchtId           | Merchant ID                            | 15  | Yes | The merchant ID you applied   |
| transType        | Transaction type                       | 20  | Yes | Please refer to Appendix A: Transaction Type  |
| accessOrderId    | Merchant order number                  | 32  | Yes | The unique identification of merchant demand  |
| oriAccessOrderId | Original merchant order number         | 32  | Yes | The merchant order number required by original pre-authorization                            |
| amount           | Amount of pre-authorization completion | 12  | Yes | e. g. 100.12  |
| notifyUrl        | Asynchronous notification URL          | 256 | No  | The URL where the backend informs merchants about payment results after making the payment. |

|          |                     |    |     |           |
|----------|---------------------|----|-----|-----------|
| sign     | Signing information |    | Yes |           |
| signType | Signing Type        | 16 | Yes | MD5/ RSA2 |

Response Result:

| Field Name       | Field Description              | Length | Required | Remarks  |
|------------------|--------------------------------|--------|----------|--|
| resultCode       | Result Code                    | 4      | Yes      | Please refer to Appendix D: Result Code                  |
| resultDesc       | Result Description             | 100    | Yes      | Incorrect descriptions in detail                         |
| mchtId           | Merchant ID                    | 15     | Yes      |  |
| accessOrderId    | Merchant Order Number          | 32     | Yes      | Be consistent to the requirement                         |
| oriAccessOrderId | Original merchant order number | 32     | No       | It will not be sent back if the transaction is abnormal. |
| currency         | Pre-authorization completion   | 3      | No       | Require to fill in when resultCode is 0000               |

|               |                                     |    |     |  |
|---------------|-------------------------------------|----|-----|--|
|               | currency                            |    |     |  |
| amount        | Pre-authorization completion amount | 12 | Yes | Be consistent to the requirement           |
| LocalCurrency | Local currency                      | 3  | No  | Require to fill in when resultCode is 0000 |
| LocalAmount   | Local amount                        | 12 | No  | Require to fill in when resultCode is 0000 |
| sign          | Signing                             |    | Yes |  |
| signType      | Signing Type                        | 16 | Yes | MD5/ RSA2                                  |

### 3.1.8. Token Pre-authorization Voiding

Request Address: {Gateway Address}/cnp/quickpay

List of Request Parameters

| Field Name | Field Description | Length | Required | Remarks  |
|------------|-------------------|--------|----------|--|
| version    | Version Number    | 8      | Yes      | V2.0.0, please refer to Appendix F for the instructions of the former versions |

|                  |                                |    |     |  |
|------------------|--------------------------------|----|-----|--|
| mchtId           | Merchant ID                    | 15 | Yes | The merchant ID you applied                                      |
| transType        | Transaction type               | 20 | Yes | Please refer to Appendix A: Transaction Type                     |
| accessOrderId    | Merchant order number          | 32 | Yes | The unique identification of merchant demand                     |
| oriAccessOrderId | Original merchant order number | 32 | Yes | The merchant order number required by original pre-authorization |
| sign             | Signing information            |    | Yes |  |
| signType         | Signing Type                   | 16 | Yes | MD5/ RSA2  |

Response Result:

| Field Name | Field Description  | Length | Required | Remarks                                 |
|------------|--------------------|--------|----------|---|
| resultCode | Result code        | 4      | Yes      | Please refer to Appendix D: result code |
| resultDesc | Result description | 100    | Yes      | Incorrect descriptions in detail        |

|                  |                                       |    |     |  |
|------------------|---------------------------------------|----|-----|--|
| mchtId           | Merchant ID                           | 15 | Yes |  |
| accessOrderId    | Merchant Order Number                 | 32 | Yes | Same to the requirement                                  |
| oriAccessOrderId | Original merchant order number        | 32 | No  | It will not be sent back if the transaction is abnormal. |
| currency         | Pre-authorization completion currency | 3  | No  | Require to fill in when resultCode is 0000               |
| amount           | Pre-authorization completion amount   | 12 | Yes | Be consistent in the requirement                         |
| sign             | Signing                               |    | Yes |  |
| signType         | Signing Type                          | 16 | Yes | MD5/ RSA2  |

### 3.1.9. Token Pre-authorization Completion Voiding

Request Address: {Gateway Address}/cnp/quickpay

List of Request Parameters:

| Field Name | Field | Length | Required | Remarks |
|------------|-------|--------|----------|---------|
|------------|-------|--------|----------|---------|

|                  | Description                    |    |     |  |
|------------------|--------------------------------|----|-----|--|
| version          | Version                        | 8  | Yes | V2.0.0, please refer to Appendix F for the instructions of the former versions |
| mchtId           | Merchant ID                    | 15 | Yes | The merchant ID you applied  |
| transType        | Transaction Type               | 20 | Yes | Please refer to Appendix A: Transaction Type                                   |
| accessOrderId    | Merchant Order Number          | 32 | Yes | The unique identification when merchants make requests                         |
| oriAccessOrderId | Original Merchant Order Number | 32 | Yes | Merchant Order required by original payment                                    |
| sign             | Signing Information            |    | Yes |  |
| signType         | Signing Type                   | 16 | Yes | MD5/ RSA2<br>MD5/ RSA2   |

Response Result:

| Field Name | Field | Length | Required | Remarks |
|------------|-------|--------|----------|---------|
|------------|-------|--------|----------|---------|

|                  | Description                           |     |     |  |
|------------------|---------------------------------------|-----|-----|--|
| resultCode       | Result Code                           | 4   | Yes | Please refer to Appendix D: Result code                  |
| resultDesc       | Result Description                    | 100 | Yes | Incorrect descriptions in detail                         |
| mchtId           | Merchant ID                           | 15  | Yes |  |
| accessOrderId    | Merchant Order Number                 | 32  | Yes | Same to the requirement                                  |
| oriAccessOrderId | Original merchant order number        | 32  | No  | It will not be sent back if the transaction is abnormal. |
| currency         | Pre-authorization completion currency | 3   | No  | Require to fill in when resultCode is 0000               |
| refundAmount     | Amount                                | 12  | Yes | Same to the requirement                                  |
| LocalCurrency    | Local currency                        | 3   | No  | Require to fill in when resultCode is 0000               |



|             |               |    |     |  |
|-------------|---------------|----|-----|--|
| LocalAmount | Local amount  | 12 | No  | Require to fill in when resultCode is 0000 |
| sign        | Signing       |    | Yes |  |
| signType    | Signing type. | 16 | Yes | MD5/ RSA2                                  |

### 3.1.10. Tokenization Result Query

In order to obtain tokenization result, merchants need to call this interface to initiate query, when tokenization response of API mode times out or in the situation of tokenization in the gateway forward mode.

Request Address: {Gateway Address}/token/manager

List of Request Parameters

| Field Name | Field Description | Length | Required | Remarks  |
|------------|-------------------|--------|----------|--|
| version    | Version Number    | 8      | Yes      | V2.0.0, please refer to Appendix F for the instructions of the former versions |
| mchtId     | Merchant ID       | 15     | Yes      | The merchant ID you applied  |
| transType  | Transaction type  | 20     | Yes      | Please refer to Appendix A: Transaction Type                                   |

|                  |                                |    |     |  |
|------------------|--------------------------------|----|-----|--|
| accessOrderId    | Merchant order number          | 32 | Yes | The unique identification when merchants make requests |
| oriAccessOrderId | Original Merchant Order Number | 32 | Yes | Original requested merchant order number               |
| sign             | Signing                        |    | Yes |  |
| signType         | Signing type                   | 16 | Yes | MD5/ RSA2  |

Response Result:

| Field Name       | Field Description              | Length | Required | Remarks  |
|------------------|--------------------------------|--------|----------|--|
| resultCode       | Result code                    | 4      | Yes      | Please refer to Appendix D: Result code                  |
| resultDesc       | Result description             | 100    | Yes      | Incorrect descriptions in detail                         |
| mchtId           | Merchant ID                    | 15     | Yes      |  |
| accessOrderId    | Merchant Order Number          | 32     | Yes      | Same to the requirement                                  |
| oriAccessOrderId | Original merchant order number | 32     | No       | It will not be sent back if the transaction is abnormal. |

|            |                     |     |    |  |
|------------|---------------------|-----|----|--|
| orderId    | System Order Number | 32  | No |  |
| status     | Order Status        | 16  | No | Please refer to Appendix E: order status. Require to fill in when resultCode is 0000.                            |
| statusDesc | Order Desc          | 16  | No | The incorrect description of original payment transaction, which is required to fill in when resultCode is 0000. |
| token      | Token Value         | 32  | No | Returned only when status is PAIED   |
| tavv       | tavv                | 128 | No | Returned only when status is PAIED   |
| expDate    | Valid Date          | 6   | No | Returned only when status is PAIED   |
| cardNo     | Card Number         | 20  | No | Returned only when status is PAIED,<br>eg: 123456***1234   |

|            |                       |     |     |   |
|------------|-----------------------|-----|-----|---|
| cardOrgn   | Cards<br>Organization | 32  | No  | Returned only when status<br>is PAIED,<br><br>Please refer to<br>appendix G: Cards<br>Organization<br>explanation |
| cardHolder | Cardholders'<br>Name  | 128 | No  | Returned only when status<br>is PAIED   |
| sign       | Signing               |     | Yes |   |
| signType   | Signing Type          | 16  | Yes | MD5/ RSA2   |

## 3.2. API Integration Mode Interface

### 3.2.1. Collection/Token Collection/Token Pre-authorization

Request Address: {Gateway address}/cnp/quickpay

List of Requested Parameters:

| Field Name        | Field<br>Description | Length | Required | Remarks                                       |
|-------------------|----------------------|--------|----------|---|
| Order Information |                      |        |          |   |
| version           | Version Number       | 8      | Yes      | V2.0.0, please refer to<br>Appendix F for the |

|                     |                       |     |     |  |
|---------------------|-----------------------|-----|-----|--|
|                     |                       |     |     | instructions of the former versions                    |
| mchtId              | Merchant ID           | 15  | Yes | The merchant ID you applied                            |
| transType           | Transaction Type      | 20  | Yes | Please refer to Appendix A: Transaction Type           |
| accessOrderId       | Merchant Order Number | 32  | Yes | The unique identification when merchants make requests |
| currency            | Payment Currency      | 3   | Yes | Please refer to Appendix B: Transaction Currency       |
| amount              | Amount                | 12  | Yes | e. g. 100.12   |
| language            | Website Language      | 10  | No  | Please refer to Appendix C: Language                   |
| email               | Email                 | 64  | Yes | Cardholders' email address                             |
| sign                | Signing               |     | Yes |  |
| signType            | Signing Type          | 16  | Yes | MD5/ RSA2  |
| Payment Information |                       |     |     |  |
| cardHolder          | Cardholders' Name     | 128 | Yes | FirstName + LastName                                   |

|             |                  |    |     |  |
|-------------|------------------|----|-----|--|
| acctNo      | Card Number      | 32 | Yes | <p>1.Insert card number in API integration collection transaction</p> <p>2.Insert the token value which is returned when token was created in Token collection / Token pre-authorization transaction.</p>  |
| expiryMonth | Validity (Month) | 2  | Yes | <p>Format: MM</p> <p>1.Insert monthly validity of the card in API integration collection transaction</p> <p>2.Insert token monthly validity in Token collection / Token pre-authorization transaction.</p> |
| expiryYear  | Validity (Year)  | 4  | Yes | <p>Format: YYYY</p> <p>1.Insert yearly validity of the card in API integration collection transaction</p> <p>2.Insert token yearly validity in Token collection / Token pre-</p>                           |

|   |                    |     |    |  |
|---|--------------------|-----|----|--|
|   |                    |     |    | authorization transaction.   |
| acctCvv   | Card CVV           | 4   | No | cvv2/cvc2/cav2/cid   |
| tavv  | tavv               | 128 | No | It is for TOKEN consumption / TOKEN pre-authorization transaction only. The tavv value that returned after creating the TOKEN must be input. |
| The below fields must be submitted when the merchant use 3DS authentication service of other gateways. (securityWay=SELF) |                    |     |    |  |
| eci   | ECI Value          | 2   | No |  |
| xid   | xid                | 128 | No | It is required to be filled in when using 3DS and card organization is VISA or AMERICAEXPRESS.   |
| sVersion  | 3ds version number | 64  | No | "1.0" or "2.0" is required to be filled in when using 3DS  |
| cavv  | cavv               | 128 | No | It is required to be filled in when using 3DS and card organization is MASTERCARD.   |
| dsTransactio  | Directory          | 128 | No | It is required to be   |

