PG Service Standard WEB API

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# Outline

## Purpose

This document is for understanding technical requirements for integration development of the PG standard payment window provided by Hecto Financial and to define detailed specifications.

## Target

This document is for the clients’ developers to execute payment through Hecto Financial’s PG system.

## Specification

The following is a general description of the integration referred to in this document.

* Required fields in the request/response parameters use the ‘●’ symbol and selected fields use the ‘○’ symbol.
* Data types for request/response parameters are as follows.

N: Numeric characters

A: Alphabetic characters

H: Korean characters

* The standard request/response parameter’s length is the UTF-8 encoded value (Byte) of the plain text.

## Others

* The offline document can be downloaded [here](https://develop.sbsvc.online/21/bbsList.do?tx=R&articleSeq=149). (Online document is always updated.)
* There is no need to read the entire document. It is divided into payment methods and services, so just refer to the parts needed.
* [Link](https://develop.sbsvc.online/3/bbsList.do) for FAQ

# Standard Payment Window (UI) Integration

The integration method of the PG standard payment window provided by Hecto Financial is defined.

## Description

* Check the request URI per payment method. (Refer to **[2.3 API URI]**)
* Check the request parameter per payment method, set the request parameter, and request in the POST method.
* Parameters related to personal/sensitive information should be encrypted. (Refer to [5. Crucial Information Security])
* Open the Hecto Financial payment window then proceed with the payment.
* If you click the [Close] button on the payment completion window, the result (response parameter) is returned to the URL specified in the request parameter nextUrl.
* If the user forcefully quits the payment window during the payment (Settle payment window ‘X’ button), the result (response parameter) is returned to the URL specified in the cancUrl parameter.

## Cautions

* **The support for the IE browser ends starting June 15, 2022, please use the Edge browser.**
* **Refrain from using the Opera browser. Some functions may not work.**
* **Merchants are responsible for any costs incurred when running tests with Merchant ID (mchtId) in a production environment.**
* **Use only the POST method for the request.**
* **Use only those specified in the integration specification for the request parameter. Otherwise, an error may occur.**
* **Refrain from using special characters like :, &, ?, ', new line, <, > for the request parameter.**
* **Refrain from using emojis for the request parameter. If an emoji is included, it will get removed regardless of the intent of the user.**
* **The request parameter may change without prior notice.**
* **If Iframe is used while integrating the payment window, it may not work properly on some browsers or devices, so refrain from using Iframe.**
* **nextUrl, notiUrl parameters**
  + nextUrl: It is the URL invoked when the customer clicks the ‘Close’ button on the Hecto Financial payment window completion screen. The response parameter is delivered in the POST method, and it is not invoked if the customer forcefully quits the payment window (browser ‘X’ button). Use nextUrl only for screen processing, and DB processing should be done in notiUrl.
  + notiUrl: If the payment was successfully processed in the Hecto Financial payment server, the server-to-server connection is made to the Merchant-side and the response parameter is delivered in the POST method. When the authorization succeeds, the response parameter is delivered regardless of whether the payment window was forcefully quit or not.
  + Therefore, on nextUrl, do screen processing to show the payment result with the delivered response parameter, and Merchant-side payment-related DB processing, you must do it on notiUrl.
* **notiUrl hash check**
  + **To check data forgery, the process of verifying hash data received through notiUrl with the merchant DB must be done The service should be provided to the user only if it matches.**
  + For the hash data check method and algorithm, refer to the Notification Parameter’s pktHash parameter.
* **nextUrl, notiUrl, cancUrl protocol**
  + When HTTP is used, the payment window may not work properly because of browser policy violations (such as cross-origin).
  + Therefore, the use of HTTPS is recommended.

## API URI

Hecto Financial payment window (UI) server domain names are as follows.

|  |  |
| --- | --- |
| **Type** | **Domain Name** |
| Testbed | tbnpg.settlebank.co.kr |
| Production | npg.settlebank.co.kr |

.

Hecto Financial Payment (UI) API URI are as follows.

|  |  |  |  |
| --- | --- | --- | --- |
| **Function** | **Payment Method** | **URI** | **HTTP Method** |
| Standard Payment Window (UI) | Credit Card | https://{domain}/card/main.do | POST |
| Credit Card - Direct | https://{domain}/card/cardDirect.do |
| Account Transfer | https://{domain}/bank/main.do |
| Virtual Account | https://{domain}/vbank/main.do |
| DCB | https://{domain}/mobile/main.do |
| Teen Cash Voucher | https://{domain}/gift/teenCash/main.do |
| Happy Money Voucher | https://{domain}/gift/happyMoney/main.do |
| Culture Land Voucher (Culture Cash) | https://{domain}/gift/cultureCash/main.do |
| Smart Gift Voucher | https://{domain}/gift/smartCash/main.do |
| Book Voucher | https://{domain}/gift/booknlife/main.do |
| Tmoney | https://{domain}/tmoney/main.do |
| POINTDAMOA | https://{domain}/point/main.do |
| Easy Payment | https://{domain}/corp/main.do |

## Request and Response Headers

|  |  |
| --- | --- |
| **Type** | **Content** |
| Request | Content-type=application/x-www-form-urlencoded; charset=UTF-8 |
| Response | Content-type=text/html; charset=UTF-8 |

## Request Parameter Verification

If there is an error after parameter verification, such as missing required values, inconsistency of hash data, and length check, the following response code is returned.

|  |
| --- |
| {  "outRsltMsg" : "Payment request information omitted (Product name)",  "mchtTrdNo" : "ORDER20211231100000",  "outRsltCd" : "1008",  "outStatCd" : "0031",  "mchtId" : "nxca\_jt\_il"  } |

## Integration Script Provision

For the convenience of the merchant when integrating, an integration script is provided.

|  |  |
| --- | --- |
| **Type** | **URL** |
| Testbed | https://tbnpg.settlebank.co.kr/resources/js/v1/SettlePG\_v1.2.js |
| Production | https://npg.settlebank.co.kr/resources/js/v1/SettlePG\_v1.2.js |

The following is an example of using the integration script.

|  |
| --- |
| SETTLE\_PG.pay({  env: "https://npg.settlebank.co.kr",  mchtId: "nxca\_jt\_il",  method: "card",  trdDt: "20211231",  trdTm: "100000",  mchtTrdNo: "ORDER20211231100000",  mchtName: "Hecto Financial",  mchtEName: "Hecto Financial",  pmtPrdtNm: "Test Product",  trdAmt: "AntV/eDpxIaKF0hJiePDKA==",  mchtCustNm: "Hong Gil Dong",  custAcntSumry: "Hecto Financial",  notiUrl: "https://example.com/notiUrl",  nextUrl: "https://example.com/nextUrl",  cancUrl: "https://example.com/cancUrl",  mchtParam: "name=HongGilDong&age=25",  custIp: "127.0.0.1",  pktHash: "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c",  ui: {  type: "popup",  width: "430",  height: "660"  }  }, function(rsp){  console.log(rsp);  }); |

Close iframe

|  |
| --- |
| parent.postMessage(JSON.stringify({action:"HECTO\_IFRAME\_CLOSE", params: \_PAY\_RESULT}), "\*"); |

Adjust iframe width

|  |
| --- |
| parent.postMessage(JSON.stringify({action:"HECTO\_IFRAME\_RESIZE", params: {width:"500px"}}), "\*"); |

Iframe default size

|  |
| --- |
| parent.postMessage(JSON.stringify({action:"HECTO\_IFRAME\_RETURNSIZE"}), "\*"); |

## Sample Source Provision

|  |
| --- |
| * To make Hecto Financial payment window integration easy, a sample source is provided. * The sample source provided by Hecto Financial only includes the basics for integration, so please integrate it according to the Merchant’s environment when developing. |

1. **Access the Hecto Financial Developer Support Site.** [**Click!**](https://develop.sbsvc.online/)
2. **From the top menu [Developer Forum] > [**[**SDK Download**](https://develop.sbsvc.online/21/bbsList.do)**], download the sample source.**
   * Standard payment window (UI), [click](https://develop.sbsvc.online/21/bbsList.do?tx=R&articleSeq=209)!
   * Credit card non/old verification API (Non-UI), [click](https://develop.sbsvc.online/21/bbsList.do?tx=R&articleSeq=210)!
   * Virtual account API (Non-UI), [click](https://develop.sbsvc.online/21/bbsList.do?tx=R&articleSeq=216)!
3. **config.xxx setting change**
   * It is the sample source setting file. Merchant ID, encryption key, log directory, and others can be set.
   * For the test environment, the default value can be used.
   * For a production environment, the Merchant ID and encryption key generated by Hecto Financial should be set.
4. **notiUrl, nextUrl, cancUrl request parameter value change**
   * notiUrl: Put the URL that receives the response parameter delivered as Server To Server from Hecto Financial
   * nextUrl: Put the URL of the merchant-side screen that the user is directed to after completing payment on the Hecto Financial payment window,
   * cancUrl: Put the URL of the merchant-side screen that the user is directed to after forcefully quitting the Hecto Financial payment window
5. **Other cautions**
   * JAVA (JSP): log4j setting file needs to be changed accordingly
   * PHP: Need to install curl and openssl package (Need to uncomment php.ini file)
   * Some functions may not work for PHP 5.4 or earlier.
   * For ASP Classic, there is a need to install a DLL file (encryption/decryption module) which was additionally distributed.
   * ASP Classic DLL Guide, [click!](https://develop.sbsvc.online/21/bbsList.do?tx=R&articleSeq=172)

# API Server Integration (Non-UI)

API service integration methods of cancellation per payment method, credit card billkey payment, mobile monthly recurring payment, virtual account issuance, etc. are defined.

## Description

* Check the API URI of the service that you want to use.
* Check the request parameter of the service that you want to use, and set the appropriate request parameter.
* Do HTTP Connection through Server to Server and request/respond with JSON Data.
* Parameters related to personal/sensitive information should be encrypted. (Refer to [5. Crucial Information Security])

## API URI

Hecto Financial API server domain names are as follows.

|  |  |
| --- | --- |
| **Type** | **Domain Name** |
| Testbed | tbgw.settlebank.co.kr |
| Production | gw.settlebank.co.kr |

The API server URI is as follows.

|  |  |  |  |
| --- | --- | --- | --- |
| **Function** | **Service** | **URI** | **HTTP Method** |
| Payment API  (Non-UI) | Credit card payment and billkey payment | https://{domain}/spay/APICardActionPay.do | POST |
| Credit card billkey issuance | https://{domain}/spay/APICardAuth.do |
| Phone monthly recurring payment | https://{domain}/spay/APIService.do |
| PAYCO Easy Payment approval | https://{domain}/spay/APITrdPayco.do |
| Cancellation API  (Non-UI) | Credit card cancellation | https://{domain}/spay/APICancel.do | POST |
| Account transfer cancellation |
| DCB cancellation |
| Teen Cash cancellation |
| Happy Money cancellation |
| Culture Land voucher (Culture Cash) cancellation |
| Smart Gift Voucher cancellation |
| Book Voucher cancellation |
| Tmoney cancellation |
| POINTDAMOA cancellation |
| Easy Payment cancellation |
| Virtual Account Service API (Non-UI) | Virtual account number issuance | https://{domain}/spay/APIVBank.do | POST |
| Virtual account number issuance cancellation | https://{domain}/spay/APIVBank.do |
| Virtual account refund | https://{domain}/spay/APIRefund.do |
| Phone Refund API | DCB refund | https://{domain}/spay/APIRefund.do | POST |
| Other Service API (Non-UI) | Credit card billkey delete | https://{domain}/spay/APICardActionDelkey.do | POST |
| Real-time transaction inquiry | https://{domain}/spay/APITrdcheck.do |

## Request and Response Headers

|  |  |
| --- | --- |
| **Type** | **Description** |
| Request | Content-type=application/json; charset=UTF-8 |
| Response | Content-type=application/json; charset=UTF-8 |

## JSON Request Data Example

The following is the credit card cancellation request parameter JSON example.

|  |
| --- |
| {  "params" : {  "mchtId" : "nxca\_jt\_il",  "ver" : "0A19",  "method" : "CA",  "bizType" : "C0",  "encCd" : "23",  "mchtTrdNo" : "ORDER20211231100000",  "trdDt" : "20211231",  "trdTm" : "100000",  "mobileYn" : "N",  "osType" : "W"  },  "data" : {  "pktHash" : "a2d6d597d55d7c9b689baa2e08c1ddf0ce71f4248c5b9b59fe61bfbf949543e1",  "crcCd" : "KRW",  "orgTrdNo" : "STFP\_PGCAnxca\_jt\_il0211129135810M1494620",  "cnclAmt" : "AntV/eDpxIaKF0hJiePDKA==",  "cnclOrd" : "001",  "cnclRsn" : "Not satisfied with the product"  }  } |

# Integration Server

## Server IP Address

Hecto Financial server’s IP addresses are as follows.

|  |  |  |  |
| --- | --- | --- | --- |
| **Type** | | **Domain Name** | **IP Address** |
| Payment Window (UI) | Testbed | tbnpg.settlebank.co.kr | 61.252.169.51  HTTPS(TCP/443) |
| Production | npg.settlebank.co.kr | 14.34.14.25(primary) |
| 61.252.169.58(secondary) |
| Cancellation and Other API Service (Non-UI) | Testbed | tbgw.settlebank.co.kr  HTTPS(TCP/443) | 61.252.169.42 |
| Production | gw.settlebank.co.kr  HTTPS(TCP/443) | 14.34.14.21(primary) |
| 61.252.169.53(secondary) |
| Settlement Collation API | Testbed | tb-nspay.settlebank.co.kr  HTTPS(TCP/443) | 61.252.169.32 |
| Production | nspay.settlebank.co.kr  HTTPS(TCP/443) | 61.252.169.29 (primary) |
| 14.34.14.37 (secondary) |

* Hecto Financial PG's next-generation system is configured with IDC center redundancy. (production environment) Therefore, the main and secondary centers may be switched due to GLB system operation without notice, and access by DNS Lookup is recommended.

Therefore, we request that you allow access to the two public IP addresses (production) in the firewall, and we do not recommend configuring the hosts file.

* If your company's internal policy is to configure the domain address as static in the hosts file, when switching to Hecto Financial IDC center, you must manually change the hosts file of all servers to "#(comment) indicated IP address" as shown below to use the payment service normally.
* All communications use HTTPS(TCP/443) protocol. We strongly recommend that you connect using TLS 1.2 or later. Support for TLS 1.1 or earlier may be discontinued without notice due to security advisories.

**#<</etc/hosts or c:\windows\system32\drivers\etc\hostsFileContent>>**

|  |
| --- |
| #cat /etc/hosts  #<<Additional>>  14.34.14.25 npg.settlebank.co.kr  #61.252.169.58 npg.settlebank.co.kr  14.34.14.21 gw.settlebank.co.kr  #61.252.169.53 gw.settlebank.co.kr |

## Notification Server

After the transaction is completed, the firewall must be allowed for the server that notifies the transaction result from Hecto Financial to the client’s system (firewall inbound must be allowed).

When invoking the payment window, the notiUrl is used to invoke the client’s page. TCP port number is the port number specified in the notiUrl, and you need to allow the firewall.

|  |  |  |
| --- | --- | --- |
| **Service** | **Type** | **IP** |
| Testbed | Send Notification | 61.252.169.22 |
| Production | Send Notification | 14.34.14.23(Primary center) |
| 61.252.169.24(Secondary center) |

* Example) notiUrl=https://abc.com:8443/abc.do
  + Source IP: Above list’s Hecto Financial notification server
  + Destination: Client’s server IP(abc.com), TCP/8443
* The receipt order of notification and payment window nextUrl result delivery or notification and NON-UI approval response is not guaranteed.
* After payment through the payment window, sending of approval notification is required but the sending of cancellation notification is optional. If you need the cancellation notification, please ask Hecto Financial’s manager to turn on the setting before the opening of the service.

# Crucial Information Security

## Encryption/Decryption of Personal Information and Crucial Information

When sending and receiving data, the following encryption/decryption should be performed for the personal information/crucial information fields.

|  |  |  |  |
| --- | --- | --- | --- |
| **Type** | **Entry** | **Application** | **Encoding** |
| Personal Information | Algorithm | AES-256/ECB/PKCS5Padding | Base64 Encoding |
| Target Field | Transaction amount, customer name, mobile phone number, e-mail, etc.  (The fields for encryption are specified in the remarks of the request field specification of each API,) | | |

## Personal Information Encryption Key

For encryption/decryption of personal information and crucial information, key information differs depending on the operation environment and is as follows.

For a simple integration test, use the first entry in the table. When the integration is successfully done, use the unique key issued by Hecto Financial.

|  |  |
| --- | --- |
| **Type** | **Encryption/Decryption Key** |
| Testbed Key (Common Key for Tests) | pgSettle30y739r82jtd709yOfZ2yK5K |
| Production Key (Merchant’s Unique Key) | Will be provided by separate notice when the service is carried out |

## Forgery Prevention Algorithm

To verify whether the request data is forged or falsified, a hash key verification is done additionally. The hash key generation algorithm is as follows.

|  |  |  |  |
| --- | --- | --- | --- |
| **Section** | **Entry** | **Application** | **Encoding** |
| Forgery | Algorithm | SHA-256 | Hex Encoding |

## Hash Generation Authentication Key

For a simple integration test, use the first entry in the table. When the integration is successfully done, use the unique key issued by Hecto Financial.

|  |  |
| --- | --- |
| **Section** | **Authentication Key** |
| Testbed Key (Common Key for Tests) | ST1009281328226982205 |
| Production Key (Merchant’s Unique Key) | Will be provided by separate notice when the service is carried out |

# Credit Card Payment (UI)

## Cautions

|  |
| --- |
| * The screen diverges depending on the Merchant ID property.   + - If the Merchant ID is set to general authentication payment, the card company’s authentication window appears.     - If the Merchant ID is set to non-authentication or old-authentication, the card information input window appears. |
| * To download the credit card billkey, you have to apply for billkey service separately. * If you’ve been issued a billkey, you can use the billkey to request 2nd payment API. ([Refer to 9. Credit Card Billkey Payment API]) * ※ Please note that the issued amount of the sales slip is displayed based on the parameters sent by the Merchant.   + - Ex) If a taxable Merchant sends a transaction amount of 1,000 won as follows     - 1) Only the transaction amount is sent: Marked as Taxable 901, VAT 99     - 2) Taxable amount 900, VAT amount 100 sent: Marked as Taxable 900, VAT 100 |

## Request Parameter (Merchant -> Hecto Financial)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial  nxca\_jt\_il:Authentication nxca\_jt\_bi:Non-authentication nxca\_ks\_gu:Old authentication nxca\_ab\_bi:English foreign currency non-authentication  nxca\_ab\_il:English foreign currency authentication | AN(10) | ● | "nxca\_jt\_il" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | "card"  ※ Fixed value |
| trdDt | Request Date | yyyyMMdd | N(8) | ● | "20211231" |
| trdTm | Request Time | HH24MISS | N(6) | ● | "100000" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtName | Merchant Korean Name | Merchant Korean name | AHN(100) | ● | "헥토파이낸셜"  (“Hecto Financial” in Korean) |
| mchtEName | Merchant English Name | Merchant English name | AN(100) | ● | "Hecto Financial" |
| pmtPrdtNm | Product Name | Product name | AHN(128) | ● | “Test Product” |
| trdAmt | Transaction Amount | Transaction amount  ※ If USD is used, delivered after multiplying by 100  ※ AES Encryption | N(12) | ● | "1000" |
| mchtCustNm | Customer Name | Customer name  ※ AES Encryption | AHN(30) | ○ | “Hong Gil Dong” |
| notiUrl | Result Processing URL | URL of the page that results after payment (Server To Server integration URL) | AN(250) | ● | "https://example.com/notiUrl" |
| nextUrl | Result Screen URL | URL for result delivery and landing page after payment | AN(250) | ● | "https://example.com/nextUrl" |
| cancUrl | Payment Cancellation URL | URL for result delivery and landing page when the user forcefully quits | AN(250) | ● | "https://example.com/cancUrl" |
| mchtParam | Merchant Reserved Field | Merchant reserved field for inputting other order information | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| email | E-mail | E-mail address  ※ AES Encryption | AN(60) | ○ | "HongGilDong@example.com" |
| prdtTerm | Product Provision Period | yyyyMMddHHmmss  If there is no value, marked as a regular payment | N(14) | ○ | "20221231235959" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent by the Merchant  ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| taxTypeCd | Tax-exempt Status | N:Taxable, Y:Tax-exempt, G:Compound tax  If it is blank, follow the Merchant’s setting | A(1) | ○ | "N" |
| taxAmt | Taxable Amount | Taxable amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “91” |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “0” |
| svcAmt | Service Charge | Credit card service charge  ※ AES Encryption | N(12) | ○ | “10” |
| instmtMon | Number of Installments | Only for credit card-direct | N(2) | ○ | “00” |
| cardType | Card Payment Type | 3: Card companies eligible for App Card only [Shinhan/ Samsung/ Hyundai/ KB/ Nonghyup/ Lotte]  6: Hyundai Card PayShot (Can be used after direct affiliation contract with the card company) | N(1) | ○ | “3” |
| chainUserId | Hyundai Card PayShot ID | Can be used after direct affiliation contract with the card company | AN(100) | ○ | “” |
| cardGb | Specific Card Company Code | Only one specific card company exposed  Refer to [**Credit Card Identifiers**] | AN(4) | ○ | “NHC” |
| appScheme | App Scheme | (AppScheme://~) format is used, and is used when one’s own app is built  Refer to [**Credit Card WebView**] | AN(100) | ○ | "PAYAPPNAME://" |
| custIp | Customer IP Address | Customer device’s IP address, not the merchant server’s IP | AN(15) | ○ | "127.0.0.1" |
| pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Merchant ID + Payment Method + Merchant Order Number + Request Date + Request Time + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

The columns that respond to the merchant side from the credit card payment window are as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial  nxca\_jt\_il: Authentication  nxca\_jt\_bi: Non-authentication  nxca\_ks\_gu: Old-authentication | AN(10) | ● | "nxca\_jt\_il" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery  URL Encoding, UTF-8 | AHN(200) | ● | “Missing Payment Request Information (Product Name)” |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | “card”  **※ Fixed value** |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent  ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| trdNo | Transaction Number | Hecto Financial transaction number | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdAmt | Transaction Amount | Transaction amount  ※ AES Encryption | N((12) | ● | "1000" |
| mchtParam | Merchant Reservation Field | Bypass the request field value as the response | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| authDt | Approval Date and Time | Payment approval date and time | N(14) | ○ | "20211231100000" |
| authNo | Approval Number | Credit card approval number | N(15) | ○ | "30001234" |
| intMon | Number of Installments | Credit card number of installments | N(2) | ○ | "00" |
| fnNm | Card Company Name | Credit card company name | AH(20) | ○ | “Woori Card” |
| fnCd | Card Company Code | Credit card company code | AN(4) | ○ | "LTC" |
| pointTrdNo | Point Transaction Number | If the customer paid with points, the transaction number of the point payment | AN(40) | ○ | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| pointTrdAmt | Point Transaction Amount | If the customer paid with points, the point payment amount  ※ AES Encryption | N(12) | ○ | "1000" |
| cardTrdAmt | Card Payment Amount | Credit card payment amount excluding discounts or points that the customer received  ※ AES Encryption | N(12) | ○ | “4000” |
| billKey | Billkey (Capital Letter ‘K’) | Recurring payment key generated when using billkey service.  Used for 2nd payment  ※ Need to apply for billkey service separately | AN(50) | ● | "SBILL\_0123456789" |

