HANPASS
PG API Service Specification

2021. 05. 03.

V 1.12

Change history

No	Version	Date	Description	Respondent
1	V0.10	2020.07.15	First Version	
2	V0.20	2020.08.28	Added Customer API	
3	V0.30	2020.09.18	Added getting started and Modified Error/Data Codes	
4	V0.40	2020.09.21	Updated Customer API	
5	V0.50	2020.10.08	Added Collection API	
6	V0.60	2020.10.30	Update Code Reference Table	
7	V0.70	2020.11.23	Update Customer API	
8	V1.00	2021.01.08	Full Modification of API	
9	V1.10	2021.03.17	Update Notification Processes, API Statuses, API Request Parameters	
10	V1.11	2021.04.20	Update API URLs and Correct Typos	
10	V1.12	2021.05.03	Update API Result Code and API Parameter Mandatory and Correct typos	

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Table of contents

1. Overview

1.1 HANPASS Integration Procedure

A. Network infrastructure preparation and readiness

Partners must prepare for a VPN connection to HANPASS system.

B. API development and test

Upon a completion of API integration, a 'dummy' test containing sender detail, beneficiary detail and verification process will be performed; API uses secure HTTPS REST method.

C. Evaluation of API and application testing

Both parties shall discuss and evaluate a result of application test on a live environment. In case of any error has been found, partner shall proceed to fix and debug the error.

D. Digital signature in production system

Both parties shall exchange a public/private key pairs to be used in respective production systems. The key is important to prove the identity of mutual system. It shall follow SHA-256 hashing method. Please refer to [Section 6] for more detail.

E. API connection URL: {host}

Develop and Test: stg-pg-settlement-api.hanpass.com

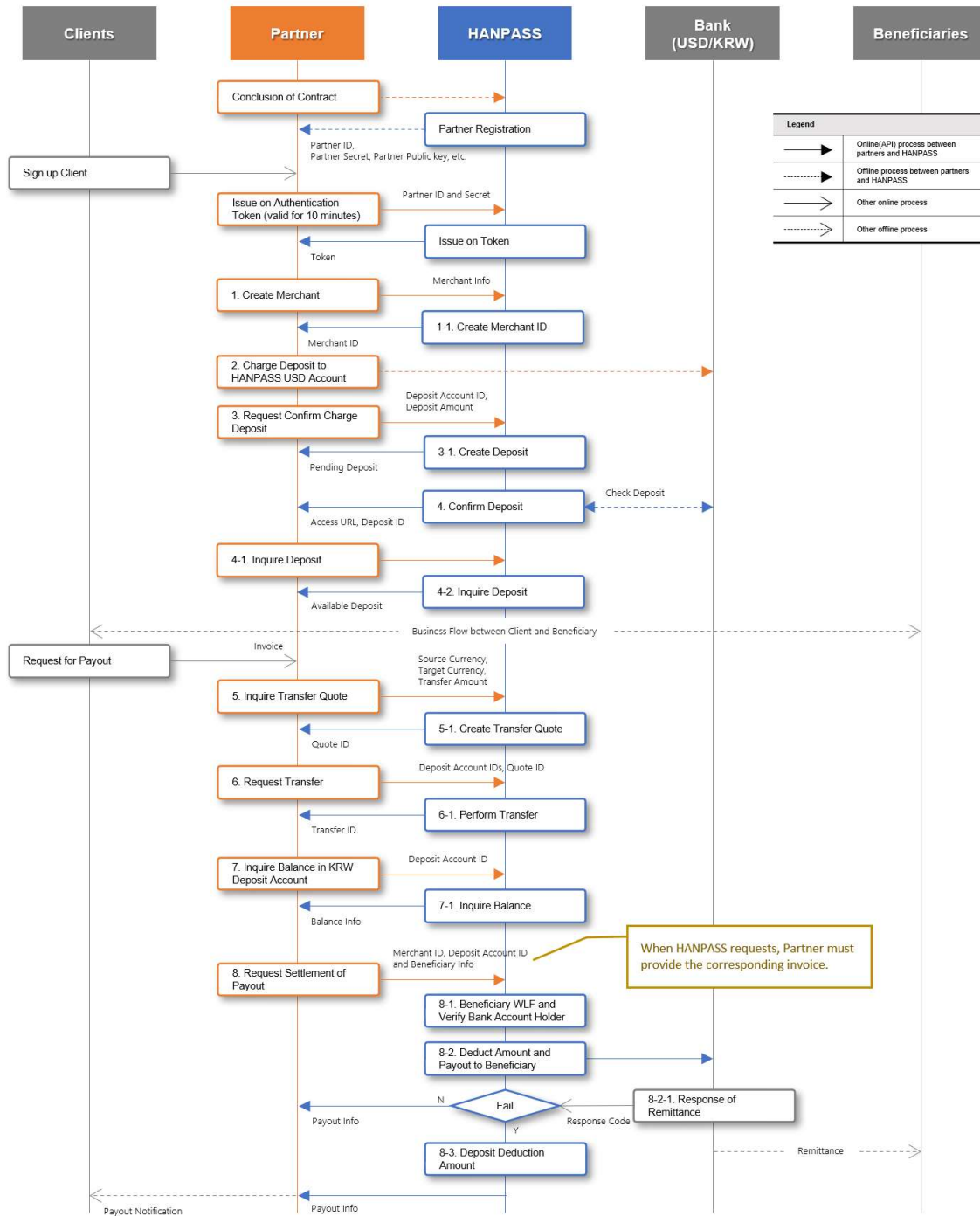Production: pg-settlement-api.hanpass.com

**Note: API will not be available from 23:30 to next day 00:30 (GMT +9) due to Korea Financial and Bank daily scheduled maintenance.

2. Getting Started

2.1 Payout Settlement

2.1.1 Payout Flow

2.1.2 Partner Contract

To use the API service of HANPASS, first sign a contract with HANPASS. When a contract is concluded with a partner, HANPASS provides the following information, and the partner uses HANPASS' API service.

A. Client ID

B. Client Secret

C. Public Key to be used for API Service

D. Deposit Accounts (USD/KRW Deposit Account ID to be used for Transactions)

2.1.3 Issue on Authentication Token

To use the PG API of HANPASS, token is issued.

Example

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/oauth/token")
    .header("Content-Type","application/x-www-form-urlencoded")
    .header("h-client-id","4e6741e8-72fa-456b-ad5f-7b232444ed3c")
    .header("h-client-
secret","AtbmyXkNH0cwEk1CgYG0YGDPvKq4h/4Eb1iz94uByPd6Z/uEAyclYwdrYP+AmNPvWN00lLBvNboAPTT
lAfbbO0xibfRFXUVFFNnd5oE+6/4i1cS+qksqRFERSJDIt/oKMN/YY85CWgnXxdzA67so6oE3ETBmYwTUQL4Golv
JxAButX5nU7rUDzyGyEsRgUNCXrbhjdq0M/FXP65y27VPbULpt4t7HAnBGLXGT1lw9OoxZ6NHtEXkPCpE1NcbEYZ
3fi7xPkR9MVh3k2aezFlwZ2E90WS0IERSulSJQAuewmt4r9KxG4Y1swGwxdHHL18opzgedO3QXQ/9D2nwK8LePQ=
=")
    .body("grant_type=client_credentials&scope=read").asString();
```

```
{
    "access_token":"eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJ
leHAiOiIxNDg1MjcwMDAwMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ
1ZSwidXNlcklkIjoiMTEwMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0",
    "token_type":"bearer",
    "expires_in":1799,
    "scope":"read"
}
```

2.1.4 Get Code List

To use the PG API of HANPASS, the list of codes defined by HANPASS is inquired.

Example

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/codelists")
    .header("Content-Type","application/json;charset=UTF-8")
```

```
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcMDIiLCJ1c2VybmFtZSI6InZlbG9wZXQ0In0")
    .body("{}").asString();
```

```json
{
    "code_categories":[{
        "code_category_name":"custmor_type_code",
        "code_list":[{
            "code_value":"PERSON",
            "code_name":"person",
            "code_korean":"개인"
        },{
            "code_value":"COMPANY",
            "code_name":"Company",
            "code_korean":"회사/법인/업체"
        }]
    },{
                                                ...
    }],
    "result_code":"20000",
    "result_message":"Success
}
```

2.1.5   Create Merchant

Create your merchant to refer to the beneficiary.

Example

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/v1/merchant")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcMDIiLCJ1c2VybmFtZSI6InZlbG9wZXQ0In0")
    .body("{
        \"birthday\":\"2010-01-01\",
        \"nationality_code\":\"KR\",
        \"merchant_name\":\"COMPANY NAME\",
        \"phone_number_nation_code\":\"+82\",
        \"phone_number\":\"01012341234\"
        \"partner_merchant_ref\":\"partner_merchant_id\"
}").asString();
```

```json
{
    "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
    "birthday":"2010-01-01",
    "nationality_code":"KR",
    "merchant_name":"COMPANY NAME",
    "phone_number_nation_code":"+82",
    "phone_number":"01012341234",
    "partner_merchant_ref":"partner_merchant_id"
    "result_code":"20000",
    "result_message":"SUCCESS"
```

```
        }
```

2.1.6   Charge Deposit

Deposit to your HANPASS account to pay your customers.

Example

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/v1/deposit")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{
        \"deposit_account_id\":\"75d35edc-f32d-11ea-9499-a8a1591fb0a9\",
        \"deposit_account_currency_code\":\"USD\",
        \"deposit_amount\":\"1000.00\",
        \"partner_deposit_ref\":\"partner_id_ref\"
    }").asString();
```

```
{
    "deposit_id":"ddb07821-f32d-11ea-9499-a8a1591fb0a9",
    "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
    "deposit_account_currency_code":"USD",
    "deposit_amount":"1000.00",
    "deposit_status":"Pending",
    "create_at":"2020-08-01T08:00:00+0900",
    "partner_deposit_ref":"partner_deposit_id"
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

2.1.7   Accept Deposit

If a partner's callback URL exists, it will be notified upon deposit acceptation.

Example Notification

```
{
    "notification_type":"DEPOSIT_ACCEPTED",
    "url":"https://{host}/api/v1/deposit/ddb07821-f32d-11ea-9499-a8a1591fb0a9",
    "id":"ddb07821-f32d-11ea-9499-a8a1591fb0a9"
}
```

Example

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/v1/deposit/ddb07821-f32d-11ea-9499-a8a1591fb0a9")
```

```
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

```
{
    "deposit_id":"ddb07821-f32d-11ea-9499-a8a1591fb0a9",
    "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
    "deposit_account_currency_code":"USD",
    "deposit_amount":"1000.00",
    "deposit_status":"DEPOSITED",
    "create_at":"2020-08-01T08:00:00+0900",
    "settlement_at":"2020-08-01T10:00:00+0900",
    "partner_deposit_ref":"partner_deposit_id",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

2.1.8 Transfer Quote Lookup

Example

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/transfer/quote
        ?source_currency_code=USD
        &target_currency_code=KRW
        &exchange_amount=1000.00")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

```
{
    "transfer_quote_id":"9ceda6f4-f32d-11ea-9499-a8a1591fb0a9",
    "source_currency_code":"USD",
    "target_currency_code":"KRW",
    "exchange_amount":"1000.00",
    "exchange_rate":"1186.00",
    "fee_amount":"1.00",
    "source_amount":"1001.00",
    "target_amount":"1186000.00",
    "exchange_rate_timestamp":"2020-08-01T08:00:00+0900",
    "expired_timestamp":"2020-08-01T08:05:00+0900",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

2.1.9 Transfer

Example

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/v1/deposit")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{
        \"source_deposit_account_id\":\"75d35edc-f32d-11ea-9499-a8a1591fb0a9\",
        \"target_deposit_account_id\":\"741329f2-50b1-11eb-b9c8-005056bb71d2\",
        \"transfer_quote_id\":\"9ceda6f4-f32d-11ea-9499-a8a1591fb0a9\",
        \"partner_transfer_ref\":\"partner_id_ref\"
    }").asString();
```

```
{
    "transfer_id":"c3b3195c-50ce-11eb-8334-000c29f86a2d",
    "source_deposit_account": {
        "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
        "currency_code":"USD",
        "alias":"Nickname of Partner USD Deposit"
    },
    "target_deposit_account": {
        "deposit_account_id":"741329f2-50b1-11eb-b9c8-005056bb71d2",
        "currency_code":"KRW",
        "alias":"Nickname of Partner KRW Deposit"
    },
    "transfer_quote_id": {
        "transfer_quote_id":"9ceda6f4-f32d-11ea-9499-a8a1591fb0a9",
        "source_currency_code":"USD",
        "target_currency_code":"KRW",
        "exchange_amount":"1000.00",
        "exchange_rate":"1186.00",
        "fee_amount":"1.00",
        "source_amount":"1001.00",
        "target_amount":"1186000.00",
        "exchange_rate_timestamp":"2020-08-01T08:00:00+0900",
        "expired_timestamp":"2020-08-01T08:05:00+0900"
    },
    "partner_transfer_ref":"partner_transfer_id",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

2.1.10 Balance Check

Example

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/balance
        ?deposit_account_id=75d35edc-f32d-11ea-9499-a8a1591fb0a9")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