|   |                          |     |     |  |
|---|--------------------------|-----|-----|--|
| nID   | Server<br>Transaction ID |     |     | filled in when using 3DS<br>and card organization is<br>MASTERCARD.                            |
| Product Information   |                          |     |     |  |
| <p>productInfo parameters are formed by the below data in the mode of JSON.<br/>Please pay attention to the capital letters and the low case letters.</p> <p>The field is inserted the value in mode of JSON array.</p> <pre>productInfo=[{"sku":"123456789","productName":"MacBook Pro","price":"11000.00","quantity":"1"}, {"sku":"987654321","productName":"Iphone11","price":"5400.00","quantity":"1"}]</pre> |                          |     |     |  |
| sku   | Product ID               | 64  | Yes |  |
| productName   | Product Name             | 128 | Yes |  |
| price   | Price                    | 16  | Yes | For the value that is more<br>than 0, it is inserted as<br>its original value. E. g.<br>100.01 |
| quantity  | Product<br>Quantity      | 16  | Yes | the integer which is more<br>than or equal to 1  |
| productImage  | Product Image<br>URL     | 256 | No  |  |
| productUrl  | Product URL              | 256 | No  |  |



| Delivery Address  |                    |     |     |   |
|-------------------|--------------------|-----|-----|---|
| shippingFirstName | First Name         | 50  | Yes |   |
| shippingLastName  | Last Name          | 50  | Yes |   |
| shippingAddress1  | Shipping Address 1 | 128 | Yes |   |
| shippingAddress2  | Shipping Address 2 | 128 | No  |   |
| shippingCity      | City               | 100 | Yes |   |
| shippingState     | State/Province     | 100 | Yes | If the country is the US or Canada, please use the two letters code of the country or region codes in ISO-3166-2:US or ISO - 3166-2:CA respectively. The codes can be got by referring to Appendix I and J. |
| shippingCountry   | Country            | 2   | Yes | Please refer to Appendix H, fill in the two letters code in the table.  |

|                  |                   |     |     |  |
|------------------|-------------------|-----|-----|--|
| shippingZipCode  | Zip Code          | 20  | Yes |  |
| shippingPhone    | Phone             | 20  | Yes |  |
| Billing Address  |                   |     |     |  |
| billingFirstName | First Name        | 50  | Yes |  |
| billingLastName  | Last Name         | 50  | Yes |  |
| billingAddress1  | Billing Address 1 | 128 | Yes |  |
| billingAddress2  | Billing Address 2 | 128 | No  |  |
| billingCity      | Billing City      | 100 | Yes |  |
| billingState     | State/Province    | 100 | Yes | If the country is the US or Canada, please use the two letters code of the country or region codes in ISO-3166-2:US or ISO - 3166-2:CA respectively. The codes can be got by referring to Appendix I |

|                     |   |     |     |   |
|---------------------|---|-----|-----|---|
|                     |   |     |     | and J.  |
| billingCountry      | Country                                   | 2   | Yes | Please refer to Appendix H, and fill in the two letters code in the table.  |
| billingZipCode      | Zip Code                                  | 20  | Yes |   |
| billingPhone        | Phone                                     | 20  | Yes |   |
| Payment Environment |   |     |     |   |
| userAgent           | UserAgent                                 | 128 | Yes |   |
| ipAddress           | Cardholder's IP Address                   | 64  | Yes | e. g. 114.0.0.11  |
| panIsPaste          | Card number is 'copied and pasted' or not | 1   | Yes | 0 refers to no<br>1 refers to yes   |
| timeZone            | Cardholder's Time Zone                    | 2   | No  | Please input statistics.<br>The time difference between UTC time is as the example shows: the time zone in Beijing is 8 and the time zone in eastern America is -5. |
| acceptLanguage      | Required                                  | 32  | No  |   |

|              |                                   |    |    |  |
|--------------|-----------------------------------|----|----|--|
| ge           | Language in cardholder's browser  |    |    |  |
| domain       | Domain of Payment Website         | 64 | No |  |
| screenWidth  | The width of cardholder's screen  | 10 | No | integer  |
| screenHeight | The height of cardholder's screen | 10 | No | integer  |
| Others       |                                   |    |    |  |
| securityWay  | Ways of Security                  | 8  | No | <p>1. SELF: Related 3DS information is required to be submitted during the process of authorization, if merchant systems have risk management strategies.</p> <p>It is for transaction of API integration collection only.</p> |
| securityMode | Modes of                          | 16 | No | If DM and 3DS were   |

|           |                               |     |    |   |
|-----------|-------------------------------|-----|----|---|
|           | Security                      |     |    | <p>disposed or 3DS opened, value of securityMode can be neglected.</p> <p>If DM was not disposed but 3DS opened, process as per the value of securityMode:</p> <p>1.3DS: transaction will be in the process of DM &amp; 3DS;</p> <p>2.03DS: transaction will be in the process of 3DS;</p> <p>3.none: transaction will not be in the processes of DM and 3DS</p> <p>It is for transaction of API integration collection only.</p> |
| returnUrl | Return URL                    | 256 | No | The merchant's URL where payment gateway will return after payment was made   |
| notifyUrl | asynchronous notification url | 256 | No | The merchant's url where backend sends the notice of payment result after payment   |

|       |                         |      |    |  |
|-------|-------------------------|------|----|--|
| dmInf | DM tailored information | 1024 | No | <p>1.The field needs to be submitted, if DM product is initiated in backend. Please communicate the contents of the field to the operation team. The contents are submitted in the format of JSON character string.</p> <p>2.For the merchants of live-streaming, cliWebSrc as the field of customers source needs to be submitted.</p> <p>It is for transaction of API integration collection only.</p> |
|-------|-------------------------|------|----|--|

Response Result:

Response message format is Json, the definitions are as below:

| Field Name | Field Description | Length | Required | Remarks                                 |
|------------|-------------------|--------|----------|---|
| resultCode | Result Code       | 4      | Yes      | Please refer to Appendix D: Result Code |
| resultDesc | Result            | 100    | Yes      | Wrong description in                    |

|               | Description                    |     |     | detail  |
|---------------|--------------------------------|-----|-----|---|
| mchtId        | Merchant ID                    | 15  | Yes |   |
| accessOrderId | Merchant Order Number          | 32  | Yes | Be consistent in the requirement.   |
| orderId       | Order Number of Payment System | 32  | No  | It is required to fill in when transaction succeeds.  |
| currency      | Payment Currency               | 3   | No  | Be consistent in the requirement.   |
| amount        | Amount                         | 12  | No  | Be consistent in the requirement.   |
| LocalCurrency | Local Currency                 | 3   | No  | It is required to fill in when resultCode is 0000   |
| LocalAmount   | Local Amount                   | 12  | No  | It is required to fill in when resultCode is 0000   |
| payUrl        | Jump URL                       | 256 | No  | It is returned in the mode of 3DS. When the value is not null, it must redirect to that page before continuing the payment. |
| transTime     | Transaction                    | 14  | No  | YYYYMMDDhhmmss, time zone   |

|          |                    |    |     |  |
|----------|--------------------|----|-----|--|
|          | Time               |    |     | is GMT+8   |
| cardOrgn | Card Organizations | 32 | No  | Please refer to Appendix G: International Credit Card Organization |
| sign     | Signing            |    | Yes |  |
| signType | Signature Type     | 16 | Yes | MD5/ RSA2  |

### 3.2.2. Tokenization

Request Address: {gateway address}/token/manager

Request Parameters:

| Field Name    | Field Description     | Length | Required | Remarks  |
|---------------|-----------------------|--------|----------|--|
| version       | Version Number        | 8      | Yes      | V2.0.0, please refer to Appendix F for the instructions of the former versions |
| mchtId        | Merchant ID           | 15     | Yes      | The merchant ID you applied  |
| accessOrderId | Merchant Order Number | 32     | Yes      | The unique requested switch code.  |
| transType     | Transaction Type      | 20     | Yes      | Please refer to Appendix A: Transaction  |



|              |                       |     |           | Type  |
|--------------|-----------------------|-----|-----------|---|
| language     | Language              | 10  | No        | Please refer to Appendix C: Language  |
| securityMode | Authentication Method | 16  | No        | <p>If the background merchant configures to use the 3DS mode, the 3DS mode is mandatory, otherwise it depends on this parameter, and the options are as follows:</p> <p>3DS: 3DS</p> <p>NO: Non-3DS (default)</p> <p>If it is a non-3DS mode, the TOKEN answer result will be created directly; if it is a 3DS mode, the tokenizedUrl link will be returned, and the token will be created by visiting the link on the page</p> |
| returnUrl    | Return Address        | 256 | Condition | <p>After the tokenization is successful, skip back to the merchant's address</p> <p>3DS mode is required</p>  |

|  |                     |     |     |                                   |
|--|---------------------|-----|-----|-----------------------------------|
| sign   | Signing Information |     | Yes |                                   |
| signType   | Signing Type        | 16  | Yes | MD5/ RSA2                         |
| Card Information   |                     |     |     |                                   |
| cardHolder   | Cardholder's Name   | 128 | Yes | FirstName + LastName              |
| acctNo   | Card Number         | 30  | Yes |                                   |
| expiryMonth  | Validity (Month)    | 2   | Yes | MM                                |
| expiryYear   | Validity (Year)     | 4   | Yes | YYYY                              |
| acctCvv  | Card CVV            | 3   | Yes | Also refers to cvv2/cvc2/cav2/cid |
| Billing Address (There is no need to fill in for non-3ds service.) |                     |     |     |                                   |
| email  | Email               | 64  | Yes | Cardholders' email address        |
| billingFirstName   | First Name          | 50  | Yes |                                   |
| billingLastName  | Surname             | 50  | Yes |                                   |
| billingAddress1  | Billing Address 1   | 128 | Yes |                                   |

|                 |                      |     |     |  |
|-----------------|----------------------|-----|-----|--|
| billingAddress2 | Billing Address<br>2 | 128 | Yes |  |
| billingCity     | Billing City         | 100 | Yes |  |
| billingState    | State/Province       | 100 | Yes | If the country is the US or Canada, please use the two letters code of the country or region codes in ISO-3166-2:US or ISO -3166-2:CA respectively. The codes can be got by referring to Appendix I and J. |
| billingCountry  | Country              | 2   | Yes | Please refer to Appendix H, fill in the two letters code in the table.   |
| billingZipCode  | Zip Code             | 20  | Yes |  |
| billingPhone    | Phone                | 20  | Yes |  |

Response Result:

| Field Name | Field Description | Length | Required | Remarks |
|------------|-------------------|--------|----------|---------|
|------------|-------------------|--------|----------|---------|

|               |                       |      |     |   |
|---------------|-----------------------|------|-----|---|
| resultCode    | Result Code           | 4    | Yes | Please refer to Appendix D: Result Code   |
| resultDesc    | Result Description    | 100  | Yes | Wrong description in detail   |
| mchtId        | Merchant ID           | 15   | Yes |   |
| accessOrderId | Merchant Order Number | 32   | Yes | Be consistent in the requirement.   |
| tokenMeta     | Token Metadata        | 2048 | No  | Require to fill in when resultCode is 0000  |
| token         | Token Value           | 32   | No  | To the card which is not supported by card organization, Allinpay Token will be given. Allinpay Token is 17 numbers long, forming its value by starting with card bin and ending with '65'. |
| tavv          | tavv                  | 128  | No  |   |
| expDate       | Validity              | 6    | No  | YYYYMM  |
| sign          | Signing               |      | Yes |   |
| signType      | Signing Type          | 16   | Yes | MD5/ RSA2   |

## 3.3. GateWay Forward Mode Interface

### 3.3.1 Collection

Merchants need to submit the below order information in form to gateway, when merchants click the payment button of shopping cart to forward to the gateway cashier page, that is, when they initiate payment request. Then cardholders select payment methods and insert relevant information of payment card in the page of CNP gateway cashier.

The order website should be reported to the customer manager for whitelist configuration.