## Notification Parameter (Hecto Financial -> Merchant)

If the transaction is completed successfully, Hecto Financial sends notification (result notification) message to the merchant.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| outStatCd | Transaction Status | Success [0021] | N(4) | ● | "0021" |
| trdNo | Transaction Number | Unique transaction number given by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| method | Payment Method | Credit Card [CA] | A(2) | ● | "CA" |
| bizType | Work Type | Approve [B0], Cancel [C0] | AN(2) | ● | "B0" |
| mchtId | Merchant ID | Merchant ID given by Hecto Financial | AN(12) | ● | "nxca\_jt\_il" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant | AN(100) | ● | "ORDER20211231100000" |
| mchtCustNm | Customer Name | Orderer name of the actual payer | AHN(30) | ○ | "Hong Gil Dong” |
| mchtName | Merchant Korean Name | Actual seller name, when a transaction request is made and there is no actual seller name, the name of the Merchant under contract with Hecto Financial | AHN(20) | ○ | "헥토파이낸셜"  ("Hecto Financial" in Korean) |
| pmtprdNm | Product Name | Name of the product ordered by the customer | AHN(128) | ○ | “Test product” |
| trdDtm | Transaction Date and Time | Approval date and time, canceled/partially canceled transaction: canceled date and time are delivered.  Format: YYYYMMDDhhmmss | N(14) | ● | "20211231100000" |
| trdAmt | Transaction Amount | Transaction amount | N(12) | ○ | "1000" |
| svcAmt | Service Charge | Credit card service charge  ※ Delivered for offline transactions that are service charge inclusive transactions. | N(12) | ○ | "0" |
| billKey | Recurring Payment Key | billKey issued for the second recurring payment | AN(40) | ○ | "SBILL\_0123456789" |
| billKeyExpireDt | Recurring Payment Key Validity | YYMM | N(4) | ○ | "2212" |
| cardCd | Card Code | Card company code  [Refer to Credit Card Identifier] | AN(10) | ○ | "NHC" |
| cardNm | Card Name | Card company name  [Refer to Credit Card Identifier] | AHN(20) | ○ | “NH Check” |
| email | Customer E-mail | Merchant customer e-mail | AN(60) | ○ | "HongGilDong@example.com" |
| mchtCustId | Merchant Customer ID | Merchant customer ID | AN(50) | ○ | "HongGilDong" |
| cardNo | Card Number | Masked card number 123456\*\*\*\*\*\*7890  \* Option value depending on the Merchant setting information | AN(20) | ○ | "123456\*\*\*\*\*\*7890" |
| cardApprNo | Card Approval Number | Card approval number | AN(15) | ○ | "30001234" |
| instmtMon | Number of Installments | Number of installments | N(2) | ○ | "00" |
| instmtType | Installment Type | If the number of installments is a part of card company event Y  \* Option value depending on the Merchant setting information | A(1) | ○ | "N" |
| orgTrdNo | Original Transaction Number | When canceled, original transaction number | AN(40) | ○ | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| orgTrdDt | Original Transaction Date | When canceled, original transaction date | N(8) | ○ | "20211231" |
| mixTrdNo | Split Payment Transaction Number | Split payment transaction number | AN(40) | ○ | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| mixTrdAmt | Split Payment Amount | \*Delivered only when mixTrdNo exists | N(12) | ○ | "1000" |
| payAmt | Actual Payment Amount | Payment amount excluding the split payment amount in the transaction amount  payAmt = trdAmt - mixTrdAmt  \*Delivered only when mixTrdNo exists | N(12) | ○ | "1000" |
| cnclType | Canceled Transaction Type | 00: Full cancellation, 10: Partial cancellation | N(2) | ○ | "00" |
| mchtParam | Merchant Reservation Field | The value delivered as the additional information field used by the Merchant is returned as is | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| pktHash | Hash Value | SHA256 (Transaction Status Code + Transaction Date + Transaction Time + Merchant ID + Merchant Order Number + Transaction Amount + Hash Key) | AN(64) | ● | "a2d6d597d55d7c9b689baa2e08c1ddf0ce71f4248c5b9b59fe61bfbf949543e1" |

Merchant sends the response to Hecto Financial.

|  |  |
| --- | --- |
| **Response (Merchant -> Hecto Financial)** | |
| Success | “OK” (All Caps) |
| Failure | “FAIL” (All Caps, When FAIL is the response, it is recognized as a clear failure. The notification is resent.) |
| Others | It is recognized as abnormal failure, and the notification is resent according to the number of times set. |

# Credit Card WebView

## APP SCHEME Setting

* Merchant App Scheme setting for payment request
  + Scheme name specified in appScheme parameter (Merchant app scheme name://).
  + When opening an external app, the control goes to the App Scheme when the external app is closed.
  + When opening a card company app and changing to another payment method app, add the App Scheme.

## Android

* Redefinition of WebViewClient class’ shouldOverrideUrlLoading method
  + When opening external app like app card and vaccine app, this is the logic for going to the market for installation of the app if the app is not installed.

|  |
| --- |
| private class TestWebViewClient extends WebViewClient {  @Override  public boolean shouldOverrideUrlLoading(WebView view, String url) {  if(url == null)  return false;    if((url.startsWith("http://") || url.startsWith("https://"))){  view.loadUrl(url);  return false;  }else{  Intent intent;  try{    intent = Intent.parseUri(url, Intent.URI\_INTENT\_SCHEME);  Uri uri = Uri.parse(intent.getDataString());  intent = new Intent(Intent.ACTION\_VIEW, uri);  startActivity(intent);  return true;  }catch(URISyntaxException e1){  e1.printStackTrace();  return false;  }catch(ActivityNotFoundException e2){  if(url.startsWith("ispmobile://")){  Uri marketUri = Uri.parse("market://details?id=kvp.jjy.MispAndroid320");  Intent marketIntent = new Intent(Intent.ACTION\_VIEW,marketUri);  startActivity(marketIntent);  return true;  }else if(url.startsWith("kftc-bankpay://")){  Uri marketUri = Uri.parse("market://details?id=com.kftc.bankpay.android");  Intent marketIntent = new Intent(Intent.ACTION\_VIEW,marketUri);  startActivity(marketIntent);  return true;  }else{  try {  String packagename = intent.getPackage();  if (packagename != null) {  Uri marketUri = Uri.parse("market://details?id=" + packagename);  Intent marketIntent = new Intent(Intent.ACTION\_VIEW, marketUri);  startActivity(marketIntent);  return true;  }  } catch (URISyntaxException e3) {  e3.printStackTrace();  return false;  }  }  }  }  return false;  } |

* Web view setting and Java script ALERT / CONFIRM method implementation
  + ※ It is required to enable Java script use
  + ※ It is required to enable Local Storage use
  + ※ It is required to enable cache use
  + Make “alert / confirm” recognizable

|  |
| --- |
| public void onCreate(Bundle savedInstanceState) {  ...  view.setWebChromeClient(new MyWebChromeClient());  WebSettings set = view.getSettings();  set.setJavaScriptEnabled(true);  set.setCacheMode(WebSettings.LOAD\_DEFAULT);  set.setDomStorageEnabled(true);  ...  }  class MyWebChromeClient extends WebChromeClient {  @Override  public booleanon JsAlert(WebView view, String url, String message, final android.webkit.JsResult result) {  new AlertDialog.Builder(MainActivity.this).setTitle("").setMessage(message)  .setPositiveButton(android.R.string.ok, new AlertDialog.OnClickListener() {  public void onClick(DialogInterface dialog, int which) {  result.confirm();  }  }).setCancelable(false).create().show();  return true;  }  @Override  public boolean onJsConfirm(WebView view, String url, String message, final JsResult result) {  new AlertDialog.Builder(MainActivity.this).setTitle("").setMessage(message)  .setPositiveButton(android.R.string.ok, new DialogInterface.OnClickListener() {  public void onClick(DialogInterface dialog, int which) {  result.confirm();  }  }).setNegativeButton(android.R.string.cancel, new  DialogInterface.OnClickListener() {  public void onClick(DialogInterface dialog, int which) {  result.cancel();  }  }).create().show();  return true;  }  } |

* Application for after Android Lollipop version
  + Insecurity page permit and Third Party Cookies

|  |
| --- |
| WebSettings settings = view.getSettings();    if(Build.VERSION.SDK\_INT>= Build.VERSION\_CODES.LOLLIPOP) {  settings.setMixedContentMode(settings.MIXED\_CONTENT\_ALWAYS\_ALLOW);  CookieManager.cookieManager = CookieManager.getInstance();  cookieManager.setAcceptCookie(true);  cookieManager.setAcceptThirdPartyCookies(view,true);  } |

* Main external app list
  + Schema and Package Name

|  |  |  |
| --- | --- | --- |
| **App** | **Scheme** | **Package Name** |
| ISP Mobile | ispmobile | kvp.jjy.MispAndroid320 |
| KBAPP Card | kb-acp | com.kbcard.cxh.appcard |
| KB Star Banking | kbbank | com.kbstar.kbbank |
| L.POINT |  | com.lottemembers.android |
| L.pay | lpayapp | com..lotte.lpay |
| LG Pay | callonlinepay | com.lge.lgpay |
| LiiV(Kookmin Bank) | liivbank | com.kbstar.liivbank |
| NHAPP Card | nhappcardansimclick | nh.smart.mobilecard |
| NH All One Pay | nhallonepayansimclick | nh.smart.nhallonepay |
| PAYCO Easy Payment | payco | com.nhnent.payapp |
| SSGPAY |  | com.ssg.serviceapp.android.egiftcertificate |
| V3 | ahnlabv3mobileplus | com.ahnlab.v3mobileplus |
| VG Web Vaccine |  | kr.co.shiftworks.vguardweb |
| mVaccine | mvaccinestart | com.TouchEn.mVaccine.webs |
| Account Transfer | kftc-bankpay | com.kftc.bankpay.android |
| Naver Pay |  | com.nhn.android.search |
| Lotte APP Card | lotteappcard | com.lcacApp |
| Lotte Mobile Payment | lottesmartpay | com.lotte.lottesmartpay |
| Liiv Next | newliiv | com.kbstar.reboot |
| Samsung APP Card | mpocket.online.ansimclick | kr.co.samsungcard.mpocket |
| Samsung Pay | samsungpay | com.samsung.android.spay |
| Samsung Pay (Mini) |  | com.samsung.android.spaylite |
| Shinhan Pay Fan (Joint Certificate) |  | com.shinhancard.smartshinhan |
| Shinhan APP Card | shinhan-sr-ansimclick | com.shcard.smartpay |
| Shinhan Super SOL |  | com.shinhan.smartcaremgr |
| Citi Public Certificate / Smart Easy Payment | smartpay | kr.co.citibank.citimobile |
| Citi Mobile App | citimobile | kr.co.citibank.citimobile |
| Citi App Public Certificate | citicardapp | com.citibank.cardapp |
| Citi App Smart Easy Payment | citispay | com.citibank.cardapp |
| Woori WON Banking | wooribank | com.wooribank.smart.npib |
| Woori WON Card | com.wooricard.smartapp | com.wooricard.smartapp |
| Woori App Card | wooripay | com.wooricard.wpay |
| Kakao Pay |  | com.kakao.talk |
| Kona Gimpo Pay |  | gov.gimpo.gpay |
| Toss | supertoss | viva.republica.toss |
| Tmoney Daem Daem |  | com.tmoney.nfc\_pay |
| Tmoney In-App |  | com.tmoney.inapp |
| Paypin | paypin | com.skp.android.paypin |
| Hana (Mobipay) | cloudpay | com.hanaskcard.paycla |
| Hana Members |  | kr.co.hanamembers.hmscustomer |
| Hana Members Wallet | hanawalletmembers | com.hanaskcard.paycla |
| Hyundai APP Card | hdcardappcardansimclick | com.hyundaicard.appcard |

## IOS

* URL Scheme setting
  + For IOS 9 and higher, due to strengthened security policy, in the plist file, App Schema should be registered in LSApplicationQueriesSchemes key.
  + There may be additions or changes to the LSApplicationQueriesSchemes registration list depending on the situations of the financial company providing the APP.

|  |  |
| --- | --- |
| **APP** | **Scheme** |
| ISP Mobile | ispmobile |
| KB APP Card | kb-acp |
| LiiV (Kookmin Bank) | liivbank |
| Liiv Next | newliiv |
| KB Star Banking | kbbank |
| Lotte APP Card | lotteappcard |
| Lotte Smart Pay | lottesmartpay |
| Hyundai APP Card | hdcardappcardansimclick |
| Hyundai Public Certificate App | smhyundaiansimclick |
| Samsung APP Card | mpocket.online.ansimclick |
| Samsung Public Certificate App | scardcertiapp |
| Shinhan APP Card | shinhan-sr-ansimclick |
| Shinhan Public Certificate App | smshinhanansimclick |
| NH APP Card | nhappcardansimclick |
| NH All One Pay | nhallonepayansimclick |
| NH Public Certificate App | nonghyupcardansimclick |
| Hana (Mobi Pay) | cloudpay |
| Citi APP Card | citispay |
| Citi Public Certificate App | citicardappkr |
| Citi Public Certificate / Smart Easy Payment (New) | citimobileapp |
| mVaccine | NA |
| Account Transfer | kftc-bankpay |
| Paypin | paypin |
| PAYCO Easy Payment | payco, paycoapplogin (Both) |
| Syrup APP Card | tswansimclick |
| Bank Wallet | bankwallet |
| UnionPay Card | uppay |
| Hana Card | Hanaskcardmobileportal |
| LG Pay | Callonlinepay |
| L.pay | Lpayapp |
| Woori App Card | Wooripay |
| Hana Members Wallet | hanawalletmembers |
| Woori WON Card | com.wooricard.wcard |
| Hana Moa Sign | hanamopmoasign |
| Woori WON Banking | NewSmartPib |
| Liiv(KB Kookmin Bank) | liivbank |
| Toss | supertoss |

* plist example

|  |
| --- |
| <key>LSApplicationQueriesSchemes</key>  <array>  <string>ispmobile</string>  <string>hdcardappcardansimclick</string>  <string>smhyundaiansimclick</string>  <string>shinhan-sr-ansimclick</string>  ...  </array> |

* Allow Cookies
  + For IOS6 and higher, the default setting for Cookies of Safari changed to “allowed” thus session expiry error might occur. Apply below cookie to always allow cookies.

|  |
| --- |
| (BOOL)application:(UIApplication \*)application  didFinishLaunchingWithOptions:(NSDictionary \*)launchOptions  {  [[NSHTTPCookieStoragesharedHTTPCookieStorage]  setCookieAcceptPolicy:NSHTTPCookieAcceptPolicyAlways];  ...  return YES;  } |

# Credit Card Payment API (Non-UI)

## Payment API Request Parameter (Billkey Issuing Included)

※ Old Authentication: Payment request with card number, validity (yyMM), identification number, and card password

※ Non-authentication: Payment request with card number, validity (yyMM)

※ Billkey (Recurring Payment Key) Issuance: According to the setting of the merchant ID, the billkey is given as the response value. Save the billkey separately, and when you need to make a payment, request billkey payment. Please request the sales manager for the billkey issuance setting for the merchant ID.

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
|  | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial  nxca\_ks\_gu: Old-authentication  nxca\_jt\_bi: Non-authentication | AN(12) | ● | "nxca\_jt\_bi" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed Value |
| method | Payment Method | Payment Method | A(2) | ● | "CA" ※ Fixed Value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "B0" ※ Fixed Value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed Value |
| mchtTrdNo | Merchant Order Number | Unique transaction number generated by the merchant | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others Blank: Unverifiable | A(1) | ○ | "W" |
|  | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| pmtprdNm | Product Name | Product name | AHN(128) | ● | "Test product" |
| mchtCustNm | Customer Name | Merchant Customer Name | AHN(30) | ● | "Hong Gil Dong” |
| mchtCustId | Merchant Customer ID | Merchant customer ID | AHN(50) | ● | "HongGilDong" |
| email | Email | Merchant customer email address | AN(60) | ○ | "HongGilDong@example.com" |
| cardNo | Card Number | Card number ※AES Encryption | N(16) | ● | "1111222233334444" |
| vldDtMon | Validity (Month) | Validity MM ※AES Encryption | N(2) | ● | "12" |
| vldDtYear | Validity (Year) | Validity YY ※AES Encryption | N(2) | ● | "24" |
| idntNo ※ Used for old-authentication only | Identification Number | 6 digits of date and year of birth or 10 digits of business registration number ※AES Encryption | N(10) | ● | "991231" |
| cardPwd ※ Used for old-authentication only | Card Password | First two digits of the card password ※AES Encryption ※Used for old-authentication only. | N(2) | ● | "00" |
| instmtMon | Number of Installments | 2-digit number of installments | N(2) | ● | "00" |
| crcCd | Currency Classification | Currency Classification | A(3) | ● | "KRW" ※Domestic Payment "USD"  ※Overseas Payment |
| taxTypeCd | Tax Classification | N:Taxable, Y:Tax-exempt, G:Compound tax  If it is blank, follow Merchant’s setting | A(1) | ○ | "N" |
| trdAmt | Transaction Amount | Transaction amount  ※ AES Encryption | N(12) |  | "1000" ※Domestic Payment "150"   ※Overseas Payment ex [1.50$] => Mark whole number [150] |
| taxAmt | Taxable Amount | Taxable amount among transaction amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount among transaction amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “91” |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount among transaction amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “0” |
| svcAmt | Service Charge | Credit card service charge  ※ AES Encryption | N(12) | ○ | “10” |
| notiUrl | Result Processing URL | Write the Callback URL to receive notification (result notification) that is sent from Hecto Financial to the merchant after completion of payment | AN(250) | ○ | "https://example.com/notiUrl" |
| mchtParam | Merchant Reserved Field | Merchant reserved field for inputting other order information | AHN(4000) | ○ | "name=HongGilDong&age=25" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Transaction Date + Transaction Time + Merchant ID + Merchant Order Number + Transaction Amount (Plain Text) + Hash Key |

## Payment API Response Parameter (Billkey Issuing Included)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
|  | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "nxca\_jt\_bi" |
| ver | Version | Parameter’s version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment method | A(2) | ● | "CA" ※ Fixed value |
| bizType | Work Classification | Work classification code | AN(2) | ● | "B0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number given by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
|  | pktHash | Hash Value | hash value in request returned as is | AN(64) | ● |  |
| trdAmt | Transaction Amount | Transaction amount ※AES Encryption | N(12) | ● | "1000" ※Domestic payment "150"   ※Overseas payment ex [1.50$] => Mark whole number [150] |
| billKey | Billkey | Billkey used in the second payment  ※ It is only provided to merchants that availed the billkey service. | AN(50) | ○ | "SBILL\_0123456789" |
| cardNo | Card Number | Masked card number is returned. ※ In default, it is not provided. It is provided to certain merchants only. Please inquire the sales team. | N(16) | ○ | "111122xxxxxx4444" |
| vldDtMon | Validity(Month) | Validity MM ※ It is only provided to merchants that availed the billkey service. | N(2) | ○ | "12" |
| vldDtYear | Validity(Year) | Validity YY ※ It is only provided to merchants that availed the billkey service. | N(2) | ○ | "24" |
| issrId | Issuer ID | Card issuer code Refer to [Credit Card Identifier] | AN(4) | ● | "NHC" |
| cardNm | Card Company Name | Card company name  Refer to [Credit Card Identifier] | AHN(20) | ● | "NH Nonghyup" |
| cardKind | Card Type Name | Card type Refer to [Credit Card Identifier] | AHN(50) | ● | "NH Check Card" |
| ninstmtTypeCd | No Interest Installment Type | Y: No interest (Partial, merchant) N: Regular installment, lumpsum | A(1) | ● | "N" |
| instmtMon | Number of Installments | Value in request returned as is | N(2) | ○ | "00" |
| apprNo | Approval Number | Card approval number | N(15) | ● | "30001234" |

## Response Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Transaction Status Code + Request Date + Request Time + Merchant ID + Merchant Order Number + Transaction Amount + Hash Key |

## Billkey Issuing API Request Parameter

※ Billkey issuance without payment  
Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "nxca\_ks\_gu" |
| ver | Version | Parameter’s version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment method | A(2) | ● | "CA" ※ Fixed value |
| bizType | Work Classification | Work classification code | AN(2) | ● | "A4" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant | AN(100) | ● | "PG\_API20220920131039" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20220920" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "131039" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E: Others Blank: Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Value | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(64) | ● | "3bf1295695eb0e081f7900dfcbfcb225887d8fb07322d54c3dba72a2726bf55d" |
| cardNo | Card Number | Card number, only the numbers ※AES Encryption | N(128) | ● | "522112\*\*\*\*\*\*1621" |
| idntNo | Identification Number | 6 digits of date and year of birth or 10 digits of business registration number ※AES Encryption | N(64) | ● | "620817" |
| vldDtMon | Validity (Month) | Card validity (month), only the numbers ※AES Encryption | N(24) | ● | "11" |
| vldDtYear | Validity (Year) | Card validity (year), only the numbers ※AES Encryption | N(24) | ● | "11" |
| cardPwd | Card Password | First two digits of the card password ※AES Encryption | N(24) | ● | "11" |
| mchtCustNm | Customer Name | Customer Name (Can include Korean letters) | AHN(30) | ○ | "Hong Gil Dong" |
| mchtCustId | Customer ID | Customer ID (Korean character not allowed) | AHN(50) | ○ | "HongGilDong" |
| keyRegYn | Billkey Issuance Request | Billkey issuance after authentication (Y, N) | A(1) | ● | "Y" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Request Date + Request Time + Merchant ID + Merchant Order Number + “0” + Hash Key |

## Billkey Issuing API Response Parameter

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "nxca\_ks\_gu" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "CA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "A4" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "PG\_API20220920131039" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_ks\_gu0220921093117M1260999" |
| trdDt | Transaction Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20220921" |
| trdTm | Transaction Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "093117" |
| outStatCd | Transaction Status | 0021: Success, 0031: Failure (Check successful transaction: Transaction Status=0021 + Result Code=0000) | N(4) | ● | "0021" |
| outRsltCd | Result Code | Result Code. Success 0000. For others, refer to [Reject Code Table[]](https://develop.sbsvc.online/16/onlineDocList.do#item-544) | N(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message | AHN(200) | ● | "Normal processing" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method | AN(64) | ● | "07d36ed4ef2a773829feca675b01e3f16db40f90b3895c6f8d85e6d0e7c1d583" |
| cardNo | Card Number | Card number | N(128) | ○ | "522112\*\*\*\*\*\*1621" |
| issrId | Issuer ID | Card Issuer Identifier Refer to [Credit Card Identifier] | A(64) | ○ | "HDC" |
| cardNm | Card Company Name | Card Company Name Refer to [Credit Card Identifier] | AH(20) | ○ | "Hyundai" |
| cardKind | Card Type Name | Card Type Refer to [Credit Card Identifier] | AN(50) | ○ | "Hyundai Master Individual" |
| billKey | Billkey | Billkey response if Issuance Request is “Y” | AN(40) | ○ | "SBILL\_PGCAnxca\_ks\_gu20222609990921093117" |

## Response Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Transaction Status Code + Request Date + Request Time + Merchant ID + Merchant Order Number + “0” + Hash Key |

# Credit Card Billkey Payment API (Non-UI)

|  |
| --- |
| * An API for making payment with Billkey given through Credit Card Payment API or Billkey Issuing API. * Billkey service requires a separate application through your sales representative. |