```
{
    "balances":[{
```

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```
            "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
            "currency_code":"KRW",
            "available_amount":"10000000.00",
            "pending_amount":"0.00",
            "total_amount":"10000000.00"
    }],
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

2.1.11 Payout

You can complete the transaction by paying the customer. After completing the transaction, HANPASS responds with the settlement ID. You can check the status of the transaction by settlement id.

Example

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/v1/settlement/payout")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{
        \"merchant_id\":\"e4a4a216-2ada-11eb-9143-000c29f86a2d\",
        \"deposit_account_id\":\"741329f2-50b1-11eb-b9c8-005056bb71d2\",
        \"target_currency_code\":\"KRW\",
        \"target_amount\":\"1186000.00\",
        \"beneficiary\": {
            \"partner_beneficiary_ref\":\"partner_beneficiary_id\",
            \"type_code\":\"COMPANY\",
            \"birthday\":\"2010-10-01\",
            \"gender_type_code\":\"COMPANY\",
            \"nationality_code\":\"KR\",
            \"real_name_number\":\"1234567890\",
            \"real_name_number_division_code\":\"BUSINESS_REGISTRATION_NUMBER\",
            \"name\":\"Hanpass Corp.\",
            \"phone_number_nation_code\":\"+82\",
            \"phone_number\":\"0212345678\",
            \"bank_account\": {
                \"account_holder_name\":\"(주)한패스\",
                \"nationality_code\":\"KR\",
                \"bank_code\":\"004\",
                \"bank_account_number\":\"12345678\"
            }
        }
        \"reason\":\"GOODS_PURCHASED\",
        \"display_in_account\":\"핑퐁페이먼트\",
        \"partner_dealing_number\":\"partner_dealing_number\"
    }").asString();
```

```
{
    "settlement_id":"29b82cce-f426-11ea-9221-a8a1591fb0a9",
    "merchant"{
        "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
        "birthday":"2010-01-01",
```

```
            "nationality_code":"KR",
            "merchant_name":"COMPANY NAME",
            "phone_number_nation_code":"+82",
            "phone_number":"01012341234",
            "partner_merchant_ref":"partner_merchant_id"
        },
    "deposit_account": {
            "deposit_account_id":"741329f2-50b1-11eb-b9c8-005056bb71d2",
            "currency_code":"KRW",
            "alias":"Nickname of Partner KRW Deposit"
        },
    "target_currency_code":"KRW",
    "target_amount":"1186000.00",
    "fee_amount":"0.00",
    "beneficiary": {
            "partner_beneficiary_ref":"partner_beneficiary_id",
            "type_code":"COMPANY",
            "birthday":"2010-10-01",
            "gender_type_code":"COMPANY",
            "nationality_code":"KR",
            "real_name_number":"1234567890",
            "real_name_number_division_code":"BUSINESS_REGISTRATION_NUMBER",
            "name":"Hanpass Corp.",
            "phone_number_nation_code":"+82",
            "phone_number":"0212345678",
            "bank_account": {
                "account_holder_name":"(주)한패스",
                "nationality_code":"KR",
                "bank_code":"004",
                "bank_account_number":"12345678"
            },
        },
    "reason":"GOODS_PURCHASED",
    "display_in_account":"핑퐁페이먼트",
    "partner_dealing_number":"partner_dealing_number",
    "create_at":"2020-08-01T08:00:00+0900",
    "settlement_at":"2020-08-01T08:01:00+0900",
    "settlement_status_code":"DONE",
    "settlement_status_message":"Settlement Process Done",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```
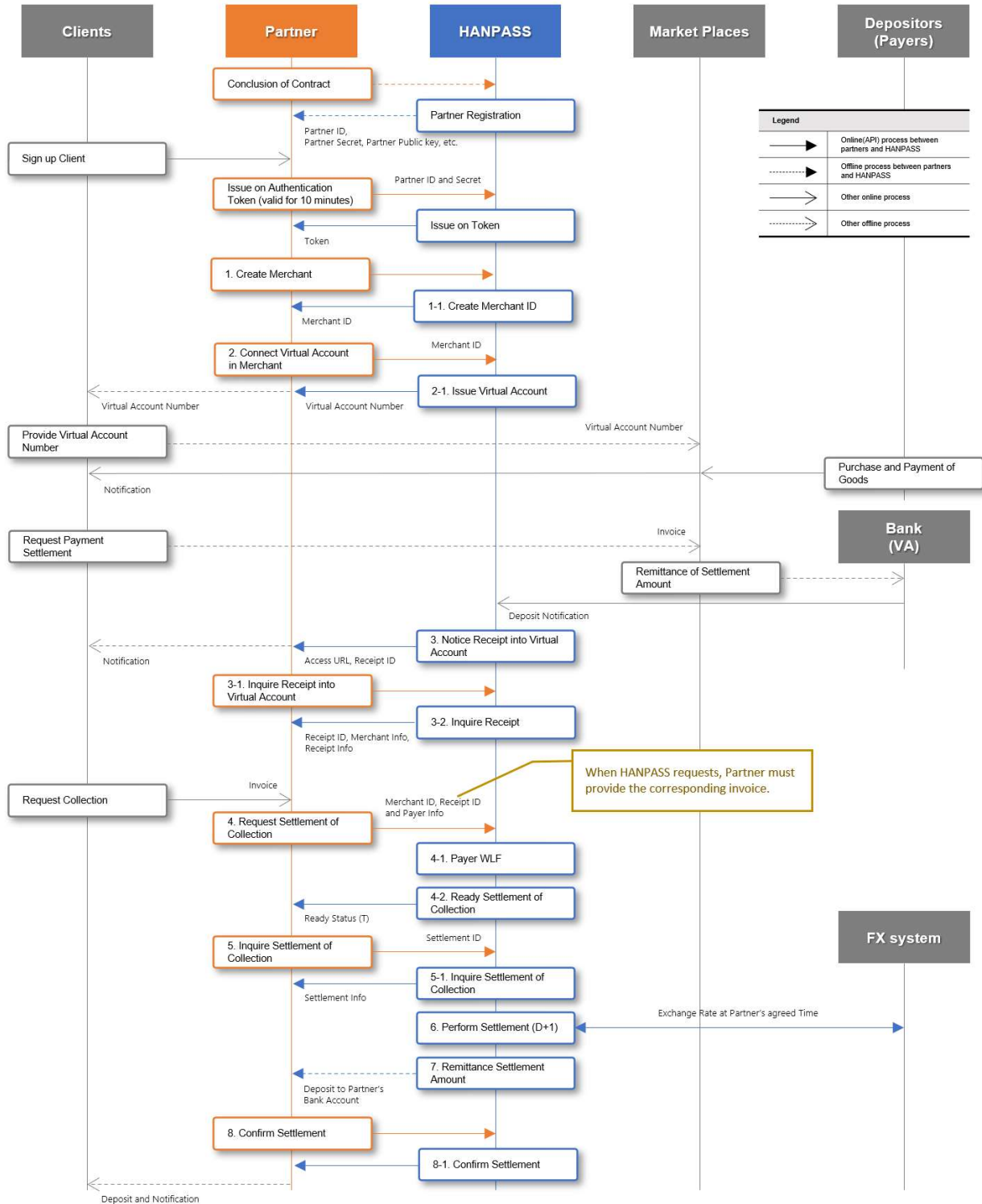
2.2 Collection Settlement

2.2.1 Collection Flow

2.2.2 Partner Contract

To use the API service of HANPASS, first sign a contract with HANPASS. When a contract is concluded with a partner, HANPASS provides the following information, and the partner uses HANPASS' API service.

- A. Client ID
- B. Client Secret
- C. Public Key to be used for API Service

2.2.3 Issue on Authentication Token

To use the PG API of HANPASS, you must issue token.

Example

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/oauth/token")
    .header("Content-Type","application/x-www-form-urlencoded")
    .header("h-client-id","4e6741e8-72fa-456b-ad5f-7b232444ed3c")
    .header("h-client-
secret","AtbmyXkNH0cwEk1CgYG0YGDPvKq4h/4Eb1iz94uByPd6Z/uEAyclYwdrYP+AmNPvWN00lLBvNboAPTT
lAfbbO0xibfRFXUVFFNnd5oE+6/4i1cS+qksqRFERSJDIt/oKMN/YY85CWgnXxdzA67so6oE3ETBmYwTUQL4Golv
JxAButX5nU7rUDzyGyEsRgUNCXrbhjdq0M/FXP65y27VPbULpt4t7HAnBGLXGT1lw9OoxZ6NHtEXkPCpE1NcbEYZ
3fi7xPkR9MVh3k2aezFlwZ2E90WS0IERSulSJQAuewmt4r9KxG4Y1swGwxdHHL18opzgedO3QXQ/9D2nwK8LePQ=
=")
    .body("grant_type=client_credentials&scope=read").asString();
```

```
{
    "access_token":"eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJ
leHAiOiIxNDg1MjcwMDAwMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ
1ZSwidXNlcklkIjoiMTEwMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0",
    "token_type":"bearer",
    "expires_in":1799,
    "scope":"read"
}
```

2.2.4 Get Code List

To use the PG API of HANPASS, the list of codes defined by HANPASS is inquired.

Example

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/codelists")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
```

```
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
```

```
    .body("{}").asString();
```

```
{
    "code_categories":[{
        "code_category_name":"custmor_type_code",
        "code_list":[{
            "code_value":"PERSON",
            "code_name":"person",
            "code_korean":"개인"
        },{
            "code_value":"COMPANY",
            "code_name":"Company",
            "code_korean":"회사/법인/업체"
        }]
    },{
                                                ...
    }],
    "result_code":"20000",
    "result_message":"Success
}
```

2.2.5   Create Merchant

Create your merchant (partner's client) to connect the virtual account.

Example

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/v1/merchant")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{
        \"birthday\":\"2010-01-01\",
        \"nationality_code\":\"KR\",
        \"merchant_name\":\"COMPANY NAME\",
        \"phone_number_nation_code\":\"+82\",
        \"phone_number\":\"01012341234\"
        \"partner_merchant_ref\":\"partner_merchant_id\"
    }").asString();
```

```
{
    "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
    "birthday":"2010-01-01",
    "nationality_code":"KR",
    "merchant_name":"COMPANY NAME",
    "phone_number_nation_code":"+82",
    "phone_number":"01012341234",
    "partner_merchant_ref":"partner_merchant_id"
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

2.2.6 Connect Virtual Account in Merchant

Issues a virtual account to Merchant requested by a partner and connects it.

Example Request

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/v1/merchant/virtualaccount")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{
        \"merchant_id\":\"e4a4a216-2ada-11eb-9143-000c29f86a2d\"
    }").asString();
```

Example Response

```
{
    "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
    "birthday":"2010-01-01",
    "nationality_code":"KR",
    "merchant_name":"COMPANY NAME",
    "phone_number_nation_code":"+82",
    "phone_number":"01012341234",
    "partner_merchant_ref":"partner_merchant_id"
    "virtual_account": {
        "bank_code":"007",
        "bank_name":"SUHYUP BANK",
        "account_number":"90012345679100",
    },
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

2.2.7 Receive Deposit Notification

When the bank sends a deposit notification, it sends the deposit information to the partner at the callback address.

Example Notification