Request Address: {gateway address}/cnp/quickpay

List of Request Parameters:

| Field Name        | Field Description | Length | Required | Remarks  |
|-------------------|-------------------|--------|----------|--|
| Order Information |                   |        |          |  |
| version           | Version Number    | 8      | Yes      | V2.0.0, please refer to Appendix F for the instructions of the former versions |
| mchtId            | Merchant ID       | 15     | Yes      | The merchant ID you applied  |
| transType         | Transaction type  | 20     | Yes      | Please refer to Appendix A: Transaction Type                                   |

|               |                               |     |     |  |
|---------------|-------------------------------|-----|-----|--|
| accessOrderId | Merchant order number         | 32  | Yes | The unique identification when merchants make requests.  |
| currency      | Payment Currency              | 3   | Yes | Please refer to Appendix B: Transaction Currency   |
| amount        | Amount                        | 12  | Yes | e. g. 100.12   |
| language      | Language                      | 10  | Yes | Please refer to Appendix C: Language   |
| payPageStyle  | Page Style                    | 10  | No  | TINY: Simple Style<br>DEFAULT: Default Style   |
| email         | Email                         | 64  | Yes | Email address of cardholder  |
| returnUrl     | Return URL                    | 256 | Yes | The merchant's URL where payment gateway will return after payment was made                                |
| notifyUrl     | asynchronous notification URL | 256 | Yes | The merchant's address where backend sends the notice about payment result after payment                   |
| timeZone      | Cardholder's Time Zone        | 2   | No  | Please input statistics.<br>The time difference between UTC time is as the example shows: the time zone in |

|  |                       |     |     |   |
|--|-----------------------|-----|-----|---|
|  |                       |     |     | Beijing is 8 and the time zone in eastern America is -5.                          |
| sign   | Signature Information |     | Yes |   |
| signType   | Signing Type          | 16  | Yes | MD5/ RSA2   |
| Product Information  |                       |     |     |   |
| <p>productInfo parameters are formed by the below data via JSON. Please pay attention to the capital letters and the low case letters.</p> <p>The field is inserted the value in mode of JSON array.</p> <p>productInfo=[{"sku":"123456789","productName":"MacBook Pro","price":"11000.00","quantity":"1"}, {"sku":"987654321","productName":"Iphone11","price":"5400.00","quantity":"1"}]</p> |                       |     |     |   |
| sku  | Product ID            | 64  | Yes |   |
| productname  | Product Name          | 128 | Yes |   |
| price  | Price                 | 16  | Yes | The numerical value which is more than 0, is rounded up to second decimal places. |
| quantity   | Product Quantity      | 16  | Yes | the integer which is equal to or more than 1                                      |

|                   |                       |     |     |  |
|-------------------|-----------------------|-----|-----|--|
| productImage      | Product Image<br>URL  | 256 | No  |  |
| productUrl        | Product Link<br>URL   | 256 | No  |  |
| Delivery Address  |                       |     |     |  |
| shippingFirstName | First Name            | 50  | Yes |  |
| shippingLastName  | Last Name             | 50  | Yes |  |
| shippingAddress1  | Shipping<br>Address 1 | 128 | Yes |  |
| shippingAddress2  | Shipping<br>Address 2 | 128 | No  |  |
| shippingCity      | City                  | 100 | Yes |  |
| shippingState     | State/Province        | 100 | Yes | If the country is the US or Canada, please use the two letters code of the country or region codes in ISO-3166-2:US or ISO -3166-2:CA respectively. The codes can be got by referring to Appendix I and J. |



|                  |                   |     |     |   |
|------------------|-------------------|-----|-----|---|
| shippingCountry  | Country           | 2   | Yes | Please refer to Appendix H  |
| shippingZipCode  | Zip Code          | 20  | Yes |   |
| shippingPhone    | Phone             | 20  | Yes |   |
| Billing Address  |                   |     |     |   |
| billingFirstName | First Name        | 50  | Yes |   |
| billingLastName  | Last Name         | 50  | Yes |   |
| billingAddress1  | Billing Address 1 | 128 | Yes |   |
| billingAddress2  | Billing Address 2 | 128 | No  |   |
| billingCity      | Billing City      | 100 | Yes |   |
| billingState     | State/Province    | 100 | Yes | If the country is the US or Canada, please use the two letters code of the country or region codes in ISO-3166-2:US or ISO -3166-2:CA respectively. The codes can |

|                |                         |      |     |   |
|----------------|-------------------------|------|-----|---|
|                |                         |      |     | be got by referring to Appendix I and J.  |
| billingCountry | Country                 | 2    | Yes | Please refer to Appendix H, fill in the two letters code in the table.  |
| billingZipCode | Zip Code                | 20   | Yes |   |
| billingPhone   | Phone                   | 20   | Yes |   |
| Others         |                         |      |     |   |
| dmInf          | DM tailored information | 1024 | No  | <p>1. The field needs to be submitted, if DM product is initiated in backend. Please communicate the contents of the field to the operation team. The contents are submitted in the format of JSON character string.</p> <p>2. For the merchants of live-streaming, cliWebSrc, the field of source of customers' needs to be submitted.</p> |

Response Result:

The response message format is JSON and its definitions are as below:

| Field Name    | Field Description              | Length | Required | Remarks                                 |
|---------------|--------------------------------|--------|----------|---|
| resultCode    | Transaction Result Code        | 4      | Yes      | Please refer to Appendix D: Result Code |
| accessOrderId | Access Order Number            | 50     | Yes      |   |
| mchtId        | Merchant ID                    | 15     | Yes      |   |
| resultDesc    | Transaction Result Description | 100    | Yes      |   |
| orderId       | Order Number                   | 32     | No       |   |
| payUrl        | Jump URL                       | 256    |          | Require to fill in after success        |
| sign          | Signing                        |        | Yes      |   |
| signType      | Signing Type                   | 16     | Yes      | MD5/ RSA2                               |

Instructions on forwarding to merchant page after making payment:

A link returning to merchant page would be provided on the payment result page after making payment. When cardholders click the link, server will forward to payment successful page as per the returnUrl submitted during requirement.

Highly recommended that transaction results must be confirmed by using query interface.

Specific forwarding method is as below:

Request Method: POST

Encoding Format: UTF-8

Parameters:

| Field Name    | Field Description         | Length | Required | Remarks  |
|---------------|---------------------------|--------|----------|--|
| resultCode    | Result Code               | 4      | Yes      | Please refer to Appendix D: Result code                |
| resultDesc    | Result Description        | 100    | Yes      | Wrong description in detail                            |
| mchtId        | Merchant ID               | 15     | Yes      | The merchant ID you applied                            |
| accessOrderId | Merchant Order Number     | 50     | Yes      | The unique identification when merchants make requests |
| orderId       | Order Number              | 32     | Yes      |  |
| cardNo        | Card Number               | 20     | Yes      |  |
| cardOrgn      | International Credit Card | 32     | Yes      | Please refer to Appendix G: International Credit       |

|  |               |  |  |                    |
|--|---------------|--|--|--------------------|
|  | Organizations |  |  | Card Organizations |
|--|---------------|--|--|--------------------|

### 3.3.2. Tokenization

Requested Address: {H5 address}/ cnp\_token/tokenCollect

List of Requested Parameters:

| Field Name        | Field Description     | Length | Required | Remarks  |
|-------------------|-----------------------|--------|----------|--|
| Order Information |                       |        |          |  |
| version           | Version Number        | 8      | Yes      | V2.0.0, please refer to Appendix F for the instructions of the former versions |
| mchtId            | Merchant ID           | 15     | Yes      | The merchant ID you applied  |
| transType         | Transaction Type      | 20     | Yes      | Please refer to Appendix A: Transaction Type                                   |
| accessOrderId     | Merchant Order Number | 32     | Yes      | The unique identification when merchant make requests                          |
| language          | Website Language      | 10     | No       | Please refer to appendix C: languages  |

|  |                       |        |          |  |
|--|-----------------------|--------|----------|--|
| securityMode   | Authentication Method | 16     | No       | 3DS : 3DS (default)<br>NO: without 3DS |
| returnUrl  | Return Address        | 256    | Yes      |  |
| sign   | Signing Information   |        | Yes      |  |
| signType   | Signing Type          | 16     | Yes      | MD5/ RSA2                              |
| Field Name   | Field Description     | Length | Required | Remarks                                |
| Billing Address (There is no need to fill in for non-3ds service.) |                       |        |          |  |
| email  | Email                 | 64     | Yes      | Cardholders' email address             |
| billingFirstName   | First Name            | 50     | Yes      |  |
| billingLastName  | Surname               | 50     | Yes      |  |
| billingAddress1  | Billing Address 1     | 128    | Yes      |  |
| billingAddress2  | Billing Address 2     | 128    | Yes      |  |
| billingCity  | Billing City          | 100    | Yes      |  |
| billingState   | State/Province        | 100    | Yes      | If the country is the                  |

|                |          |    |     |   |
|----------------|----------|----|-----|---|
|                |          |    |     | US or Canada, please use the two letters code of the country or region codes in ISO-3166-2:US or ISO-3166-2:CA respectively. The codes can be got by referring to Appendix I and J. |
| billingCountry | Country  | 2  | Yes | Please refer to Appendix H, fill in the two letters code in the table.  |
| billingZipCode | Zip Code | 20 | Yes |   |
| billingPhone   | Phone    | 20 | Yes |   |

Notes: This interface can only take parameters (including signature) by inserting form into page and submit the routine which is relocated.

After submitting successfully, it would relocate to the TOKEN creation page.

Request sample:

```
<!DOCTYPE html>

<html lang="zh-CN">

<head>
```

```
<title>OCAS.CASHIER</title>

<meta name="viewport" content="width=400,maximum-scale=1.3,user-scalable=no">

<meta http-equiv="Content-Type" content="text/html; charset=utf-8">

<script src="https://libs.baidu.com/jquery/2.0.0/jquery.min.js"></script>

<script src="https://cdn.bootcss.com/jsencrypt/3.0.0-beta.1/jsencrypt.js"></script>

</head>

<body>

<form id="form" method="post" action="{H5 Address}/ cnp_token/tokenCollect"
enctype="multipart/form-data" accept-charset="utf-8">

<input type="input" name="version" value="V2.0.0"/>

<input type="input" name="mchtId" value="852999941210001"/>

<input type="input" name="accessOrderId"
value="3a00ac5ce3696641cc719d9994b31a21"/>

<input type="input" name="language" value="zh-hant"/>

<input type="input" name="returnUrl"
value="http://localhost:8080/api/payment/create-token-finish"/>

<input type="input" name="sign"
value="F009kN+v4RYF30AaXI8W1Xh3kPajJQxj4VD3b/pfASF6rS6+tENOTN0LDRH2q4WvL/4y23cw50
Sq+DpU0yuiSL1omth7RY3i1RP3No9bHg3EoT45M/GR3nClubFEo8fB1PWZcqAsR0+0KDZUV6ibq1Xo3GU
zij+iP+JgqIHVJ9RCie506W2J+gvq6ags1MMHDY2zPozxzAmx5xgTAdODXbAX47puywQFKpA9fHHakVRF
sdUqWInjUZ5N722CV7C7aZPACd40u2iF3EX4aMHJGhy+aw6Q/a1PQj5ST/itSDjpV+qjDD0QE5qQ0LBQY
nZN5pkQeQpJDYLtd75LJBGpZw==" />
```



```
<input type="input" name="signType" value="RSA2"/>

<input type="input" name="billingFirstName" value="Zhang"/>

<input type="input" name="billingLastName" value="San"/>

<input type="input" name="billingAddress1" value="Central"/>

<input type="input" name="billingAddress2" value="No. 8"/>

<input type="input" name="billingCity" value="Hong Kong"/>

<input type="input" name="billingCountry" value="CN"/>

<input type="input" name="billingState" value="Canton"/>

<input type="input" name="billingZipCode" value="999077"/>

<input type="input" name="billingPhone" value="8617792518651"/>

<input type="input" name="email" value="test@123.com"/>

<input type="input" name="transType" value="TokenCreate" />

<button onclick="tokenPage();">create token</button>

<button hidden=hidden type="submit" id="btn">create token</button>

</form>

<script type="text/javascript">

function tokenPage() {

$("#btn").submit();

}
```

```
</script>
```

```
</body>
```

```
</html>
```

### 3.3.3. Asynchronous Notification of Tokenization

Notes:

After tokenization plan is completed, clients would be notified asynchronously.

Merchants need to process the request of result asynchronous notification correctly, response to Http Status Code 200, and return “SUCCESS” character string.

If our system fails to receive merchants’ response, our system would notify repeatedly no more than 7 times and the time gap is 30s, 30s, 60s, 60s, 1800s, 1800s, 1800s respectively.

Please contact account manager to complete configuration of token asynchronous notification address.

| Field Name | Field Description | Length | Required | Remarks |
|------------|-------------------|--------|----------|---------|
| mchtId     | Merchant ID       | 15     | Yes      |         |
| cardNo     | Card Number       | 20     | Yes      |         |
| token      | Token Number      | 32     | Yes      |         |

|               |   |     |    |  |
|---------------|---|-----|----|--|
| accessOrderId | Merchant Oder<br>Number                       | 32  | No | It will be sent back<br>when the state is<br>ACTIVED.                                |
| orderId       | System Oder<br>Number                         | 32  | No | It will be sent back<br>when the state is<br>ACTIVED.                                |
| tavv          | Tavv  | 128 | No | It will be sent back<br>when the state is<br>ACTIVED.                                |
| expDate       | Validity                                      | 6   | No | YYYYMM<br><br>It will be sent back<br>when the state is<br>ACTIVED.                  |
| cardOrgn      | International<br>Credit Card<br>Organizations | 32  | No | Please refer to Appendix<br>G: List of International<br>Credit Card<br>Organizations |
| cardHolder    | Cardholder's<br>Name                          | 128 | No |  |
| state         | Token State                                   | 16  | No | SUSPENDED<br><br>ACTIVED<br><br>INACTIVE   |

|           |                          |      |     |   |
|-----------|--------------------------|------|-----|---|
|           |                          |      |     | DELETED<br><br>UPDATE: metadata change  |
| tokenMeta | Token<br>Displaying Data | 2048 | No  | The data are required to fill in when the state is UPDATE.<br><br>Please refer to Appendix K: TokenMeta example |
| sign      | Signing                  |      | Yes |   |
| signType  | Signing Type             | 16   | Yes | MD5/ RSA2   |

## 4. File Interface

### 4.1. Reconciliation File Download

Function explanation: the reconciliation interface is for verifying accounts automatically by the system of accessing party. This is a mode of interface and the format of the file is csv. Merchants can download the xlsx file through AllinpayHK merchant platform.