## Request Parameter (Merchant -> Hecto Financial)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial  nxca\_ks\_gu: Old authentication  nxca\_jt\_bi: Non authentication | AN(12) | ● | "nxca\_jt\_bi" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "CA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "B0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
|  | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| pmtprdNm | Product Name | Product name | AHN(128) | ● | "Test Product" |
| mchtCustNm | Customer Name | Merchant Customer Name | AHN(30) | ● | "Hong Gil Dong" |
| mchtCustId | Merchant Customer ID | Merchant customer ID | AHN(50) | ● | "HongGilDong" |
| email | Customer Email | Merchant customer email address | AN(60) | ○ | "HongGilDong@example.com" |
| billKey | Billkey | Billkey issued for the first payment | AN(50) | ● | "SBILL\_0123456789" |
| instmtMon | Number of Installments | 2-digit number of installments | N(2) | ● | "00" |
| crcCd | Currency Classification | Currency classification | A(3) | ● | "KRW" ※ Fixed value |
| taxTypeCd | Tax Classification | N:Taxable, Y:Tax-exempt, G:Compound tax  If it is blank, follow Merchant’s setting | A(1) | ○ | "N" |
| trdAmt | Transaction Amount | Transaction amount ※AES Encryption | N(12) | ● | "1000" |
| taxAmt | Taxable Amount | Taxable amount among transaction amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount among transaction amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “91” |
| taxFreeAmt | Non-taxable Amount | Tax-exempt amount among transaction amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “0” |
| svcAmt | Service Charge | Credit card service charge  ※ AES Encryption | N(12) | ○ | “10” |
| mchtParam | Merchant Reserved Field | Merchant reserved field for inputting other order information | AHN(4000) | ○ | "name=HongGilDong&age=25" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Transaction Date + Transaction Time + Merchant ID + Merchant Order Number + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "nxca\_jt\_bi" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "CA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "B0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number given by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
|  | pktHash | Hash Value | Hash value in request returned as is | AN(64) | ● |  |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| billKey | Billkey | Value in request returned as is | AN(50) | ● | "SBILL\_0123456789" |
| cardNo | Card Number | Masked card number is returned. ※ In default, it is not provided. It is provided to certain merchants only. Please inquire the sales team. | N(16) | ○ | "111122xxxxxx4444" |
| vldDtMon | Validity (Month) | Validity MM ※ It is only provided to merchants that availed the billkey service. | N(2) | ○ | "12" |
| vldDtYear | Validity (Year) | Validity YY ※ It is only provided to merchants that availed the billkey service. | N(2) | ○ | "24" |
| issrId | Issuer Name | Card Issuer Identifier Refer to [Credit Card Identifier] | AN(4) | ● | "NHC" |
| cardNm | Card Company Name | Card Company Name Refer to [Credit Card Identifier] | AHN(20) | ● | "NH Nonghyup" |
| cardKind | Card Type Name | Card Type Refer to [Credit Card Identifier] | AHN(50) | ● | "NH Check Card" |
| ninstmtTypeCd | No Interest Installment Type | Y: No interest (Partial, merchant) N: Regular installment, lumpsum | A(1) | ● | "N" |
| instmtMon | Number of Installments | Value in request returned as is | N(2) | ○ | "00" |
| apprNo | Approval Number | Card Approval Number | N(15) | ● | "30001234" |

## Response Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Transaction Status Code + Request Date + Request Time + Merchant ID + Merchant Order Number + Transaction Amount + Hash Key |

# Credit Card Billkey Deleting API (Non-UI)

## Request Parameter (Merchant -> Hecto Financial)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial  nxca\_jt\_bi: Non authentication  nxca\_ks\_gu: Old authentication | AN(12) | ● | "nxca\_jt\_bi" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "CA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "A1" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| billKey | Billkey | Billkey issued as the first round response | AN(50) | ● | "SBILL\_0123456789" |
| etcInfo | Termination Reason | Termination Reason Code | AN(12) | ○ | "" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Transaction Date + Transaction Time + Merchant ID + Merchant Order Number + “0” + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "nxca\_jt\_bi" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "CA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "A1" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number given by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | Hash value in request returned as is | AN(64) | ● |  |
| billKey | Billkey | Value in request returned as is | AN(50) | ● | "SBILL\_0123456789" |

## Response Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Transaction Status Code + Request Date + Request Time + Merchant ID + Merchant Order Number + Transaction Amount + Hash Key |

# Credit Card Cancellation (Non-UI)

## Request Parameter (Merchant -> Hecto Financial)

* API URI
  + Test Environment: https://tbgw.settlebank.co.kr/spay/APICancel.do
  + Production Environment: https://gw.settlebank.co.kr/spay/APICancel.do

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial  nxca\_jt\_il:Authentication nxca\_jt\_bi:Non-authentication nxca\_ks\_gu:Old authentication nxca\_ab\_bi:English foreign currency non-authentication | AN(12) | ● | "nxca\_jt\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "CA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
|  | ktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| crcCd | Currency Classification | Currency classification value | A(3) | ● | "KRW" ※Domestic Payment "USD"  ※Overseas Payment |
| cnclOrd | Cancellation Round | Start from 001. For second partial cancellation, 002. | N(3) | ● | "001" |
| taxTypeCd | Tax-exempt Status | Y:Tax-exempt, N: Taxable G:Compound tax  If it is blank, follow Merchant’s setting | A(1) | ○ | "N" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "1000" ※Domestic Payment "150"   ※Overseas Payment ex [1.50$] => Marked in whole number [150] |
| taxAmt | Taxable Amount | Taxable amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “91” |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “0” |
| svcAmt | Service Charge | Credit card service charge  ※ AES Encryption | N(12) | ○ | “0” |
| cnclRsn | Reason for Cancellation | If needed, write the reason for cancellation message | AHN(255) | ○ | "Don’t like the product" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Cancellation Request Date + Cancellation Request Time + Merchant ID + Merchant Order Number + Cancellation Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial server to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "nxca\_jt\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "CA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | Hash value in request returned as is | AN(64) | ● |  |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "1000" ※Domestic Payment "150"   ※Overseas Payment ex [1.50$] => Mark with whole number [150] |
| cardCnclAmt | Credit Card Cancellation Amount | Canceled credit card amount among total amount ※ AES Encryption | N(12) | ● | "5000" |
| pntCnclAmt | Point Cancellation Amount | Canceled point amount among total amount ※ AES Encryption | N(12) | ● | "1000" |
| blcAmt | Cancellable Balance | When cancellation is successful, remaining cancellable balance according to transaction number is returned ※ AES Encryption | N(12) | ● | "0" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [6.5 Notification Parameter]

# Account Transfer Payment (UI)

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | "bank"  ※ Fixed value |
| trdDt | Request Date | yyyyMMdd | N(8) | ● | "20211231" |
| trdTm | Request Time | HH24MISS | N(6) | ● | "100000" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtName | Merchant Korean Name | Merchant Korean name | AHN(100) | ● | "헥토파이낸셜"  (“Hecto Financial” in Korean) |
| mchtEName | Merchant English Name | Merchant English name | AN(100) | ● | "Hecto Financial" |
| pmtPrdtNm | Product Name | Product name | AHN(128) | ● | “test product” |
| trdAmt | Transaction Amount | Transaction amount  ※ AES Encryption | N(12) | ● | "1000" |
| mchtCustNm | Customer Name | Customer name  ※ AES Encryption | AHN(30) | ○ | "Hong Gil Dong" |
| custAcntSumry | Bank Account Remark | Remark that will be marked on customer’s bank account | AHN(50) | ○ | "Hecto Financial" |
| notiUrl | Result Processing URL | URL of the page that results after payment (Server To Server integration URL) | AN(250) | ● | "https://example.com/notiUrl" |
| nextUrl | Result Screen URL | URL for result delivery and landing page after payment | AN(250) | ● | "https://example.com/nextUrl" |
| cancUrl | Payment Cancellation URL | URL for result delivery and landing page when the user force quit | AN(250) | ● | "https://example.com/cancUrl" |
| mchtParam | Merchant Reserved Field | Merchant reserved field for inputting other order information | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| email | E-mail | E-mail address  ※ AES Encryption | AN(60) | ○ | "HongGilDong@example.com" |
| prdtTerm | Product Provision Period | yyyyMMddHHmmss  If there is no value, marked as regular payment | N(14) | ○ | "20221231235959" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent by the Merchant  ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| taxTypeCd | Tax-exempt Status | N:Taxable, Y:Tax-exempt, G:Compound tax  If it is blank, follow Merchant’s setting | A(1) | ○ | "N" |
| taxAmt | Taxable Amount | Taxable amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “91” |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “0” |
| custIp | Customer IP Address | Customer device’s IP address, not the merchant server’s IP | AN(15) | ○ | "127.0.0.1" |
| appScheme | App Scheme | (AppScheme://~) format is used, and is used when one’s own app is built | AN(100) | ○ | "PAYAPPNAME://" |
| pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Merchant ID + Payment Method + Merchant Order Number + Request Date + Request Time + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from bank transfer payment window to the merchant side are defined as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Payment request information missing (product name)" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | "bank" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| trdNo | Transaction Number | Hecto Financial transaction number | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| mchtParam | Merchant Reserved Field | Bypass the request field value as the response | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| authDt | Approval Date and Time | Payment approval date and time | N(14) | ○ | "20211231100000" |
| fnNm | Bank Name | Bank Name Refer to [Financial Institution Identifier] | AH(50) | ○ | "Nonghyup" |
| fnCd | Bank Code | Bank Code  Refer to [Financial Institution Identifier] | N(4) | ○ | "11" |

## Notification Parameter (Hecto Financial -> Merchant)

If the transaction is completed successfully, Hecto Financial sends notification (result notification) message to the merchant.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| outStatCd | Transaction Status | Success [0021] | N(4) | ● | "0021" |
| trdNo | Transaction Number | Unique transaction number given by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| method | Payment Method | Account Transfer[RA] | A(2) | ● | "RA" |
| bizType | Work Type | Approve [B0], Cancel [C0] | AN(2) | ● | "B0" |
| mchtId | Merchant ID | Merchant ID given by Hecto Financial | AN(12) | ● | "nx\_mid\_il" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant | AN(100) | ● | "ORDER20211231100000" |
| mchtCustNm | Customer Name | Orderer name of the actual payer | AHN(30) | ○ | "Hong Gil Dong" |
| mchtName | Merchant Korean Name | Actual seller name, if there is no actual seller name when requesting transaction, the name of the merchant that signed the contract with Hecto Financial | AHN(20) | ○ | "Hecto Financial" |
| pmtprdNm | Product Name | Name of the product ordered by the customer | AHN(128) | ○ | "Test Product" |
| trdDtm | Transaction Date and Time | Approval date and time, canceled/partially canceled transaction: canceled date and time are delivered.  Format: YYYYMMDDhhmmss | N(14) | ● | "20211231100000" |
| trdAmt | Transaction Amount | Transaction Amount | N(12) | ○ | "1000" |
| bankCd | Bank Code | Bank Code Refer to [Financial Institution Identifier] | AN(10) | ○ | "011" |
| bankNm | Bank Name | Bank Name Refer to [Financial Institution Identifier] | AHN(10) | ○ | "NH Nonghyup" |
| acntPrintNm | Bank Account Remark | Remark that will be marked on customer’s bank account – Value delivered during payment request will be delivered. However, if there is no value, the name of the merchant that signed the contract with Hecto Financial will be delivered. | AHN(12) | ○ | "Hecto Financial" |
| email | Customer Email | Merchant customer email | AN(60) | ○ | "HongGilDong@example.com" |
| mchtCustId | Merchant Customer ID | Merchant customer ID | AN(50) | ○ | "HongGilDong" |
| orgTrdNo | Original Transaction Number | When canceled, original transaction number | AN(40) | ○ | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| orgTrdDt | Original Transaction Date | When canceled, original transaction date | N(8) | ○ | "20211231" |
| csrcIssNo | Cash Receipt Approval Number | Cash receipt approval number | AN(9) | ○ | "0123456789" |
| cnclType | Canceled Transaction Type | 00: Full cancellation, 10: Partial cancellation | N(2) | ○ | "00" |
| mchtParam | Merchant Reservation Field | The value delivered as the additional information field used by the Merchant is returned as is | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| pktHash | Hash Value | SHA256 (Transaction Status Code + Transaction Date + Transaction Time + Merchant ID + Merchant Order Number + Transaction Amount + Hash Key) | AN(64) | ● | "a2d6d597d55d7c9b689baa2e08c1ddf0ce71f4248c5b9b59fe61bfbf949543e1" |

Merchant sends the response to Hecto Financial.

|  |  |
| --- | --- |
| **Response (Merchant -> Hecto Financial)** | |
| Success | “OK” (All Caps) |
| Failure | “FAIL” (All Caps, When FAIL is the response, it is recognized as a clear failure. The notification is resent.) |
| Others | It is recognized as abnormal failure, and the notification is resent according to the number of times set. |

# Account Transfer Cancellation (Non-UI)

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "nx\_mid\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "RA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| crcCd | Currency Classification | Currency classification value | A(3) | ● | "KRW" ※ Fixed value |
| cnclOrd | Cancellation Round | Start from 001. 002 for partial cancellation round 2. | N(3) | ● | "001" |
| taxTypeCd | Tax-exempt Status | Y:Tax-exempt, N:Taxable, G:Compound tax  If it is blank, follow Merchant’s setting | A(1) | ○ | "N" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "1000" |
| taxAmt | Taxable Amount | Taxable amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “91” |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “0” |
| cnclRsn | Reason for Cancellation | If needed, write the reason for cancellation message | AHN(255) | ○ | "Don’t like the product" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Cancellation Request Date + Cancellation Request Time + Merchant ID + Merchant Order Number + Cancellation Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial server to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "RA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | Hash value in request returned as is | AN(64) | ● |  |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "1000" |
| blcAmt | Cancellable Balance | When cancellation is successful, remaining cancellable balance according to transaction number is returned ※ AES Encryption | N(12) | ● | "0" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [12.4 Notification Parameter]

# Virtual Account Payment (UI)

## Request Parameter (Merchant -> Hecto Financial)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | "vbank"  ※ Fixed value |
| trdDt | Request Date | yyyyMMdd | N(8) | ● | "20211231" |
| trdTm | Request Time | HH24MISS | N(6) | ● | "100000" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtName | Merchant Korean Name | Merchant Korean name | AHN(100) | ● | "헥토파이낸셜"  (“Hecto Financial” in Korean) |
| mchtEName | Merchant English Name | Merchant English name | AN(100) | ● | "Hecto Financial" |
| pmtPrdtNm | Product Name | Product name | AHN(128) | ● | “test product” |
| trdAmt | Transaction Amount | Transaction amount  ※ AES Encryption | N(12) | ● | "1000" |
| mchtCustNm | Customer Name | Customer name  ※ AES Encryption | AHN(30) | ○ | “Merchant Name\_Hong Gil Dong" |
| custAcntSumry | Bank Account Remark | Remark that will be marked on customer’s bank account ※ If blank, mchtName (Merchant Korean Name) will be used as the bank account remark | AHN(50) | ○ | "MerchantName\_HongGilDong" |
| expireDt | Deposit Expiry Date and Time | The deadline for the deposit after applying for virtual account  Ex) If the application date is December 30, and the deposit date goes over "20201231235959”, the deposit expiry date is until December 31 ※ If the deposit expiry date is not set, it is automatically set to 10 days after the transaction date. ※ The deposit expiry date cannot go over current date + 365 days 23:59:59.  Ex) If the application date is January 1, 2022, it cannot go over 20230101235959 | N(14) | ○ | "20211231235959" |
| notiUrl | Result Processing URL | URL of the page that results after payment (Server To Server integration URL) | AN(250) | ● | "https://example.com/notiUrl" |
| nextUrl | Result Screen URL | URL for result delivery and landing page after payment | AN(250) | ● | "https://example.com/nextUrl" |
| cancUrl | Payment Cancellation URL | URL for result delivery and landing page when the user force quit | AN(250) | ● | "https://example.com/cancUrl" |
| mchtParam | Merchant Reserved Field | Merchant reserved field for inputting other order information | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| email | E-mail | E-mail address  ※ AES Encryption | AN(60) | ○ | "HongGilDong@example.com" |
| prdtTerm | Product Provision Period | yyyyMMddHHmmss  If there is no value, marked as regular payment | N(14) | ○ | "20221231235959" |
| cphoneNo | Mobile Number | 010xxxxyyyy (Remove hyphen)  ※ AES Encryption | N(11) | ○ | "01012345678" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent by the Merchant  ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| taxTypeCd | Tax-exempt Status | N:Taxable, Y:Tax-exempt, G:Compound tax  If it is blank, follow Merchant’s setting | A(1) | ○ | "N" |
| taxAmt | Taxable Amount | Taxable amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “91” |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “0” |
| custIp | Customer IP Address | Customer device’s IP address, not the merchant server’s IP | AN(15) | ○ | "127.0.0.1" |
| pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Merchant ID + Payment Method + Merchant Order Number + Request Date + Request Time + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from virtual account payment window to merchant side are defined as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| outStatCd | Transaction Status | Transaction status code (Success/Failure) 0051:Issuance (VA issuance) success 0031: Failure | AN(4) | ● | "0051" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Payment request information missing (product name)" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | "vbank" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| trdNo | Transaction Number | Hecto Financial transaction number | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| mchtParam | Merchant Reserved Field | Bypass the request field value as the response | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| authDt | Approval Date & Time | Virtual account order (issuance) date & time | N(14) | ○ | "20211231100000" |
| vtlAcntNo | Virtual Account Number | Virtual account number the customer deposits to ※ AES Encryption | N(30) | ○ | "0123456789" |
| expireDt | Deposit Period | Virtual account number deposit expiry date | N(14) | ○ | "20211231235959" |
| reqIssueDt | Issuance Request Date & Time | Date and time of issuance request  (Applicable only for 010 Virtual Account) yyyyMMddHHmmss | N(14) | ○ | "20211231100000" |
| fnNm | Bank Name | Bank Name Refer to [Financial Institution Identifier] | AH(50) | ○ | "Nonghyup" |
| fnCd | Bank Code | Bank Code Refer to [Financial Institution Identifier] | N(4) | ○ | "11" |

## (Test Environment) Deposit Test API

|  |
| --- |
| **Cautions**   * This API is a simulator for deposit test on test environment. * Merchants are responsible for any costs incurred when running tests with Merchant ID (mchtId) in production environment. * [**Deposit test link**](https://pgtest.settlebank.co.kr/spay2/vbank_test.jsp) |

**Request Parameter (Merchant -> Hecto Financial)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial  [nx\_mid\_il] Regular Virtual Account  [nxva\_sb\_il] 010 Virtual Account | AN(10) | ● | "nx\_mid\_il" |
| method | Payment Method | Payment method classification code | AN(2) | ● | “VA” ※ Fixed value |
| bizType | Work Classification | Work classification code | N(2) | ● | "F1" ※ Fixed value |
| vAcntNo | Virtual Account Number | Issued virtual account number | N(11) | ● | "01012345678" |
| trdAmt | Transaction Amount | Transaction Amount | N(12) | ● | "1000" |

**Deposit Test Example**

|  |
| --- |
| https://tbgw.settlebank.co.kr/spay/APIVBankTest.do?mchtId=nx\_mid\_il&method=VA&bizType=F1&vAcntNo=01012345678&trdAmt=1000 |

**Response Parameter (Hecto Financial -> Merchant)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| method | Payment Method | Payment method classification code | AN(2) | ● | "VA" |
| bizType | Work Classification | Work classification code | AN(2) | ● | "F1" |
| outRsltCd | Result Code | Result code | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result Message | AHN(200) | ● | "Normally processed." |

## Notification Parameter (Hecto Financial -> Merchant)

※ There are two notifications for virtual account transaction: issuance notification and deposit notification. Please make sure to process both issuance notification and deposit notification.

* Issuance Notification: It is the notification sent by Hecto Financial to Merchant when the Mercahtn requests a transaction from Hecto Financial and a virtual account number is issued.
  + It is delivered as outStatCd[0051] .
* Deposit Notification: It is the notification sent by Hecto Financial to Merchant when the merchant’s customer deposits to the issued virtual account number.
  + It is delivered as outStatCd[0021] .