```
{
    "notification_type":"VIRTUAL_ACCOUNT_RECEIPTED",
    "url":"https://{host}/api/v1/settlement/receipt/c1f4db6a-517f-11eb-8334-
000c29f86a2d",
    "id":"c1f4db6a-517f-11eb-8334-000c29f86a2d"
}
```

Example

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/settlement/receipt/c1f4db6a-517f-11eb-8334-
000c29f86a2d")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("").asString();
```

```
{
    "receipt_id":"c1f4db6a-517f-11eb-8334-000c29f86a2d",
    "merchant"{
        "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
        "birthday":"2010-01-01",
        "nationality_code":"KR",
        "merchant_name":"COMPANY NAME",
        "phone_number_nation_code":"+82",
        "phone_number":"01012341234",
        "partner_merchant_ref":"partner_merchant_id",
        "virtual_account": {
            "bank_code":"007",
            "bank_name":"SUHYUP BANK",
            "account_number":"90012345679100",
        },
    },
    "sender": {
        "name":"(주)한패스",
        "bank_account": {
            "account_holder_name":"(주)한패스",
        },
    },
    "receipt_at":"2020-08-01T08:00:00+0900",
    "receipt_amount":"1000000.00",
    "receipt_currency_code":"KRW",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

2.2.8 Collection Request

The partner requests settlement of the amount collected(deposited) into the virtual account.

<table>
<tr><td>Example Request</td></tr>
</table>

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/v1/settlement/collection")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{
        \"merchant_id\":\"e4a4a216-2ada-11eb-9143-000c29f86a2d\",
        \"sender\": {
            \"partner_sender_ref\":\"partner_beneficiary_id\",
            \"type_code\":\"COMPANY\",
```

```
            \"birthday\":\"2010-10-01\",
            \"gender_type_code\":\"COMPANY\",
            \"nationality_code\":\"KR\",
            \"real_name_number\":\"1234567890\",
            \"real_name_number_division_code\":\"BUSINESS_REGISTRATION_NUMBER\",
            \"name\":\"Hanpass Corp.\",
            \"phone_number_nation_code\":\"+82\",
            \"phone_number\":\"0212345678\",
            \"bank_account\": {
                \"account_holder_name\":\"(주)한패스\",
                \"nationality_code\":\"KR\",
                \"bank_code\":\"004\",
                \"bank_account_number\":\"12345678\"
            }
        },
        \"source_currency_code\":\"KRW\",
        \"source_amount\":\"10000000.00\",
        \"target_currency_code\":\"USD\",
        \"receipts\": [{
            \"receipt_id_in_virtual_account\":\"c1f4db6a-517f-11eb-8334-000c29f86a2d\"
        }],
        \"reason\":\"GOODS_PURCHASED\",
        \"partner_dealing_number\":\"partner_dealing_number\"
    }").asString();
```

Example Response

```
{
    "settlement_id":"29b82cce-f426-11ea-9221-a8a1591fb0a9",
    "merchant": {
        "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
        "birthday":"2010-01-01",
        "nationality_code":"KR",
        "merchant_name":"COMPANY NAME",
        "phone_number_nation_code":"+82",
        "phone_number":"01012341234",
        "partner_merchant_ref":"partner_merchant_id",
        "virtual_account": {
            "bank_code":"007",
            "bank_name":"SUHYUP BANK",
            "account_number":"90012345679100",
        },
    },
    "source_currency_code":"KRW",
    "source_amount":"10000000.00",
    "target_currency_code":"USD",
    "receipts": [{
        "receipt_id_in_virtual_account":"c1f4db6a-517f-11eb-8334-000c29f86a2d"
    }],
    "sender": {
        "partner_sender_ref":"partner_sender_id",
        "type_code":"COMPANY",
        "birthday":"2010-10-01",
        "gender_type_code":"COMPANY",
        "nationality_code":"KR",
        "real_name_number":"1234567890",
        "real_name_number_division_code":"BUSINESS_REGISTRATION_NUMBER",
        "name":"Hanpass Corp.",
        "phone_number_nation_code":"+82",
        "phone_number":"0212345678",
        "bank_account": {
            "account_holder_name":"(주)한패스",
            "nationality_code":"KR",
```

hanpass
Global Digital Banking

```
            "bank_code":"004",
            "bank_account_number":"12345678"
        },
    },
    "reason":"GOODS_PURCHASED",
    "partner_dealing_number":"partner_dealing_number",
    "create_at":"2020-08-01T08:00:00+0900",
    "settlement_status_code":"SETTLEMENT_READY",
    "settlement_status_message":"Prepare Settlement for Collection Request",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

2.2.9 Settlement for the requested Collection

HANPASS transfers the settlement amount for the settlement request to the partner after one working day.

At settlement of accounts, the exchange rate is applied at the time the partner agrees.

2.2.10 Collection Confirm

After you receive the collected amount from HANPASS,   can complete the collection settlement by using the confirm API.

Example Request

```
HttpResponse<String> response = Unirest
    .put("https://{host}/api/v1/settlement/collection/29b82cce-f426-11ea-9221-
a8a1591fb0a9")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("").asString();
```

Example Response

```
{
    "settlement_id":"29b82cce-f426-11ea-9221-a8a1591fb0a9",
    "merchant"{
        "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
        "birthday":"2010-01-01",
        "nationality_code":"KR",
        "merchant_name":"COMPANY NAME",
        "phone_number_nation_code":"+82",
        "phone_number":"01012341234",
        "partner_merchant_ref":"partner_merchant_id",
        "virtual_account": {
            "bank_code":"007",
            "bank_name":"SUHYUP BANK",
            "account_number":"90012345679100",
```

```
            },
        },
        "source_currency_code":"KRW",
        "source_amount":"10000000.00",
        "target_currency_code":"USD",
        "quote"{
            "quote_id":"9ceda6f4-f32d-11ea-9499-a8a1591fb0a9",
            "source_currency_code":"KRW",
            "target_currency_code":"USD",
            "colletion_quote":{
                "source_amount":"1190000.00",
                "target_amount":"1000.00",
                "exchange_rate":"1190.00",
                "fee_amount":"1.00",
                "partner_amount":"999.00",
                "payer_amount":"1190000.00",
            },
            "exchange_rate_timestamp":"2020-08-01T08:00:00+0900",
            "expired_timestamp":"2020-08-01T08:05:00+0900"
        },
        "receipts": [{
            "receipt_id_in_virtual_account":"c1f4db6a-517f-11eb-8334-000c29f86a2d"
        }],
        "sender": {
            "partner_sender_ref":"partner_sender_id",
            "type_code":"COMPANY",
            "birthday":"2010-10-01",
            "gender_type_code":"COMPANY",
            "nationality_code":"KR",
            "real_name_number":"1234567890",
            "real_name_number_division_code":"BUSINESS_REGISTRATION_NUMBER",
            "name":"Hanpass Corp.",
            "phone_number_nation_code":"+82",
            "phone_number":"0212345678",
            "bank_account": {
                "account_holder_name":"(주)한패스",
                "nationality_code":"KR",
                "bank_code":"004",
                "bank_account_number":"12345678"
            },
        },
        "receipts": [{
            "receipt_id_in_virtual_account":"c1f4db6a-517f-11eb-8334-000c29f86a2d"
        }],
        "reason":"GOODS_PURCHASED",
        "partner_dealing_number":"partner_dealing_number",
        "create_at":"2020-08-01T08:00:00+0900",
        "settlement_at":"2020-08-02T11:00:00+0900",
        "settlement_status_code":"DONE",
        "settlement_status_message":"Settlement Process Done",
        "result_code":"20000",
        "result_message":"SUCCESS"
}
```

3. Data Type & API Status

3.1 Data Type

Data ID	Data Type	Description
GUID	String	07c9db48-f32d-11ea-9499-a8a1591fb0a9' (GUID) format
NUMBER	String	Number in '###' format (ex: '100000','1234000')
AMOUNT	String	Number in '###.##' format (ex: USD can be in '1.99' format, KRW only in '10000.00' format)
RATE	String	Number in '###.##' format (ex: '1000.00')
CODE	String	Max 64 characters Alphanumeric
COUNTRY	String	Two-letter ISO 3166-2 country code (Alpha-2)
CURRENCY	String	Three-letter ISO 4217 currency code (Code 3 Byte Character)
DATE	String	Date in 'YYYY-MM-DD' format
DTZ	String	Date and time with time-zone information in 'YYYY-MM-DDTHH:mm:ss+0900' format (KST, ISO 8601 UTC(+9))
TEXT	String	String of up to 200 characters
REFTEXT	String	String of up to 100 characters excluding blank and special characters
TOKEN	String	BASE64 encoded JWT (if you are using JWT, put the 'bearer' + blank + JWT at your HTTP header authorization
RSA	String	BASE64 encoded string of RSA public key
LIST	Array	List of Item
OBJECT	Object(Map)	Object

3.2 API Status

3.2.1 HTTP Status Code

Code	Description
200	OK
400	Bad request

401	Unauthorized
403	Forbidden
404	Not found
405	Method Not Allowed
406	Not Acceptable
415	Unsupported Media Type
500	Internal Server Error
503	Service Unavailable

3.2.2 API Result Code

HTTP Status	Code	Description
200	20000	[SUCCESS] Request is succeed.
400	40000	[Bad Request] Request parameter is not valid. (required field is null, invalid data type or data exists.)
400	41001	Partner ID is not valid.
400	41002	Merchant ID is not valid.
400	41003	Deposit account ID is not valid.
400	41004	Deposit ID is not valid.
400	41005	Transfer ID is not valid.
400	41006	Transfer quote ID is not valid.
400	41007	Payout settlement ID is not valid.
400	41008	Collection settlement ID is not valid.
400	41009	Receipt ID is not valid.
400	41010	Virtual account is not valid.
400	41101	Virtual account is already registered in Merchant.
400	41102	There are no virtual accounts that can be allocated. (please let us know if you are receiving this error.)
400	41201	It is not deposit account of partner or it is different from the currency code you entered.

400	41301	Exchange currency must be one of source or target.
400	41302	Not provide FX services for the entered currency pair.
400	41401	Beneficiary bank account number is being used by someone else.
400	41402	Quote is expired.
400	41403	Partner dealing number is duplicated.
400	41404	Beneficiary bank account holder name you entered is different from validation value.
400	41405	Partner deposit account balance is insufficient.
400	41501	Source amount you entered and sum of deposit amount into virtual account are different.
400	41502	Sender bank account holder name you entered must be equal to receipt notification.
400	41503	Receipt ID you entered was already collected.
400	41504	Collection process is not finished yet.
400	41505	All Receipts sender name must be same.
400	49999	API signature is not valid.
401	40001	[Unauthorized] Partner is no authentication because partner credential is invalid or expired.
401	40011	Partner agreement of payout settlement is expired.
401	40021	Partner agreement of collection settlement is expired.
403	40003	[Forbidden] Partner is no authorization.
404	40004	[Not Found] Request endpoint is not valid.
405	40005	[Method Not Allowed] Request method is not valid.
406	40006	[Not Acceptable] Accept of request header is not valid.
415	40015	[Unsupported Media Type] Media type of request header is not valid.
500	50000	[Internal Server Error] Internal server error is occurred because something went wrong on our end. (Please let us know if you are receiving this error.)
500	59000	[External Server Error] External server error is occurred because something went wrong on our 3rd party. (please let us know if you are receiving this error.)
503	50003	[Service Unavailable] Unavailable for service. (API will not be available from 23:30 to next day 00:30 (GMT +9). If it happens in any other time, please let us know.)

4. API Specification

4.1 Authentication

Before using the API, the partner must first obtain the authentication token with the client ID and client secret value provided by the HANPASS. This token must be in the authorization HTTP header when making other API calls.

4.1.1 Issue on Authentication Token

Using this method, you are issued an authentication token to use the API. The issued authentication token is available for 30 minutes. If the authentication token expires, a new authentication token is issued.

Endpoint	/api/oauth/token	
Method	POST	
Headers	Content-Type: application/x-www-form-urlencoded	
Header +		
h-client-id	RSA required	Credentials(ID) for issuing Authentication Token
h-client-secret	RSA required	Credentials(API Key) for issuing Authentication Token
Request Body		
grant_type	REFTEXT required	Settings for issuing Authentication Token ('client_credentials' only)
scope	REFTEXT required	Settings for issuing Authentication Token ('read' only)
Response Body		
access_token	TOKEN	Authentication Token
token_type	TEXT	Type of Authentication Token ('bearer' only)
expires_in	TEXT	Time(Seconds) Remaining before Authentication Token Expiration
scope	TEXT	API Scope
Example Request		
HttpResponse<String> response = Unirest		

```
    .post("https://{host}/api/oauth/token")
    .header("Content-Type","application/x-www-form-urlencoded")
    .header("h-client-id","4e6741e8-72fa-456b-ad5f-7b232444ed3c")
    .header("h-client-
secret","AtbmyXkNH0cwEk1CgYG0YGDPvKq4h/4Eb1iz94uByPd6Z/uEAyclYwdrYP+AmNPvWN00lLBvNboAPTT
lAfbbO0xibfRFXUVFFNnd5oE+6/4i1cS+qksqRFERSJDIt/oKMN/YY85CWgnXxdzA67so6oE3ETBmYwTUQL4Golv
JxAButX5nU7rUDzyGyEsRgUNCXrbhjdq0M/FXP65y27VPbULpt4t7HAnBGLXGT1lw9OoxZ6NHtEXkPCpE1NcbEYZ
3fi7xPkR9MVh3k2aezFlwZ2E90WS0IERSulSJQAuewmt4r9KxG4Y1swGwxdHHL18opzgedO3QXQ/9D2nwK8LePQ=
=")
    .body("grant_type=client_credentials&scope=read").asString();
```

Example Response