Request Address: {Gateway Address}/cnp/downfile

Request Message:

| Field Name | Field Description | Length | Required | Remarks                 |
|------------|-------------------|--------|----------|-------------------------|
| version    | Version Number    | 8      | Yes      | V2.0.0, please refer to |

|               |                      |    |     |  |
|---------------|----------------------|----|-----|--|
|               |                      |    |     | Appendix F for the instructions of the former versions |
| mchtId        | Merchant ID          | 15 | Yes | The id of the account that you applied                 |
| transType     | Transaction Type     | 20 | Yes | Please refer to Appendix A: Transaction Type           |
| accessOrderId | Request order number | 32 | Yes | The unique identification of request.                  |
| billDate      | Transaction date     | 8  | Yes | Reconciliation date<br>yyyyMMdd                        |
| sign          | Signature            |    | Yes |  |
| signType      | Signing Type         | 16 | Yes | MD5/ RSA2  |

Response Message:

| Field Name    | Field Description     | Length | Required | Remarks                                 |
|---------------|-----------------------|--------|----------|---|
| resultCode    | Result code           | 4      | Yes      | Please refer to Appendix D: result Code |
| accessOrderId | Merchant order number | 50     | Yes      | Same to the requirement.                |
| resultDesc    | Result                | 100    | Yes      | Description of enquiry                  |

|          |                                  |  |    |                 |
|----------|----------------------------------|--|----|-----------------|
|          | description                      |  |    | result          |
| billData | Reconciliation<br>files contents |  | No | Base64 decoding |

#### The Format Instructions of Reconciliation Files

- 1.The contents in every line of the files must meet the standard of format.  
And every line must be ended in pressing ENTER to the next line.
- 2.The data are separated by comma “,”
- 3.It is not necessary to fill any information in the related data  
(including Space Bar), if the data is null.
- 4.The last line shows the aggregate information, the format is as below:

| Sequence | Field Name                             | Explanation |
|----------|--|-------------|
| 1.       | summary                                |             |
| 2.       | Transaction Date                       |             |
| 3.       | Settlement Currency                    |             |
| 4.       | Payment Amount                         |             |
| 5.       | Total Service Charge of<br>Transaction |             |
| 6.       | Settlement Total Currency              |             |
| 7.       | Total Number of Transaction            |             |

|     |                               |  |
|-----|-------------------------------|--|
| 8.  | Total Amount of Transaction   |  |
| 9.  | Total Discount                |  |
| 10. | Amount of Profit Distributing |  |
| 11. | Transaction                   |  |
| 12. | Service Charge for refund     |  |

5、Explanation of Reconciliation Data Scale:

| Sequence | Field Name                                 | Explanation |
|----------|--|-------------|
| 1.       | Transaction Date                           | yyyyMMdd    |
| 2.       | Merchant ID (null is acceptable)           |             |
| 3.       | Merchant Name                              |             |
| 4.       | Terminal Number                            |             |
| 5.       | Order number in payment system             |             |
| 6.       | Transaction Type                           |             |
| 7.       | Card Number                                |             |
| 8.       | The International Credit Card organization |             |
| 9.       | Batch Number                               |             |

|     |                                     |                             |
|-----|-------------------------------------|-----------------------------|
| 10. | Swift number                        |                             |
| 11. | Transaction time                    | yyyy-MM-dd HH:mm:ss         |
| 12. | Transaction currency                |                             |
| 13. | Payment amount                      | as per ISO currency decimal |
| 14. | Tips amount                         |                             |
| 15. | Settlement currency                 |                             |
| 16. | Settlement amount                   |                             |
| 17. | Transaction                         |                             |
| 18. | Total amount                        |                             |
| 19. | Discount amount                     |                             |
| 20. | Settlement rate                     |                             |
| 21. | Order number in the original system |                             |
| 22. | Remarks                             |                             |
| 23. | Profit distributing amount          |                             |
| 24. | Merchant order number               | 同交易请求的字段：<br>accessOrderId  |



|     |                           |  |
|-----|---------------------------|--|
| 25. | Deposit                   |  |
| 26. | Service charge for refund |  |

## 4.2. Chargeback Data Download

### 4.2.1. Chargeback Data Download by Merchants

Request Address: {gateway address}/cnp/downfile

Request Message:

| Field Name       | Field Description    | Length | Required | Remarks  |
|------------------|----------------------|--------|----------|--|
| version          | Version Number       | 8      | Yes      | V2.0.0, please refer to Appendix F for the instructions of the former versions |
| mchtId           | Merchant ID          | 15     | Yes      | The merchant ID you applied  |
| transType        | Transaction type     | 20     | Yes      |  |
| accessOrderId    | Request order number | 32     | Yes      | The unique identification of request   |
| disputeStartDate | Starting Date        | 8      | Yes      | Date yyyyMMdd  |

|                |                                   |    |     |               |
|----------------|-----------------------------------|----|-----|---------------|
|                | of Chargeback Enquiry             |    |     |               |
| disputeEndDate | Ending Date of Chargeback Enquiry |    |     | Date yyyyMMdd |
| signType       | Signing type                      | 16 | Yes | MD5/ RSA2     |
| sign           | Signature                         |    | Yes |               |

Response Message:

| Field Name    | Field Description       | Length | Required | Remarks                                 |
|---------------|-------------------------|--------|----------|---|
| resultCode    | Result Code             | 4      | Yes      | Please refer to Appendix D: result code |
| resultDesc    | Result Code Description | 100    | Yes      | Description of enquiry result           |
| mchtId        | Merchant ID             | 15     | Yes      | Merchant ID that you applied            |
| accessOrderId | Merchant order number   | 50     | Yes      | Same to the requirement                 |
| disputeData   | Chargeback details      |        | No       | Base64 decode                           |

## 4.2.2. Explanation of Chargeback Detailed Format

1.The contents in every line of the files must meet the standard of format.  
And every line must be ended in pressing ENTER to the next line.

2.The data are separated by comma “,”.

3. If the data is null, it is not necessary to fill any information in the related data (including Space Bar).

4.The last line shows the aggregate information.

5.The explanation of domain of chargeback details.

| Sequence | Field Name                     | Explanation  |
|----------|--------------------------------|--|
| 1.       | Account number                 | Merchant ID  |
| 2.       | Terminal number                | Null is ok   |
| 3.       | Partner number                 | Null is ok   |
| 4.       | Original transaction number    | The original transaction swift number in the system which is related to the chargeback |
| 5.       | Original merchant order number | The original transaction merchant order number which is related to the chargeback      |
| 6.       | Original transaction type      |  |

|     |                                  |   |
|-----|----------------------------------|---|
| 7.  | Original transaction Amount      | With decimal point  |
| 8.  | Original transaction currency    |   |
| 9.  | Original transaction card number | The first sixth and the last fourth numbers are not disclosed |
| 10. | Original transaction time        | YYYYMMDDhhmmss, time zone: GMT+8                              |
| 11. | Transaction channel              | Banks/international credit card organizations                 |
| 12. | Chargeback order number          |   |
| 13. | Chargeback amount                |   |
| 14. | Chargeback currency              |   |
| 15. | Chargeback reason                |   |
| 16. | Explanation of chargeback reason |   |
| 17. | Chargeback time                  | YYYYMMDD, time zone: GMT+8                                    |
| 18. | Chargeback service               |   |
| 19. | Merchant name                    |   |

|     |                                |  |
|-----|--------------------------------|--|
| 20. | ARN                            |  |
| 21. | Card organization              |  |
| 22. | Acceptable chargeback amount   |  |
| 23. | Acceptable chargeback currency |  |
| 24. | Deadline for reply             |  |
| 25. | State                          |  |
| 26. | Creation time                  |  |
| 27. | Chargeback state               |  |

The recorded statical information in the bottom line of the file:

| Sequence | Field Name               | Explanation   |
|----------|--------------------------|---|
| 1.       | Summary                  |   |
| 2.       | Chargeback date          | The enquiry period of time of submitted chargeback e.g. 20200420-20200430 |
| 3.       | Transaction total amount |   |
| 4.       | Transaction currency     |   |

|    |                            |  |
|----|----------------------------|--|
| 5. | Chargeback total amount    |  |
| 6. | Chargeback currency        |  |
| 7. | Total number of chargeback |  |

## 5. F & Q

Q: In the mode of integration of API and 3DS, which elements are displayed in the checkout page of OATS CNP system.

A: OATS CNP system only displays a loading page without any payment information. If the loading page is placed into the merchant system, the loading represents the process of paying.

Q: What are the differences between the two fashions designated by the field payPageStyle?

A: In the fashion of TINY, the payment gateway can be filled in payment card information only, including card number, cardholder's name, expiry date, and CVV. No modification is allowed, once the billing information was sent. While in the fashion of DEFAULT, not only can payment gateway be input payment card information, but cardholder's billing information can be modified.

Q: Is it available to settle the same payment several times in the checkout of CNP?

A: For every order, it is only allowed to settle the payment by one time. In the gateway forward Mode, if the payment was failed, paying again is available. While in the Direct Mode with 3DS, it is allowed to make the

payment by only one time. Payment result will be presented, after the payment was completed. Therefore, merchants need to pay attention to handling the payment result.

Q: In which circumstances is the asynchronous notification pushed?

A: For the mode of integration of API and 3DS and gateway forward Mode, asynchronous notification will be pushed after making the payment. If the push failed, CNP will push it again in a fixed period. The push times will not exceed 8.

Q: What are transaction currency and settlement currency?

A: Transaction currency is the quoted currency of merchants and over 140 currencies are supported by OATS CNP system by now. Settlement currency is also called local currency. Only one currency can be chosen as settlement currency of merchants and once being chosen, it cannot be changed.

Q: In which circumstances can the interface of transaction results query be used?

A: In this system, all the transaction interfaces can use this interface to query transaction results. Attention should be paid to the below two situations:

1. In the gateway forward Mode, the transaction interface results query only represents the current transaction result of the order not the final one, since the payment gateway allows failure in paying more than one time until success.

2. When forwarding to payment gateway after completing payment in the mode of integration of API and 3DS and gateway forward Mode, it is strongly recommended to use the query interface to confirm the transaction results rather than to use synchronous request information.

Q: How can reconciliation be made?

A: Reconciliation files can be downloaded through this route: files interface – reconciliation files download. Produced by the system every midnight, reconciliation files of last day can be downloaded after 8 am.

Q: When ‘requested URL doesn’t match filing URL’ exists, how can it be handled?

A: In the gateway forward mode, the system, by refererUrl, would examine the URL initiated by merchants. Therefore, when accessing to the network, it is necessary to file merchants’ URLs in the CNP system and the operation team will allocate them.

Q: When ‘The product doesn’t exist’ appears, how can it be solved?

A: It suggests that the function has not been turned on and please contact the operation team to turn on the related function.

Q: When ‘order timed out’ exists, how can it be handled?

A: Time for payment is set to be 24 hours by the system. For the order which is not paid in the due time, the system will show ‘the order timed out’ when making the payment. At this moment, a new order can be recreated by the merchant system.

Q: In the API integration Mode, after receiving results, how can judge transaction status and whether it needs to jump to the Cashier Register or not.

A: When resultCode is 0000 and field payUrl exists, it only means order successfully and needs to jump to the page of Cashier Register. The transaction final result is determined by asynchronous notification or transaction query;



When resultCode is 0000 and filed payUrl doesn't exist, it means transacted successfully and doesn't need to jump to the page of Cashier Register;

When resultCode is not 0000, whether query is required is determined by resultCode.

Q: If merchants want transactions to engage in 3DS, how can it be set?

A: It can be achieved by setting the security mode as 3DS/03DS in the request text. The difference between 3DS and 03DS is that when merchants have turned on DM, DM is supported in 3DS, but DM is not supported by 03DS.