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| outStatCd | Transaction Status | Success [0021] / Waiting for virtual account deposit [0051] | N(4) | ● | "0021" |
| trdNo | Transaction Number | Unique transaction number given by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| method | Payment Method | Virtual Account [VA] | A(2) | ● | "VA" |
| bizType | Work Classification | Issuance [A0], Issuance Cancellation[A2], 010 Virtual Account Issuance [A4], Deposit Notification [B1], Refund [C0] | AN(2) | ● | "A0" |
| mchtId | Merchant ID | Merchant ID given by Hecto Financial | AN(12) | ● | "nx\_mid\_il" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the merchant | AN(100) | ● | "ORDER20211231100000" |
| mchtCustNm | Customer Name | Orderer name of the actual payer | AHN(30) | ○ | "MerchantName\_HongGilDong" |
| mchtName | Merchant Korean Name | Actual seller name, if there is no actual seller name when requesting transaction, the name of the merchant that signed the contract with Hecto Financial | AHN(20) | ○ | "헥토파이낸셜" (“Hecto Financial” in Korean) |
| pmtprdNm | Product Name | Name of the product ordered by the customer | AHN(128) | ○ | "Test Product" |
| trdDtm | Transaction Date and Time | Approval date and time, canceled/partially canceled transaction: canceled date and time are delivered.  Format: YYYYMMDDhhmmss | N(14) | ● | "20211231100000" |
| trdAmt | Transaction Amount | Transaction Amount | N(12) | ○ | "1000" |
| bankCd | Bank Code | Bank Code  Refer to [Financial Institution Identifier] | AN(10) | ○ | "011" |
| bankNm | Bank Name | Bank Name Refer to [Financial Institution Identifier] | AHN(10) | ○ | "NH Nonghyup" |
| acntType | Account Classification | 1 : Default (Dynamic), 2 : Static 3 : Static Unlimited | N(1) | ○ | "1" |
| vAcntNo | Virtual Account Number | Virtual account number | N(64) | ○ | "0123456789" |
| expireDt | Virtual Account Deposit Expiry Date and Time | Virtual account deposit expiry date and time | N(14) | ○ | "20211231235959" |
| AcntPrintNm | Bank Account Remark | Remark that will be marked on customer’s bank account Value delivered during payment request will be delivered.  However, if there is no value, the name of the merchant that signed the contract with Hecto Financial will be delivered. | AHN(12) | ○ | "Hecto Financial" |
| dpstrNm | Depositor Name | Name of the person who made the actual deposit to the virtual account | AHN(30) | ○ | "Hong Gil Dong" |
| email | Customer Email | Merchant customer email | AN(60) | ○ | "HongGilDong@example.com" |
| mchtCustId | Merchant Customer ID | Merchant customer ID | AN(50) | ○ | "HongGilDong" |
| orgTrdNo | Original Transaction Number | When canceled, original transaction number | AN(40) | ○ | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| orgTrdDt | Original Transaction Date | When canceled, original transaction date | N(8) | ○ | "20211231" |
| csrcIssNo | Cash Receipt Approval Number | Cash receipt approval number | AN(9) | ○ | "0123456789" |
| cnclType | Canceled Transaction Type | 00: Full cancellation, 10: Partial cancellation | N(2) | ○ | "00" |
| mchtParam | Merchant Reservation Field | The value delivered as the additional information field used by the Merchant is returned as is | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| pktHash | Hash Value | SHA256 (Transaction Status Code + Transaction Date + Transaction Time + Merchant ID + Merchant Order Number + Transaction Amount + Hash Key) | AN(64) | ● | "a2d6d597d55d7c9b689baa2e08c1ddf0ce71f4248c5b9b59fe61bfbf949543e1" |

Merchant sends the response to Hecto Financial.

|  |  |
| --- | --- |
| **Response (Merchant -> Hecto Financial)** | |
| Success | “OK” (All Caps) |
| Failure | “FAIL” (All Caps, When FAIL is the response, it is recognized as a clear failure. The notification is resent.) |
| Others | It is recognized as abnormal failure, and the notification is resent according to the number of times set. |

# Virtual Account Number Issuance (Non-UI)

## Request Parameter (Merchant -> Hecto Financial)

Request URI

|  |  |
| --- | --- |
| **Type** | **URL** |
| Testbed | https://tbgw.settlebank.co.kr/spay/APIVBank.do |
| Production | https://gw.settlebank.co.kr/spay/APIVBank.do |

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial nx\_mid\_il:Default(Dynamic) nxva\_fix:Static nxva\_fix2:Static Unlimited | AN(10) | ● | "nx\_mid\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "VA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "A0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant when issuance is requested | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| bankCd | Virtual Account Bank Code | Refer to [PG Virtual Account Bank Code] | AN(3) | ● | "011" |
| acntType | Bank Account Classification | 1 : Default(Dynamic): Bank account issued randomly and used 2 : Static: Account allocated in advance and used (Need to consult with Hecto Financial) Method of issuing for every deposit 3 : Static Unlimited: Account allocated in advance and used (Need to consult with Hecto Financial). Method of having one-time issuance and then depositing continuously | N(1) | ● | "1" (Set as “1” if it is blank) |
| vAcntNo | Vi | ※ Used only for static. ( acntType = 2 or 3 ) ※ AES Encryption | N(16) | ○ | Refer to [Static Virtual Account List] |
| expireDate | Deposit Expiry Date and Time | The deadline for the deposit after applying for virtual account YYYYMMDDhhmmss ※ If the deposit expiry date is not set, it is automatically set to 10 days after the transaction date.  ※ The deposit expiry date cannot go over current date + 365 days 23:59:59.  Ex) If the application date is January 1, 2022, it cannot go over 20230101235959 | N(14) | ○ | "20211231235959" |
| prdtNm | Product Name | Product Name | AHN(128) | ● | "Test Product" |
| sellerNm | Seller Name | Seller Name | AHN(128) | ● | "Hecto Financial" |
| ordNm | Orderer Name | Orderer Name | AHN(30) | ○ | "Hong Gil Dong" |
| trdAmt | Transaction Amount | Transaction amount ※ If it is static unlimited account, set to (acntType=3) 0 ※ AES Encryption | N(12) | ● | "1000" |
| dpstrNm | Bank Account Remark | Remark that will be marked on customer’s bank account ※ If blank, sellerNm(seller name) will be used as the bank account remark | AHN(50) | ○ | "MerchantName\_HongGilDong" |
| pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| taxTypeCd | Tax-exempt Status | N:Taxable, Y:Tax-exempt, G:Compound tax  If it is blank, follow Merchant’s setting | A(1) |  | "N" |
| taxAmt | Taxable Amount | Taxable amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “91” |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “0” |
| escrAgrYn | Use Status | Escrow use status  Y: Agree, N: Disagree | A(1) | ● | "N" |
| escrPwd | Password | Escrow password (required when using Escrow) ※ AES Encryption | AN(64) | ○ | "1234" |
| rfdDpstrNm | Account Holder Name | Account holder name for escrow refund (required when using Escrow) ※ AES Encryption | AHN(50) | ○ | "Hong Gil Dong" |
| csrcIssReqYn | Issuance Status | Cash receipt issuance status Y:Issued, N:Unissued | A(1) | ● | "N" |
| cashRcptPrposDivCd | Use Classification | Cash receipt use classification (required when using cash receipt) 0: Income proof, 1: Payment proof | N(1) | ○ | "0" |
| csrcRegNoDivCd | Registration Number Classification Code | Cash receipt registration number classification code (required when using cash receipt) 1:Card, 2:Resident Registration Number, 3:Business Registration Number, 4:Mobile Number | N(1) | ○ | "4" |
| csrcRegNo | Unique Identification Information | Cash receipt unique identification information (required when using cash receipt) ※ AES Encryption | AN(64) | ○ | "1234567890" |
| email | Email | User email (Required if Escrow is used) | AN(60) | ○ | "HongGilDong@example.com" |
| notiUrl | Result Processing URL | URL of the page that results after payment (Server To Server integration URL) | AN(250) | ○ | "https://example.com/notiUrl" |
| mchtParam | Merchant Reserved Field | Merchant reserved field for inputting other order information | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent by the Merchant | AN(50) | ○ | "HongGilDong" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Transaction Date + Transaction Time + Merchant ID + Merchant Order Number + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| Params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "VA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "A0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique transaction number generated by merchant when requesting issuance | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGVAnx\_mid\_il00210806075210M1853381" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Issuance success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | Hash value in request returned as is | AN(64) | ● |  |
| bankCd | Virtual Account Bank Code | Refer to [PG Virtual Account Bank Code] | AN(3) | ● | "011" |
| vAcntNo | Virtual Account Number | Issued virtual account number ※ AES Encryption | N(16) | ● | "0123456789" |
| expireDate | Deposit Expiry Date and Time | Deposit expiry date and time YYYYMMDDhhmmss | N(14) | ● | "20211231235959" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| acntType | Account Classification | Value in request delivered as is | N(1) | ● | "1" |

## Response Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Transaction Status Code + Request Date + Request Time + Merchant ID + Merchant Order Number + Transaction Amount (Plain Text) + Hash Key |

## (Test Environment) Deposit Test API

※ Refer to [14.4 Deposit Test API]

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [14.5 Notification Parameter]

## (Test Environment) Static Virtual Account List

The following virtual account numbers can only be used on test environment (tbgw.settlebank.co.kr).

|  |  |  |
| --- | --- | --- |
| **Merchant ID (mchtId)** | **Bank Code (bankCd)** | **Virtual Account Number (vAcntNo)** |
| nxva\_fix | 004 | 2022004000001~2022004000050 |
| 011 | 2022011000001~2022011000050 |
| nxva\_fix2 | 004 | 2022004000056~2022004000100 |
| 011 | 2022011000056~2022011000100 |

## PG Virtual Account Bank Code

The bank codes available for PG virtual account number issuance (virtual account issuance) are as follows.

|  |  |
| --- | --- |
| **Bank Code** | **Bank Name** |
| 003 | IBK |
| 004 | Kookmin Bank |
| 007 | Suhyup |
| 011 | Nonghyup Bank |
| 020 | Woori Bank |
| 023 | SC Bank |
| 031 | Daegu Bank |
| 032 | Busan Bank |
| 034 | Kwangju Bank |
| 039 | Kyongnam Bank |
| 045 | Korea Federation of Community Credit Cooperatives (KFCC) |
| 071 | Korea Post |
| 081 | Hana Bank (KEB Hana Bank) |
| 088 | Shinhan Bank |
| 089 | Kbank |

# Virtual Account Number Issuance Information Change (Non-UI)

## Request Parameter (Merchant -> Hecto Financial)

Request URI

|  |  |
| --- | --- |
| **Type** | **URL** |
| Testbed | https://tbgw.settlebank.co.kr/spay/APIVBank.do |
| Production | https://gw.settlebank.co.kr/spay/APIVBank.do |

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "VA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "A1" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant when request is made | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| bankCd | Bank Code | Refer to [PG Virtual Account Bank Code] | AN(3) | ● | "011" |
| vAcntNo | Virtual Account Number | Issued virtual account number ※ AES Encryption | N(16) | ● | "1234567890" |
| expireDate | Deposit Expiry Date and Time | Changed deposit expiry date: yyyyMMddHHmmss | N(14) | ● | "20221231235959" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| acntType | Account Classification | Virtual account classification  1: Dynamic 2: Static 3: Static Unlimited | N(1) | ● | "1" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Request Date + Request Time + Merchant ID + Merchant Order Number + Transaction Amount + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial server to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "VA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "A1" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STBK\_0123456789" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "120000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | Value in request returned as is | AN(64) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| bankCd | Bank Code | Value in request returned as is | AN(3) | ● | "011" |
| vAcntNo | Virtual Account Number | Value in request returned as is ※ AES Encryption | N(16) | ● | "1234567890" |
| expireDate | Deposit Expiry Date and Time | Value in request returned as is | N(14) | ● | "20221231235959" |
| trdAmt | Transaction Amount | Value in request returned as is ※ AES Encryption | N(12) | ● | "1000" |
| acntType | Account Classification | Value in request returned as is | N(1) | ● | "1" |

# Virtual Account Number Issuance Cancellation (Non-UI)

## Request Parameter (Merchant -> Hecto Financial)

Request URI

|  |  |
| --- | --- |
| **Type** | **URL** |
| Testbed | https://tbgw.settlebank.co.kr/spay/APIVBank.do |
| Production | https://gw.settlebank.co.kr/spay/APIVBank.do |

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "VA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "A2" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant when issuance is canceled | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| orgTrdNo | Original Transaction Number | Transaction number issued by Hecto Financial during issuance | AN(40) | ● | "STFP\_PGVAnx\_mid\_il00210806075210M1853381" |
| vAcntNo | Virtual Account Number | Issued virtual account number ※ AES Encryption | N(16) | ● | "1234567890" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Cancellation Request Date + Cancellation Request Time + Merchant ID + Merchant Order Number + “0” + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial server to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "VA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "A2" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant when issuance is canceled | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STBK\_0123456789" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "120000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | Hash value in request returned as is | AN(64) | ● |  |
| orgTrdNo | Original Transaction Number | Transaction number issued by Hecto Financial during issuance | AN(40) | ○ | "STFP\_PGVAnx\_mid\_il00210806075210M1853381" |
| acntType | Account Classification | Virtual account classification 4:010 Virtual Account null: Others | N(1) | ○ | "4" |
| vAcntNo | Virtual Account Number | Issued virtual account number ※ AES Encryption | N(16) | ● | "1234567890" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [14.5 Notification Parameter]

# Virtual Account Refund (Non-UI)

|  |
| --- |
|  |
| **Cautions for Virtual Account Refund**   * Refund function is only allowed for Merchants registered to Refund service. * Refund API is a function for receiving refund requests. The remittance to the actual customer’s bank account can take 3 to 5 days. * Refund can fail when requested during bank maintenance time (23:30~00:35). Please refrain from requesting the refund during the maintenance time. |

## Request Parameter (Merchant -> Hecto Financial)

Request URI

|  |  |
| --- | --- |
| **Type** | **URL** |
| Testbed | https://tbgw.settlebank.co.kr/spay/APIRefund.do |
| Production | https://gw.settlebank.co.kr/spay/APIRefund.do |

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment method | A(2) | ● | "VA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant for refund | AN(100) | ● | "ORDER20211231" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
|  | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| orgTrdNo | Original Transaction Number | Transaction number issued by Hecto Financial during issuance request | AN(40) | ● | "STFP\_PGVAnx\_mid\_il00210806075210M1853381" |
| crcCd | Currency Classification | Currency classification value | A(3) | ● | "KRW" ※ Fixed value |
| cnclOrd | Cancellation Round | Start from 001. For second partial cancellation, 002. | N(3) | ● | "001" |
| taxTypeCd | Tax-exempt Status | Y:Tax-exempt, N:Taxable G:Compound tax  If it is blank, follow Merchant’s setting  ※ Required if it is a compound tax | A(1) | ○ | "N" |
| cnclAmt | Refund Amount | Refund amount ※ AES Encryption | N(12) | ● | "1000" |
| taxAmt | Taxable Amount | Taxable amount among refund amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount among refund amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “91” |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount among refund amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “0” |
| refundBankCd | Refund Bank Code | Code of the bank the refund will be made to Refer to [Financial Institution Identifier] | AN(3) | ● | "011" |
| refundAcntNo | Refund Account Number | Account number for the refund ※ AES Encryption | N(16) | ● | "1234567890" |
| refundDpstrNm | Account Holder Name of the Refund Account | Account Holder Name of Refund Account | AHN(50) | ● | "Hong Gil Dong" |
| cnclRsn | Reason for Refund | If needed, write the refund reason as the message | AHN(255) | ○ | "Don’t like the product" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Refund Request Date + Refund Request Time + Merchant ID + Merchant Order Number + Refund Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial server to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "VA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant for refund | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGVAnx\_mid\_il00210806075210M1853381" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | Hash value in request returned as is | AN(64) | ● |  |
| orgTrdNo | Original Transaction Number | Transaction number issued by Hecto Financial during issuance request | AN(40) | ● | "STFP\_PGVAnx\_mid\_il00210806075210M1853381" |
| cnclAmt | Refund Amount | Refund amount ※ AES Encryption | N(12) | ● | "1000" |
| blcAmt | Refundable Balance | When refund is successful, remaining refundable balance according to transaction number is returned ※ AES Encryption | N(12) | ● | "0" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [14.5 Notification Parameter]

# 010 Virtual Account Payment (UI)

|  |
| --- |
| For detailed specifications and API integration for 010 Virtual Account, [click here.](https://develop.sbsvc.online/26/onlineDocList.do) |

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxva\_sb\_il" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | “vbank010”  ※ Fixed value |
| trdDt | Request Date | yyyyMMdd | N(8) | ● | "20211231" |
| trdTm | Request Time | HH24MISS | N(6) | ● | "100000" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtName | Merchant Korean Name | Merchant Korean name | AHN(100) | ● | "헥토파이낸셜"  (“Hecto Financial” in Korean) |
| mchtEName | Merchant English Name | Merchant English name | AN(100) | ● | "Hecto Financial" |
| pmtPrdtNm | Product Name | Product name | AHN(128) | ● | “test product” |
| trdAmt | Transaction Amount | Transaction amount  ※ AES Encryption | N(12) | ● | "1000" |
| mchtCustNm | Customer Name | Customer name  ※ AES Encryption | AHN(30) | ○ | "MerchantName\_HongGilDong" |
| expireDt | Deposit Expiry Date | The deadline for the deposit after applying for virtual account  Ex) If the application date is December 30, and the deposit date goes over "20201231235959”, the deposit expiry date is until December 31 ※ If the deposit expiry date is not set, it is automatically set to 10 days after the transaction date. | N(14) | ● | "20201231235959" |
| notiUrl | Result Processing URL | URL of the page that results after payment (Server To Server integration URL) | AN(250) | ● | "https://example.com/notiUrl" |
| nextUrl | Result Screen URL | URL for result delivery and landing page after payment | AN(250) | ● | "https://example.com/nextUrl" |
| cancUrl | Payment Cancellation URL | URL for result delivery and landing page when the user force quit | AN(250) | ● | "https://example.com/cancUrl" |
| mchtParam | Merchant Reserved Field | Merchant reserved field for inputting other order information | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| email | E-mail | E-mail address  ※ AES Encryption | AN(60) | ○ | "HongGilDong@example.com" |
| prdtTerm | Product Provision Period | yyyyMMddHHmmss  If there is no value, marked as regular payment | N(14) | ○ | "20221231235959" |
| cphoneNo | Mobile Number | 010xxxxyyyy (Remove hyphen)  ※ If you want to skip ownership verification, this must be sent  ※ AES Encryption | N(11) | ○ | "01012345678" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent by the Merchant  ※ If you want to skip ownership verification, this must be sent  ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| taxTypeCd | Tax-exempt Status | N:Taxable  Y:Tax-exempt, G:Compound tax  If it is blank, follow Merchant’s setting | A(1) | ○ | "N" |
| taxAmt | Taxable Amount | Taxable amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “91” |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “0” |
| custIp | Customer IP Address | Customer device’s IP address, not the merchant server’s IP | AN(15) | ○ | "127.0.0.1" |
| pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Merchant ID + Payment Method + Merchant Order Number + Request Date + Request Time + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response column from virtual account payment window to merchant are as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxva\_sb\_il" |
| outStatCd | Transaction Status | Transaction status code (Success/Failure) 0051: Issuance success (Waiting for deposit) 0031: Failure | AN(4) | ● | "0051" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Payment request information missing (product name)" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | "vbank010" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| trdNo | Transaction Number | Hecto Financial transaction number | AN(40) | ● | "STFP\_PGVAnx\_mid\_il00210806075210M1853381" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| mchtParam | Merchant Reserved Field | Bypass the request field value as the response | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| authDt | Approval Date and Time | Virtual account order (issuance) date and time | N(14) | ○ | "20211231100000" |
| vtlAcntNo | Virtual Account Number | Virtual account number the customer will deposit to ※ AES Encryption | N(30) | ○ | "1234567890" |
| expireDt | Deposit Date | Virtual account number deposit expiry date and time | N(14) | ○ | "20210101235959" |
| reqIssueDt | Issuance Request Date and Time | Date and time of issuance request yyyyMMddHHmmss | N(14) | ○ | "20211231100000" |
| fnNm | Bank Name | Bank Name Refer to [Financial Institution Identifier] | AH(50) | ○ | "Kbank" |
| fnCd | Bank Code | Bank Code  Refer to [Financial Institution Identifier] | N(4) | ○ | "089" |

## (Test Environment) Deposit Test API

※ Refer to [14.4 Deposit Test API]

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [14.5 Notification Parameter]

# Direct Carrier Billing (DCB) (UI)

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial ※ Merchant ID for test nxhp\_pl\_il:Default nxhp\_pl\_hd:Authentical/Approval Separate Type (Hybrid) nxhp\_pl\_ma:Monthly Recurring Payment | AN(10) | ● | "nxhp\_pl\_il" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | “mobile”  ※ Fixed value |
| trdDt | Request Date | yyyyMMdd | N(8) | ● | "20211231" |
| trdTm | Request Time | HH24MISS | N(6) | ● | "100000" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtName | Merchant Korean Name | Merchant Korean name | AHN(100) | ● | "헥토파이낸셜"  (“Hecto Financial” in Korean) |
| mchtEName | Merchant English Name | Merchant English name | AN(100) | ● | "Hecto Financial" |
| pmtPrdtNm | Product Name | Product name | AHN(128) | ● | “test product” |
| trdAmt | Transaction Amount | Transaction amount  ※ AES Encryption | N(12) | ● | "1000" |
| mchtCustNm | Customer Name | Customer name  ※ AES Encryption | AHN(30) | ○ | "Hong Gil Dong" |
| notiUrl | Result Processing URL | URL of the page that results after payment (Server To Server integration URL) | AN(250) | ● | "https://example.com/notiUrl" |
| nextUrl | Result Screen URL | URL for result delivery and landing page after payment | AN(250) | ● | "https://example.com/nextUrl" |
| cancUrl | Payment Cancellation URL | URL for result delivery and landing page when the user force quit | AN(250) | ● | "https://example.com/cancUrl" |
| mchtParam | Merchant Reserved Field | Merchant reserved field for inputting other order information | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| cphoneNo | Mobile Number | 010xxxxyyyy (Remove hyphen)  ※ AES Encryption | N(11) | ○ | "01012345678" |
| email | E-mail | E-mail address  ※ AES Encryption | AN(60) | ○ | "HongGilDong@example.com" |
| prdtTerm | Product Provision Period | yyyyMMddHHmmss  If there is no value, marked as regular payment | N(14) | ○ | "20221231235959" |
| telecomCd | Mobile Carrier | SKT:SK Telecom , KTF:KT,  LGT:LG U+,  CJH:CJ Hello Mobile,  KCT:Korea Cable Telecom,  SKL:SK 7Mobile  ※Cautions  Only the inputted mobile carrier is shown on the screen.  "|" can be used as a delimiter to input several mobile carriers ex) "SKT|KTF|LGT", "SKT" | AN(23) | ○ | "SKT|KTF|LGT" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent by the Merchant  ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| taxTypeCd | Tax-exempt Status | N:Taxable  Y:Tax-exempt, G:Compound tax  If it is blank, follow Merchant’s setting | A(1) | ○ | "N" |
| taxAmt | Taxable Amount | Taxable amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “91” |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “0” |
| autoPayType | Recurring Payment Type | ※ Blank:Regular Payment, M:Monthly Recurring Payment | A(1) | ○ | "" |
| linkMethod | Integration Method | ※ Blank or STD : Standard Payment Window HBRD:Hybrid(Authentication, Approval Separate Method) | AN(12) | ○ | "STD" |
| custIp | Customer IP Address | Customer device’s IP address, not the merchant server’s IP | AN(15) | ○ | "127.0.0.1" |
| pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Merchant ID + Payment Method + Merchant Order Number + Request Date + Request Time + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from mobile payment window to merchant are as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial ※ Merchant ID for test nxhp\_pl\_il: Regular nxhp\_pl\_hd: Authentication/Approval Separate Type (Hybrid) nxhp\_pl\_ma: Monthly Recurring Payment | AN(10) | ● | "nxhp\_pl\_il" |
| outStatCd | Transaction Status | Transaction status code (Success/Failure) 0021: Success 0061: Authentication success (hybrid method) 0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Payment request information missing (product name)" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | "mobile" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| trdNo | Transaction Number | Hecto Financial transaction number | AN(40) | ● | "STFP\_PGVAnx\_mid\_il00210806075210M1853381" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| mchtParam | Merchant Reserved Field | Bypass the request field value as the response | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| billKey | Monthly Recurring Key (Capital Letter 'K') | Monthly recurring payment key. Used for second round of payment ※Only for merchants using billkey | AN(50) | ○ | "MO0123456789" |
| authDt | Approval Date and Time | Approval date and time | N(14) | ○ | "20211231100000" |
| fnNm | Mobile Carrier Name | Mobile carrier name | A(50) | ○ | "SKT" |
| fnCd | Mobile Carrier Code | Mobile carrier code | N(3) | ○ | "001" |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial ※ Merchant Id for Test nxhp\_pl\_il: Regular nxhp\_pl\_hd: Authentication/ Approval Separate Type (Hybrid) nxhp\_pl\_ma: Monthly Recurring Payment | AN(10) | ● | "nxhp\_pl\_il" |