```
{
    "access_token":"eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJ
leHAiOiIxNDg1MjcwMDAwMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ
1ZSwidXNlcklkIjoiMTEwMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0",
    "token_type":"bearer",
    "expires_in":1799,
    "scope":"read"
}
```

4.2 Merchant

The merchant API is used to register and query the merchant, partner's client.

4.2.1 Create Merchant

Use this method to create merchant. The created merchant can only use a payout request. The merchant to use for collection request connects the virtual account separately.

Endpoint	/api/v1/merchant	
Method	POST	
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8	
Header +		
Authorization	TOKEN required	Authentication Token
Request Body		
birthday	DATE optional	Merchant Establishment Date
nationality_code	COUNTRY optional	Merchant Nationality Code
merchant_name	TEXT required	Merchant Name in English

phone_number_nation_code	CODE optional	Nation Code Number of Merchant Phone Number (example: '+82')
phone_number	NUMBER optional	Merchant Phone Number except '-' (example: 01012345678)
partner_merchant_ref	REFTEXT optional	Partner managed Merchant ID

Response Body

merchant_id	GUID	Merchant ID for Request
birthday	DATE	Merchant Establishment Date
nationality_code	COUNTRY	Merchant Nationality Code
merchant_name	TEXT	Merchant Name in English
phone_number_nation_code	CODE	Nation Code Number of Merchant Phone Number
phone_number	NUMBER	Merchant Phone Number
partner_merchant_ref	REFTEXT	Partner managed Merchant ID
result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/v1/merchant")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{
        \"birthday\":\"2010-01-01\",
        \"nationality_code\":\"KR\",
        \"merchant_name\":\"COMPANY NAME\",
        \"phone_number_nation_code\":\"+82\",
        \"phone_number\":\"01012341234\"
        \"partner_merchant_ref\":\"partner_merchant_id\"
    }").asString();
```

Example Response

```
{
    "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
    "birthday":"2010-01-01",
    "nationality_code":"KR",
    "merchant_name":"COMPANY NAME",
    "phone_number_nation_code":"+82",
    "phone_number":"01012341234",
    "partner_merchant_ref":"partner_merchant_id"
    "result_code":"20000",
    "result_message":"SUCCESS"
```

```
}
```

4.2.2   Connect Virtual Account in Merchant

Use this method to connect the virtual account in merchant.

Endpoint	/api/v1/merchant/virtualaccount	
Method	POST	
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8	
Header +		
Authorization	TOKEN required	Authentication Token
Request Body		
merchant_id	GUID required	Merchant ID to connect Virtual Account
Response Body		
merchant_id	GUID	Merchant ID
birthday	DATE	Merchant Establishment Date
nationality_code	COUNTRY	Merchant Nationality Code
merchant_name	TEXT	Merchant Name in English
phone_number_nation_code	CODE	Nation Code Number of Merchant Phone Number
phone_number	NUMBER	Merchant Phone Number
partner_merchant_ref	REFTEXT	Partner managed Merchant ID
virtual_account	OBJECT	Virtual Account connected to Merchant
bank_code	CODE	Virtual Account Bank Code
bank_name	TEXT	Virtual Account Bank Name
account_number	NUMBER	Virtual Account Number
result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/v1/merchant/virtualaccount")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{
        \"merchant_id\":\"e4a4a216-2ada-11eb-9143-000c29f86a2d\"
    }").asString();
```

Example Response

```
{
    "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
    "birthday":"2010-01-01",
    "nationality_code":"KR",
    "merchant_name":"COMPANY NAME",
    "phone_number_nation_code":"+82",
    "phone_number":"01012341234",
    "partner_merchant_ref":"partner_merchant_id",
    "virtual_account": {
        "bank_code":"007",
        "bank_name":"SUHYUP BANK",
        "account_number":"90012345679100",
    },
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.2.3 Get Merchant Infomation

Use this method to query the merchant.

Endpoint	/api/v1/merchant/{merchant_id}	
Method	GET	
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8	
Header +		
Authorization	TOKEN required	Authentication Token
Response Body		
merchant_id	GUID	Merchant ID
birthday	DATE	Merchant Establishment Date
nationality_code	COUNTRY	Merchant Nationality Code

merchant_name	TEXT	Merchant Name in English
phone_number_nation_code	CODE	Nation Code Number of Merchant Phone Number
phone_number	NUMBER	Merchant Phone Number
partner_merchant_ref	REFTEXT	Partner managed Merchant ID
virtual_account	OBJECT	Virtual Account connected to Merchant
bank_code	CODE	Virtual Account Bank Code
bank_name	TEXT	Virtual Account Bank Name
account_number	NUMBER	Virtual Account Number
result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/merchant/e4a4a216-2ada-11eb-9143-000c29f86a2d")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

Example Response

```
{
    "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
    "birthday":"2010-01-01",
    "nationality_code":"KR",
    "merchant_name":"COMPANY NAME",
    "phone_number_nation_code":"+82",
    "phone_number":"01012341234",
    "partner_merchant_ref":"partner_merchant_id"
    "virtual_account": {
        "bank_code":"007",
        "bank_name":"SUHYUP BANK",
        "account_number":"90012345679100",
    },
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.2.4 Get List of Merchants

Use this method to query the list of merchants.

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Endpoint	/api/v1/merchants		
Method	GET		
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8		
Header +			
Authorization		TOKEN required	Authentication Token
Parameter			
page		NUMBER optional	Page Number (Default '0', Page Size is '100')
Response Body			
has_more		TEXT	Flag to determine if more Results ('true' or 'false')
items		LIST	Paged Results of Merchant
merchant_id		GUID	Merchant ID
birthday		DATE	Merchant Establishment Date
nationality_code		COUNTRY	Merchant Nationality Code
merchant_name		TEXT	Merchant Name in English
phone_number_nation_code		CODE	Nation Code Number of Merchant Phone Number
phone_number		NUMBER	Merchant Phone Number
partner_merchant_ref		REFTEXT	Partner managed Merchant ID
virtual_account		OBJECT	Virtual Account connected to Merchant
bank_code		CODE	Virtual Account Bank Code
bank_name		TEXT	Virtual Account Bank Name
account_number		NUMBER	Virtual Account Number
result_code		CODE	API Result Code of Request
result_message		TEXT	API Result Message of Request
Example Request			

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/merchants
        ?page=0")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
```

```
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

```
{
    "has_more":"false",
     "items":[{
         "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
         "birthday":"2010-01-01",
         "nationality_code":"KR",
         "merchant_name":"COMPANY NAME",
         "phone_number_nation_code":"+82",
         "phone_number":"01012341234",
         "partner_merchant_ref":"partner_merchant_id"
         "virtual_account": {
             "bank_code":"007",
             "bank_name":"SUHYUP BANK",
             "account_number":"90012345679100",
         }
    }],
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.3 Deposit Account

Deposit accounts are created at the time of contract and provided to partners. If you want an additional deposit account, you must request HANPASS.

HANPASS will provide deposit accounts for USD, HKD, AUD, CNY, JPY and KRW currencies. Currently, we only support USD and KRW currencies.

4.3.1 Modify Nickname of the Deposit Account

Use this method to change the alias of the deposit account provided by HANPASS.

Endpoint	/api/v1/depositaccount/{deposit_account_id}		
Method	PUT		
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8		
Header +			
Authorization		TOKEN required	Authentication Token

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Request Body		
alias	TEXT required	Nickname of Partner Deposit Account
Response Body		
deposit_account_id	GUID	Deposit Account ID
currency_code	CURRENCY	Deposit Account Currency
alias	TEXT	Deposit Account Nickname
result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request
Example Request		

```
HttpResponse<String> response = Unirest
    .put("https://{host}/api/v1/depositaccount/75d35edc-f32d-11ea-9499-a8a1591fb0a9")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{
        \"alias\":\"Nickname of Partner USD Deposit\",
    }").asString();
```

Example Response		

```
{
    "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
    "currency_code":"USD",
    "alias":"Nickname of Partner USD Deposit",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.3.2 Get Deposit Account Information

Use this method to query the deposit accounts.

Endpoint	/api/v1/depositaccount/{deposit_account_id}
Method	GET
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8
Header +	

Authorization	TOKEN required	Authentication Token

Response Body		
deposit_account_id	GUID	Deposit Account ID
currency_code	CURRENCY	Deposit Account Currency
alias	TEXT	Deposit Account Nickname
result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/depositaccount/75d35edc-f32d-11ea-9499-a8a1591fb0a9")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

Example Response

```
{
    "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
    "currency_code":"USD",
    "alias":"Nickname of Partner USD Deposit",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.3.3   Get List of Deposit Accounts

Use this method to view a list of partner's deposit accounts.

Endpoint	/api/v1/depositaccounts
Method	GET
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8
Header +		
Authorization	TOKEN required	Authentication Token
Response Body		

deposit_accounts	LIST	List of Deposit Accounts
deposit_account_id	GUID	Deposit Account ID
currency_code	CURRENCY	Deposit Account Currency
alias	TEXT	Deposit Account Nickname
result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/depositaccounts")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

Example Response

```
{
    "deposit_accounts":[{
        "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
        "currency_code":"USD",
        "alias":"Nickname of Partner USD Deposit"
    }, {
        "deposit_account_id":"741329f2-50b1-11eb-b9c8-005056bb71d2",
        "currency_code":"KRW",
        "alias":"Nickname of Partner KRW Deposit"
    }],
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.4   Deposit

The partner deposits into the bank account provided by HANPASS and uses API to check deposit confirmation and deposit status.

4.4.1   Charge Deposit

Using this method, you will be notified of your deposit on HANPASS. After checking the deposit of the partner, HANPASS processes the deposit confirmation through the web application.

Endpoint	/api/v1/deposit
Method	POST
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8

Header +

Authorization	TOKEN required	Authentication Token

Request Body

deposit_account_id	GUID required	Deposit Account ID
deposit_account_currency_code	CURRENCY required	Deposit Account Currency
deposit_amount	AMOUNT required	Amount deposited by Partner
partner_deposit_ref	TEXT optional	Partner managed Deposit ID

Response Body

deposit_id	GUID	Deposit ID of Request
deposit_account_id	GUID	Deposit Account ID
deposit_account_currency_code	CURRENCY	Deposit Account Currency
deposit_amount	AMOUNT	Deposit Amount
deposit_status	REFTEXT	Deposit Processing Status ('PENDING', 'CANCELED' or 'DEPOSITED')
create_at	DTZ	Timestamp this Deposit was created
partner_deposit_ref	TEXT	Partner managed Deposit ID
result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/v1/deposit")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{
        \"deposit_account_id\":\"75d35edc-f32d-11ea-9499-a8a1591fb0a9\",
        \"deposit_account_currency_code\":\"USD\",
        \"deposit_amount\":\"1000.00\",
```

hanpass
Global Digital Banking

```
        \"partner_deposit_ref\":\"partner_id_ref\"
    }").asString();
```

Example Response

```
{
    "deposit_id":"ddb07821-f32d-11ea-9499-a8a1591fb0a9",
    "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
    "deposit_account_currency_code":"USD",
    "deposit_amount":"1000.00",
    "deposit_status":"Pending",
    "create_at":"2020-08-01T08:00:00+0900",
    "partner_deposit_ref":"partner_deposit_id",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.4.2 Accept Deposit

If the partner's callback URL exists, accept deposit and send notification.

Endpoint	`https://partner.com/callback/`		
Request Body			
`notification_type`	TEXT required	`'DEPOSIT_ACCEPTED'` only	
`url`	TEXT required	Inquiry URL	
`id`	GUID required	Item ID	
Example Request body			

```
HttpResponse<String> response = Unirest
    .post("https://partner.com/callback/")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .body("{
        \"notification_type\":\"DEPOSIT_ ACCEPTED\",
        \"url\":\"https://{host}/api/v1/deposit/ddb07821-f32d-11ea-9499-a8a1591fb0a9\",
        \"id\":\"ddb07821-f32d-11ea-9499-a8a1591fb0a9\"
    }").asString();
```

4.4.3 Get Deposit Status

Use this method to query the deposit status.

Endpoint	`/api/v1/deposit/{deposit_id}`

Method	GET
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8

Header +		
Authorization	TOKEN required	Authentication Token

Response Body		
deposit_id	GUID	Deposit ID of Request
deposit_account_id	GUID	Deposit Account ID
deposit_account_currency_code	CURRENCY	Deposit Account Currency
deposit_amount	AMOUNT	Deposit Amount
deposit_status	REFTEXT	Deposit Processing Status ('PENDING', 'CANCELED' or 'DEPOSITED')
create_at	DTZ	Timestamp this Deposit was created
settlement_at	DTZ	Timestamp this Deposit was confirmed
partner_deposit_ref	TEXT	Partner managed Deposit ID
result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/v1/deposit/ddb07821-f32d-11ea-9499-a8a1591fb0a9")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

Example Response

```
{
    "deposit_id":"ddb07821-f32d-11ea-9499-a8a1591fb0a9",
    "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
    "deposit_account_currency_code":"USD",
    "deposit_amount":"1000.00",
    "deposit_status":"DEPOSITED",
    "create_at":"2020-08-01T08:00:00+0900",
    "settlement_at":"2020-08-01T10:00:00+0900",
    "partner_deposit_ref":"partner_deposit_id",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

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Global Digital Banking

4.4.4 Get List of Deposits

Use this method to view a list of partner's deposits.