## 6. Appendix

### 6.1. Appendix A – Transaction Type

| Transaction Code | Description                             |
|------------------|---|
| QuickPay         | Collecting-API Integration Mode         |
| TokenQuickPay    | TOKEN Collecting – API Integration Mode |
| TokenPreAuth     | TOKEN Pre-authorization                 |
| Pay              | Collecting- Gateway Forward             |
| Refund           | Refund                                  |
| TokenRefund      | TOKEN Refund                            |
| TokenPreAuthCn1  | TOKEN Pre-authorization Voiding         |

|                     |  |
|---------------------|--|
| TokenPreAuthComp    | TOKEN Pre-authorization Completion                     |
| TokenPreAuthCompCnl | TOKEN Pre-authorization Completion Voiding             |
| Query               | Transaction Result Query                               |
| DownFile            | Reconciliation Files Download                          |
| DownDispFile        | Chargeback Files Download                              |
| DownBusData         | Business Data of International Credit Card<br>Download |
| TokenCreate         | TOKEN Tokenization                                     |
| TokenManager        | TOKEN Effective Period Management                      |
| TokenOrderQuery     | TOKEN Tokenization Result Query                        |

## 6.2. Appendix B – Transaction Currencies

| Currency | Description      |
|----------|------------------|
| CNY      | Chinese Yuan     |
| HKD      | Hong Kong Dollar |
| USD      | American Dollar  |
| EUR      | Euro             |

|                  |   |
|------------------|---|
| GBP              | Pound   |
| JPY              | Japanese Yen                                      |
| TWD              | New Taiwan dollar                                 |
| AUD              | Australian dollar                                 |
| SGD              | Singapore dollar                                  |
| Other currencies | Please refer to the three-letter code in ISO 4217 |

### 6.3. Appendix C – Language

| Language | Description         |
|----------|---------------------|
| zh       | Simplified Chinese  |
| en       | English             |
| zh-hant  | Traditional Chinese |
| ja       | Japanese            |
| kr       | Korean              |
| fr       | French              |
| es       | Spanish             |
| ar       | Arabic              |

## 6.4. Appendix D – Result Code

| Result Codes | Description                   | Processing mode   |
|--------------|-------------------------------|---|
| 0000         | success                       | transaction successful  |
| P000         | Transaction payment under way | Transaction result is uncertain and query interface needs to be used to confirm the result.   |
| 0006         | Processing timeout            | For collection, TOKEN creation and management etc., it can be considered transaction failure. To solve the problem, you just need to initiate the transaction again. For voiding and refund, transaction query needs to be initiated. |
| 0001         | Parameter error               | Please check whether the request parameters meet the interface standards, whether the required parameters are missed, and whether the length of parameters exceeds the limit  |
| 0002         | Key verification failed       | Please check whether the signing algorithm meets the requirement; whether strings to be signed were generated as per the requirement; whether the merchant secret key is valid; and contact the account                               |

|      |   |  |
|------|---|--|
|      |   | manage rto confirm whether the merchant public key was configured.   |
| 0004 | The requested function is not yet supported | contact the account manager to confirm whether the permission to relevant products was given.  |
| 0005 | Unsupported currency                        |  |
| 0007 | Order does not exist                        | For query transaction, if this mistake is reported 30 minutes after initiating the original transaction, it can be considered that the original transaction fails. To other transactions, it can be considered they fails. |
| 0008 | Risk trading                                |  |
| 0009 | Message format error                        | Please check whether the request mode of interface and request contents meet the requirement   |
| 0010 | Invalid Merchant                            | Please contact account manager to check whether the merchant state is valid.   |
| 0013 | Out of limit                                | exceed the payer's transaction limit, please ask cardholder to contact the issuer.   |

|      |   |  |
|------|---|--|
| 0015 | No routing available                      | Please contact the account manager to confirm the reasons.   |
| 0016 | No such issuer                            |  |
| 0017 | Invalid Amount                            | Check the transaction amount   |
| 0018 | Failed to check the registration of 3DS   | Cardholder's card has not been registered  |
| 0019 | Failed to verify the authorization of 3DS |  |
| 0020 | DM failed                                 | Log in the partner platform or merchant platform to confirm the reasons for the failure to pass DM |
| 0021 | Exchange rate conversion failed           | To contact the account manager to check the reasons for failure.                                   |
| 0022 | Duplicate order                           | Check merchants order number to ensure every request is unique                                     |
| 0035 | Transaction is not allowed in this period | Contact the account manager to check the timescale when transaction is not allowed.                |
| 0037 | Sorry, your balance is not enough         | The balance amount of cardholder's card is not enough to transact.                                 |
| 0038 | Original order has been paid              |  |
| 0039 | Order closed                              | Order is closed for not paying on  |

|      |  |   |
|------|--|---|
|      |  | time, please reinitiate   |
| 0040 | No such merchant                         | Check whether the merchant ID is correct                            |
| 0051 | Original transaction is being processing | Wait for the completion of original transaction                     |
| 0052 | Original transaction failed              | Check the state of original transaction                             |
| 0053 | Issuer or transit system unavailable     | Issuer breaks down, please ask the cardholder to contact the issuer |
| 0054 | Contact the acquirer                     | Contact account manager to check the reasons                        |
| 0056 | Expired card                             |   |
| 0057 | Fraud card                               |   |
| 0058 | Suspected fraud                          |   |
| 0059 | Security violation                       |   |
| 0060 | Illegal transaction                      |   |
| 0061 | No action taken                          |   |
| 0062 | Transaction not permitted to cardholder  | Issuer rejects, ask the cardholder to contact the issuer.           |
| 0063 | restricted card                          | Issuer rejects, ask the cardholder to contact the issuer.           |

|      |  |   |
|------|--|---|
| 0065 | Additional verification required                           | Failed to pass the issuer's verification, ask the cardholder to contact issuer.   |
| 0067 | invalid account  | Check whether the transaction card is valid   |
| 0073 | Invalid CVV/CVV2   | Ask cardholder to confirm whether CVV/CVV2 is filled in correctly   |
| 0074 | Domestic Debit Transaction Not Allowed (Regional use only) | Issuer rejects, ask the cardholder to contact the issuer.   |
| 0075 | Lost card  |   |
| 0076 | Stolen card  |   |
| 0078 | Do not honor   | Issuer rejects, ask the cardholder to contact the issuer.   |
| 0079 | DECLINE-Policy   | Issuer rejects, ask the cardholder to contact the issuer.   |
| 0080 | DECLINE-life cycle   | Issuer rejects, ask the cardholder to contact the issuer.   |
| 0083 | Risk control over the limit                                | Risk control limit of merchant transaction, please contact the account manager to check the detailed information of transaction risk management |
| 0099 | Statement does not exist                                   | Bank statement would not be   |



|      |  |   |
|------|--|---|
|      |  | generated, if bank statement has not been generated or there is not transaction on that date.   |
| 3028 | The request URL does not match the report URL        | This happens in the scenario of CNP jumping. When jumping to Allinpayintl cashier, the system would check whether the address before jumping is the same as the merchant website address offered when onboarding. If the error happens, please contact the account manager to check whether the current merchant website address is the same as the one before jumping. |
| 5003 | The account has been bound and cannot be bound again |   |
| 6000 | Please contact the issuing bank                      |   |
| 6001 | Confiscate the card                                  |   |
| 6002 | Non acceptance                                       | Contact account manager to check the reasons  |
| 6006 | Invalid card number                                  |   |
| 6010 | Invalid / wrong related party transaction            | Check whether the related transactions exist or not and whether they are successful or not.   |
| 7000 | DM score was not passed                              | Log in the partner platform or  |

|      |                   |   |
|------|-------------------|---|
|      |                   | merchant platform to confirm DM rating and the reasons for failure to pass.   |
| 7003 | DM review         |   |
| 9998 | Processing failed |   |
| 9999 | System exception  | For collection, TOKEN creation and management etc., it can be considered transaction failure. To solve the problem, you just need to initiate the transaction again. For voiding and refund, transaction query needs to be initiated. |

## 6.5. Appendix E – Order State

| State Code | Explanation              |
|------------|--------------------------|
| READY      | To be paid               |
| PAYING     | in the process of paying |
| PAIED      | payment has been made    |
| REVOKED    | revocation has been made |
| CLOSED     | closed                   |
| REFUND     | refunded                 |

|        |                    |
|--------|--------------------|
| FAILED | transaction failed |
|--------|--------------------|

## 6.6. Appendix F – Version Number Explanation

Version V1.0.0 supports MD5 Algorithm only

Version V2.0.0 supports RSA Algorithm in general. The specific algorithm is designated in the field signType.

## 6.7. Appendix G – List of International Credit Card Organizations

| International Credit Card Organizations | Available Region     |
|---|----------------------|
| VISA                                    | Hong Kong, Singapore |
| MASTERCARD                              | Hong Kong, Singapore |
| JCB                                     | Hong Kong            |
| AMERICAEXPRESS                          | Singapore            |
| UNIONPAY                                | Hong Kong, Singapore |

## 6.8. Appendix H – List of Countries

| English Name | Two Letters Code | Three Letters Code | Digital Code | ISO 3166-2 | Chinese Name |
|--------------|------------------|--------------------|--------------|------------|--------------|
|--------------|------------------|--------------------|--------------|------------|--------------|

|                     |    |     |     |               |         |
|---------------------|----|-----|-----|---------------|---------|
| Afghanistan         | AF | AFG | 004 | ISO 3166-2:AF | 阿富汗     |
| Aaland Islands      | AX | ALA | 248 | ISO 3166-2:AX | 奥兰      |
| Albania             | AL | ALB | 008 | ISO 3166-2:AL | 阿尔巴尼亚   |
| Algeria             | DZ | DZA | 012 | ISO 3166-2:DZ | 阿尔及利亚   |
| American Samoa      | AS | ASM | 016 | ISO 3166-2:AS | 美属萨摩亚   |
| Andorra             | AD | AND | 020 | ISO 3166-2:AD | 安道尔     |
| Angola              | AO | AGO | 024 | ISO 3166-2:AO | 安哥拉     |
| Anguilla            | AI | AIA | 660 | ISO 3166-2:AI | 安圭拉     |
| Antarctica          | AQ | ATA | 010 | ISO 3166-2:AQ | 南极洲     |
| Antigua and Barbuda | AG | ATG | 028 | ISO 3166-2:AG | 安提瓜和巴布达 |
| Argentina           | AR | ARG | 032 | ISO 3166-     | 阿根廷     |

|            |    |     |     |               |      |
|------------|----|-----|-----|---------------|------|
|            |    |     |     | 2:AR          |      |
| Armenia    | AM | ARM | 051 | ISO 3166-2:AM | 亚美尼亚 |
| Aruba      | AW | ABW | 533 | ISO 3166-2:AW | 阿鲁巴  |
| Australia  | AU | AUS | 036 | ISO 3166-2:AU | 澳大利亚 |
| Austria    | AT | AUT | 040 | ISO 3166-2:AT | 奥地利  |
| Azerbaijan | AZ | AZE | 031 | ISO 3166-2:AZ | 阿塞拜疆 |
| Bahamas    | BS | BHS | 044 | ISO 3166-2:BS | 巴哈马  |
| Bahrain    | BH | BHR | 048 | ISO 3166-2:BH | 巴林   |
| Bangladesh | BD | BGD | 050 | ISO 3166-2:BD | 孟加拉国 |
| Barbados   | BB | BRB | 052 | ISO 3166-2:BB | 巴巴多斯 |
| Belarus    | BY | BLR | 112 | ISO 3166-2:BY | 白俄罗斯 |

|                                     |    |     |     |               |        |
|-------------------------------------|----|-----|-----|---------------|--------|
| Belgium                             | BE | BEL | 056 | ISO 3166-2:BE | 比利时    |
| Belize                              | BZ | BLZ | 084 | ISO 3166-2:BZ | 伯利兹    |
| Benin                               | BJ | BEN | 204 | ISO 3166-2:BJ | 贝宁     |
| Bermuda                             | BM | BMU | 060 | ISO 3166-2:BM | 百慕大    |
| Bhutan                              | BT | BTN | 064 | ISO 3166-2:BT | 不丹     |
| Bolivia<br>(Plurinational State of) | BO | BOL | 068 | ISO 3166-2:BO | 玻利维亚   |
| Bonaire, Sint Eustatius and Saba    | BQ | BES | 535 | ISO 3166-2:BQ | 荷兰加勒比区 |
| Bosnia and Herzegovina              | BA | BIH | 070 | ISO 3166-2:BA | 波黑     |
| Botswana                            | BW | BWA | 072 | ISO 3166-2:BW | 博茨瓦纳   |
| Bouvet Island                       | BV | BVT | 074 | ISO 3166-2:BV | 布韦岛    |

|                                |    |     |     |               |         |
|--------------------------------|----|-----|-----|---------------|---------|
| Brazil                         | BR | BRA | 076 | ISO 3166-2:BR | 巴西      |
| British Indian Ocean Territory | IO | IOT | 086 | ISO 3166-2:IO | 英属印度洋领地 |
| Brunei Darussalam              | BN | BRN | 096 | ISO 3166-2:BN | 文莱      |
| Bulgaria                       | BG | BGR | 100 | ISO 3166-2:BG | 保加利亚    |
| Burkina Faso                   | BF | BFA | 854 | ISO 3166-2:BF | 布基纳法索   |
| Burundi                        | BI | BDI | 108 | ISO 3166-2:BI | 布隆迪     |
| Cabo Verde                     | CV | CPV | 132 | ISO 3166-2:CV | 佛得角     |
| Cambodia                       | KH | KHM | 116 | ISO 3166-2:KH | 柬埔寨     |
| Cameroon                       | CM | CMR | 120 | ISO 3166-2:CM | 喀麦隆     |
| Canada                         | CA | CAN | 124 | ISO 3166-2:CA | 加拿大     |
| Cayman Islands                 | KY | CYM | 136 | ISO 3166-     | 开曼群岛    |