## Notification Parameter (Hecto Financial -> Merchant)

If the transaction is completed successfully, Hecto Financial sends notification (result notification) message to the merchant.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| outStatCd | Transaction Status | Success [0021] | N(4) | ● | "0021" |
| trdNo | Transaction Number | Unique transaction number given by Hecto Financial | AN(40) | ● | "STFP\_PGVAnx\_mid\_il00210806075210M1853381" |
| method | Payment Method | DCB [MP] | A(2) | ● | "MP" |
| bizType | Work Classification | Payment[B0], Cancellation[C0], Automatic Extension[B1], Hecto Financial Source Payment [B2], Refund[C1] | AN(2) | ● | "B0" |
| mchtId | Merchant ID | Merchant ID given by Hecto Financial | AN(12) | ● | "nxhp\_pl\_il" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the merchant | AN(100) | ● | "ORDER20211231100000" |
| mchtCustNm | Customer Name | Orderer name of the actual payer | AHN(30) | ○ | "Hong Gil Dong" |
| mchtName | Merchant Korean Name | Actual seller name, if there is no actual seller name when requesting transaction, the name of the merchant that signed the contract with Hecto Financial | AHN(20) | ○ | "헥토파이낸셜" (“Hecto Financial” in Korean) |
| pmtprdNm | Product Name | Name of the product ordered by the customer | AHN(128) | ○ | "Test product" |
| trdDtm | Transaction Date and Time | Approval date and time, canceled/partially canceled transaction: canceled date and time are delivered.  Format: YYYYMMDDhhmmss | N(14) | ● | "20211231010101" |
| trdAmt | Transaction Amount | Transaction Amount | N(12) | ○ | "1000" |
| billKey | Recurring Payment Key | billKey issued for the second recurring payment | AN(40) | ○ | "MO0123456789" |
| billKeyExpireDt | Recurring Payment Key Validity | YYMM | N(4) | ○ | "1231" |
| telecomCd | Mobile Carrier Code | SKT:SK Telecom, KTF:KT, LGT:LG U+, CJH:CJ Hello Mobile, KCT:Korea Cable Telecom, SKL:SK 7Mobile | A(10) | ○ | "SKT" |
| telecomNm | Mobile Carrier Name | Mobile carrier name | AHN(10) | ○ | "SK Telecom" |
| email | Customer Email | Merchant customer email | AN(60) | ○ | "HongGilDong@example.com" |
| mchtCustId | Merchant Customer ID | Merchant Customer ID | AN(50) | ○ | "HongGilDong" |
| phoneNoEnc | Mobile Number(Encryption) | Customer’s mobile number encrypted and delivered ※ AES Encryption | N(11) | ○ | "01012345678" |
| orgTrdNo | Original Transaction Number | Original transaction number when cancelling | AN(40) | ○ | "STFP\_PGVAnx\_mid\_il00210806075210M1853381" |
| orgTrdDt | Original Transaction Date | Original transaction date when cancelling | N(8) | ○ | "20211231" |
| cnclType | Canceled Transaction Type | 00: Full cancellation, 10: Partial cancellation | N(2) | ○ | "00" |
| mchtParam | Merchant Reservation Field | The value delivered as the additional information field used by the Merchant is returned as is | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| pktHash | Hash Value | SHA256 (Transaction Status Code + Transaction Date + Transaction Time + Merchant ID + Merchant Order Number + Transaction Amount + Hash Key) | AN(64) | ● | "a2d6d597d55d7c9b689baa2e08c1ddf0ce71f4248c5b9b59fe61bfbf949543e1" |

Merchant sends the response to Hecto Financial.

|  |  |
| --- | --- |
| **Response (Merchant -> Hecto Financial)** | |
| Success | “OK” (All Caps) |
| Failure | “FAIL” (All Caps, When FAIL is the response, it is recognized as a clear failure. The notification is resent.) |
| Others | It is recognized as abnormal failure, and the notification is resent according to the number of times set. |

# Phone Approval API (Hybrid)

## API URI

|  |  |
| --- | --- |
| **Type** | **URL** |
| Testbed | https://tbgw.settlebank.co.kr/spay/APIService.do |
| Production | https://gw.settlebank.co.kr/spay/APIService.do |

## Request and Response Headers

|  |  |
| --- | --- |
| **Type** | **Content** |
| Request | Content-type=application/json; charset=UTF-8 |
| Response | Content-type=application/json; charset=UTF-8 |

## Request Parameter (Merchant -> Hecto Financial)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxhp\_sb\_hd" |
| ver | Version | Parameter’s version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment method | A(2) | ● | "MP" ※ Fixed value |
| bizType | Work Classification | Work classification code B0: Payletter resale approval, B2: Hecto Financial source approval | AN(2) | ● | "B2" |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | ※ Caution Merchant order number generated during authentication request must be written. | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| phoneNo | Mobile Number | Customer’s mobile number ※ AES Encryption | N(11) | ○ | "01012345678" |
| telCo | Mobile Carrier | SKT:SK Telecom , KTF:KT, LGT:LG U+, CJH:CJ Hello Mobile, KCT:Korea Cable Telecom, SKL:SK 7Mobile ※ AES Encryption | A(3) | ○ | "SKT" |
| email | Email | Customer email address | AN(60) | ○ | "HongGilDong@example.com" |
| mUserId | Merchant Customer ID | Merchant customer ID | AHN(50) | ○ | "HongGilDong" |
| crcCd | Currency Classification | Currency classification | A(3) | ● | "KRW" ※ Fixed value |
| trdAmt | Transaction Amount | ※AES Encryption | N(12) | ● | "1000" |
| prdtNm | Product Name | Product name | AHN(128) | ● | "De Simone" |
| sellerNm | Seller Name | Seller name | AHN(128) | ○ | "Hecto Financial" |
| ordNm | Orderer Name | Orderer name | AHN(30) | ○ | "Hong Gil Dong" |
| getBillKeyYn | Billkey Issuance Status | Y:Billkey issued, Others:Billkey not issued | A(1) | ○ | "" |
| authTrdNo | Authentication Transaction Number | ※ Transaction number given as a response when authentication succeeds | AN(40) | ● | "SOFP\_PGMPnxhp\_pl\_hd0211021111808M1234567" |
| linkMethod | Integration Method Code | Integration method code | AN(12) | ● | "HBRD" ※ Fixed value |
| notiUrl | Result Processing URL | URL of the page that results after payment (Server To Server integration URL) | AN(250) | ○ | "https://example.com/notiUrl" |
| mchtParam | Merchant Reserved Field | Merchant reserved field for inputting other order information | AHN(4000) | ○ | "name=HongGilDong&age=25" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Transaction Date + Transaction Time + Merchant ID + Merchant Order Number + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxhp\_pl\_hd" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "MP" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "B0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | Hash value in request returned as is | AN(64) | ● |  |
| phoneNo | Mobile Number | Customer’s Mobile Number ※ AES Encryption | N(11) | ○ | "01012341234" |
| telCo | Mobile Carrier | Value in request returned as is ※ AES Encryption | A(3) | ○ | "SKT" |
| trdAmt | Transaction Amount | Value in request returned as is ※ AES Encryption | N(12) | ● | "1000" |
| getBillKeyYn | Billkey Issuance Status | Y: Billkey Issued Others: Billkey Not Issued | A(1) | ○ | "" |
| billKey | Billkey | Billkey issued by Hecto Financial, used from the second round | AN(50) | ○ | "MO0123456789" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [20.4 Notification Parameter]

# Phone Recurring Payment (Non-UI)

## Description

* Monthly Recurring Payment
  + Mobile recurring payment is a service in which after the first payment approval, the issued authentication key (billKey) is used again to pay the next time.
  + For the first payment (refer to 19.1 Request Parameter), set “M” for autoPayType request parameter, then Hecto Financial will return  billKey parameter as the response.
  + For the second payment, set the issued billKey in the request parameter and then request payment.
  + The transaction amount and product name of the second payment should be the same as that of the first payment.
* Key Issuance Recurring Payment
  + Key issuance recurring payment is a service in which after the first key issuance (UI) authentication, the requested user authentication token (userToken) and recurring payment key (easyKey) received as response are used to request payment.

## API URI

|  |  |
| --- | --- |
| **Type** | **URL** |
| Testbed | https://tbgw.settlebank.co.kr/spay/APIService.do |
| Production | https://gw.settlebank.co.kr/spay/APIService.do |

## Request and Response Headers

Mobile recurring payment is a Non-UI method and does not use a standard payment window. Refer to (JSON Request Data Example).

|  |  |
| --- | --- |
| **Type** | **Content** |
| Request | Content-type=application/json; charset=UTF-8 |
| Response | Content-type=application/json; charset=UTF-8 |

## Monthly Recurring Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxhp\_pl\_ma" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "MP" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "B1" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| email | Email | Customer email address | AN(60) | ● | "HongGilDong@example.com" |
| mUserId | Merchant Customer ID | Merchant customer ID | AHN(50) | ● | "HongGilDong" |
| crcCd | Currency Classification | Currency classification | A(3) | ● | "KRW" ※ Fixed value |
| trdAmt | Transaction Amount | ※AES Encryption | N(12) | ● | "1000" |
| prdtNm | Product Name | Product name | AHN(128) | ● | "De Simone" |
| sellerNm | Seller Name | Seller name | AHN(50) | ○ | "Hecto Financial" |
| ordNm | Orderer Name | Orderer name | AHN(50) | ● | "Hong Gil Dong" |
| billKey | Billkey | Billkey issued by Hecto Financial | AN(50) | ● | "MO0123456789" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Transaction Date + Transaction Time + Merchant ID + Merchant Order Number + Transaction Amount (Plain Text) + Hash Key |

## Monthly Recurring Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial server to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxhp\_pl\_ma" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "MP" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "B1" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique transaction number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | Hash value in request returned as is | AN(64) | ● |  |
| telCo | Mobile Carrier | Value in request returned as is ※ AES Encryption | A(3) | ○ | "SKT" |
| trdAmt | Transaction Amount | Value in request returned as is ※ AES Encryption | N(12) | ● | "1000" |
| billKey | Billkey | Value in request returned as is | AN(50) | ● | "MO0123456789" |

## Key Issuance Recurring Payment Request Parameter (Merchant -> Hecto Financial)

Request URI

|  |  |
| --- | --- |
| **Type** | **URL** |
| Testbed | https://tbgw.settlebank.co.kr/spay/APIService.do |
| Production | https://gw.settlebank.co.kr/spay/APIService.do |

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxhp\_sb\_ai" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A18" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "MP" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "E2" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| email | Email | Customer email address | AN(60) | ● | "HongGilDong@example.com" |
| mUserId | Merchant Customer ID | Merchant customer ID | AHN(50) | ● | "HongGilDong" |
| crcCd | Currency Classification | Currency classification | A(3) | ● | "KRW" ※ Fixed value |
| trdAmt | Transaction Amount | ※AES Encryption | N(12) | ● | "1000" |
| prdtNm | Product Name | Product name | AHN(128) | ● | "De Simone" |
| sellerNm | Seller Name | Seller name | AHN(50) | ○ | "Hecto Financial" |
| ordNm | Orderer Name | Orderer name | AHN(50) | ● | "Hong Gil Dong" |
| mpEzKey | Recurring Payment Key | easyKey in key issuance (UI) response parameter ※ AES Encryption | AN(64) | ● | "MO0123456789" |
| appTkn | Customer Authentication Token | userToken in key issuance (UI) response parameter | AN(500) | ● | "TESTUSERTOKEN000020230217235959001" |

## Key Issuance Recurring Payment Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial server to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxhp\_sb\_ai" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "MP" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "B1" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique transaction number generated by the merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | Hash value in the request returned as is | AN(64) | ● |  |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| trdAmt | Transaction Amount | Value in request returned as is ※ AES Encryption | N(12) | ● | "1000" |
| mpEzKey | Recurring Payment Key | Value in request returned as is ※ AES Encryption | AN(64) | ● | "MO0123456789" |
| prdtNm | Product Name | Value in request returned as is | AHN(128) | ● | "De Simone" |
| ordNm | Orderer Name | Value in request returned as is | AHN(50) | ● | "Hong Gil Dong" |
| sellerNm | Merchant Name | Value in request returned as is | AHN(50) | ○ | "Hecto Financial" |

# Direct Carrier Billing (DCB) Cancellation (Non-UI)

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxhp\_pl\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "MP" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [Request Parameter Hash Code] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| crcCd | Currency Classification | Currency classification value | A(3) | ● | "KRW" ※ Fixed value |
| cnclOrd | Cancellation Round | Start from 001. For second partial cancellation, 002. | N(3) | ● | "001" |
| taxTypeCd | Tax-exempt Status | Y:Tax-exempt,  N:Taxable  G:Compound tax  If it is blank, follow Merchant’s setting | A(1) | ○ | "N" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "1000" |
| taxAmt | Taxable Amount | Taxable amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “91” |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “0” |
| cnclRsn | Reason for Cancellation | If needed, write the reason for cancellation message | AHN(255) | ○ | "Don’t like the product" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Cancellation Request Date + Cancellation Request Time + Merchant ID + Merchant Order Number + Cancellation Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial server to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxhp\_pl\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "MP" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique transaction number generated by the merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | Hash value in the request returned as is | AN(64) | ● |  |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "1000" |
| blcAmt | Cancellable Balance | When cancellation is successful, remaining cancellable balance according to transaction number is returned ※ AES Encryption | N(12) | ● | "0" |
| rfdPsblCd | Refund Availability | Refund classification code according to cancellation failure Y: Refund allowed N: Refund not allowed (not registered to the service) C: Refund not allows (refund conditions are not met) | A(1) | ○ | "Y" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [20.4 Notification Parameter]

# Direct Carrier Billing (DCB) Refund (Non-UI)

When DCB cancellation is not allowed because the DCB cancellation period (same month) has passed,

request a refund.

* Example
  + 2023-06-30 Approved Transaction / On 2023-07-01, Refund API Request

## Request Parameter (Merchant -> Hecto Financial)

Request URI

|  |  |
| --- | --- |
| **Type** | **URL** |
| Testbed | https://tbgw.settlebank.co.kr/spay/APIRefund.do |
| Production | https://gw.settlebank.co.kr/spay/APIRefund.do |

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxhp\_sb\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "MP" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C1" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant for refund | AN(100) | ● | "ORDER20211231" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| orgTrdNo | Original Transaction Number | Transaction number issued by Hecto Financial during issuance request | AN(40) | ● | "STFP\_PGVAnx\_mid\_il00210806075210M1853381" |
| crcCd | Currency Classification | Currency classification | A(3) | ● | "KRW" ※ Fixed value |
| cnclOrd | Cancellation Round | Start from 001. For second partial cancellation, 002. | N(3) | ● | "001" |
| taxTypeCd | Tax-exempt Status | Y:Tax-exempt,  N:Taxable  G:Compound tax  If it is blank, follow Merchant’s setting | A(1) | ○ | "N" |
| cnclAmt | Refund Amount | Refund amount ※ AES Encryption | N(12) | ● | "1000" |
| taxAmt | Taxable Amount | Taxable amount among refund amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount among refund amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “91” |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount among refund amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “0” |
| refundBankCd | Refund Bank Code | Code of the bank the refund will be made to Refer to [Financial Institution Identifier] | AN(3) | ● | "011" |
| refundAcntNo | Refund Account Number | Account number for the refund ※ AES Encryption | N(16) | ● | "1234567890" |
| refundDpstrNm | Account Holder Name of the Refund Account | Account Holder Name of Refund Account | AHN(50) | ● | "Hong Gil Dong" |
| cnclRsn | Reason for Refund | If needed, write the refund reason as the message | AHN(255) | ○ | "Don’t like the product" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Refund Request Date + Refund Request Time + Merchant ID + Merchant Order Number + Refund Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial server to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxhp\_sb\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "MP" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C1" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant for refund | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGVAnx\_mid\_il00210806075210M1853381" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | Hash value in request returned as is | AN(64) | ● |  |
| orgTrdNo | Original Transaction Number | Transaction number issued by Hecto Financial during issuance request | AN(40) | ● | "STFP\_PGVAnx\_mid\_il00210806075210M1853381" |
| cnclAmt | Refund Amount | Refund amount ※ AES Encryption | N(12) | ● | "1000" |
| blcAmt | Refundable Balance | When refund is successful, remaining refundable balance according to transaction number is returned ※ AES Encryption | N(12) | ● | "0" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [20.4 Notification Parameter]

# Teen Cash/Happy Money/Culture Cash/Smart Gift Voucher/Book Voucher/Tmoney Payment (UI)

## Request Parameter (Merchant -> Hecto Financial)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| method | Payment Method | Teen Cash[teencash] Happy Money[happymoney] Culture Land Voucher (Culture Cash)[culturecash] Smart Gift Certificate[smartcash] Book Voucher[booknlife] Tmoney[tmoney] | AN(20) | ● | “teencash” |
| trdDt | Request Date | yyyyMMdd | N(8) | ● | "20211231" |
| trdTm | Request Time | HH24MISS | N(6) | ● | "100000" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtName | Merchant Korean Name | Merchant Korean name | AHN(100) | ● | "헥토파이낸셜"  (“Hecto Financial” in Korean) |
| mchtEName | Merchant English Name | Merchant English name | AN(100) | ● | "Hecto Financial" |
| pmtPrdtNm | Product Name | Product name | AHN(128) | ● | “test product” |
| trdAmt | Transaction Amount | Transaction amount  ※ AES Encryption  ※ If there is cup deposit, transaction amount + cup deposit value setting | N(12) | ● | "1000" |
| taxFreeAmt | Non-taxable Amount | Non-taxable amount among payment amount (Cup deposit 300 won) ※ AES Encryption ※ Only applicable to Tmoney | N(12) | ○ | "300" |
| mchtCustNm | Customer Name | Customer name  ※ AES Encryption | AHN(30) | ○ | "Hong Gil Dong" |
| notiUrl | Result Processing URL | URL of the page that results after payment (Server To Server integration URL) | AN(250) | ● | "https://example.com/notiUrl" |
| nextUrl | Result Screen URL | URL for result delivery and landing page after payment | AN(250) | ● | "https://example.com/nextUrl" |
| cancUrl | Payment Cancellation URL | URL for result delivery and landing page when the user force quit | AN(250) | ● | "https://example.com/cancUrl" |
| prdtTerm | Product Provision Period | yyyyMMddHHmmss  If there is no value, marked as regular payment | N(14) | ○ | "20221231235959" |
| mchtParam | Merchant Reserved Field | Merchant reserved field for inputting other order information | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent by the Merchant  ※ AES Encryption  ※ Required for Culture Land voucher (Culture Cash) [culturecash] | AN(50) | ○ | "HongGilDong" |
| custIp | Customer IP Address | Customer device’s IP address, not the merchant server’s IP | AN(15) | ○ | "127.0.0.1" |
| pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Merchant ID + Payment Method + Merchant Order Number + Request Date + Request Time + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Teen Cash Voucher payment window to merchant are as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Payment request information missing (product name)" |
| method | Payment Method | Teen Cash[teencash] Happy Money[happymoney] Culture Land Voucher (Culture Cash)[culturecash] Smart Gift Certificate[smartcash] Book Voucher[booknlife] Tmoney[tmoney] | AN(10) | ● | "teencash" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent ※ AES Encryption ※ Required for Culture Land Voucher (Culture Cash)[culturecash] | AN(50) | ○ | "HongGilDong" |
| trdNo | Transaction Number | Hecto Financial transaction number | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| mchtParam | Merchant Reserved Field | Bypass the request field value as the response | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| authDt | Approval Date and Time | Approval date and time | N(14) | ○ | "20211231100000" |

## Notification Parameter (Hecto Financial -> Merchant)

If the transaction is completed successfully, Hecto Financial sends notification (result notification) message to the merchant.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| outStatCd | Transaction Status | Success [0021] | N(4) | ● | "0021" |
| trdNo | Transaction Number | Unique transaction number given by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| method | Payment Method | Tmoney[TM], Culture Land Voucher(Culture Cash)[CG], Smart Voucher[SG], Book Voucher[BG], Happy Money[HM], Teen Cash [TC], POINTDAMOA[CP] | A(2) | ● | "TC" |
| bizType | Work Type | Approve [B0], Cancel [C0] | AN(2) | ● | "B0" |
| mchtId | Merchant ID | Merchant ID given by Hecto Financial | AN(12) | ● | "nx\_mid\_il" |
| mchtTrdNo | Merchant Order Number | Order transaction number generated by the merchant | AN(100) | ● | "ORDER20211231100000" |
| mchtCustNm | Customer Name | Orderer name of the actual payer | AHN(30) | ○ | "Hong Gil Dong" |
| mchtName | Merchant Korean Name | Actual seller name, if there is no actual seller name when requesting transaction, the name of the merchant that signed the contract with Hecto Financial | AHN(20) | ○ | "헥토파이낸셜"  (“Hecto Financial” in Korean) |
| pmtprdNm | Product Name | Name of the product ordered by the customer | AHN(128) | ○ | "Test product" |
| trdDtm | Transaction Date and Time | Approval date and time, canceled transaction: canceled date and time are delivered.  Format: YYYYMMDDhhmmss | N(14) | ● | "20211231100000" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ○ | "1000" |
| email | Customer Email | Merchant customer email | AN(60) | ○ | "HongGilDong@example.com" |
| mchtCustId | Merchant Customer ID | Merchant customer ID | AN(50) | ○ | "HongGilDong" |
| csrcIssNo | Cash Receipt Approval Number | Cash receipt approval number | AN(9) | ○ | "0123456789" |
| mchtParam | Merchant Reservation Field | The value delivered as the additional information field used by the Merchant is returned as is | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| pktHash | Hash Value | SHA256 (Transaction Status Code + Transaction Date + Transaction Time + Merchant ID + Merchant Order Number + Transaction Amount + Hash Key) | AN(64) | ● | "a2d6d597d55d7c9b689baa2e08c1ddf0ce71f4248c5b9b59fe61bfbf949543e1" |

Merchant sends the response to Hecto Financial.

|  |  |
| --- | --- |
| **Response (Merchant -> Hecto Financial)** | |
| Success | “OK” (All Caps) |
| Failure | “FAIL” (All Caps, When FAIL is the response, it is recognized as a clear failure. The notification is resent.) |
| Others | It is recognized as abnormal failure, and the notification is resent according to the number of times set. |

# Teen Cash/Happy Money/Culture Cash/Smart Gift Voucher/Book Voucher/Tmoney Cancellation (Non-UI)

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| ver | Version | Parameter’s version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Teen Cash[TC], Happy Money[HM], Culture Land Voucher (Culture Cash)[CG], Smart Voucher[SG], Book Voucher[BG], Tmoney[TM] | A(2) | ● | "TC" |
| bizType | Work Classification | Work classification code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| crcCd | Currency Classification | Currency classification value | A(3) | ● | "KRW" ※ Fixed value |
| cnclOrd | Cancellation Round | Fixed value of 001 for voucher types. | N(3) | ● | "001" ※ Fixed value |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "1000" |
| cnclRsn | Reason for Cancellation | If needed, write the reason for cancellation message | AHN(255) | ○ | "Don’t like the product" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Cancellation Request Date + Cancellation Request Time + Merchant ID + Merchant Order Number + Cancellation Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial server to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nx\_mid\_il" |
| ver | Version | Parameter’s version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Teen Cash[TC], Happy Money[HM], Culture Land Voucher(Culture Cash)[CG], Smart Voucher[SG], Book Voucher[BG], Tmoney[TM] | A(2) | ● | "TC" |
| bizType | Work Classification | Work classification code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | hash value in request returned as is | AN(64) | ● |  |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "1000" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [25.4 Notification Parameter]

# POINTDAMOA Payment (UI)

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxpt\_kt\_il" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | “point” ※ Fixed value |
| trdDt | Request Date | yyyyMMdd | N(8) | ● | "20211231" |
| trdTm | Request Time | HH24MISS | N(6) | ● | "100000" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtName | Merchant Korean Name | Merchant Korean name | AHN(100) | ● | "헥토파이낸셜"  (“Hecto Financial” in Korean) |
| mchtEName | Merchant English Name | Merchant English name | AN(100) | ● | "Hecto Financial" |
| pmtPrdtNm | Product Name | Product name | AHN(128) | ● | "Test product" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| mchtCustNm | Customer Name | Customer name  ※ AES Encryption | AHN(30) | ○ | "Hong Gil Dong" |
| notiUrl | Result Processing URL | URL of the page that results after payment (Server To Server integration URL) | AN(250) | ● | "https://example.com/notiUrl" |
| nextUrl | Result Screen URL | URL for result delivery and landing page after payment | AN(250) | ● | "https://example.com/nextUrl" |
| cancUrl | Payment Cancellation URL | URL for result delivery and landing page when the user force quit | AN(250) | ● | "https://example.com/cancUrl" |
| mchtParam | Merchant Reserved Field | Merchant reserved field for inputting other order information | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| email | E-mail | E-mail address  ※ AES Encryption | AN(60) | ○ | "HongGilDong@example.com" |
| prdtTerm | Product Provision Period | yyyyMMddHHmmss  If there is no value, marked as regular payment | N(14) | ○ | "20221231235959" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent by the Merchant  ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| clipCustNm | Customer Name | When using POINT DAMOA ※ AES Encryption | AHN(30) | ○ | "Hong Gil Dong" |
| clipCustCi | CI | When using POINT DAMOA ※ AES Encryption | AN(88) | ○ | "CI value is 88byte before AES256 encryption" |
| clipCustPhoneNo | Mobile Number | When using POINT DAMOA ※ AES Encryption | N(11) | ○ | "01012345678" |
| certNotiUrl | Authentication Result URL | Authentication result delivery (Server To Server integration URL) Used by specific merchants only | AN(250) | ○ | "https://example.com/certNotiUrl" |
| skipCd | Skip Status | Whether terms consent was skipped or not | A(1) | ○ | "N" |
| custIp | Customer IP Address | Customer device’s IP address, not the merchant server’s IP | AN(15) | ○ | "127.0.0.1" |
| pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Merchant ID + Payment Method + Merchant Order Number + Request Date + Request Time + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from POINTDAMOA payment window to merchant are defined as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxpt\_kt\_il" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Payment request information missing (product name)" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(10) | ● | "point" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| trdNo | Transaction Number | Hecto Financial transaction number | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| mchtParam | Merchant Reserved Field | Bypass the request field value as the response | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| authDt | Approval Date and Time | Approval date and time | N(14) | ○ | "20211231100000" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [25.4 Notification Parameter].