Endpoint	/api/v1/deposits	
Method	GET	
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8	
Header +		
Authorization	TOKEN required	Authentication Token
Parameter		
condition_type	CODE optional	Condition Type ('create_at' or 'settlement_at')
deposit_account_id	GUID optional	Deposit Account ID
from_at	DATE optional	The Start Date of 'create_at/settlement_at' in KST (Default Today 'YYYY-MM-DD')
to_at	DATE optional	The End Date of 'create_at/settlement_at' in KST (Default Today 'YYYY-MM-DD')
page	NUMBER optional	Page Number (Default '0', Page Size is '100')
Response Body		
has_more	TEXT	Flag to determine if more Results ('true' or 'false')
items	LIST	Paged Results of Deposit
deposit_id	GUID	Deposit ID of Request
deposit_account_id	GUID	Deposit Account ID
deposit_account_currency_code	CURRENCY	Deposit Account Currency
deposit_amount	AMOUNT	Deposit Amount
deposit_status	REFTEXT	Deposit Processing Status ('PENDING', 'CANCELED' or 'DEPOSITED')
create_at	DTZ	Timestamp this Deposit was created
settlement_at	DTZ	Timestamp this Deposit was confirmed
partner_deposit_ref	TEXT	Partner managed Deposit ID

result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/deposits
        ?condition_type=create_at
        &deposit_account_id=75d35edc-f32d-11ea-9499-a8a1591fb0a9
        &from_at=2020-08-01
        &to_at=2020-08-01
        &page=0")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

Example Response

```
{
    "has_more":"false",
    "items":[{
        "deposit_id":"ddb07821-f32d-11ea-9499-a8a1591fb0a9",
        "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
        "deposit_account_currency_code":"USD",
        "deposit_amount":"1000.00",
        "deposit_status":"DEPOSITED",
        "create_at":"2020-08-01T08:00:00+0900",
        "settlement_at":"2020-08-01T10:00:00+0900",
        "partner_deposit_ref":"partner_deposit_id"
    },{
        "deposit_id":"0bc0f288-50b6-11eb-b9c8-005056bb71d2",
        "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
        "deposit_account_currency_code":"USD",
        "deposit_amount":"2000.00",
        "deposit_status":"CANCELED",
        "create_at":"2020-08-01T13:00:00+0900",
        "partner_deposit_ref":"partner_deposit_id"
    },{
        "deposit_id":"153f2c43-50b6-11eb-b9c8-005056bb71d2",
        "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
        "deposit_account_currency_code":"USD",
        "deposit_amount":"2000.00",
        "deposit_status":"PENDING",
        "create_at":"2020-08-01T14:00:00+0900",
        "partner_deposit_ref":"partner_deposit_id"
    }],
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

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Global Digital Banking

4.5 Quote

Partners can get quotes for exchange rates and exchange amount before making a payout, collection and transfer request. The quote provided is available only within the expiration time.

Basically, HANPASS Market FX receives exchange rates from KIS(Korea Investment & Securities Inc.) every 5 minutes (However, 10 minutes from 18:00 to next day 08:00 (GMT +9)).

4.5.1 Get Transfer Quote

Use this method to obtain a HANPASS's transfer quote.

Endpoint	/api/v1/quote/transfer	
Method	GET	
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8	
Header +		
Authorization	TOKEN required	Authentication Token
Parameter		
source_currency_code	CURRENCY required	Source Deposit Account Currency
target_currency_code	CURRENCY required	Target Deposit Account Currency
exchange_amount	AMOUNT required	Amount to be exchanged
Response Body		
transfer_quote_id	GUID	Transfer Quote ID for Request
source_currency_code	CURRENCY	Source Deposit Account Currency
target_currency_code	CURRENCY	Target Deposit Account Currency
exchange_amount	AMOUNT	Amount to be exchanged
exchange_rate	RATE	Exchanging Rate to Target Currency
fee_amount	AMOUNT	Fee Amount based on the Source Currency
source_amount	AMOUNT	Amount to be deducted from a Source Deposit Account

target_amount	AMOUNT	Amount to be deposited in a Target Deposit Account
exchange_rate_timestamp	DTZ	Timestamp received Exchange Rate from KIS
expired_timestamp	DTZ	Timestamp of Expiration for the Quote provided
result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/transfer/quote
        ?source_currency_code=USD
        &target_currency_code=KRW
        &exchange_amount=1000.00")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVyyC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVyyC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

Example Response

```
{
    "transfer_quote_id":"9ceda6f4-f32d-11ea-9499-a8a1591fb0a9",
    "source_currency_code":"USD",
    "target_currency_code":"KRW",
    "exchange_amount":"1000.00",
    "exchange_rate":"1186.00",
    "fee_amount":"1.00",
    "source_amount":"1001.00",
    "target_amount":"1186000.00",
    "exchange_rate_timestamp":"2020-08-01T08:00:00+0900",
    "expired_timestamp":"2020-08-01T08:05:00+0900",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.6 Transfer

4.6.1 Create Transfer

Use this method to create transfer.

Endpoint	/api/v1/transfer
Method	POST
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8

Header +		
Authorization	TOKEN required	Authentication Token
Request Body		
source_deposit_account_id	GUID required	Source Deposit Account ID
target_deposit_account_id	GUID required	Target Deposit Account ID
transfer_quote_id	GUID required	Transfer Quote Id
partner_transfer_ref	REFTEXT optional	Partner managed Transfer ID
Response Body		
transfer_id	GUID	Transfer ID for Request
source_deposit_account	OBJECT	Source Deposit Account
deposit_account_id	GUID	Deposit Account ID
currency_code	CURRENCY	Deposit Account Currency
alias	TEXT	Deposit Account Nickname
target_deposit_account	OBJECT	Target Deposit Account
deposit_account_id	GUID	Deposit Account ID
currency_code	CURRENCY	Deposit Account Currency
alias	TEXT	Deposit Account Nickname
transfer_quote	GUID	Transfer Quote
transfer_quote_id	GUID	Transfer Quote ID
source_currency_code	CURRENCY	Source Deposit Account Currency
target_currency_code	CURRENCY	Target Deposit Account Currency
exchange_amount	AMOUNT	Amount to be exchanged
exchange_rate	RATE	Exchanging Rate to Target Currency
fee_amount	AMOUNT	Fee Amount based on the Source Currency
source_amount	AMOUNT	Amount to be deducted from a Source Deposit Account
target_amount	AMOUNT	Amount to be deposited in a Target Deposit Account

exchange_rate_timestamp	DTZ	Timestamp received Exchange Rate from KIS
expired_timestamp	DTZ	Timestamp of Expiration for the Quote provided
partner_transfer_ref	REFTEXT	Partner managed Transfer ID
result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/v1/deposit")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{
        \"source_deposit_account_id\":\"75d35edc-f32d-11ea-9499-a8a1591fb0a9\",
        \"target_deposit_account_id\":\"741329f2-50b1-11eb-b9c8-005056bb71d2\",
        \"transfer_quote_id\":\"9ceda6f4-f32d-11ea-9499-a8a1591fb0a9\",
        \"partner_transfer_ref\":\"partner_id_ref\"
    }").asString();
```

Example Response

```
{
    "transfer_id":"c3b3195c-50ce-11eb-8334-000c29f86a2d",
    "source_deposit_account": {
        "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
        "currency_code":"USD",
        "alias":"Nickname of Partner USD Deposit"
    },
    "target_deposit_account": {
        "deposit_account_id":"741329f2-50b1-11eb-b9c8-005056bb71d2",
        "currency_code":"KRW",
        "alias":"Nickname of Partner KRW Deposit"
    },
    "transfer_quote_id": {
        "transfer_quote_id":"9ceda6f4-f32d-11ea-9499-a8a1591fb0a9",
        "source_currency_code":"USD",
        "target_currency_code":"KRW",
        "exchange_amount":"1000.00",
        "exchange_rate":"1186.00",
        "fee_amount":"1.00",
        "source_amount":"1001.00",
        "target_amount":"1186000.00",
        "exchange_rate_timestamp":"2020-08-01T08:00:00+0900",
        "expired_timestamp":"2020-08-01T08:05:00+0900"
    },
    "partner_transfer_ref":"partner_transfer_id",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.6.2 Get Transfer

Use this method to query the transfer.

Endpoint	/api/v1/transfer/{transfer_id}		
Method	GET		
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8		
Header +			
Authorization		TOKEN required	Authentication Token
Response Body			
transfer_id		GUID	Transfer ID for Request
source_deposit_account		OBJECT	Source Deposit Account
deposit_account_id		GUID	Deposit Account ID
currency_code		CURRENCY	Deposit Account Currency
alias		TEXT	Deposit Account Nickname
target_deposit_account		OBJECT	Target Deposit Account
deposit_account_id		GUID	Deposit Account ID
currency_code		CURRENCY	Deposit Account Currency
alias		TEXT	Deposit Account Nickname
transfer_quote		GUID	Transfer Quote
transfer_quote_id		GUID	Transfer Quote ID
source_currency_code		CURRENCY	Source Deposit Account Currency
target_currency_code		CURRENCY	Target Deposit Account Currency
exchange_amount		AMOUNT	Amount to be exchanged
exchange_rate		RATE	Exchanging Rate to Target Currency
fee_amount		AMOUNT	Fee Amount based on the Source Currency
source_amount		AMOUNT	Amount to be deducted from a Source Deposit Account

target_amount	AMOUNT	Amount to be deposited in a Target Deposit Account
exchange_rate_timestamp	DTZ	Timestamp received Exchange Rate from KIS
expired_timestamp	DTZ	Timestamp of Expiration for the Quote provided
partner_transfer_ref	REFTEXT	Partner managed Transfer ID
result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/transfer/c3b3195c-50ce-11eb-8334-000c29f86a2d")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

Example Response

```
{
    "transfer_id":"c3b3195c-50ce-11eb-8334-000c29f86a2d",
    "source_deposit_account": {
        "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
        "currency_code":"USD",
        "alias":"Nickname of Partner USD Deposit"
    },
    "target_deposit_account": {
        "deposit_account_id":"741329f2-50b1-11eb-b9c8-005056bb71d2",
        "currency_code":"KRW",
        "alias":"Nickname of Partner KRW Deposit"
    },
    "transfer_quote_id": {
        "transfer_quote_id":"9ceda6f4-f32d-11ea-9499-a8a1591fb0a9",
        "source_currency_code":"USD",
        "target_currency_code":"KRW",
        "exchange_amount":"1000.00",
        "exchange_rate":"1186.00",
        "fee_amount":"1.00",
        "source_amount":"1001.00",
        "target_amount":"1186000.00",
        "exchange_rate_timestamp":"2020-08-01T08:00:00+0900",
        "expired_timestamp":"2020-08-01T08:05:00+0900"
    },
    "partner_transfer_ref":"partner_transfer_id",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.6.3   Get List of Transfers

Use this method to view a list of partner's transfers.

Endpoint	/api/v1/transfers
Method	GET
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8

Header +		
Authorization	TOKEN required	Authentication Token

Parameter		
deposit_account_id	GUID optional	Deposit Account ID
from_at	DATE optional	The Start Date in KST (Default Today 'YYYY-MM-DD')
to_at	DATE optional	The End Date in KST (Default Today 'YYYY-MM-DD')
page	NUMBER optional	Page Number (Default '0', Page Size is '100')

Response Body		
has_more	TEXT	Flag to determine if more Results ('true' or 'false')
items	LIST	Paged Results of Transfer
transfer_id	GUID	Transfer ID for Request
source_deposit_account	OBJECT	Source Deposit Account
deposit_account_id	GUID	Deposit Account ID
currency_code	CURRENCY	Deposit Account Currency
alias	TEXT	Deposit Account Nickname
target_deposit_account	OBJECT	Target Deposit Account
deposit_account_id	GUID	Deposit Account ID
currency_code	CURRENCY	Deposit Account Currency
alias	TEXT	Deposit Account Nickname
transfer_quote	GUID	Transfer Quote
transfer_quote_id	GUID	Transfer Quote ID
source_currency_code	CURRENCY	Source Deposit Account Currency

target_currency_code	CURRENCY	Target Deposit Account Currency
exchange_amount	AMOUNT	Amount to be exchanged
exchange_rate	RATE	Exchanging Rate to Target Currency
fee_amount	AMOUNT	Fee Amount based on the Source Currency
source_amount	AMOUNT	Amount to be deducted from a Source Deposit Account
target_amount	AMOUNT	Amount to be deposited in a Target Deposit Account
exchange_rate_timestamp	DTZ	Timestamp received Exchange Rate from KIS
expired_timestamp	DTZ	Timestamp of Expiration for the Quote provided
partner_transfer_ref	REFTEXT	Partner managed Transfer ID
result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/transfers
        ?deposit_account_id=75d35edc-f32d-11ea-9499-a8a1591fb0a9
        &from_at=2020-08-01
        &to_at=2020-08-01
        &page=0")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

Example Response