|                                    |    |     |     |               |           |
|------------------------------------|----|-----|-----|---------------|-----------|
|                                    |    |     |     | 2:KY          |           |
| Central African Republic           | CF | CAF | 140 | ISO 3166-2:CF | 中非        |
| Chad                               | TD | TCD | 148 | ISO 3166-2:TD | 乍得        |
| Chile                              | CL | CHL | 152 | ISO 3166-2:CL | 智利        |
| China                              | CN | CHN | 156 | ISO 3166-2:CN | 中国        |
| Christmas Island                   | CX | CXR | 162 | ISO 3166-2:CX | 圣诞岛       |
| Cocos (Keeling) Islands            | CC | CCK | 166 | ISO 3166-2:CC | 科科斯（基林）群岛 |
| Colombia                           | CO | COL | 170 | ISO 3166-2:CO | 哥伦比亚      |
| Comoros                            | KM | COM | 174 | ISO 3166-2:KM | 科摩罗       |
| Congo                              | CG | COG | 178 | ISO 3166-2:CG | 刚果共和国     |
| Congo (Democratic Republic of the) | CD | COD | 180 | ISO 3166-2:CD | 刚果民主共和国   |



|               |    |     |     |               |       |
|---------------|----|-----|-----|---------------|-------|
| Cook Islands  | CK | COK | 184 | ISO 3166-2:CK | 库克群岛  |
| Costa Rica    | CR | CRI | 188 | ISO 3166-2:CR | 哥斯达黎加 |
| Cote d'Ivoire | CI | CIV | 384 | ISO 3166-2:CI | 科特迪瓦  |
| Croatia       | HR | HRV | 191 | ISO 3166-2:HR | 克罗地亚  |
| Cuba          | CU | CUB | 192 | ISO 3166-2:CU | 古巴    |
| Cura?ao       | CW | CUW | 531 | ISO 3166-2:CW | 库拉索   |
| Cyprus        | CY | CYP | 196 | ISO 3166-2:CY | 塞浦路斯  |
| Czechia       | CZ | CZE | 203 | ISO 3166-2:CZ | 捷克    |
| Denmark       | DK | DNK | 208 | ISO 3166-2:DK | 丹麦    |
| Djibouti      | DJ | DJI | 262 | ISO 3166-2:DJ | 吉布提   |
| Dominica      | DM | DMA | 212 | ISO 3166-     | 多米尼克  |

|                             |    |     |     |               |       |
|-----------------------------|----|-----|-----|---------------|-------|
|                             |    |     |     | 2:DM          |       |
| Dominican Republic          | DO | DOM | 214 | ISO 3166-2:DO | 多米尼加  |
| Ecuador                     | EC | ECU | 218 | ISO 3166-2:EC | 厄瓜多尔  |
| Egypt                       | EG | EGY | 818 | ISO 3166-2:EG | 埃及    |
| El Salvador                 | SV | SLV | 222 | ISO 3166-2:SV | 萨尔瓦多  |
| Equatorial Guinea           | GQ | GNQ | 226 | ISO 3166-2:GQ | 赤道几内亚 |
| Eritrea                     | ER | ERI | 232 | ISO 3166-2:ER | 厄立特里亚 |
| Estonia                     | EE | EST | 233 | ISO 3166-2:EE | 爱沙尼亚  |
| Eswatini                    | SZ | SWZ | 748 | ISO 3166-2:SZ | 斯威士兰  |
| Ethiopia                    | ET | ETH | 231 | ISO 3166-2:ET | 埃塞俄比亚 |
| Falkland Islands (Malvinas) | FK | FLK | 238 | ISO 3166-2:FK | 福克兰群岛 |

|                             |    |     |     |               |           |
|-----------------------------|----|-----|-----|---------------|-----------|
| Faroe Islands               | FO | FRO | 234 | ISO 3166-2:FO | 法罗群岛      |
| Fiji                        | FJ | FJI | 242 | ISO 3166-2:FJ | 斐济        |
| Finland                     | FI | FIN | 246 | ISO 3166-2:FI | 芬兰        |
| France                      | FR | FRA | 250 | ISO 3166-2:FR | 法国        |
| French Guiana               | GF | GUF | 254 | ISO 3166-2:GF | 法属圭亚那     |
| French Polynesia            | PF | PYF | 258 | ISO 3166-2:PF | 法属波利尼西亚   |
| French Southern Territories | TF | ATF | 260 | ISO 3166-2:TF | 法属南部和南极领地 |
| Gabon                       | GA | GAB | 266 | ISO 3166-2:GA | 加蓬        |
| Gambia                      | GM | GMB | 270 | ISO 3166-2:GM | 冈比亚       |
| Georgia                     | GE | GEO | 268 | ISO 3166-2:GE | 格鲁吉亚      |
| Germany                     | DE | DEU | 276 | ISO 3166-     | 德国        |

|            |    |     |     |               |      |
|------------|----|-----|-----|---------------|------|
|            |    |     |     | 2:DE          |      |
| Ghana      | GH | GHA | 288 | ISO 3166-2:GH | 加纳   |
| Gibraltar  | GI | GIB | 292 | ISO 3166-2:GI | 直布罗陀 |
| Greece     | GR | GRC | 300 | ISO 3166-2:GR | 希腊   |
| Greenland  | GL | GRL | 304 | ISO 3166-2:GL | 格陵兰  |
| Grenada    | GD | GRD | 308 | ISO 3166-2:GD | 格林纳达 |
| Guadeloupe | GP | GLP | 312 | ISO 3166-2:GP | 瓜德罗普 |
| Guam       | GU | GUM | 316 | ISO 3166-2:GU | 关岛   |
| Guatemala  | GT | GTM | 320 | ISO 3166-2:GT | 危地马拉 |
| Guernsey   | GG | GGY | 831 | ISO 3166-2:GG | 根西   |
| Guinea     | GN | GIN | 324 | ISO 3166-2:GN | 几内亚  |

|                                   |    |     |     |               |            |
|-----------------------------------|----|-----|-----|---------------|------------|
| Guinea-Bissau                     | GW | GNB | 624 | ISO 3166-2:GW | 几内亚比绍      |
| Guyana                            | GY | GUY | 328 | ISO 3166-2:GY | 圭亚那        |
| Haiti                             | HT | HTI | 332 | ISO 3166-2:HT | 海地         |
| Heard Island and McDonald Islands | HM | HMD | 334 | ISO 3166-2:HM | 赫德岛和麦克唐纳群岛 |
| Holy See                          | VA | VAT | 336 | ISO 3166-2:VA | 梵蒂冈        |
| Honduras                          | HN | HND | 340 | ISO 3166-2:HN | 洪都拉斯       |
| Hong Kong                         | HK | HKG | 344 | ISO 3166-2:HK | 香港         |
| Hungary                           | HU | HUN | 348 | ISO 3166-2:HU | 匈牙利        |
| Iceland                           | IS | ISL | 352 | ISO 3166-2:IS | 冰岛         |
| India                             | IN | IND | 356 | ISO 3166-2:IN | 印度         |
| Indonesia                         | ID | IDN | 360 | ISO 3166-     | 印尼         |

|                            |    |     |     |                |     |
|----------------------------|----|-----|-----|----------------|-----|
|                            |    |     |     | 2: ID          |     |
| Iran (Islamic Republic of) | IR | IRN | 364 | ISO 3166-2: IR | 伊朗  |
| Iraq                       | IQ | IRQ | 368 | ISO 3166-2: IQ | 伊拉克 |
| Ireland                    | IE | IRL | 372 | ISO 3166-2: IE | 爱尔兰 |
| Isle of Man                | IM | IMN | 833 | ISO 3166-2: IM | 马恩岛 |
| Israel                     | IL | ISR | 376 | ISO 3166-2: IL | 以色列 |
| Italy                      | IT | ITA | 380 | ISO 3166-2: IT | 意大利 |
| Jamaica                    | JM | JAM | 388 | ISO 3166-2: JM | 牙买加 |
| Japan                      | JP | JPN | 392 | ISO 3166-2: JP | 日本  |
| Jersey                     | JE | JEY | 832 | ISO 3166-2: JE | 泽西  |
| Jordan                     | JO | JOR | 400 | ISO 3166-2: JO | 约旦  |

|   |    |     |     |               |        |
|---|----|-----|-----|---------------|--------|
| Kazakhstan                              | KZ | KAZ | 398 | ISO 3166-2:KZ | 哈萨克斯坦  |
| Kenya                                   | KE | KEN | 404 | ISO 3166-2:KE | 肯尼亚    |
| Kiribati                                | KI | KIR | 296 | ISO 3166-2:KI | 基里巴斯   |
| Korea (Democratic People's Republic of) | KP | PRK | 408 | ISO 3166-2:KP | 朝鲜     |
| Korea (Republic of)                     | KR | KOR | 410 | ISO 3166-2:KR | 韩国     |
| Kuwait                                  | KW | KWT | 414 | ISO 3166-2:KW | 科威特    |
| Kyrgyzstan                              | KG | KGZ | 417 | ISO 3166-2:KG | 吉尔吉斯斯坦 |
| Lao People's Democratic Republic        | LA | LAO | 418 | ISO 3166-2:LA | 老挝     |
| Latvia                                  | LV | LVA | 428 | ISO 3166-2:LV | 拉脱维亚   |
| Lebanon                                 | LB | LBN | 422 | ISO 3166-2:LB | 黎巴嫩    |

|               |    |     |     |               |       |
|---------------|----|-----|-----|---------------|-------|
| Lesotho       | LS | LSO | 426 | ISO 3166-2:LS | 莱索托   |
| Liberia       | LR | LBR | 430 | ISO 3166-2:LR | 利比里亚  |
| Libya         | LY | LBY | 434 | ISO 3166-2:LY | 利比亚   |
| Liechtenstein | LI | LIE | 438 | ISO 3166-2:LI | 列支敦士登 |
| Lithuania     | LT | LTU | 440 | ISO 3166-2:LT | 立陶宛   |
| Luxembourg    | LU | LUX | 442 | ISO 3166-2:LU | 卢森堡   |
| Macao         | MO | MAC | 446 | ISO 3166-2:MO | 澳门    |
| Madagascar    | MG | MDG | 450 | ISO 3166-2:MG | 马达加斯加 |
| Malawi        | MW | MWI | 454 | ISO 3166-2:MW | 马拉维   |
| Malaysia      | MY | MYS | 458 | ISO 3166-2:MY | 马来西亚  |
| Maldives      | MV | MDV | 462 | ISO 3166-     | 马尔代夫  |



|                                     |    |     |     |               |          |
|-------------------------------------|----|-----|-----|---------------|----------|
|                                     |    |     |     | 2:MV          |          |
| Mali                                | ML | MLI | 466 | ISO 3166-2:ML | 马里       |
| Malta                               | MT | MLT | 470 | ISO 3166-2:MT | 马耳他      |
| Marshall Islands                    | MH | MHL | 584 | ISO 3166-2:MH | 马绍尔群岛    |
| Martinique                          | MQ | MTQ | 474 | ISO 3166-2:MQ | 马提尼克     |
| Mauritania                          | MR | MRT | 478 | ISO 3166-2:MR | 毛里塔尼亚    |
| Mauritius                           | MU | MUS | 480 | ISO 3166-2:MU | 毛里求斯     |
| Mayotte                             | YT | MYT | 175 | ISO 3166-2:YT | 马约特      |
| Mexico                              | MX | MEX | 484 | ISO 3166-2:MX | 墨西哥      |
| Micronesia<br>(Federated States of) | FM | FSM | 583 | ISO 3166-2:FM | 密克罗尼西亚联邦 |
| Moldova (Republic of)               | MD | MDA | 498 | ISO 3166-2:MD | 摩尔多瓦     |

|            |    |     |     |               |       |
|------------|----|-----|-----|---------------|-------|
| of)        |    |     |     | 2:MD          |       |
| Monaco     | MC | MCO | 492 | ISO 3166-2:MC | 摩纳哥   |
| Mongolia   | MN | MNG | 496 | ISO 3166-2:MN | 蒙古国   |
| Montenegro | ME | MNE | 499 | ISO 3166-2:ME | 黑山    |
| Montserrat | MS | MSR | 500 | ISO 3166-2:MS | 蒙特塞拉特 |
| Morocco    | MA | MAR | 504 | ISO 3166-2:MA | 摩洛哥   |
| Mozambique | MZ | MOZ | 508 | ISO 3166-2:MZ | 莫桑比克  |
| Myanmar    | MM | MMR | 104 | ISO 3166-2:MM | 缅甸    |
| Namibia    | NA | NAM | 516 | ISO 3166-2:NA | 纳米比亚  |
| Nauru      | NR | NRU | 520 | ISO 3166-2:NR | 瑙鲁    |
| Nepal      | NP | NPL | 524 | ISO 3166-2:NP | 尼泊尔   |