# POINTDAMOA Cancellation (Non-UI)

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxpt\_kt\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "CP" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique transaction number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| crcCd | Currency Classification | Currency classification value | A(3) | ● | "KRW" ※ Fixed value |
| cnclOrd | Cancellation Round | Start from 001. For second partial cancellation, 002. | N(3) | ● | "001" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "1000" |
| cnclRsn | Reason for Cancellation | If needed, write the reason for cancellation message | AHN(255) | ○ | "Don’t like the product" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Cancellation Request Date + Cancellation Request Time + Merchant ID + Merchant Order Number + Cancellation Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxpt\_kt\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "CP" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | hash value in request returned as is | AN(64) | ● |  |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "1000" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [25.4 Notification Parameter]

# PAYCO Easy Payment (UI)

## API URI

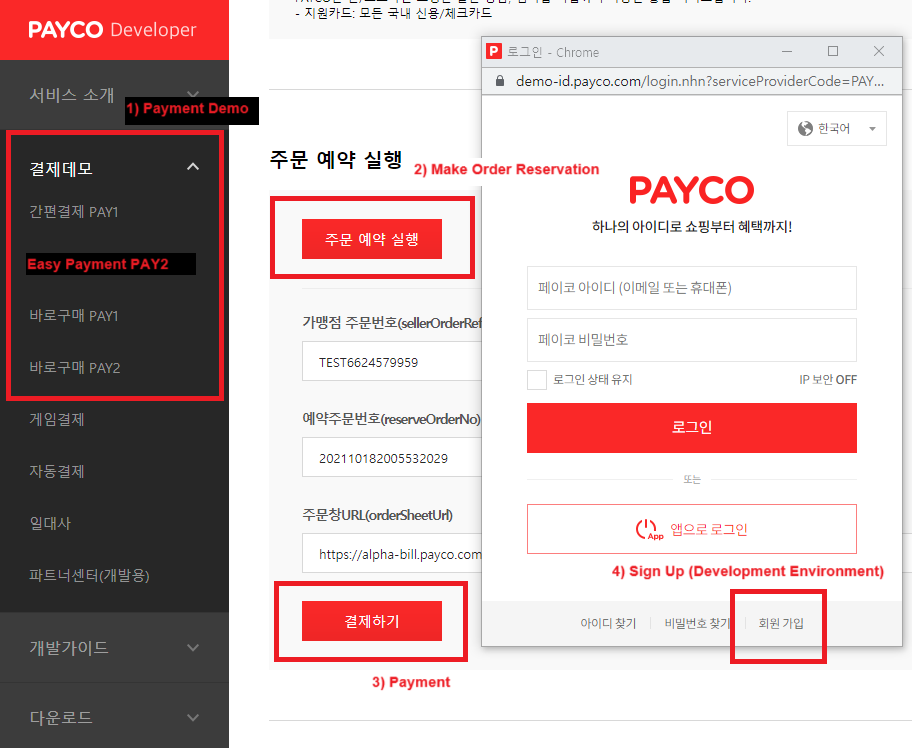
|  |  |
| --- | --- |
| **Type** | **URL** |
| Testbed | https://tbnpg.settlebank.co.kr/corp/main.do |
| Production | https://npg.settlebank.co.kr/corp/main.do |

## Request and Response Headers

|  |  |
| --- | --- |
| **Type** | **Content** |
| Request | Content-type=application/x-www-form-urlencoded; charset=UTF-8 |
| Response | Content-type=text/html; charset=UTF-8 |

## PAYCO (Development Environment) Sign Up

|  |
| --- |
| * This is the guide for making account and registering test card on PAYCO Developer Center. Please refer to the image below. * [Payment Demo] > [Advance Order] > [Make payment] > On Log-in Window, click ‘Sign Up’. * Please understand that there are cases in which test is not possible on development environment due to internal work and such from time to time. |



|  |
| --- |
| * The following cards can be registered in development environment. Please register several cards for the test, and if an error occurs, please do the test with another card. * No real payments are made in the development environment. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Card Number** | **Validity (MM/YY)** | **CVC** | **Password** |
| Hana Card | 9440 - 81\*\* - \*\*\*\* - \*\*\*\* | 12/25 | \*\*\* | \*\*\*\* |
| 4570 - 47\*\* - \*\*\*\* - \*\*\*\* |
| Shinhan Card | 5107 - 3767 - 1104 - \*\*\*\* |
| 9410 - 84\*\* - \*\*\*\* - \*\*\*\* |
| BC Card | 4906 - \*\*\*\* - \*\*\*\* - \*\*\*\* |
| 5377 - 03\*\* - \*\*\*\* - \*\*\*\* |
| Hyundai Card | 9490 - 1907 - \*\*\*\* - \*\*\*\* |
| 3646 - 83\*\* - \*\*\*\* - \*\*\*\* |
| Woori Card | 6253 - 20\*\* - \*\*\*\* - \*\*\*\* |
| 9420 - 22\*\* - \*\*\*\* - \*\*\*\* |
| Kookmin Card | 4673 - 09\*\* - \*\*\*\* - \*\*\*\* |
| 4579 - 92\*\* - \*\*\*\* - \*\*\*\* |
| Nonghyup Card | 4988 - 19\*\* - \*\*\*\* - \*\*\*\* |

**“\*” can be any value.**

In addition, for mobile environments, the test AOS / iOS app can be downloaded and installed from

Development Center – Download – PAYCO App (For Development) page.

(URL: <https://devcenter.payco.com/download/app>)

|  |
| --- |
| **Cautions**   * After installation, in the case of iOS: Go to Settings > General > Device Management > 'NHN'. In the Trust pop-up, click [Trust] to use it. * If it is not set, you will be prompted to go to the IOS app store and install PAYCO app. * If the original PAYCO real app is installed, please install after deleting it. * For Android and IOS APP SCHEME, refer to APP SCHEME List > [PAYCO Easy Payment] part. |

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial ※ Merchant ID for Test hecto\_test: Payco Easy Payment nx\_mid\_hd: Authentication / Approval Separate Type | AN(10) | ● | "hecto\_test" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | “corp” ※ Fixed value |
| corpPayCode | Easy Payment Code | Easy Payment code value PAC:PAYCO | AN(3) | ● | "PAC" |
| trdDt | Request Date | yyyyMMdd | N(8) | ● | "20211231" |
| trdTm | Request Time | HH24MISS | N(6) | ● | "100000" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtName | Merchant Korean Name | Merchant Korean name | AHN(100) | ● | "헥토파이낸셜" (“Hecto Financial” in Korean) |
| pmtPrdtNm | Product Name | Product name | AHN(128) | ● | "Test product" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| taxTypeCd | Tax Classification | N:Taxable  Y:Tax-exempt,  G:Compound tax  If it is blank, follow Merchant’s setting | A(1) | ○ | "N" |
| taxAmt | Taxable Amount | Taxable amount among transaction amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount among transaction amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “91” |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount among transaction amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | “0” |
| notiUrl | Result Processing URL | URL of the page that results after payment (Server To Server integration URL) | AN(250) | ● | "https://example.com/notiUrl" |
| nextUrl | Result Screen URL | URL for result delivery and landing page after payment | AN(250) | ● | "https://example.com/nextUrl" |
| cancUrl | Payment Cancellation URL | URL for result delivery and landing page when the user force quit | AN(250) | ● | "https://example.com/cancUrl" |
| mchtParam | Merchant Reserved Field | Merchant reserved field for inputting other order information | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent by the Merchant  ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| appScheme | App Scheme | Used for building one’s own app | AN(100) | ○ | "PAYAPPNAME" |
| pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Merchant ID + Payment Method + Merchant Order Number + Request Date + Request Time + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "hecto\_test" |
| outStatCd | Transaction Status | Transaction status code (Success/Failure) 0021: Success 0061: Authentication success (Authentication / Approval separate type) 0031:Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Payment request information missing (product name)" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | "corp" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| trdNo | Transaction Number | Hecto Financial transaction number | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| mchtParam | Other Order Information | Bypass the request field value as the response | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| authDt | Approval Date and Time | Approval date and time | N(14) | ○ | "20211231100000" |

## Notification Parameter (Hecto Financial -> Merchant)

If the transaction is completed successfully, Hecto Financial sends notification (result notification) message to the merchant.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| outStatCd | Transaction Status | Success [0021] | N(4) | ● | "0021" |
| trdNo | Transaction Number | Unique transaction number given by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| method | Payment Method | Easy Payment [PZ] | A(2) | ● | "PZ" |
| bizType | Work Classification | [Payco, Kakao Pay] - Approval [B0], Cancellation[C0] [Naver Pay] - Point[B0], Credit Card[B1], Cancellation[C0] | AN(2) | ● | "B0" |
| mchtId | Merchant ID | Merchant ID given by Hecto Financial | AN(12) | ● | "hecto\_test" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| ezpDivCd | Easy Payment Company Classification Code | Kakao Pay[KKP], Naver Pay[NVP], Payco[PAC] | AN(12) | ● | "PAC" |
| mchtName | Merchant Korean Name | Actual seller name, when a transaction request is made and there is no actual seller name, the name of the Merchant under contract with Hecto Financial | AHN(20) | ○ | "헥토파이낸셜"  (“Hecto Financial” in Korean) |
| pmtprdNm | Product Name | Name of the product ordered by the customer | AHN(128) | ○ | "Test product" |
| trdDtm | Transaction Date and Time | Approval date and time, canceled/partially canceled transaction: canceled date and time are delivered.  Format: YYYYMMDDhhmmss | N(14) | ● | "20211231100000" |
| trdAmt | Transaction Amount | Transaction Amount | N(12) | ○ | "1000" |
| cardCd | Card Code | Card company code  [Refer to Credit Card Identifier] | AN(10) | ○ | "NHC" |
| cardNm | Card Name | Card company name  [Refer to Credit Card Identifier] | AHN(20) | ○ | "NH Check" |
| email | Customer E-mail | Merchant customer e-mail | AN(60) | ○ | "HongGilDong@example.com" |
| mchtCustId | Merchant Customer ID | Merchant customer ID | AN(50) | ○ | "HongGilDong" |
| cardNo | Card Number | Masked card number 123456\*\*\*\*\*\*7890  \* Option value depending on the Merchant setting information | AN(20) | ○ | "123456\*\*\*\*\*\*7890" |
| cardApprNo | Card Approval Number | Card approval number | AN(15) | ○ | "30001234" |
| instmtMon | Number of Installments | Number of installments | N(2) | ○ | "00" |
| instmtType | Installment Type | If the number of installments is a part of card company event Y  \* Option value depending on the Merchant setting information | A(1) | ○ | "N" |
| orgTrdNo | Original Transaction Number | When canceled, original transaction number | AN(40) | ○ | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| orgTrdDt | Original Transaction Date | When canceled, original transaction date | N(8) | ○ | "20211231" |
| pntAmt | Point Amount | Point amount among total amount | N(13) | ● | "0" |
| cardAmt | Credit Card Amount | Credit card amount among total amount | N(13) | ● | "3000" |
| coupAmt | Coupon Amount | Coupon amount among total amount | N(13) | ● | "1000" |
| kkmAmt | Kakao Money Amount | Kakao Money amount | N(13) | ○ | "5000" |
| csrcIssAmt | Cash Receipt Issuance Target Amount | Cash receipt target amount | N(13) | ○ | "3000" |
| cnclType | Canceled Transaction Type | 00: Full cancellation, 10: Partial cancellation | N(2) | ○ | "00" |
| csrcIssNo | Cash Receipt Approval Number | Cash receipt approval number | AN(30) | ○ | "0123456789" |
| mchtParam | Merchant Reservation Field | The value delivered as the additional information field used by the Merchant is returned as is | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| pktHash | Hash Value | SHA256 (Transaction Status Code + Transaction Date + Transaction Time + Merchant ID + Merchant Order Number + Transaction Amount + Hash Key) | AN(64) | ● | "a2d6d597d55d7c9b689baa2e08c1ddf0ce71f4248c5b9b59fe61bfbf949543e1" |

Merchant sends the response to Hecto Financial.

|  |  |
| --- | --- |
| **Response (Merchant -> Hecto Financial)** | |
| Success | “OK” (All Caps) |
| Failure | “FAIL” (All Caps, When FAIL is the response, it is recognized as a clear failure. The notification is resent.) |
| Others | It is recognized as abnormal failure, and the notification is resent according to the number of times set. |

# PAYCO Easy Payment Approval API (Non-UI)

## API URI

|  |  |
| --- | --- |
| **Type** | **URL** |
| Testbed | https://tbgw.settlebank.co.kr/spay/APITrdPayco.do |
| Production | https://gw.settlebank.co.kr/spay/APITrdPayco.do |

## Request and Response Headers

PAYCO Easy Payment Approval API is in Non-UI method and does not use the standard payment window. Refer to this (3.4 JSON Request Data example).

|  |  |
| --- | --- |
| **Type** | **Content** |
| Request | Content-type=application/json; charset=UTF-8 |
| Response | Content-type=application/json; charset=UTF-8 |

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "nx\_mid\_hd" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "PZ" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "B2" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | ※ Caution Merchant order number generated during authentication request must be written. | AN(100) | ● | "ORDER20230323100000" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20230323" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "af8c82f79a5722fffcce52323dc1859844cafa577232b3ab94535b0f469077c9" |
| authTrdNo | Authentication Transaction Number | ※ Transaction number given as a response by Hecto Financial when authentication is successful | AN(40) | ● | "STFP\_PGPZnx\_mid\_hd0230315153232M1196602" |
| trdAmt | Transaction Amount | ※AES Encryption | N(12) | ● | "1000" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Transaction Date + Transaction Time + Merchant ID + Merchant Order Number + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "nx\_mid\_hd" |
| ver | Version | Parameter’s Version | AN(4) | ○ | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ○ | "PZ" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ○ | "B2" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20230323100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGPZnx\_mid\_hd0230315153232M1196602" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | hash value in request returned as is | AN(64) | ● |  |
| authTrdNo | Authentication Transaction Number | ※ Transaction number given as a response by Hecto Financial when authentication is successful | AN(40) | ○ | "STFP\_PGPZnx\_mid\_hd0230315153232M1196602" |
| trdAmt | Transaction Amount | ※AES Encryption | N(12) | ● | "1000" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [29.7 Notification Parameter].

# PAYCO Easy Payment Cancellation API (Non-UI)

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "hecto\_test" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "PZ" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| crcCd | Currency Classification | Currency classification value | A(3) | ● | "KRW" ※ Fixed value |
| cnclOrd | Cancellation Round | Start from 001. For second partial cancellation, 002. | N(3) | ● | "001" |
| taxTypeCd | Tax-exempt Status | Y:Tax-exempt, N:Taxable, G:Compoun tax. If it is blank, follow merchant basic info | A(1) | ○ | "N" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "1000" |
| taxAmt | Taxation Amount | Taxation amount among canceled amount (required for compound tax) ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount among canceled amount (required for compound tax) ※ AES Encryption | N(12) | ○ | "91" |
| taxFreeAmt | Non-taxation Amount | Non-taxation amount among canceled amount (required for compound tax) ※ AES Encryption | N(12) | ○ | "0" |
| svcAmt | Service Charge | Service charge among canceled amount ※ AES Encryption | N(12) | ○ | "0" |
| cnclRsn | Reason for Cancellation | If needed, write the reason for cancellation message | AHN(255) | ○ | "Don’t like the product" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Cancellation Request Date +Cancellation Request Time + Merchant ID + Merchant Order Number + Cancellation Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial server to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "hecto\_test" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "PZ" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | Hash value in request returned as is | AN(64) | ● |  |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "6000" |
| cardCnclAmt | Credit Card Cancellation Amount | Canceled credit card amount among total amount ※ AES Encryption | N(12) | ● | "5000" |
| pntCnclAmt | Point Cancellation Amount | Canceled point amount among total amount ※ AES Encryption | N(12) | ● | "0" |
| coupCnclAmt | Coupon Cancellation Amount | Canceled coupon amount among total amount ※ AES Encryption | N(12) | ● | "1000" |
| blcAmt | Cancellable Balance | When cancellation is successful, remaining cancellable balance according to transaction number is returned ※ AES Encryption | N(12) | ● | "0" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [29.7 Notification Parameter].

# Kakao Pay Easy Payment (UI)

## API URI

|  |  |
| --- | --- |
| **Type** | **URL** |
| Testbed | https://tbnpg.settlebank.co.kr/corp/main.do |
| Production | https://npg.settlebank.co.kr/corp/main.do |

## Request and Response Headers

|  |  |
| --- | --- |
| **Type** | **Content** |
| Request | Content-type=application/x-www-form-urlencoded; charset=UTF-8 |
| Response | Content-type=text/html; charset=UTF-8 |

## Request Parameter (Merchant -> Hecto Financial)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Cautions**   * Please note that real payments are made in the test environment too. * Transactions that are paid in the test environment are automatically canceled. * Refer to payment method per tax type.  |  |  | | --- | --- | | Tax Type | Payment Method | | Taxable | Credit card, money, money+point compound payment | | Non-taxable | Credit card, money, money+point compound payment | | Compound Tax | Allowed for credit card only | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial ※ Merchant ID for Test hecto\_test: Kakao Pay Easy Payment | AN(10) | ● | "hecto\_test" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | “corp” ※ Fixed value |
| corpPayCode | Easy Payment Code | Easy Payment code value KKP: Kakao Pay | AN(3) | ● | "KKP" |
| trdDt | Request Date | yyyyMMdd | N(8) | ● | "20211231" |
| trdTm | Request Time | HH24MISS | N(6) | ● | "100000" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtName | Merchant Korean Name | Merchant Korean name | AHN(100) | ● | "헥토파이낸셜" (“Hecto Financial” in Korean) |
| pmtPrdtNm | Product Name | Product name | AHN(128) | ● | "Test product" |
| trdAmt | Transaction Amount | ※AES Encryption | N(12) | ● | "1000" |
| notiUrl | Result Processing URL | URL of the page that results after payment (Server To Server integration URL) | AN(250) | ● | "https://example.com/notiUrl" |
| nextUrl | Result Screen URL | URL for result delivery and landing page after payment | AN(250) | ● | "https://example.com/nextUrl" |
| cancUrl | Payment Cancellation URL | URL for result delivery and landing page when the user force quit | AN(250) | ● | "https://example.com/cancUrl" |
| mchtParam | Merchant Reserved Field | Merchant reserved field for inputting other order information | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent by the Merchant  ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| appScheme | App Scheme | Used for building one’s own app | AN(100) | ○ | "PAYAPPNAME" |
| pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Merchant ID + Payment Method + Merchant Order Number + Request Date + Request Time + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "hecto\_test" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Payment request information missing (product name)" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | "corp" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| trdNo | Transaction Number | Hecto Financial transaction number | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| mchtParam | Other Order Information | Bypass the request field value as the response | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| authDt | Approval Date and Time | Approval date and time | N(14) | ○ | "20211231100000" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [29.7 Notification Parameter].

# Kakao Pay Easy Payment Cancellation API (Non-UI)

|  |
| --- |
| Kakao Pay partial cancellation is not supported in test environment. (It is allowed on production environment.) |

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "hecto\_test" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "PZ" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| crcCd | Currency Classification | Currency classification value | A(3) | ● | "KRW" ※ Fixed value |
| cnclOrd | Cancellation Round | Start from 001. For second partial cancellation, 002. | N(3) | ● | "001" |
| taxTypeCd | Tax-exempt Status | Y:Tax-exempt, N:Taxable, G:Compoun tax. If it is blank, follow merchant basic info | A(1) | ○ | "N" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "1000" |
| taxAmt | Taxable Amount | Taxable amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "91" |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "0" |
| svcAmt | Service Charge | Service charge among canceled amount ※ AES Encryption | N(12) | ○ | "0" |
| cnclRsn | Reason for Cancellation | If needed, write the reason for cancellation message | AHN(255) | ○ | "Don’t like the product" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Cancellation Request Date + Cancellation Request Time + Merchant ID + Merchant Order Number + Cancellation Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "hecto\_test" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "PZ" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | Hash value in request returned as is | AN(64) | ● |  |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "6000" |
| cardCnclAmt | Credit Card Cancellation Amount | Canceled credit card amount among total amount ※ AES Encryption | N(12) | ● | "5000" |
| pntCnclAmt | Point Cancellation Amount | Canceled point amount among total amount ※ AES Encryption | N(12) | ● | "0" |
| coupCnclAmt | Coupon Cancellation Amount | Canceled coupon amount among total amount ※ AES Encryption | N(12) | ● | "1000" |
| blcAmt | Cancellable Balance | When cancellation is successful, remaining cancellable balance according to transaction number is returned ※ AES Encryption | N(12) | ● | "0" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [29.7 Notification Parameter].