```
{
    "has_more":"false",
    "items":[{
        "transfer_id":"c3b3195c-50ce-11eb-8334-000c29f86a2d",
        "source_deposit_account": {
            "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
            "currency_code":"USD",
            "alias":"Nickname of Partner USD Deposit"
        },
        "target_deposit_account": {
            "deposit_account_id":"741329f2-50b1-11eb-b9c8-005056bb71d2",
            "currency_code":"KRW",
            "alias":"Nickname of Partner KRW Deposit"
        },
        "transfer_quote_id": {
            "transfer_quote_id":"9ceda6f4-f32d-11ea-9499-a8a1591fb0a9",
            "source_currency_code":"USD",
            "target_currency_code":"KRW",
```

```
        "exchange_amount":"1000.00",
        "exchange_rate":"1186.00",
        "fee_amount":"1.00",
        "source_amount":"1001.00",
        "target_amount":"1186000.00",
        "exchange_rate_timestamp":"2020-08-01T08:00:00+0900",
        "expired_timestamp":"2020-08-01T08:05:00+0900"
    },
    "partner_transfer_ref":"partner_transfer_id",
}],
"result_code":"20000",
"result_message":"SUCCESS"
}
```

4.7 Balance

The balance API can be used to get available and pending balances.

4.7.1 Get Current Balance

Use this method to inquire into the partner's current balance.

Endpoint	/api/v1/balance		
Method	GET		
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8		
Header +			
Authorization	TOKEN required	Authentication Token	
Parameter			
deposit_account_id	GUID optional	Partner's Deposit Account ID provided by HANPASS	
Response Body			
balances	LIST	Balance Information	
deposit_account_id	GUID	Partner's Deposit Account ID provided by HANPASS	
currency_code	CURRENCY	Currency of Partner's Deposit Account	
available_amount	AMOUNT	Available Balance	
pending_amount	AMOUNT	Pending Amount, Deposit before Approval	
total_amount	AMOUNT	Total Balance (available and pending)	

result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/balance
        ?deposit_account_id=75d35edc-f32d-11ea-9499-a8a1591fb0a9")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3M3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

Example Response

```
{
    "balances":[{
        "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
        "currency_code":"USD",
        "available_amount":"10000.00",
        "pending_amount":"5000.00",
        "total_amount":"15000.00"
    }],
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.7.2 Get Balance History

Using this method to inquire into the partner's balance variation history.

Endpoint	/api/v1/balances
Method	GET
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8

Header +

Authorization	TOKEN required	Authentication Token

Parameter

deposit_account_id	GUID required	Partner's Deposit Account ID provided by HANPASS
from_at	DATE optional	The Start Date of 'settlement_at' in KST (Default Today 'YYYY-MM-DD')
to_at	DATE optional	The End Date of 'settlement_at' in KST (Default Today 'YYYY-MM-DD')

page	NUMBER optional	Page Number (Default '0', Page Size is '100')

Response Body

has_more	TEXT	Flag to determine if more Results ('true' or 'false')
deposit_account_id	GUID	Partner's Deposit Account ID provided by HANPASS
currency_code	CURRENCY	Currency of Partner's Deposit Account
items	LIST	Paged Results of Balance
amount	AMOUNT	Amount of Deposit and Payout
balance_amount	AMOUNT	Balance after change occurred
fee_amount	AMOUNT	Amount of Fee
source_ref_id	GUID	Transaction ID
source_type	CD	Transaction Type ('DEPOSIT', 'CONVERSION', 'PAYOUT','COLLECTION')
settlement_at	DTZ	Timestamp of Balance Change Occurrence
result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/balances
        ?deposit_account_id=/75d35edc-f32d-11ea-9499-a8a1591fb0a9
        &from_at=2020-08-01
        &to_at=2020-08-01
        &page=0")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

Example Response

```
{
    "has_more":"false",
    "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
    "currency_code":"USD",
    "items":[{
        "amount":"1000.00",
        "balance_amount":"8999.00",
        "fee_amount:"1.00",
        "source_ref_id":"29b82cce-f426-11ea-9221-a8a1591fb0a9",
        "source_type":"PAYOUT",
        "settlement_at":"2020-08-01T10:00:00+0900"
```

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```
    },{
        "deposit_account_id":"75d35edc-f32d-11ea-9499-a8a1591fb0a9",
        "currency_code":"USD",
        "amount":"5000.00",
        "balance_amount":"10000.00",
        "source_ref_id":"ddb07821-f32d-11ea-9499-a8a1591fb0a9",
        "source_type":"DEPOSIT",
        "settlement_at":"2020-08-01T08:00:00+0900"
    }],
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.8 Payout Settlement

4.8.1 Request a Settlement of Payout

Use this method to request a payout. Payout are deduced in the currency of the specified deposit account. Therefore, the target currency and the deposit account currency must be the same.

Endpoint	/api/v1/settlement/payout		
Method	POST		
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8		
Header +			
Authorization	TOKEN required	Authentication Token	
Request Body			
merchant_id	GUID required	Merchant ID	
deposit_account_id	GUID required	Deposit Account ID to be deducted	
target_currency_code	CODE required	Currency Code of Target	
target_amount	AMOUNT required	Amount of Target	
beneficiary	OBJECT required	Beneficiary Information	
partner_beneficiary_ref	REFTEXT required	Partner managed Beneficiary ID	
type_code	CODE required	Beneficiary's Type Code	
birthday	DATE optional	Beneficiary's Birthday ('YYYY-MM-DD')	

gender_type_code	CODE optional	Beneficiary's Gender Type Code
nationality_code	COUNTRY required	Beneficiary's Nationality Code
real_name_number	TEXT optional	Beneficiary's Encrypted Social Security Number
real_name_number_division_code	CODE optional	Beneficiary's Social Security Number Division Code
name	TEXT required	Beneficiary's Full Name in English
phone_number_nation_code	CODE optional	Nation Code Number of Beneficiary's Phone Number
phone_number	NUMBER optional	Beneficiary's Phone Number except '-'
bank_account	OBJECT required	Beneficiary's Bank Account Information
account_holder_name	TEXT optional	Bank Account Holder's Name in Korean
nationality_code	COUNTRY required	Bank's Nationality Code
bank_code	CODE required	Bank Code
bank_account_number	TEXT required	Bank Account Number
reason	TEXT required	Reason of Payout ('GOODS_PURCHASED', 'TRADE_ACCOUNT_FUNDING')
display_in_account	TEXT optional	Text to be printed on Beneficiary Account (Default Merchant Name)
partner_dealing_number	REFTEXT required	Partner's Dealing Number
Response Body		
settlement_id	GUID	Settlement ID of Request
merchant	OBJECT	Merchant Information
merchant_id	GUID	Merchant ID
birthday	DATE	Merchant Establishment Date
nationality_code	COUNTRY	Merchant Nationality Code
merchant_name	TEXT	Merchant Name in English
phone_number_nation_code	CODE	Nation Code Number of Merchant Phone Number
phone_number	NUMBER	Merchant Phone Number
partner_merchant_ref	REFTEXT	Partner managed Merchant ID

deposit_account	OBJECT	Deposit Account Information
deposit_account_id	GUID	Deposit Account ID
currency_code	CURRENCY	Deposit Account Currency
alias	TEXT	Deposit Account Nickname
target_currency_code	CODE	Currency Code of Target
target_amount	AMOUNT	Amount of Target
fee_amount	AMOUNT	Amount of Fee
beneficiary	OBJECT	Beneficiary Information
partner_beneficiary_ref	REFTEXT	Partner managed Beneficiary ID
type_code	CODE	Beneficiary's Type Code
birthday	DATE	Beneficiary's Birthday ('YYYY-MM-DD')
gender_type_code	CODE	Beneficiary's Gender Type Code
nationality_code	COUNTRY	Beneficiary's Nationality Code
real_name_number	TEXT	Beneficiary's Encrypted Social Security Number
real_name_number_division_code	CODE	Beneficiary's Social Security Number Division Code
name	TEXT	Beneficiary's Full Name in English
phone_number_nation_code	CODE	Nation Code Number of Beneficiary's Phone Number
phone_number	NUMBER	Beneficiary's Phone Number except '-'
bank_account	OBJECT	Beneficiary's Bank Account Information
account_holder_name	TEXT	Bank Account Holder's Name in Korean
nationality_code	COUNTRY	Bank's Nationality Code
bank_code	CODE	Bank Code
bank_account_number	TEXT	Bank Account Number
reason	TEXT	Reason of Payout
display_in_account	TEXT	Text to be printed on Beneficiary Account
partner_dealing_number	REFTEXT	Partner's Dealing Number

create_at	DTZ	Timestamp of Request created
settlement_at	DTZ	Timestamp of Request done
settlement_status_code	CODE	Status Code of Settlement Request
settlement_status_message	TEXT	Status Message of Settlement Request
result_code	CODE	API Result of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/v1/settlement/payout")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{
        \"merchant_id\":\"e4a4a216-2ada-11eb-9143-000c29f86a2d\",
        \"deposit_account_id\":\"741329f2-50b1-11eb-b9c8-005056bb71d2\",
        \"target_currency_code\":\"KRW\",
        \"target_amount\":\"1186000.00\",
        \"beneficiary\": {
            \"partner_beneficiary_ref\":\"partner_beneficiary_id\",
            \"type_code\":\"COMPANY\",
            \"birthday\":\"2010-10-01\",
            \"gender_type_code\":\"COMPANY\",
            \"nationality_code\":\"KR\",
            \"real_name_number\":\"1234567890\",
            \"real_name_number_division_code\":\"BUSINESS_REGISTRATION_NUMBER\",
            \"name\":\"Hanpass Corp.\",
            \"phone_number_nation_code\":\"+82\",
            \"phone_number\":\"0212345678\",
            \"bank_account\": {
                \"account_holder_name\":\"(주)한패스\",
                \"nationality_code\":\"KR\",
                \"bank_code\":\"004\",
                \"bank_account_number\":\"12345678\"
            }
        }
        \"reason\":\"GOODS_PURCHASED\",
        \"display_in_account\":\"펑풍페이먼트\",
        \"partner_dealing_number\":\"partner_dealing_number\"
    }").asString();
```

Example Response

```
{
    "settlement_id":"29b82cce-f426-11ea-9221-a8a1591fb0a9",
    "merchant"{
        "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
        "birthday":"2010-01-01",
        "nationality_code":"KR",
        "merchant_name":"COMPANY NAME",
        "phone_number_nation_code":"+82",
        "phone_number":"01012341234",
```

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```
            "partner_merchant_ref":"partner_merchant_id"
        },
        "deposit_account": {
            "deposit_account_id":"741329f2-50b1-11eb-b9c8-005056bb71d2",
            "currency_code":"KRW",
            "alias":"Nickname of Partner KRW Deposit"
        },
        "target_currency_code":"KRW",
        "target_amount":"1186000.00",
        "fee_amount":"0.00",
        "beneficiary": {
            "partner_beneficiary_ref":"partner_beneficiary_id",
            "type_code":"COMPANY",
            "birthday":"2010-10-01",
            "gender_type_code":"COMPANY",
            "nationality_code":"KR",
            "real_name_number":"1234567890",
            "real_name_number_division_code":"BUSINESS_REGISTRATION_NUMBER",
            "name":"Hanpass Corp.",
            "phone_number_nation_code":"+82",
            "phone_number":"0212345678",
            "bank_account": {
                "account_holder_name":"(주)한패스",
                "nationality_code":"KR",
                "bank_code":"004",
                "bank_account_number":"12345678"
            },
        },
        "reason":"GOODS_PURCHASED",
        "display_in_account":"펑펑페이먼트",
        "partner_dealing_number":"partner_dealing_number",
        "create_at":"2020-08-01T08:00:00+0900",
        "settlement_at":"2020-08-01T08:01:00+0900",
        "settlement_status_code":"DONE",
        "settlement_status_message":"Settlement Process Done",
        "result_code":"20000",
        "result_message":"SUCCESS"
}
```

4.8.2   Get Payout Processing Status

Use this method to query the status of payout.