|                          |    |     |     |               |         |
|--------------------------|----|-----|-----|---------------|---------|
| Netherlands              | NL | NLD | 528 | ISO 3166-2:NL | 荷兰      |
| New Caledonia            | NC | NCL | 540 | ISO 3166-2:NC | 新喀里多尼亚  |
| New Zealand              | NZ | NZL | 554 | ISO 3166-2:NZ | 新西兰     |
| Nicaragua                | NI | NIC | 558 | ISO 3166-2:NI | 尼加拉瓜    |
| Niger                    | NE | NER | 562 | ISO 3166-2:NE | 尼日尔     |
| Nigeria                  | NG | NGA | 566 | ISO 3166-2:NG | 尼日利亚    |
| Niue                     | NU | NIU | 570 | ISO 3166-2:NU | 纽埃      |
| Norfolk Island           | NF | NFK | 574 | ISO 3166-2:NF | 诺福克岛    |
| North Macedonia          | MK | MKD | 807 | ISO 3166-2:MK | 北马其顿    |
| Northern Mariana Islands | MP | MNP | 580 | ISO 3166-2:MP | 北马里亚纳群岛 |
| Norway                   | NO | NOR | 578 | ISO 3166-     | 挪威      |

|                     |    |     |     |               |         |
|---------------------|----|-----|-----|---------------|---------|
|                     |    |     |     | 2:NO          |         |
| Oman                | OM | OMN | 512 | ISO 3166-2:OM | 阿曼      |
| Pakistan            | PK | PAK | 586 | ISO 3166-2:PK | 巴基斯坦    |
| Palau               | PW | PLW | 585 | ISO 3166-2:PW | 帕劳      |
| Palestine, State of | PS | PSE | 275 | ISO 3166-2:PS | 巴勒斯坦    |
| Panama              | PA | PAN | 591 | ISO 3166-2:PA | 巴拿马     |
| Papua New Guinea    | PG | PNG | 598 | ISO 3166-2:PG | 巴布亚新几内亚 |
| Paraguay            | PY | PRY | 600 | ISO 3166-2:PY | 巴拉圭     |
| Peru                | PE | PER | 604 | ISO 3166-2:PE | 秘鲁      |
| Philippines         | PH | PHL | 608 | ISO 3166-2:PH | 菲律宾     |
| Pitcairn            | PN | PCN | 612 | ISO 3166-2:PN | 皮特凯恩群岛  |

|  |    |     |     |               |                                |
|--|----|-----|-----|---------------|--------------------------------|
| Poland   | PL | POL | 616 | ISO 3166-2:PL | 波兰                             |
| Portugal   | PT | PRT | 620 | ISO 3166-2:PT | 葡萄牙                            |
| Puerto Rico  | PR | PRI | 630 | ISO 3166-2:PR | 波多黎各                           |
| Qatar  | QA | QAT | 634 | ISO 3166-2:QA | 卡塔尔                            |
| Réunion  | RE | REU | 638 | ISO 3166-2:RE | 留尼汪                            |
| Romania  | RO | ROU | 642 | ISO 3166-2:RO | 罗马尼亚                           |
| Russian Federation                                 | RU | RUS | 643 | ISO 3166-2:RU | 俄罗斯                            |
| Rwanda   | RW | RWA | 646 | ISO 3166-2:RW | 卢旺达                            |
| Saint Barthélemy                                   | BL | BLM | 652 | ISO 3166-2:BL | 圣巴泰勒米                          |
| Saint Helena,<br>Ascension and<br>Tristan da Cunha | SH | SHN | 654 | ISO 3166-2:SH | 圣赫勒拿、<br>阿森松和特<br>里斯坦-达库<br>尼亚 |

|                                  |    |     |     |               |            |
|----------------------------------|----|-----|-----|---------------|------------|
| Saint Kitts and Nevis            | KN | KNA | 659 | ISO 3166-2:KN | 圣基茨和尼维斯    |
| Saint Lucia                      | LC | LCA | 662 | ISO 3166-2:LC | 圣卢西亚       |
| Saint Martin (French part)       | MF | MAF | 663 | ISO 3166-2:MF | 法属圣马丁      |
| Saint Pierre and Miquelon        | PM | SPM | 666 | ISO 3166-2:PM | 圣皮埃尔和密克隆   |
| Saint Vincent and the Grenadines | VC | VCT | 670 | ISO 3166-2:VC | 圣文森特和格林纳丁斯 |
| Samoa                            | WS | WSM | 882 | ISO 3166-2:WS | 萨摩亚        |
| San Marino                       | SM | SMR | 674 | ISO 3166-2:SM | 圣马力诺       |
| Sao Tome and Principe            | ST | STP | 678 | ISO 3166-2:ST | 圣多美和普林西比   |
| Saudi Arabia                     | SA | SAU | 682 | ISO 3166-2:SA | 沙特阿拉伯      |
| Senegal                          | SN | SEN | 686 | ISO 3166-2:SN | 塞内加尔       |
| Serbia                           | RS | SRB | 688 | ISO 3166-     | 塞尔维亚       |

|                                |    |     |     |               |                |
|--------------------------------|----|-----|-----|---------------|----------------|
|                                |    |     |     | 2:RS          |                |
| Seychelles                     | SC | SYC | 690 | ISO 3166-2:SC | 塞舌尔            |
| Sierra Leone                   | SL | SLE | 694 | ISO 3166-2:SL | 塞拉利昂           |
| Singapore                      | SG | SGP | 702 | ISO 3166-2:SG | 新加坡            |
| Sint Maarten<br>(Dutch part)   | SX | SXM | 534 | ISO 3166-2:SX | 荷属圣马丁          |
| Slovakia                       | SK | SVK | 703 | ISO 3166-2:SK | 斯洛伐克           |
| Slovenia                       | SI | SVN | 705 | ISO 3166-2:SI | 斯洛文尼亚          |
| Solomon Islands                | SB | SLB | 090 | ISO 3166-2:SB | 所罗门群岛          |
| Somalia                        | SO | SOM | 706 | ISO 3166-2:SO | 索马里            |
| South Africa                   | ZA | ZAF | 710 | ISO 3166-2:ZA | 南非             |
| South Georgia and<br>the South | GS | SGS | 239 | ISO 3166-2:GS | 南乔治亚和<br>南桑威奇群 |

|   |    |     |     |               |          |
|---|----|-----|-----|---------------|----------|
| Sandwich Islands                                    |    |     |     |               | 岛        |
| South Sudan   | SS | SSD | 728 | ISO 3166-2:SS | 南苏丹      |
| Spain   | ES | ESP | 724 | ISO 3166-2:ES | 西班牙      |
| Sri Lanka   | LK | LKA | 144 | ISO 3166-2:LK | 斯里兰卡     |
| Sudan   | SD | SDN | 729 | ISO 3166-2:SD | 苏丹       |
| Suriname  | SR | SUR | 740 | ISO 3166-2:SR | 苏里南      |
| Svalbard and Jan Mayen                              | SJ | SJM | 744 | ISO 3166-2:SJ | 斯瓦尔巴和扬马延 |
| Sweden  | SE | SWE | 752 | ISO 3166-2:SE | 瑞典       |
| Switzerland   | CH | CHE | 756 | ISO 3166-2:CH | 瑞士       |
| Syrian Arab Republic                                | SY | SYR | 760 | ISO 3166-2:SY | 叙利亚      |
| Taiwan, Province of China[ <a href="#">note 1</a> ] | TW | TWN | 158 | ISO 3166-2:TW | 中国台湾省    |



|                              |    |     |     |               |          |
|------------------------------|----|-----|-----|---------------|----------|
| Tajikistan                   | TJ | TJK | 762 | ISO 3166-2:TJ | 塔吉克斯坦    |
| Tanzania, United Republic of | TZ | TZA | 834 | ISO 3166-2:TZ | 坦桑尼亚     |
| Thailand                     | TH | THA | 764 | ISO 3166-2:TH | 泰国       |
| Timor-Leste                  | TL | TLS | 626 | ISO 3166-2:TL | 东帝汶      |
| Togo                         | TG | TGO | 768 | ISO 3166-2:TG | 多哥       |
| Tokelau                      | TK | TKL | 772 | ISO 3166-2:TK | 托克劳      |
| Tonga                        | TO | TON | 776 | ISO 3166-2:TO | 汤加       |
| Trinidad and Tobago          | TT | TTO | 780 | ISO 3166-2:TT | 特立尼达和多巴哥 |
| Tunisia                      | TN | TUN | 788 | ISO 3166-2:TN | 突尼斯      |
| Turkey                       | TR | TUR | 792 | ISO 3166-2:TR | 土耳其      |
| Turkmenistan                 | TM | TKM | 795 | ISO 3166-     | 土库曼斯坦    |

|  |    |     |     |               |           |
|--|----|-----|-----|---------------|-----------|
|  |    |     |     | 2:TM          |           |
| Turks and Caicos Islands                             | TC | TCA | 796 | ISO 3166-2:TC | 特克斯和凯科斯群岛 |
| Tuvalu   | TV | TUV | 798 | ISO 3166-2:TV | 图瓦卢       |
| Uganda   | UG | UGA | 800 | ISO 3166-2:UG | 乌干达       |
| Ukraine  | UA | UKR | 804 | ISO 3166-2:UA | 乌克兰       |
| United Arab Emirates                                 | AE | ARE | 784 | ISO 3166-2:AE | 阿联酋       |
| United Kingdom of Great Britain and Northern Ireland | GB | GBR | 826 | ISO 3166-2:GB | 英国        |
| United States of America                             | US | USA | 840 | ISO 3166-2:US | 美国        |
| United States Minor Outlying Islands                 | UM | UMI | 581 | ISO 3166-2:UM | 美国本土外小岛屿  |
| Uruguay  | UY | URY | 858 | ISO 3166-2:UY | 乌拉圭       |

|  |    |     |     |               |             |
|--|----|-----|-----|---------------|-------------|
| Uzbekistan                               | UZ | UZB | 860 | ISO 3166-2:UZ | 乌兹别克斯坦      |
| Vanuatu                                  | VU | VUT | 548 | ISO 3166-2:VU | 瓦努阿图        |
| Venezuela<br>(Bolivarian<br>Republic of) | VE | VEN | 862 | ISO 3166-2:VE | 委内瑞拉        |
| Viet Nam                                 | VN | VNM | 704 | ISO 3166-2:VN | 越南          |
| Virgin Islands<br>(British)              | VG | VGB | 092 | ISO 3166-2:VG | 英属维尔京群岛     |
| Virgin Islands<br>(U. S. )               | VI | VIR | 850 | ISO 3166-2:VI | 美属维尔京群岛     |
| Wallis and Futuna                        | WF | WLF | 876 | ISO 3166-2:WF | 瓦利斯和富图纳     |
| Western Sahara                           | EH | ESH | 732 | ISO 3166-2:EH | 阿拉伯撒哈拉民主共和国 |
| Yemen                                    | YE | YEM | 887 | ISO 3166-2:YE | 也门          |
| Zambia                                   | ZM | ZMB | 894 | ISO 3166-2:ZM | 赞比亚         |

|          |    |     |     |               |      |
|----------|----|-----|-----|---------------|------|
| Zimbabwe | ZW | ZWE | 716 | ISO 3166-2:ZW | 津巴布韦 |
|----------|----|-----|-----|---------------|------|

# 6.9. Appendix I – List of the Provinces in Canada (CA)

| Code | Chinese Name | English Name              | Type      |
|------|--------------|---------------------------|-----------|
| AB   | 阿尔伯塔省        | Alberta                   | Province  |
| BC   | 不列颠哥伦比亚省     | British Columbia          | Province  |
| MB   | 马尼托巴省        | Manitoba                  | Province  |
| NB   | 新布蓝兹维省       | New Brunswick             | Province  |
| NL   | 纽芬兰与拉布拉多省    | Newfoundland and Labrador | Province  |
| NS   | 新斯科舍省        | Nova Scotia               | Province  |
| NT   | 西北地区         | Northwest Territories     | Territory |
| NU   | 努纳武特地区       | Nunavut                   | Territory |
| ON   | 安大略省         | Ontario                   | Province  |
| PE   | 爱德华王子岛省      | Prince Edward Island      | Province  |
| QC   | 魁北克          | Quebec                    | Province  |

|    |        |                 |           |
|----|--------|-----------------|-----------|
| SK | 萨斯喀彻温省 | Saskatchewan    | Province  |
| YT | 育空地区   | Yukon Territory | Territory |