# Naver Pay Easy Payment (UI)

## API URI

|  |  |
| --- | --- |
| **Type** | **URL** |
| Testbed | https://tbnpg.settlebank.co.kr/corp/main.do |
| Production | https://npg.settlebank.co.kr/corp/main.do |

## Request and Response Headers

|  |  |
| --- | --- |
| **Type** | **Content** |
| Request | Content-type=application/x-www-form-urlencoded; charset=UTF-8 |
| Response | Content-type=text/html; charset=UTF-8 |

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial ※ Test not allowed on Naver Pay test environment | AN(10) | ● | "hecto\_test" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | “corp” ※ Fixed value |
| corpPayCode | Easy Payment Code | Easy Payment code alue NVP: Naver Pay | AN(3) | ● | "NVP" |
| trdDt | Request Date | yyyyMMdd | N(8) | ● | "20211231" |
| trdTm | Request Time | HH24MISS | N(6) | ● | "100000" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtName | Merchant Korean Name | Merchant Korean name | AHN(100) | ● | "헥토파이낸셜" (“Hecto Financial” in Korean) |
| pmtPrdtNm | Product Name | Product name | AHN(128) | ● | "Test product" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| taxTypeCd | Tax Type | N:Taxable, Y:Tax-exempt, G:Compound tax  If it is blank, follow Merchant’s setting | A(1) | ○ | "N" |
| taxAmt | Taxation Amount | Taxation amount among transaction amount (Required for compound tax) ※AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount among transaction amount (Required for compound tax) ※AES Encryption | N(12) | ○ | "91" |
| taxFreeAmt | Non-taxable Amount | Non-taxable amount among transaction amount (Required for compound tax) ※AES Encryption | N(12) | ○ | "0" |
| notiUrl | Result Processing URL | URL of the page that results after payment (Server To Server integration URL) | AN(250) | ● | "https://example.com/notiUrl" |
| nextUrl | Result Screen URL | URL for result delivery and landing page after payment | AN(250) | ● | "https://example.com/nextUrl" |
| cancUrl | Payment Cancellation URL | URL for result delivery and landing page when the user force quit | AN(250) | ● | "https://example.com/cancUrl" |
| mchtParam | Merchant Reserved Field | Merchant reserved field for inputting other order information | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent by the Merchant  ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| appScheme | App Scheme | Used for building one’s own app | AN(100) | ○ | "PAYAPPNAME" |
| pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Merchant ID + Payment Method + Merchant Order Number + Request Date + Request Time + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "hecto\_test" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Payment request information missing (product name)" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | "corp" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| trdNo | Transaction Number | Hecto Financial transaction number | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| mchtParam | Other Order Information | Bypass the request field value as the response | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| authDt | Approval Date and Time | Approal date and time | N(14) | ○ | "20211231100000" |
| csrcAmt | Cash Receipt Issuance Amount | Cash receipt issuance amount ※ AES Encryption ※ Can be different from the payment amount (Cash receipt is issued only to points that are topped up, not the accumulative points) | N(12) | ● | "1000" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [29.7 Notification Parameter].

# Naver Pay Easy Payment Cancellation API (Non-UI)

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "hecto\_test" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "PZ" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| crcCd | Currency Classification | Currency classification value | A(3) | ● | "KRW" ※ Fixed value |
| cnclOrd | Cancellation Round | Start from 001. For second partial cancellation, 002. | N(3) | ● | "001" |
| taxTypeCd | Tax-exempt Status | Y:Tax-exempt, N:Taxable, G:Compoun tax. If it is blank, follow merchant basic info | A(1) | ○ | "N" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "1000" |
| taxAmt | Taxable Amount | Taxable amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "91" |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "0" |
| svcAmt | Service Charge | Service charge among canceled amount ※ AES Encryption | N(12) | ○ | "0" |
| cnclRsn | Reason for Cancellation | If needed, write the reason for cancellation message | AHN(255) | ○ | "Don’t like the product" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Cancellation Request Date + Cancellation Request Time + Merchant ID + Merchant Order Number + Cancellation Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "hecto\_test" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "PZ" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | hash value in response returned as is | AN(64) | ● |  |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "6000" |
| cardCnclAmt | Credit Card Cancellation Amount | Canceled credit card amount among total amount ※ AES Encryption | N(12) | ● | "5000" |
| pntCnclAmt | Point Cancellation Amount | Canceled point amount among total amount ※ AES Encryption | N(12) | ● | "0" |
| coupCnclAmt | Coupon Cancellation Amount | Canceled coupon amount among total amount ※ AES Encryption | N(12) | ● | "1000" |
| blcAmt | Cancellable Balance | When cancellation is successful, remaining cancellable balance according to transaction number is returned ※ AES Encryption | N(12) | ● | "0" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [29.7 Notification Parameter].

# Samsung Pay Easy Payment (UI)

Describes the Samsung Pay Easy Payment integration method.

## API URI

|  |  |
| --- | --- |
| **Type** | **URL** |
| Testbed | https://tbnpg.settlebank.co.kr/card/cardDirect.do |
| Production | https://npg.settlebank.co.kr/card/cardDirect.do |

## Request and Response Headers

|  |  |
| --- | --- |
| **Type** | **Content** |
| Request | Content-type=application/x-www-form-urlencoded; charset=UTF-8 |
| Response | Content-type=text/html; charset=UTF-8 |

## Request Parameter (Merchant -> Hecto Financial)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxca\_jt\_il" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | "card" ※ Fixed value |
| trdDt | Request Date | yyyyMMdd | N(8) | ● | "20211231" |
| trdTm | Request Time | HH24MISS | N(6) | ● | "100000" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtName | Merchant Korean Name | Merchant Korean name | AHN(100) | ● | "헥토파이낸셜" (“Hecto Financial” in Korean) |
| mchtEName | Merchant English Name | Merchant English name | AN(100) | ● | "Hecto Financial" |
| pmtPrdtNm | Product Name | Product name | AHN(128) | ● | "Test product" |
| trdAmt | Transaction Amount | Transaction Amount ※AES Encryption | N(12) | ● | "1000" |
| mchtCustNm | Customer Name | Orderer name of the actual payer | AHN(30) | ○ | "Hong Gil Dong" |
| notiUrl | Result Processing URL | URL of the page that results after payment (Server To Server integration URL) | AN(250) | ● | "https://example.com/notiUrl" |
| nextUrl | Result Screen URL | URL for result delivery and landing page after payment | AN(250) | ● | "https://example.com/nextUrl" |
| cancUrl | Payment Cancellation URL | URL for result delivery and landing page when the user force quit | AN(250) | ● | "https://example.com/cancUrl" |
| mchtParam | Merchant Reserved Field | Merchant reserved field for inputting other order information | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| email | E-mail | E-mail address  ※ AES Encryption | AN(60) | ○ | "HongGilDong@example.com" |
| prdtTerm | Product Provision Period | yyyyMMddHHmmss  If there is no value, marked as regular payment | N(14) | ○ | "20221231235959" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent by the Merchant  ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| taxTypeCd | Tax-exempt Status | N:Taxable, Y:Tax-exempt, G:Compound tax  If it is blank, follow Merchant’s setting | A(1) | ○ | "N" |
| taxAmt | Taxable Amount | Taxable amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "91" |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "0" |
| svcAmt | Service Charge | Credit card service charge  ※ AES Encryption | N(12) | ○ | "10" |
| instmtMon | Number of Installments | Only for credit card-direct | N(2) | ○ | "00" |
| cardGb | Specific Card Company Code | Samsung Pay card company Fixed code value(SSP) | AN(4) | ● | "SSP" |
| appScheme | App Scheme | (AppScheme://~) format is used, and is used when one’s own app is built  Refer to [**Credit Card WebView**] | AN(100) | ○ | "PAYAPPNAME://" |
| custIp | Customer IP Address | Customer device’s IP address, not the merchant server’s IP | AN(15) | ○ | "127.0.0.1" |
| pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Merchant ID + Payment Method + Merchant Order Number + Request Date + Request Time + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

After Samsung Pay payment, the response columns to merchant are as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial  nxca\_jt\_il: Authentication | AN(10) | ● | "nxca\_jt\_il" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Payment request information missing (product name)" |
| method | Payment Method | Payment Type code applicable to the PG service | AN(20) | ● | "card" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant  ※ Excluding Korean | AN(100) | ● | "ORDER20211231100000" |
| mchtCustId | Merchant Customer ID | Unique customer ID or unique key sent ※ AES Encryption | AN(50) | ○ | "HongGilDong" |
| trdNo | Transaction Number | Hecto Financial transaction number | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdAmt | Transaction Amount | Transaction Amount ※ AES Encryption | N(12) | ● | "1000" |
| mchtParam | Merchant Reserved Field | Bypass the request field value as the response | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| authDt | Approval Date and Time | Payment approval date and time | N(14) | ○ | "20211231100000" |
| authNo | Approval Number | Credit card approval number | N(15) | ○ | "30001234" |
| intMon | Number of Installments | Credit card number of installments | N(2) | ○ | "00" |
| fnNm | Card Company Name | Credit card company name | AH(20) | ○ | “Woori Card” |
| fnCd | Card Company Code | Credit card company code | AN(4) | ○ | "LTC" |

## Notification Parameter (Hecto Financial -> Merchant)

If the transaction is completed successfully, Hecto Financial sends notification (result notification) message to the merchant.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| outStatCd | Transaction Status | Success [0021] | N(4) | ● | "0021" |
| trdNo | Transaction Number | Unique transaction number given by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| method | Payment Method | Credit Card [CA] | A(2) | ● | "CA" |
| bizType | Work Type | Approve [B0], Cancel [C0] | AN(2) | ● | "B0" |
| mchtId | Merchant ID | Merchant ID given by Hecto Financial | AN(12) | ● | "nxca\_jt\_il" |
| mchtTrdNo | Merchant Order Number | Unique order number generated by the Merchant | AN(100) | ● | "ORDER20211231100000" |
| mchtCustNm | Customer Name | Orderer name of the actual payer | AHN(30) | ○ | "Hong Gil Dong" |
| mchtName | Merchant Korean Name | Actual seller name, when a transaction request is made and there is no actual seller name, the name of the Merchant under contract with Hecto Financial | AHN(20) | ○ | "헥토파이낸셜"  (“Hecto Financial” in Korean) |
| pmtprdNm | Product Name | Name of the product ordered by the customer | AHN(128) | ○ | "Test product" |
| trdDtm | Transaction Date and Time | Approval date and time, canceled/partially canceled transaction: canceled date and time are delivered.  Format: YYYYMMDDhhmmss | N(14) | ● | "20211231100000" |
| trdAmt | Transaction Amount | Transaction amount | N(12) | ○ | "1000" |
| svcAmt | Service Charge | Credit card service charge ※ Delivered for offline transaction that includes service charge. | N(12) | ○ | "0" |
| billKey | Recurring Payment Key | billKey issued for the second recurring payment | AN(40) | ○ | "SBILL\_0123456789" |
| billKeyExpireDt | Recurring Payment Key Validity | YYMM | N(4) | ○ | "2212" |
| cardCd | Card Code | Card company code  [Refer to Credit Card Identifier] | AN(10) | ○ | "NHC" |
| cardNm | Card Name | Card company name  [Refer to Credit Card Identifier] | AHN(20) | ○ | "NH Check" |
| email | Customer E-mail | Merchant customer e-mail | AN(60) | ○ | "HongGilDong@example.com" |
| mchtCustId | Merchant Customer ID | Merchant customer ID | AN(50) | ○ | "HongGilDong" |
| cardNo | Card Number | Masked card number 123456\*\*\*\*\*\*7890  \* Option value depending on the Merchant setting information | AN(20) | ○ | "123456\*\*\*\*\*\*7890" |
| cardApprNo | Card Approval Number | Card approval number | AN(15) | ○ | "30001234" |
| instmtMon | Number of Installments | Number of installments | N(2) | ○ | "00" |
| instmtType | Installment Type | If the number of installments is a part of card company event Y  \* Option value depending on the Merchant setting information | A(1) | ○ | "N" |
| orgTrdNo | Original Transaction Number | When canceled, original transaction number | AN(40) | ○ | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| orgTrdDt | Original Transaction Date | When canceled, original transaction date | N(8) | ○ | "20211231" |
| mixTrdNo | Split Payment Transaction Number | Split payment transaction number | AN(40) | ○ | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| mixTrdAmt | Split Payment Amount | \*Delivered only when mixTrdNo exists | N(12) | ○ | "1000" |
| payAmt | Actual Payment Amount | Payment amount excluding the split payment amount in the transaction amount  payAmt = trdAmt - mixTrdAmt  \*Delivered only when mixTrdNo exists | N(12) | ○ | "1000" |
| cnclType | Canceled Transaction Type | 00: Full cancellation, 10: Partial cancellation | N(2) | ○ | "00" |
| mchtParam | Merchant Reservation Field | The value delivered as the additional information field used by the Merchant is returned as is | AHN(4000) | ○ | "name=HongGilDong&age=25" |
| pktHash | Hash Value | SHA256 (Transaction Status Code + Transaction Date + Transaction Time + Merchant ID + Merchant Order Number + Transaction Amount + Hash Key) | AN(64) | ● | "a2d6d597d55d7c9b689baa2e08c1ddf0ce71f4248c5b9b59fe61bfbf949543e1" |

Merchant sends the response to Hecto Financial.

|  |  |
| --- | --- |
| **Response (Merchant -> Hecto Financial)** | |
| Success | “OK” (All Caps) |
| Failure | “FAIL” (All Caps, When FAIL is the response, it is recognized as a clear failure. The notification is resent.) |
| Others | It is recognized as abnormal failure, and the notification is resent according to the number of times set. |

# Samsung Pay Easy Payment Cancellation API (Non-UI)

Describes the Samsung Pay Easy Payment cancellation API integration method.

## Request Parameter (Merchant -> Hecto Financial)

* API URI
  + Test: https://tbgw.settlebank.co.kr/spay/APICancel.do
  + Production: https://gw.settlebank.co.kr/spay/APICancel.do

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "nxca\_jt\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "CA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| mobileYn | Mobile or Not | Y: Mobile Web / App, N: PC and others | A(1) | ○ | "N" |
| osType | OS Classification | A:Android, I:IOS, W:windows, M:Mac, E:Others  Blank:Unverifiable | A(1) | ○ | "W" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| crcCd | Currency Classification | Currency classification value | A(3) | ● | "KRW" ※ Fixed value |
| cnclOrd | Cancellation Round | Start from 001. For second partial cancellation, 002. | N(3) | ● | "001" |
| taxTypeCd | Tax-exempt Status | Y:Tax-exempt, N:Taxable, G:Compoun tax. If it is blank, follow merchant basic info | A(1) | ○ | "N" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "1000" |
| taxAmt | Taxable Amount | Taxable amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "909" |
| vatAmt | VAT Amount | VAT amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "91" |
| taxFreeAmt | Nontaxable Amount | Tax-exempt amount among cancelled amount (Required if it is a compound tax)  ※ AES Encryption | N(12) | ○ | "0" |
| svcAmt | Service Charge | Service charge among canceled amount ※ AES Encryption | N(12) | ○ | "0" |
| cnclRsn | Reason for Cancellation | If needed, write the reason for cancellation message | AHN(255) | ○ | "Don’t like the product" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Cancellation Request Date + Cancellation Request Time + Merchant ID + Merchant Order Number + Cancellation Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial to Merchant are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "nxca\_jt\_il" |
| ver | Version | Parameter’s Version | AN(4) | ● | "0A19" ※ Fixed value |
| method | Payment Method | Payment Method | A(2) | ● | "CA" ※ Fixed value |
| bizType | Work Classification | Work Classification Code | AN(2) | ● | "C0" ※ Fixed value |
| encCd | Encryption Classification | Encryption classification code | N(2) | ● | "23" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique order number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Hecto Financial Transaction Number | Unique transaction number generated by Hecto Financial | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| trdDt | Cancellation Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Cancellation Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status | Transaction status code (Success / Failure)  0021: Success  0031: Failure | AN(4) | ● | "0021" |
| outRsltCd | Reject Code | If transaction status is “0031”, the relevant code is sent  Refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result message delivery URL Encoding, UTF-8 | AHN(200) | ● | "Normally processed." |
| data | pktHash | Hash Value | Hash value in request returned as is | AN(64) | ● |  |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ● | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |
| cnclAmt | Canceled Amount | Canceled Amount ※ AES Encryption | N(12) | ● | "6000" |
| cardCnclAmt | Credit Card Cancellation Amount | Canceled credit card amount among total amount ※ AES Encryption | N(12) | ● | "5000" |
| pntCnclAmt | Point Cancellation Amount | Canceled point amount among total amount ※ AES Encryption | N(12) | ● | "1000" |
| blcAmt | Cancellable Balance | When cancellation is successful, remaining cancellable balance according to transaction number is returned ※ AES Encryption | N(12) | ● | "0" |

## Notification Parameter (Hecto Financial -> Merchant)

※ Refer to [6.5 Notification Parameter].

# Real-Time Transaction Inquiry API (Non-UI)

## Integration Method

* Check the request parameter and then set the parameter.
* Make an HTTP connection through Server to Server and request POST as JSON data **(34.4 JSON Request Data Example)**.

|  |
| --- |
| **Single Transaction Status Inquiry Per Payment Method**   * For Original Transaction Date, input the date of the request for the Original Transaction Number you are inquiring (Inquiry of transaction from the day before to the day after the transaction day) * If the Original Transaction Number can be checked, the Original Transaction Number is given additionally |

## API URI

|  |  |
| --- | --- |
| **Type** | **URL** |
| Testbed | https://tbgw.settlebank.co.kr/spay/APITrdcheck.do |
| Production | https://gw.settlebank.co.kr/spay/APITrdcheck.do |

## Request and Response Headers

|  |  |
| --- | --- |
| **Type** | **Content** |
| Request | Content-type=application/json; charset=UTF-8 |
| Response | Content-type=application/json; charset=UTF-8 |

## JSON Request Data Example

|  |
| --- |
| {  "params" : {  "mchtId" : "nx\_mid\_il",  "ver" : "0A1M",  "mchtTrdNo" : "PG\_vbank\_20210806075154649",  "trdDt" : "20210806",  "trdTm" : "080101"  },  "data" : {  "pktHash" : "996E651D9435700D54E0D69B5726B5489AD0691C3FC86BE572314D39A2AE8B6D",  "method" : "VA",  "trdAmt" : "500",  "orgTrdDt" : "20210806",  "orgMchtTrdNo" : "PG\_vbank\_20210806075154648",  "orgTrdNo" : "STFP\_PGVAnx\_mid\_il00210806075210M1853381"  }  } |

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "nx\_mid\_il" |
| ver | Version | Parameter’s version | AN(4) | ● | "0A1M" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Unique transaction number generated by merchant | AN(100) | ● | "ORDER20211231100000" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| data | pktHash | Hash Data | Hash value generated by SHA256 method  Refer to [**Request Parameter Hash Code**] | AN(200) | ● | "f395b6725a9a18f2563ce34f8bc76698051d27c05e5ba815f463f00429061c0c" |
| method | Payment Method | 2-digit of payment method Refer to [Payment Method Code] | A(2) | ● | "VA" |
| trdAmt | Transaction Amount | Transaction amount 1,000 won -> 1000 | N(12) | ● | "1000" |
| orgTrdDt | Original Transaction Date | Request date of original transaction payment request (YYYYMMDD) | N(8) | ● | "20211231" |
| orgMchtTrdNo | Original Transaction Merchant Order Number | Original transaction’s merchant order number | AN(100) | ● | "ORDER20211231100000" |
| orgTrdNo | Original Transaction Number | Transaction number given by Hecto Financial for payment | AN(40) | ○ | "STFP\_PGCAnxca\_jt\_il0211129135810M1494620" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Transaction Date + Transaction Time + Merchant ID + Merchant Order Number + Transaction Amount (Plain Text) + Hash Key |

## Response Parameter (Hecto Financial -> Merchant)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| params | mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(12) | ● | "nx\_mid\_il" |
| ver | Version | Parameter’s version | AN(4) | ● | "0A1M" ※ Fixed value |
| mchtTrdNo | Merchant Order Number | Bypass the order number for request | AN(100) | ● | "ORDER20211231100000" |
| trdNo | Transaction Number | Hecto Financial transaction number | AN(40) | ● | "STFP\_PGHMnx\_mid\_il00220623130711M1872705" |
| trdDt | Request Date | Date of sending the current parameter (YYYYMMDD) | N(8) | ● | "20211231" |
| trdTm | Request Time | Time of sending the current parameter (HHMMSS) | N(6) | ● | "100000" |
| outStatCd | Transaction Status Code | 0021:Success, 0031:Failure (Check successful transaction: transaction status=0021 + result code =0000) | N(4) | ● | "0000" |
| outRsltCd | Result Code | Result Code 0000 : Normal transaction (for virtual account, it means deposit success) 0001 : Cancellation status (for virtual account it means refund status) 0009 : Payment failure (payment failure history exists) For others, refer to [Reject Code Table] | AN(4) | ● | "0000" |
| outRsltMsg | Result Message | Result Message | AHN(200) | ● | "Normal Transaction" |
| data | pktHash | Hash Value | Hash value in request returned as is | AN(64) | ● |  |
| method | Payment Method | 2-digit payment method Refer to [Payment Method Code] | A(2) | ● | "VA" |
| trdAmt | Transaction Amount | Transaction amount | N(12) | ● | "1000" |
| cnclAmt | Canceled Amount | Canceled Amount ※ 0 won if cancellation does not exist | N(12) | ○ | "1000" |

## Payment Method Code

The payment method codes are as follows.

|  |  |
| --- | --- |
| **Code** | **Payment Method** |
| **BG** | Book Voucher |
| **CG** | Culture Land Voucher (Culture Cash) |
| **HM** | Happy Money |
| **TC** | Teen Cash |
| **CP** | POINTDAMOA |
| **CA** | Credit Card |
| **MP** | DCB |
| **RA** | Wire Transfer |
| **VA** | Virtual Account |
| **TM** | Tmoney |
| **SG** | Smart Gift Voucher |

# Transaction Collation API (Non-UI)

Transaction Collation API integration method is defined.

## API Description

API for transaction collation inquiry is invoked from merchant server to Hecto Financial server. Hecto Financial’s transaction collation result response is given as the result of the invoke below.