Endpoint	/api/v1/settlement/payout/{settlement_id}		
Method	GET		
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8		
Header +			
Authorization		TOKEN required	Authentication Token
Response Body			

settlement_id	GUID	Settlement ID of Request
merchant	OBJECT	Merchant Information
merchant_id	GUID	Merchant ID
birthday	DATE	Merchant Establishment Date
nationality_code	COUNTRY	Merchant Nationality Code
merchant_name	TEXT	Merchant Name in English
phone_number_nation_code	CODE	Nation Code Number of Merchant Phone Number
phone_number	NUMBER	Merchant Phone Number
partner_merchant_ref	REFTEXT	Partner managed Merchant ID
deposit_account	OBJECT	Deposit Account Information
deposit_account_id	GUID	Deposit Account ID
currency_code	CURRENCY	Deposit Account Currency
alias	TEXT	Deposit Account Nickname
target_currency_code	CODE	Currency Code of Target
target_amount	AMOUNT	Amount of Target
fee_amount	AMOUNT	Amount of Fee
beneficiary	OBJECT	Beneficiary Information
partner_beneficiary_ref	REFTEXT	Partner managed Beneficiary ID
type_code	CODE	Beneficiary's Type Code
birthday	DATE	Beneficiary's Birthday ('YYYY-MM-DD')
gender_type_code	CODE	Beneficiary's Gender Type Code
nationality_code	COUNTRY	Beneficiary's Nationality Code
real_name_number	TEXT	Beneficiary's Encrypted Social Security Number
real_name_number_division_code	CODE	Beneficiary's Social Security Number Division Code
name	TEXT	Beneficiary's Full Name in English
phone_number_nation_code	CODE	Nation Code Number of Beneficiary's Phone Number

phone_number	NUMBER	Beneficiary's Phone Number except '-'
bank_account	OBJECT	Beneficiary's Bank Account Information
account_holder_name	TEXT	Bank Account Holder's Name in Korean
nationality_code	COUNTRY	Bank's Nationality Code
bank_code	CODE	Bank Code
bank_account_number	TEXT	Bank Account Number
reason	TEXT	Reason of Payout
display_in_account	TEXT	Text to be printed on Beneficiary Account
partner_dealing_number	REFTEXT	Partner's Dealing Number
create_at	DTZ	Timestamp of Request created
settlement_at	DTZ	Timestamp of Request done
settlement_status_code	CODE	Status Code of Settlement Request
settlement_status_message	TEXT	Status Message of Settlement Request
result_code	CODE	API Result of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/settlement/payout/29b82cce-f426-11ea-9221-a8a1591fb0a9")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

Example Response

```
{
    "settlement_id":"07a2786a-5164-11eb-8334-000c29f86a2d",
    "merchant"{
        "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
        "birthday":"2010-01-01",
        "nationality_code":"KR",
        "merchant_name":"COMPANY NAME",
        "phone_number_nation_code":"+82",
        "phone_number":"01012341234",
        "partner_merchant_ref":"partner_merchant_id"
    },
    "deposit_account": {
        "deposit_account_id":"741329f2-50b1-11eb-b9c8-005056bb71d2",
```

```
        "currency_code":"KRW",
        "alias":"Nickname of Partner KRW Deposit"
    },
    "target_currency_code":"KRW",
    "target_amount":"1186000.00",
    "fee_amount":"0.00",
    "beneficiary": {
        "partner_beneficiary_ref":"partner_beneficiary_id",
        "type_code":"PERSON",
        "birthday":"2010-10-01",
        "gender_type_code":"MALE",
        "nationality_code":"KR",
        "real_name_number":"9901011234567",
        "real_name_number_division_code":"RESIDENT_REGISTRATION_NUMBER",
        "name":"HONG GILDONG",
        "phone_number_nation_code":"+82",
        "phone_number":"01012345678",
        "bank_account": {
            "account_holder_name":"홍길동",
            "nationality_code":"KR",
            "bank_code":"004",
            "bank_account_number":"12345678"
        },
    },
    "reason":"GOODS_PURCHASED",
    "display_in_account":"핑퐁페이먼트",
    "partner_dealing_number":"partner_dealing_number",
    "create_at":"2020-08-01T08:00:00+0900",
    "settlement_at":"2020-08-01T08:01:00+0900",
    "settlement_status_code":"DONE",
    "settlement_status_message":"Settlement Process Done",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.8.3 Get List of Payout

Use this method to check the partner's list of payout settlement.

Endpoint	/api/v1/settlement/payouts		
Method	GET		
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8		
Header +			
Authorization	TOKEN required	Authentication Token	
Parameter			
deposit_account_id	GUID required	Partner's Deposit Account ID provided by HANPASS	
from_at	DATE optional	The Start Date of 'settlement_at' in KST (Default Today 'YYYY-MM-DD')	

to_at	DATE optional	The End Date of 'settlement_at' in KST (Default Today 'YYYY-MM-DD')
page	NUMBER optional	Page Number (Default '0', Page Size is '100')
Response Body		
has_more	TEXT	Flag to determine if more Results ('true' or 'false')
items	LIST	Paged Results of Payout
settlement_id	GUID	Settlement ID of Request
merchant	OBJECT	Merchant Information
merchant_id	GUID	Merchant ID
birthday	DATE	Merchant Establishment Date
nationality_code	COUNTRY	Merchant Nationality Code
merchant_name	TEXT	Merchant Name in English
phone_number_nation_code	CODE	Nation Code Number of Merchant Phone Number
phone_number	NUMBER	Merchant Phone Number
partner_merchant_ref	REFTEXT	Partner managed Merchant ID
deposit_account	OBJECT	Deposit Account Information
deposit_account_id	GUID	Deposit Account ID
currency_code	CURRENCY	Deposit Account Currency
alias	TEXT	Deposit Account Nickname
target_currency_code	CODE	Currency Code of Target
target_amount	AMOUNT	Amount of Target
fee_amount	AMOUNT	Amount of Fee
beneficiary	OBJECT	Beneficiary Information
partner_beneficiary_ref	REFTEXT	Partner managed Beneficiary ID
type_code	CODE	Beneficiary's Type Code
birthday	DATE	Beneficiary's Birthday ('YYYY-MM-DD')
gender_type_code	CODE	Beneficiary's Gender Type Code

nationality_code	COUNTRY	Beneficiary's Nationality Code	
real_name_number	TEXT	Beneficiary's Encrypted Social Security Number	
real_name_number_division_code	CODE	Beneficiary's Social Security Number Division Code	
name	TEXT	Beneficiary's Full Name in English	
phone_number_nation_code	CODE	Nation Code Number of Beneficiary's Phone Number	
phone_number	NUMBER	Beneficiary's Phone Number except '-'	
bank_account	OBJECT	Beneficiary's Bank Account Information	
	account_holder_name	TEXT	Bank Account Holder's Name in Korean
	nationality_code	COUNTRY	Bank's Nationality Code
	bank_code	CODE	Bank Code
	bank_account_number	TEXT	Bank Account Number
reason	TEXT	Reason of Payout	
display_in_account	TEXT	Text to be printed on Beneficiary Account	
partner_dealing_number	REFTEXT	Partner's Dealing Number	
create_at	DTZ	Timestamp of Request created	
settlement_at	DTZ	Timestamp of Request done	
settlement_status_code	CODE	Status Code of Settlement Request	
settlement_status_message	TEXT	Status Message of Settlement Request	
result_code	CODE	API Result of Request	
result_message	TEXT	API Result Message of Request	

Example Request

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/settlement/payouts
        ?deposit_account_id=75d35edc-f32d-11ea-9499-a8a1591fb0a9
        &from_at=2020-08-01
        &to_at=2020-08-01
        &page=0")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJlc2VybmFtZSI6InZlbG9wZXJ0In0")
```

```
      .body("{}").asString();
```

Example Response

```
{
    "has_more":"false",
    "items":[{
        "settlement_id":"07a2786a-5164-11eb-8334-000c29f86a2d",
        "merchant"{
            "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
            "birthday":"2010-01-01",
            "nationality_code":"KR",
            "merchant_name":"COMPANY NAME",
            "phone_number_nation_code":"+82",
            "phone_number":"01012341234",
            "partner_merchant_ref":"partner_merchant_id"
        },
        "deposit_account": {
            "deposit_account_id":"741329f2-50b1-11eb-b9c8-005056bb71d2",
            "currency_code":"KRW",
            "alias":"Nickname of Partner KRW Deposit"
        },
        "target_currency_code":"KRW",
        "target_amount":"1186000.00",
        "fee_amount":"0.00",
        "beneficiary": {
            "partner_beneficiary_ref":"partner_beneficiary_id",
            "type_code":"PERSON",
            "birthday":"2010-10-01",
            "gender_type_code":"MALE",
            "nationality_code":"KR",
            "real_name_number":"9901011234567",
            "real_name_number_division_code":"RESIDENT_REGISTRATION_NUMBER",
            "name":"HONG GILDONG",
            "phone_number_nation_code":"+82",
            "phone_number":"01012345678",
            "bank_account": {
                "account_holder_name":"홍길동",
                "nationality_code":"KR",
                "bank_code":"004",
                "bank_account_number":"12345678"
            },
        },
        "reason":"GOODS_PURCHASED",
        "display_in_account":"펑퐁페이먼트",
        "partner_dealing_number":"partner_dealing_number",
        "create_at":"2020-08-01T08:00:00+0900",
        "settlement_at":"2020-08-01T08:01:00+0900",
        "settlement_status_code":"DONE"
    }, {
        "settlement_id":"29b82cce-f426-11ea-9221-a8a1591fb0a9",
        "merchant"{
            "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
            "birthday":"2010-01-01",
            "nationality_code":"KR",
            "merchant_name":"COMPANY NAME",
            "phone_number_nation_code":"+82",
            "phone_number":"01012341234",
            "partner_merchant_ref":"partner_merchant_id"
        },
        "deposit_account": {
            "deposit_account_id":"741329f2-50b1-11eb-b9c8-005056bb71d2",
            "currency_code":"KRW",
```

```
            "alias":"Nickname of Partner KRW Deposit"
        },
        "target_currency_code":"KRW",
        "target_amount":"1186000.00",
        "fee_amount":"0.00",
        "beneficiary": {
            "partner_beneficiary_ref":"partner_beneficiary_id",
            "type_code":"COMPANY",
            "birthday":"2010-10-01",
            "gender_type_code":"COMPANY",
            "nationality_code":"KR",
            "real_name_number":"1234567890",
            "real_name_number_division_code":"BUSINESS_REGISTRATION_NUMBER",
            "name":"Hanpass Corp.",
            "phone_number_nation_code":"+82",
            "phone_number":"0212345678",
            "bank_account": {
                "account_holder_name":"(주)한패스",
                "nationality_code":"KR",
                "bank_code":"004",
                "bank_account_number":"12345678"
            },
        },
        "reason":"GOODS_PURCHASED",
        "display_in_account":"핑퐁페이먼트",
        "partner_dealing_number":"partner_dealing_number",
        "create_at":"2020-08-01T08:00:00+0900",
        "settlement_at":"2020-08-01T08:01:00+0900",
        "settlement_status_code":"DONE",
        "settlement_status_message":"Settlement Process Done"
    }],
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.9   Collection Settlement

4.9.1   Notice Receipt into Virtual Account

When is deposited into a virtual account of a partner's merchant, HANPASS notifies the partner of the deposit.

Endpoint	https://partner.com/callback/	
Request Body		
notification_type	TEXT required	'VIRTUAL_ACCOUNT_RECEIPTED' only
url	TEXT required	Inquiry URL
id	GUID required	Item ID
Example Request body		

```
HttpResponse<String> response = Unirest
    .post("https://partner.com/callback/")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .body("{
        \"notification_type\":\"VIRTUAL_ACCOUNT_RECEIPTED\",
        \"url\":\"https://{host}/api/v1/settlement/receipt/c1f4db6a-517f-11eb-8334-
000c29f86a2d\",
        \"id\":\"c1f4db6a-517f-11eb-8334-000c29f86a2d\"
    }").asString();
```

4.9.2　Get Receipt into Virtual Account

The partner checks the deposit notification information and includes this information in the requesting information to collection request.

Endpoint	/api/v1/settlement/receipt/{receipt_id}		
Method	GET		
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8		
Header +			
Authorization		TOKEN required	Authentication Token
Response Body			
receipt_id		GUID	Receipt ID managed by HANPASS that the Payer deposited into a Virtual Account
merchant		OBJECT	Merchant linked to Virtual Account
merchant_id		GUID	Merchant ID
birthday		DATE	Merchant Establishment Date
nationality_code		COUNTRY	Merchant Nationality Code
merchant_name		TEXT	Merchant Name in English
phone_number_nation_code		CODE	Nation Code Number of Merchant Phone Number (example: '+82')
phone_number		NUMBER	Merchant Phone Number except '-' (example: 01012345678)
partner_merchant_ref		REFTEXT	Partner managed Merchant ID
virtual_account		OBJECT	Virtual Account connected to Merchant
bank_code		CODE	Virtual Account Bank Code

	bank_name	TEXT	Virtual Account Bank Name
	account_number	NUMBER	Virtual Account Number
sender		OBJECT	Sender Information
	name	TEXT	Sender's Full Name in English
	bank_account	OBJECT	Sender's Bank Account Information
	account_holder_name	TEXT	Bank Account Holder's Name in Korean
receipt_at		DTZ	Timestamp deposited into a Virtual Account
receipt_amount		AMOUNT	Amount deposited into a Virtual Account
receipt_currency_code		CODE	Currency Code of a Virtual Account
result_code		CODE	API Result Code of Request
result_message		TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/settlement/receipt/c1f4db6a-517f-11eb-8334-
000c29f86a2d")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("").asString();
```