## 6.11. Appendix J – List of the States in the US

| Code | Chinese Name | English Name         | Type             |
|------|--------------|----------------------|------------------|
| AK   | 阿拉斯加州        | Alaska               | State            |
| AL   | 亚拉巴马州        | Alabama              | State            |
| AR   | 阿肯色州         | Arkansas             | State            |
| AS   | 美属萨摩亚        | American Samoa       | Territory        |
| AZ   | 亚利桑那州        | Arizona              | State            |
| CA   | 加利福尼亚州       | California           | State            |
| CO   | 科罗拉多州        | Colorado             | State            |
| CT   | 康涅狄格州        | Connecticut          | State            |
| DC   | 华盛顿哥伦比亚特区    | District of Columbia | Federal District |
| DE   | 特拉华州         | Delaware             | State            |
| FL   | 佛罗里达州        | Florida              | State            |
| GA   | 佐治亚州         | Georgia              | State            |

|    |         |                          |           |
|----|---------|--------------------------|-----------|
| GU | 关岛      | Guam                     | Territory |
| HI | 夏威夷州    | Hawaii                   | State     |
| IA | 艾奥瓦州    | Iowa                     | State     |
| ID | 爱达荷州    | Idaho                    | State     |
| IL | 伊利诺伊州   | Illinois                 | State     |
| IN | 印第安纳州   | Indiana                  | State     |
| KS | 堪萨斯州    | Kansas                   | State     |
| KY | 肯塔基州    | Kentucky                 | State     |
| LA | 路易斯安那州  | Louisiana                | State     |
| MA | 马萨诸塞州   | Massachusetts            | State     |
| MD | 马里兰州    | Maryland                 | State     |
| ME | 缅因州     | Maine                    | State     |
| MI | 密歇根州    | Michigan                 | State     |
| MN | 明尼苏达州   | Minnesota                | State     |
| MO | 密苏里州    | Missouri                 | State     |
| MP | 北马里亚纳群岛 | Northern Mariana Islands | Territory |

|    |        |                |           |
|----|--------|----------------|-----------|
| MS | 密西西比州  | Mississippi    | State     |
| MT | 蒙大拿州   | Montana        | State     |
| NC | 北卡罗来纳州 | North Carolina | State     |
| ND | 北达科他州  | North Dakota   | State     |
| NE | 内布拉斯加州 | Nebraska       | State     |
| NH | 新罕布什尔州 | New Hampshire  | State     |
| NJ | 新泽西州   | New Jersey     | State     |
| NM | 新墨西哥州  | New Mexico     | State     |
| NV | 内华达州   | Nevada         | State     |
| NY | 纽约州    | New York       | State     |
| OH | 俄亥俄州   | Ohio           | State     |
| OK | 俄克拉荷马州 | Oklahoma       | State     |
| OR | 俄勒冈州   | Oregon         | State     |
| PA | 宾夕法尼亚州 | Pennsylvania   | State     |
| PR | 波多黎各   | Puerto Rico    | Territory |
| RI | 罗得岛州   | Rhode Island   | State     |

|    |          |                                      |           |
|----|----------|--------------------------------------|-----------|
| SC | 南卡罗来纳州   | South Carolina                       | State     |
| SD | 南达科他州    | South Dakota                         | State     |
| TN | 田纳西州     | Tennessee                            | State     |
| TX | 得克萨斯州    | Texas                                | State     |
| UM | 美国本土外小岛屿 | United States Minor Outlying Islands | Territory |
| UT | 犹他州      | Utah                                 | State     |
| VA | 弗吉尼亚州    | Virginia                             | State     |
| VI | 美属维尔京群岛  | Virgin Islands of the United States  | Territory |
| VT | 佛蒙特州     | Vermont                              | State     |
| WA | 华盛顿州     | Washington                           | State     |
| WI | 威斯康星州    | Wisconsin                            | State     |
| WV | 西弗吉尼亚州   | West Virginia                        | State     |
| WY | 怀俄明州     | Wyoming                              | State     |

## 6.11. Appendix K – TokenMeta Samples

The card metadata returned in the process of tokenization is the card pattern of front and back sides, including card number, valid date, CVV2,



state, color, background image, logo, the name of issuing bank, website and so forth. There is no specific requirement of card pattern display.

Visa official tokenMeta:

| Field Name                               | Field Description                 | Length      | Required | Remarks  |
|--|-----------------------------------|-------------|----------|--|
| vPanEnrollmentID                         | Card Registered id                | 36          |          |  |
| paymentInstrument                        |                                   |             |          | Include the last 4 figures of the card number and card expiration date |
| paymentInstrument .expiration Date.month | Card expiration date -month       | 2           |          |  |
| paymentInstrument .expiration Date.year  | Card valid date-year              | 4           |          |  |
| paymentInstrument .last4                 | The last 4 figures of card number | 4           |          |  |
| paymentInstrument .cvv2PrintedInd        | Is CVV2 printed in                | enumeration |          | • Y-Printed• N-Not printed   |

|   |   |             |  |  |
|---|---|-------------|--|--|
|   | the payment instrument?                               |             |  |  |
| paymentInstrument.expDatePrintedInd                   | Is expiration date printed in the payment instrument? | enumeration |  | <ul style="list-style-type: none"> <li>• Y–Printed</li> <li>• N–Not printed</li> </ul> |
| paymentInstrument.paymentAccountReference             | Payment account reference                             | 29          |  | If there are these references then they exist  |
| paymentInstrument.enabledServices.merchantPresentedQR | Is code scanning available?                           | enumeration |  | <ul style="list-style-type: none"> <li>• Y–Enabled</li> <li>• N–Disabled</li> </ul>    |
| tokens  |   |             |  | Including the information relevant to token  |
| tokens.vProvisionedTokenID                            | The id requested in Token registration                | 36          |  |  |
| tokens.tokenStatus                                    | Token state   | enumeration |  | <ul style="list-style-type: none"> <li>• INACTIVE</li> <li>• ACTIVE</li> </ul>         |

|                                  |                                       |     |    |  |
|----------------------------------|---------------------------------------|-----|----|--|
|                                  |                                       |     |    | <ul style="list-style-type: none"> <li>• SUSPENDED</li> </ul>          |
| cardMetaData                     |                                       |     |    | Including contact information, card colors, terms and conditions, etc. |
| cardMetaData.<br>backgroundColor | Card<br>background<br>color           | 32  |    | CSS pattern and hexadecimal format, e.g. 0x0e19d2                      |
| cardMetaData.<br>foregroundColor | Card<br>foreground<br>color           | 32  |    | CSS pattern and hexadecimal format, e.g. 0x0e19d2                      |
| cardMetaData. labelColor         | Card label<br>color                   | 32  |    | CSS pattern and hexadecimal format, e.g. 0x0e19d2                      |
| cardMetaData.<br>contactWebsite  | Issuing<br>bank<br>website<br>address | 256 |    |  |
| cardMetaData. contactEmail       | Issuing<br>bank<br>contact            |     | No |  |

|                                   |                                      |    |    |   |
|-----------------------------------|--------------------------------------|----|----|---|
|                                   | email                                |    |    |   |
| cardMetaData.<br>contactNumber    | Issuing<br>bank<br>contact<br>number |    | No |   |
| cardMetaData. contactName         | Issuing<br>bank<br>contact<br>name   | 32 |    |   |
| cardMetaData.<br>shortDescription | Card brief<br>introduction           | 32 | No | If cardMetaData.<br>longDescription<br>did not appear, it<br>does emerge  |
| cardMetaData.<br>longDescription  | Card<br>detailed<br>introduction     | 64 | No |   |
| cardMetaData. cardData. guid      | Id of<br>contents                    | 32 |    | There is a group<br>of data cardData<br>transmitting card<br>information, e. g.<br>pattern and terms<br>and conditions. |

|   |  |             |  |  |
|---|--|-------------|--|--|
| cardMetaData. cardData. contentType                     | Contents type  | enumeration |  | <ul style="list-style-type: none"> <li>digitalCardArt</li> <li>digitalCardArtBackground</li> <li>cardSymbol</li> <li>termsAndConditions</li> </ul> |
| cardMetaData. cardData. content                         | Contents details   |             |  | omit   |
| cardMetaData. issuerFlags. deviceBinding                | Is device bound?   | enumeration |  | <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>  |
| cardMetaData. issuerFlags. cardholderVerification       | Does issuing bank engage in cross-merchant card binding? | enumeration |  | <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>  |
| cardMetaData. issuerFlags. trustedBeneficiaryEnrollment | Is the beneficiary who registered reliable?              | enumeration |  | <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>  |

|   |  |             |  |   |
|---|--|-------------|--|---|
| cardMetaData. issuerFlags. delegatedAuthenticationSupported | Is it available for issuing bank to entrust authentication | enumeration |  | <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul> |
|---|--|-------------|--|---|

Sample:

```
{
  "vPanEnrollmentID": "94ebaf87e0fe420dce661632c81b3102",
  "paymentInstrument": {
    "expirationDate": {
      "month": "07",
      "year": "2023"
    },
    "last4": "0173",
    "cvv2PrintedInd": "Y",
    "expDatePrintedInd": "Y",
    "paymentAccountReference": "V0010013818193029602813461455",
    "enabledServices": {
      "merchantPresentedQR": "N"
    }
  }
}
```

```
}
```

```
},
```

```
"tokens": [{
```

```
"vProvisionedTokenID": "463c53e0d42f338381c9194bc8b4a502",
```

```
"tokenStatus": "ACTIVE"
```

```
}],
```

```
"cardMetaData": {
```

```
"backgroundColor": "0xffffffff",
```

```
"foregroundColor": "0xffffffff",
```

```
"labelColor": "0xffffffff",
```

```
"contactWebsite": "https://www.dbs.com.sg",
```

```
"contactNumber": "18001111111",
```

```
"contactName": "DBS Bank",
```

```
"shortDescription": "DBS Visa Debit Card",
```

```
"longDescription": "DBS Visa Debit Card",
```

```
"cardData": [{
```

```
"guid": "c2de608elfc3488b9b9a72522d17b909",
```

```
"contentType": "cardSymbol",
```

```
"content": [{
```

```
"mimeType": "image/png",
```

```
"width": "100",

"height": "100"

}]

}, {

"guid": "1af51dd9aa1548d9a100b5ab0a798c5d",

"contentType": "digitalCardArt",

"content": [{

"mimeType": "image/png",

"width": "1536",

"height": "969"

}]

}],

"issuerFlags": {

"deviceBinding": false,

"cardholderVerification": false,

"trustedBeneficiaryEnrollment": false,

"delegatedAuthenticationSupported": true

}

}

}
```



MasterCard Official tokenMeta:

| Field Name                    | Field Description   | Length | Required | Remarks   |
|-------------------------------|---|--------|----------|---|
| brandLogoAssetId              | The Mastercard relevant to this card or Maestro brand emblem id                                     | 64     | Yes      |   |
| cardBackgroundCombinedAssetId | Card image which represents digital card; this combined option contains brand, issuing bank and any | 64     | No       | cardBackgroundCombinedAssetId or cardBackgroundAssetId would appear |

|                       |  |     |     |  |
|-----------------------|--|-----|-----|--|
|                       | united<br>brand<br>emblem id   |     |     |  |
| cardBackgroundAssetId | Card<br>image<br>which<br>represent<br>s digital<br>card;<br>exclusive<br>of brand,<br>issuing<br>bank or<br>any<br>united<br>brand<br>emblem id | 64  | No  | cardBackgroundCombinedAss<br>etId or<br>cardBackgroundAssetId<br>would appear              |
| CustomerServiceUrl    | Customer<br>Service<br>URL   | 128 | No  |  |
| foregroundColor       | The color<br>of<br>foregroun<br>d<br>character<br>s on the<br>card   | 6   | Yes | Hexadecimal RGB color, no<br>differentiation between<br>uppercase and lowercase<br>letters |

|                         |   |     |     |  |
|-------------------------|---|-----|-----|--|
|                         | image,<br>e. g.<br>product<br>type,<br>debit or<br>credit |     |     |  |
| issuerName              | Issuing<br>bank name                                      | 64  | Yes |  |
| issuerProductConfigCode | Product<br>codes set<br>by<br>issuing<br>bank             | 64  | No  |  |
| privacyPolicyUrl        | Privacy<br>policy<br>URL                                  | 128 | No  |  |
| shortDescription        | Card<br>products<br>brief<br>descripti<br>on              | 128 | Yes |  |
| longDescription         | Card<br>products<br>detailed<br>descripti                 | 256 | No  |  |

|                       |  |     |    |  |
|-----------------------|--|-----|----|--|
|                       | on   |     |    |  |
| termsAndConditionsUrl | Terms and<br>condition<br>s URL of<br>card | 128 | No |  |

Sample:

```
{
  "brandLogoAssetId": "3789637f-32a1-4810-a138-4bf34501c509",
  "cardBackgroundCombinedAssetId": "fbc1c3f1-b162-4bbb-8c49-9f3dc9bc7298",
  "customerServiceUrl": "https://www.commbank.com.au",
  "foregroundColor": "000000",
  "issuerName": "Commonwealth Bank of Australia",
  "issuerProductConfigCode": "931140",
  "privacyPolicyUrl": "https://www.commbank.com.au/security-privacy/general-  
security/privacy.html",
  "shortDescription": "Standard Debit Mastercard",
  "termsAndConditionsUrl": "https://www.commbank.com.au/payterms"
}
```