## API URI

|  |  |  |
| --- | --- | --- |
| **Server**  **Type** | **URI** | **HTTP**  **Method** |
| Testbed | https://tb-nspay.settlebank.co.kr/api/pg/{**MerchantID**}/transInfo.do | GET/POST |
| Production | https://nspay.settlebank.co.kr/api/pg/{**MerchantID**}/transInfo.do | GET/POST |

## Request and Response Headers

API request and response header formats are as follows.

|  |  |
| --- | --- |
| Request | Content-type=application/x-www-form-urlencoded;charset=UTF-8 |
| Response | Content-type=text/plain;charset=UTF-8 |

## Request Parameter (Merchant -> Hecto Financial)

Request columns from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxca\_jt\_il" |
| mchtTy | Merchant ID Type | Merchant ID Type Value | AN(1) | ● | "M" ※Fixed Value |
| method | Payment Method | 2-digit payment method Refer to [Payment Method Code] | AN(2) | ● | "CA" |
| pdTy | Inquiry Period Type | Inquiry Period Type Code | AN(1) | ● | "D" ※Fixed Value |
| trdDtSt | Transaction Date | Transaction Date yyyyMMdd | N(8) | ● | "20211231" |
| pktHash | hash Data | Hash value generated in SHA256 method Refer to [Request Parameter Hash Code] | AN(200) | ● | "346a2496f3e8b2cbb2ebd157eee0f7404c4e97c34d3cefe8a9b0113cc93f8cc1" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Merchant ID + Transaction Date + Authentication Key |

## Response Parameter (Hecto Financial -> Merchant)

Response columns from Hecto Financial server to Merchant are defined as follows.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Number | Parameter Name | Description | Type (Length) | Example |
| **Inquiry Result - Output first row on inquiry** | | | | |
| 1 | Result Code | API response result code | AN(4) |  |
| 2 | Result Message | API response result message | AN(4) |  |
| 3 | Number of Inquiries | Number of successful transaction inquiries | N |  |
| **Transaction History – If Inquiry Success(result:0000), output per transaction from the second row (Repeat)** | | | | |
| 1 | Merchant ID | Merchant ID | AN(10) |  |
| 2 | Payment Method | Payment method code | N(2) |  |
| 3 | Hecto Financial Transaction Number | Transaction number generated by Hecto Financial | AN(40) |  |
| 4 | Order Number | Merchant order number | AN(100) |  |
| 5 | Approval Type | Approve / Cancel Type | N(1) | “0”: Approve,  “1”: Cancel |
| 6 | Transaction Date | Transaction date (cancellation date)  yyyyMMdd | N(8) |  |
| 7 | Transaction Time | Transaction time (cancellation time)  hhmmss | N(6) |  |
| 8 | Transaction Amount | Transaction amount | N(13) |  |
| 9 | Original Transaction Number | Original transaction number for cancelled transaction | AN(40) |  |
| 10 | Original Transaction Date | Original transaction date for cancelled transaction | N(8) |  |
| 11 | Name of Orderer | Merchant orderer name | AN(88) |  |
| 12 | Product Name | Merchant product name | AN(200) |  |
| 13 | Approval Number | Credit card approval number |  |  |
| 14 | Financial Company | Financial company | AHN(20) |  |
| 15 | Number of Installments | Number of installments for credit card transaction | N(2) |  |
| 16 | Interest-Free Installment Status | Merchant-paid interest-free installment transaction status (credit card) | AN(1) |  |

## Transaction Collation Response Value Example

Example 1. This is the example of normally processed response value when transaction collation API inquiry is done.

|  |
| --- |
| 0000|NormallyProcessed.|3|  mid\_test|VA|STBK\_PGVAmid\_test000000000000000M0000001|TEST000000000000000001|0|20211231|100001|1000|||HongGilDong|TestProduct||Kbank|||  mid\_test|VA|STBK\_PGVAmid\_test000000000000000M0000002|TEST000000000000000002|0|20211231|100002|2000|||HongGilDong|TestProduct||Kbank|||  mid\_test|VA|STBK\_PGVAmid\_test000000000000000M0000003|TEST000000000000000003|0|20211231|100003|3000|||HongGilDong|||Kbank||| |

Example 2. This is the example of failure response value when transaction collation API inquiry is done.

|  |
| --- |
| ST92|Hash Value Mismatch.|0| |

## Code Table

* Collation API Code

|  |  |
| --- | --- |
| **Code** | **Payment Method** |
| 0000 | Normally processed. |
| 1001 | No inquiry details. |
| ST09 | Invalid request parameter. |
| ST10 | Internal system error. |
| ST90 | Unregistered merchant ID. |
| ST91 | Require parameter error. |
| ST92 | Hash value mismatch. |

* Payment Method Code – Refer to [Payment Method Code]
* Financial Institution Code – Refer to [Financial Institution Identifier]
* Card Company Code (Acquirer Code)

|  |  |
| --- | --- |
| **Code** | **Card Company Name** |
| 01 | BC |
| 02 | Kookmin |
| 03 | Hana |
| 04 | Samsung |
| 05 | Shinhan |
| 08 | Hyundai |
| 09 | Lotte |
| 15 | NH |

* Mobile Carrier Code

|  |  |
| --- | --- |
| **Code** | **Payment Method** |
| SKT | SK Telecom |
| KFT | KT |
| LGT | LG U+ |
| SKL | SK 7 Mobile |
| CJH | CJ Hello Mobile |
| KCT | Korea Cable Telecom |

# Settlement Collation API (Non-UI)

Settlement Collation API integration method is defined.

## API Description

API for settlement collation inquiry is invoked from merchant server to Hecto Financial server. Hecto Financial’s settlement collation result response is given as the result of the invoke below.

## API URI

|  |  |  |
| --- | --- | --- |
| **Server**  **Type** | **URI** | **HTTP**  **Method** |
| Testbed | https://tb-nspay.settlebank.co.kr/api/pg/{**MerchantID**}/sttlmntInfo.do | GET/POST |
| Production | https://nspay.settlebank.co.kr/api/pg/{**MerchantID**}/sttlmntInfo.do | GET/POST |

## Request and Response Headers

API request and response header formats are as follows.

|  |  |
| --- | --- |
| Request | Content-type=application/x-www-form-urlencoded;charset=UTF-8 |
| Response | Content-type=text/plain;charset=UTF-8 |

## Request Parameter (Merchant -> Hecto Financial)

Request column from Merchant server to Hecto Financial are defined as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Name** | **Description** | **Type**  **(Length)** | **Required** | **Example** |
| mchtId | Merchant ID | Unique merchant ID given by Hecto Financial | AN(10) | ● | "nxca\_jt\_il" |
| method | Payment Method | 2-digit payment method Refer to [Payment Method Code] | AN(2) | ● | “CA” |
| crtrDt | Inquiry Date | Scheduled date for settlement | N(8) | ● | “20211231” |
| pktHash | Hash Data | Hash value generated in SHA256 method Refer to [Request Parameter Hash Code] | AN(32) | ● | "346a2496f3e8b2cbb2ebd157eee0f7404c4e97c34d3cefe8a9b0113cc93f8cc1" |

## Request Parameter Hash Code

|  |  |
| --- | --- |
| **Entry** | **Combination Field** |
| pktHash | Merchant ID + Inquiry Date + Authentication Key |

## Response Parameter (Hecto Financial -> Merchant)

Response parameter is the response parameter from Hecto Financial to Merchant with the values of the collation that occurred on the Merchant’s requested transaction date.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Number | Parameter Name | Description | Type (Length) | Example |
| **Inquiry Result - Output first row on inquiry** | | | | |
| 1 | Result Code | API response result code | AN(4) |  |
| 2 | Result Message | API response result message | AN(4) |  |
| 3 | Number of Inquiries | Number of successful transaction inquiries | N |  |
| **Transaction History – If Inquiry Success(result:0000), output per transaction from the second row (Repeat)** | | | | |
| 1 | Merchant ID | Merchant ID | AN(10) |  |
| 2 | Hecto Financial Transaction Number | Transaction number generated by Hecto Financial | AN(40) |  |
| 3 | Original Transaction Number | Original transaction number of canceled transaction | AN(40) |  |
| 4 | Payment Method | Payment method code | N(2) |  |
| 5 | Approve / Cancel Date | Transaction date (Cancellation date)  yyyyMMdd | N(8) |  |
| 6 | Approve / Cancel Status | Approve / Cancel classification | N(1) | “0”: Approve  “1”: Cancel |
| 7 | Financial Company / Carrier Code | Financial Company | AHN(20) |  |
| 8 | Approval Number | Credit card approval number |  |  |
| 9 | Number of Installments | Number of installments for credit card transaction | N(2) |  |
| 10 | Order Number | Merchant order number | AN(100) |  |
| 11 | Name of Orderer | Merchant orderer name | AN(88) |  |
| 12 | Product Name | Merchant product name | AN(200) |  |
| 13 | Payment Amount | Payment amount | N(13) |  |
| 14 | Fee | Supply amount | N(13) |  |
| 15 | Additional Tax | Additional tax | N(13) |  |
| 16 | Expected Settlement Amount | Expected Settlement Amount | N(13) |  |
| 17 | Expected Settlement Date | Expected Settlement Date  yyyyMMdd | N(8) |  |

## Settlement Inquiry Response Value Example

Example 1. This is the example of normally processed response value when settlement collation API inquiry is done.

|  |
| --- |
| 0000|NormallyProcessed.|3|  mid\_test|VA|STBK\_PGVAmid\_test000000000000000M0000001|TEST000000000000000001|0|20211231|100001|1000|||HongGilDong|TestProduct||Kbank|||  mid\_test|VA|STBK\_PGVAmid\_test000000000000000M0000002|TEST000000000000000002|0|20211231|100002|2000|||HongGilDong|TestProduct||Kbank|||  mid\_test|VA|STBK\_PGVAmid\_test000000000000000M0000003|TEST000000000000000003|0|20211231|100003|3000|||HongGilDong|||Kbank||| |

Example 2. This is the example of failure response value when settlement collation API inquiry is done.

|  |
| --- |
| ST92|Hash Value Mismatch.|0| |

# Others

## Reject Code Table

* PG common response code

|  |  |  |  |
| --- | --- | --- | --- |
| Code | Description | Code | Description |
| 0000 | Normal processing | 0009 | User cancellation |
| 1001 | Missing payment request info (merchant ID) | 1002 | Missing payment request info (payment method) |
| 1003 | Missing payment request info (transaction date) | 1004 | Missing payment request info (transaction time) |
| 1005 | Missing payment request info (merchant order number) | 1006 | Missing payment request info (merchant Korean name) |
| 1007 | Missing payment request info (merchant English name) | 1008 | Missing payment request info (product name) |
| 1009 | Missing payment request info (transaction amount) | 1010 | Missing payment request info (result processing URL) |
| 1011 | Missing payment request info (result screen URL) | 1012 | Missing payment request info (payment cancellation URL) |
| 1013 | Missing payment request info (merchant customer ID) | 1101 | Payment request info length error (merchant ID) |
| 1102 | Payment request info length error (payment method) | 1103 | Payment request info length error (request date) |
| 1104 | Payment request info length error (request time) | 1105 | Payment request info length error (merchant order number) |
| 1106 | Payment request info length error (merchant Korean name) | 1107 | Payment request info length error (merchant English name) |
| 1108 | Payment request info length error (product name) | 1109 | Payment request info length error (transaction amount) |
| 1110 | Payment request info length error (customer name) | 1111 | Payment request info length error (result processing URL) |
| 1112 | Payment request info length error (result screen URL) | 1113 | Payment request info length error (payment cancellation URL) |
| 1114 | Payment request info length error (merchant reserved field) | 1115 | Payment request info length error (email) |
| 1116 | Payment request info length error (product provision period) | 1117 | Payment request info length error (merchant customer ID) |
| 1118 | Payment request info length error (tax-free status) | 1119 | Payment request info length error (tax amount) |
| 1120 | Payment request info length error (VAT amount) | 1121 | Payment request info length error (non-taxation amount) |
| 1122 | Payment request info length error (service charge) | 1123 | Payment request info length error (card payment type) |
| 1124 | Payment request info length error (specific card company code) | 1125 | Payment request info length error (app scheme) |
| 1126 | Payment request info length error (customer IP address) | 1127 | Payment request info length error (hash data) |
| 1901 | Hash value mismatch error | 1902 | Encryption entry unprocessed error |
| 2001 | Security code does not match | 2002 | Exceeded the security code authentication attempt limit |
| 2003 | Authentication time exceeded | 5001 | Accessed the wrong path (null error) |
| 5002 | Transaction time exceeded (expired error) | 5003 | Accessed the wrong path (encoding error) |
| 5004 | Accessed the wrong path (parse error) | 5005 | Accessed the wrong path (mapping error) |
| 5006 | Accessed the wrong path (io error) | 6001 | Invalid request parameter |
| 9001 | Legacy code inquiry error | 9002 | Payment window option inquiry error |
| 9003 | Payment window banner inquiry error | 9004 | Terms list inquiry error |
| 9005 | Notice inquiry error | 9006 | Affiliate discount inquiry error |
| 9007 | Payment info inquiry error | 9901 | Gateway request parameter error |
| 9902 | Gateway response parameter error | 9903 | Gateway request error |
| 9904 | Gateway response error | 9905 | Gateway system error |
| 9999 | Internal system error | 3007 | Cancellation limit exceeded |
| ST01 | No customer information | STR1~STR8 | Internal policy |
| ST06 | No transaction information | ST03 | Existing payment transaction |
| ST08 | Already registered bank account | ST07 | Invalid parameter |
| ST09 | Invalid request parameter | ST10 | Internal system error |
| ST11 | Provider maintenance time | ST13 | No authentication details |
| ST19 | Transaction not allowed for other reasons | ST24 | Account holder mismatch |
| ST25 | Duplicate cancellation request | ST26 | Cancellation information error |
| ST30 | Authentication time expiry | ST32 | Account holder name error |
| ST38 | Processing ongoing | ST39 | Refund duplicate request |
| ST41 | Traffic overload | ST44 | Provider information error |
| ST45 | Cancellation failure | ST46 | Cancellation period expired |
| ST47 | Unregistered merchant | ST48 | Unregistered merchant |
| ST50 | Duplicate request | ST54 | Partial cancellation not allowed |
| ST55 | Compound tax amount mismatch | ST56 | Cancellation round error |
| ST57 | Cancellation amount (refund amount) exceeds original transaction amount. | ST58 | Amount requested for cancellation and the original transaction amount do not match. |
| ST60 | Abnormal processing | ST68 | Service suspension |
| ST69 | Service not allowed | ST70 | Policy block |
| ST79 | System error | ST90~ST97 | Individual definition per payment method |
| ST99 | Other error | VTIM | Provider timeout |
| 0000 | Normal processing | 0009 | User cancellation |
| 1001 | Lacking payment request information (merchant ID) | 1002 | Lacking payment request information (payment method) |

* Credit Card Response Code

|  |  |  |  |
| --- | --- | --- | --- |
| Code | Description | Code | Description |
| CA01 | Provider maintenance | CA02 | Provider error |
| CA03 | Parameter validity check | CA04 | Payment relay agent error |
| CA10 | No transaction information | CA11 | Already acquired transaction |
| CA12 | Already canceled transaction | CA13~CA19 | Request information error |
| CA20 | Card validity is invalid. | CA21~CA23 | Installment-related error |
| CA26 | Exceeded number of use | CA27~CA29 | Password-related error |
| CA30 | Identification number error | CA31~CA37 | Limit-related error |
| CA38 | Transaction not allowed due to not meeting point limit | CA40~CA41 | Transaction amount error |
| CA42 | Transaction not allowed for amount below 1,000 won or over 99,999,999 won | CA50~CA57 | Card status error |
| CA58 | Unregistered card. Please contact the card company | CA60~CA64 | Merchant status error |
| CA59 | Transaction is not allowed for corporate cards. | J999 | Please call the card company |
| CA65 | Merchant not applied to authentication transactions | CA70 | Identification number (date and year of birth / business registration number) + invalid password |
| CA75 | Joint Certificate authentication information is not valid. | CA80 | Service not allowed for the transaction |
| CA81 | Error occurred while processing transaction. | 0905 | Please do self-verification |
| CA82 | Please call the card company. | CA83 | This transaction cannot be canceled. |
| CA84 | Error caused by other reasons has occurred. | CA85 | An error has occurred while processing cancellation transaction. |
| CA86 | It’s duplicate transaction. | CA87 | Merchant number is invalid. |
| CA88 | Partial cancellation is not allowed for prepaid card (gift card). | 8373 | Please call the card company |
| 8375 | Other errors in processing |  |  |

* Tmoney Response Code

|  |  |  |  |
| --- | --- | --- | --- |
| Code | Description | Code | Description |
| TM01 | Already canceled transaction | TM02 | No payment information |
| TM03 | Duplicate cancellation | TM04 | Cancellation amount exceeded |
| TM05 | Request material error | TM11 | Cancellation error |
| TM14 | Merchant / service not registered | TM22~TM23 | CASHBEE transaction |
| TM30 | Refund period has passed | TM40 | Cancellation failure |
| TM99 | Unknown error |  |  |

* Mobile Response Code

|  |  |  |  |
| --- | --- | --- | --- |
| Code | Description | Code | Description |
| MP01 | Request material error | MP02 | Request information mismatch |
| MP03 | No payment information | MP04 | Unregistered merchant / service |
| MP05~MP13 | Payment of the customer not allowed | MP14~MP17 | Mobile carrier small purchase not allowed |
| MP18~MP19 | Mobile carrier small purchase use consent | MP20~MP21 | Mobile carrier small purchase block request |
| MP22 | Mobile carrier recurring payment blocked | MP23~MP26 | Limit exceeded |
| MP27~MP33 | Provider RM(imPAY) | MP34~MP36 | Provider duplicate processing |
| MP37~MP40 | Provider value added service | MP41~MP44 | Small purchase password |
| MP45 | No information on the monthly recurring payment for the previous month |  |  |
| MP50~MP51 | Valid time expired | MP60~MP77 | Authentication related error |
| MP78 | Easy payment service | MP80 | Cancellation failure |
| MP81 | Cancellation period expired | MP82 | Already canceled transaction |
| MP94 | Service not allowed | MP95~MP96 | Provider traffic overload |
| MP97 | Internal error | MP98 | Other errors |
| MP99 | Payment Window Authentication Cancellation Processed |  |  |

* Wire Transfer Response Code

|  |  |  |  |
| --- | --- | --- | --- |
| Code | Description | Code | Description |
| RA01 | Exceeded the number of transfers | RA02~RA04 | Limit-related error |
| RA05 | Insufficient balance | RA10~RA13 | Customer information mismatch |
| RA14 | Exceeded amount | RA15 | Amount mismatch |
| RA16 | Duplicate payment | RA17 | No bank information |
| RA20 | No bank information | RA21 | Account number status error |
| RA30~RA31 | Working time over | RA32 | Service not allowed for this merchant |
| RA33 | Already canceled transaction | RA34 | Original transaction inquiry failure |
| RA35 | No transaction information | RA40 | Process check |
| RA41 | Proof processing | RA80~RA81 | Provider network error |
| RA82 | Hecto Financial’s error | RA83 | Provider network error |
| RA84 | Hecto Financial’s error | RA85 | Authentication processing |
| RA86~RA87 | Bank error | RA88 | Bank closed |

* POINT DAMOA Response Code

|  |  |  |  |
| --- | --- | --- | --- |
| Code | Description | Code | Description |
| CP01 | Limit exceeded | CP02 | Available amount exceeded |
| CP03 | Request amount exceeded | CP04 | Amount mismatch |
| CP10~CP11 | Customer information inquiry failure | CP12 | Authentication related |
| CP13 | Customer information does not exist | CP14 | Terms and conditions do not exist |
| CP15~CP16 | Related to account information | CP17 | Duplicate payment error |
| CP30 | Already canceled transaction | CP31 | Transaction time expired |
| CP32~CP33 | Original transaction inquiry failure | CP34 | Duplicate payment error |
| CP70 | Merchant status error | CP71 | Ad-related error |
| CP80~CP87 | Provider related error | CP88 | File-related error |
| CP89 | Point inquiry related error | CP90 | Input information error |

* Voucher Response Code

|  |  |  |  |
| --- | --- | --- | --- |
| Code | Description | Code | Description |
| GC01 | Request material error | GC02 | Request information mismatch |
| GC03 | No payment information | GC04 | Unregistered merchant / service |
| GC05 | No payment information | GC06 | Duplicate payment error |
| GC07 | Limit exceeded | GC08 | Processing complete |
| GC09 | Authentication information error | GC10 | Member information related |
| GC11 | Limit exceeded | GC12~GC13 | Merchant status error |
| GC20~GC24 | Provider-related error | GC40 | Cancellation error |
| GC41 | Cancellation already processed | GC42 | Cancellation not allowed |
| GC94 | Service not allowed | GC95~GC96 | Provider system error |
| GC97 | Internal error | GC98 | Other error |
| ST90 | Output separate Alert window for vouchers |  |  |

* Easy Payment Response Code

|  |  |  |  |
| --- | --- | --- | --- |
| Code | Description | Code | Description |
| PZ01, PZ05 | Provider maintenance | PZ02 | Provider error |
| PZ03 | Payment relay error | PZ04 | Access not allowed |
| PZ06 | Invalid account | PZ07 | Invalid card number |
| PZ08 | Invalid card expiry date | PZ09 | Request information error |
| PZ10 | Original transaction information does not exist | PZ14~PZ19 | Password related error |
| PZ26~PZ27 | Invalid amount | PZ31 | The transaction is not allowed for this merchant |
| PZ32 | End of Merchant business hour | PZ33~PZ35 | Transaction for this payment method not allowed |
| PZ40,PZ42 | Installment-related error | PZ45 | Number of allowed authentication errors exceeded |
| PZ50~PZ54 | Card status error | PZ60~PZ65 | Member information related error |
| PZ69 | Parameter format error | PZ70 | Service not allowed for this transaction |
| PZ71 | Error occurred while processing transaction | PZ72 | Coupon use not allowed. |
| PZ73 | Business/corporate registration number mismatch | PZ74 | Please call the card company. |
| PZ75 | Cancellation not allowed for the transaction | PZ76 | Other error |
| PZ77~PZ78 | Refund/cancellation processing error | PZ79 | Transaction limit time expired. |
| PZ80 | Inquiry not allowed during this period | PZ81 | Transaction in progress |
| PZ82 | Approval detail does not exist | PZ83 | Coupon application not allowed |
| PZ84 | Refund not allowed | PZ85 | Event participation not allowed |
| PZ86 | Already processed transaction | PZ87 | Already canceled transaction |
| PZ91 | Discount Not Applicable |  |  |

## Credit Card Identifiers

Unique identification codes of credit cards are as follows.

|  |  |  |  |
| --- | --- | --- | --- |
| Credit Card Company Code | Credit Card Company Name | Credit Card Company Code | Credit Card Company Name |
| BCC | BC | KBC | Kookmin |
| HNC | Hana | SSC | Samsung |
| SHN | Shinhan | WRI | Woori |
| HDC | Hyundai | LTC | Lotte |
| 007 | Suhyup | NHC | NH Nonghyup |
| 035 | Jeju | 034 | Kwangju |
| 037 | Jeonbuk | 027 | Citi |
| 218 | KB Securities | 050 | Savings Bank |
| 071 | Korea Post | 048 | NACUFOK |
| 002 | KDB | 090 | Kakao Bank |
| 089 | Kbank | KBP | KBPay |
| 247 | KFCC |  |  |

## Financial Institution Identifiers

The unique identification codes for financial institutions are as follows.

|  |  |  |  |
| --- | --- | --- | --- |
| Code | Name | Code | Name |
| 002 | Korea Development Bank | 088 | Shinhan Bank |
| 003 | Industrial Bank | 089 | Kbank |
| 092 | Toss Bank | 271 | Toss Securities |
| 004 | Kookmin Bank | 090 | Kakao Bank |
| 005 | Korea Exchange Bank | 209 | Yuanta Securities |
| 007 | NFFC | 218 | KB Securities |
| 011 | NH | 238 | Mirae Asset Securities |
| 012 | NACF | 240 | Samsung Securities |
| 020 | Woori Bank | 243 | Korea Investment & Securities |
| 023 | SC Bank | 247 | NH Investment & Securities |
| 027 | Korea Citi Bank | 261 | Kyobo Securities |
| 031 | Daegu Bank | 262 | HI Investment & Securities |
| 032 | Busan Bank | 263 | Hyundai Motors Securities |
| 034 | Kwangju Bank | 264 | Kiwoom Securities |
| 035 | Jeju Bank | 265 | eBest Securities |
| 037 | Jeonbuk Bank | 266 | SK Securities |
| 039 | Kyongnam Bank | 267 | Daishin Securities |
| 045 | KFCC | 269 | Hanwha Investment & Securities |
| 048 | Credit Union (NCUF) | 270 | Hana Financial Investment |
| 050 | Mutual Savings Bank | 278 | Shinhan Financial Investment |
| 054 | HSBC Bank | 279 | DB Securities |
| 055 | Deutsche Bank | 280 | Eugene Investment Securities |
| 057 | JP Morgan Chase Bank | 287 | Meritz Securities |
| 060 | Bank of America | 290 | BOOKOOK Securities |
| 062 | Industrial and Commercial Bank of China | 291 | Shinyoung Securities |
| 064 | National Forestry Cooperative Federation | 292 | CAPE Investment & Securities |
| 071 | Korea Post | 103 | SBI Savings Bank |