Example Response

```
{
    "receipt_id":"c1f4db6a-517f-11eb-8334-000c29f86a2d",
    "merchant"{
        "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
        "birthday":"2010-01-01",
        "nationality_code":"KR",
        "merchant_name":"COMPANY NAME",
        "phone_number_nation_code":"+82",
        "phone_number":"01012341234",
        "partner_merchant_ref":"partner_merchant_id",
        "virtual_account": {
            "bank_code":"007",
            "bank_name":"SUHYUP BANK",
            "account_number":"90012345679100",
        },
    },
    "sender": {
        "name":"(주)한패스",
        "bank_account": {
            "account_holder_name":"(주)한패스",
        },
    },
```

```
    "receipt_at":"2020-08-01T08:00:00+0900",
    "receipt_amount":"1000000.00",
    "receipt_currency_code":"KRW",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.9.3   Get List of Receipt into Virtual Account

Use this method to get the receipt list of merchant's virtual account.

Endpoint	/api/v1/settlement/receipts		
Method	GET		
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8		
Header +			
Authorization	TOKEN required	Authentication Token	
Parameter			
merchant_id	GUID optional	Merchant ID	
from_at	DATE optional	The Start Date of 'receipt_at' in KST (Default Today 'YYYY-MM-DD')	
to_at	DATE optional	The End Date of 'receipt_at' in KST (Default Today 'YYYY-MM-DD')	
page	NUMBER optional	Page Number (Default '0', Page Size is '100')	
Response Body			
has_more	TEXT	Flag to determine if more Results ('true' or 'false')	
items	LIST	Paged Results of Collection	
receipt_id	GUID	Receipt ID managed by HANPASS that the Payer deposited into a Virtual Account	
merchant	OBJECT	Merchant linked to Virtual Account	
merchant_id	GUID	Merchant ID	
birthday	DATE	Merchant Establishment Date	
nationality_code	COUNTRY	Merchant Nationality Code	
merchant_name	TEXT	Merchant Name in English	

phone_number_nation_code	CODE	Nation Code Number of Merchant Phone Number (example: '+82')
phone_number	NUMBER	Merchant Phone Number except '-' (example: 01012345678)
partner_merchant_ref	REFTEXT	Partner managed Merchant ID
virtual_account	OBJECT	Virtual Account connected to Merchant
bank_code	CODE	Virtual Account Bank Code
bank_name	TEXT	Virtual Account Bank Name
account_number	NUMBER	Virtual Account Number
sender	OBJECT	Sender Information
name	TEXT	Sender's Full Name in English
bank_account	OBJECT	Sender's Bank Account Information
account_holder_name	TEXT	Bank Account Holder's Name in Korean
receipt_at	DTZ	Timestamp deposited into a Virtual Account
receipt_amount	AMOUNT	Amount deposited into a Virtual Account
receipt_currency_code	CODE	Currency Code of a Virtual Account
result_code	CODE	API Result Code of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/settlement/receipts
        ?merchant_id=e4a4a216-2ada-11eb-9143-000c29f86a2d
        &from_at=2020-08-01
        &to_at=2020-08-05
        &page=0")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("").asString();
```

Example Response

```
{
    "has_more":"false",
    "items":[{
        "receipt_id":"c1f4db6a-517f-11eb-8334-000c29f86a2d",
        "merchant"{
            "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
```

```
          "birthday":"2010-01-01",
          "nationality_code":"KR",
          "merchant_name":"COMPANY NAME",
          "phone_number_nation_code":"+82",
          "phone_number":"01012341234",
          "partner_merchant_ref":"partner_merchant_id",
          "virtual_account": {
              "bank_code":"007",
              "bank_name":"SUHYUP BANK",
              "account_number":"90012345679100",
          },
      },
      "sender": {
          "name":"(주)한패스",
          "bank_account": {
              "account_holder_name":"(주)한패스",
          },
      },
      "receipt_at":"2020-08-01T08:00:00+0900",
      "receipt_amount":"1000000.00",
      "receipt_currency_code":"KRW",
  }],
  "result_code":"20000",
  "result_message":"SUCCESS"
}
```

4.9.4   Request a Settlement of Collection

Use this method to request a collection.

Endpoint	/api/v1/settlement/collection		
Method	POST		
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8		
Header +			
Authorization	TOKEN required	Authentication Token	
Request Body			
merchant_id	GUID required	Merchant ID	
source_currency_code	CODE required	Currency Code of Source ('KRW' only)	
source_amount	AMOUNT required	Total Amount of Receipt IDs in Virtual Account	
target_currency_code	CODE required	Currency Code of Target ('USD' only)	
receipts	LIST required	Receipt List	

receipt_id_in_virtual_account	GUID required	Receipt ID Deposited into Virtual Account
sender	OBJECT required	Sender Information
partner_sender_ref	REFTEXT required	Partner managed Sender ID
type_code	CODE required	Sender's Type Code
birthday	DATE optional	Sender's Birthday ('YYYY-MM-DD')
gender_type_code	CODE optional	Sender's Gender Type Code
nationality_code	COUNTRY required	Sender's Nationality Code
real_name_number	TEXT optional	Sender's Encrypted Social Security Number
real_name_number_division_code	CODE optional	Sender's Social Security Number Division Code
name	TEXT required	Sender's Full Name in English
phone_number_nation_code	CODE required	Nation Code Number of Sender's Phone Number
phone_number	NUMBER required	Sender's Phone Number except '-'
bank_account	OBJECT optional	Sender's Bank Account Information
account_holder_name	TEXT optional	Bank Account Holder's Name in Korean
nationality_code	COUNTRY optional	Bank's Nationality Code
bank_code	CODE required	Bank Code
bank_account_number	TEXT required	Bank Account Number
reason	TEXT required	Reason of Collection ('GOODS_PURCHASED', 'TRADE_ACCOUNT_FUNDING')
partner_dealing_number	REFTEXT optional	Partner's Dealing Number
Response Body		
settlement_id	GUID	Settlement ID of Request
merchant	OBJECT	Merchant Information
merchant_id	GUID	Merchant ID
birthday	DATE	Merchant Establishment Date
nationality_code	COUNTRY	Merchant Nationality Code

merchant_name	TEXT	Merchant Name in English
phone_number_nation_code	CODE	Nation Code Number of Merchant Phone Number
phone_number	NUMBER	Merchant Phone Number
partner_merchant_ref	REFTEXT	Partner managed Merchant ID
virtual_account	OBJECT	Virtual Account Information of Merchant
bank_code	CODE	Virtual Account Bank Code
bank_name	TEXT	Virtual Account Bank Name
account_number	NUMBER	Virtual Account Number
source_currency_code	CODE required	Currency Code of Source ('KRW' only)
source_amount	AMOUNT required	Total Amount of Receipt IDs in Virtual Account
target_currency_code	CODE required	Currency Code of Target ('USD' only)
receipts	LIST required	Receipt List
receipt_id_in_virtual_account	GUID required	Receipt ID Deposited into Virtual Account
sender	OBJECT	Sender Information
partner_sender_ref	REFTEXT	Partner managed Sender ID
type_code	CODE	Sender's Type Code
birthday	DATE	Sender's Birthday ('YYYY-MM-DD')
gender_type_code	CODE	Sender's Gender Type Code
nationality_code	COUNTRY	Sender's Nationality Code
real_name_number	TEXT	Sender's Encrypted Social Security Number
real_name_number_division_code	CODE	Sender's Social Security Number Division Code
name	TEXT	Sender's Full Name in English
phone_number_nation_code	CODE	Nation Code Number of Sender's Phone Number
phone_number	NUMBER	Sender's Phone Number except '-'
bank_account	OBJECT	Sender's Bank Account Information
account_holder_name	TEXT	Bank Account Holder's Name in Korean

nationality_code	COUNTRY	Bank's Nationality Code
bank_code	CODE	Bank Code
bank_account_number	TEXT	Bank Account Number
reason	TEXT	Reason of Collection
partner_dealing_number	REFTEXT	Partner's Dealing Number
create_at	DTZ	Timestamp of Request created
settlement_status_code	CODE	Status Code of Settlement Request
settlement_status_message	TEXT	Status Message of Settlement Request
result_code	CODE	API Result of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .post("https://{host}/api/v1/settlement/collection")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{
        \"merchant_id\":\"e4a4a216-2ada-11eb-9143-000c29f86a2d\",
        \"sender\": {
            \"partner_sender_ref\":\"partner_beneficiary_id\",
            \"type_code\":\"COMPANY\",
            \"birthday\":\"2010-10-01\",
            \"gender_type_code\":\"COMPANY\",
            \"nationality_code\":\"KR\",
            \"real_name_number\":\"1234567890\",
            \"real_name_number_division_code\":\"BUSINESS_REGISTRATION_NUMBER\",
            \"name\":\"Hanpass Corp.\",
            \"phone_number_nation_code\":\"+82\",
            \"phone_number\":\"0212345678\",
            \"bank_account\": {
                \"account_holder_name\":\"(주)한패스\",
                \"nationality_code\":\"KR\",
                \"bank_code\":\"004\",
                \"bank_account_number\":\"12345678\"
            }
        },
        \"source_currency_code\":\"KRW\",
        \"source_amount\":\"10000000.00\",
        \"target_currency_code\":\"USD\",
        \"receipts\": [{
            \"receipt_id_in_virtual_account\":\"c1f4db6a-517f-11eb-8334-000c29f86a2d\"
        }],
        \"reason\":\"GOODS_PURCHASED\",
        \"partner_dealing_number\":\"partner_dealing_number\"
    }").asString();
```

Example Response

```
{
    "settlement_id":"29b82cce-f426-11ea-9221-a8a1591fb0a9",
    "merchant": {
        "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
        "birthday":"2010-01-01",
        "nationality_code":"KR",
        "merchant_name":"COMPANY NAME",
        "phone_number_nation_code":"+82",
        "phone_number":"01012341234",
        "partner_merchant_ref":"partner_merchant_id",
        "virtual_account": {
            "bank_code":"007",
            "bank_name":"SUHYUP BANK",
            "account_number":"90012345679100",
        },
    },
    "source_currency_code":"KRW",
    "source_amount":"10000000.00",
    "target_currency_code":"USD",
    "receipts": [{
        "receipt_id_in_virtual_account":"c1f4db6a-517f-11eb-8334-000c29f86a2d"
    }],
    "sender": {
        "partner_sender_ref":"partner_sender_id",
        "type_code":"COMPANY",
        "birthday":"2010-10-01",
        "gender_type_code":"COMPANY",
        "nationality_code":"KR",
        "real_name_number":"1234567890",
        "real_name_number_division_code":"BUSINESS_REGISTRATION_NUMBER",
        "name":"Hanpass Corp.",
        "phone_number_nation_code":"+82",
        "phone_number":"0212345678",
        "bank_account": {
            "account_holder_name":"(주)한패스",
            "nationality_code":"KR",
            "bank_code":"004",
            "bank_account_number":"12345678"
        },
    },
    "reason":"GOODS_PURCHASED",
    "partner_dealing_number":"partner_dealing_number",
    "create_at":"2020-08-01T08:00:00+0900",
    "settlement_status_code":"SETTLEMENT_READY",
    "settlement_status_message":"Prepare Settlement for Collection Request",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.9.5 Confirm a Settlement of Collection

Use this method to confirm a collection.

Endpoint	/api/v1/settlement/collection/{settlement_id}

Method	PUT
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8

Header +		
Authorization	TOKEN required	Authentication Token

Response Body		
settlement_id	GUID	Settlement ID of Request
merchant	OBJECT	Merchant Information
merchant_id	GUID	Merchant ID
birthday	DATE	Merchant Establishment Date
nationality_code	COUNTRY	Merchant Nationality Code
merchant_name	TEXT	Merchant Name in English
phone_number_nation_code	CODE	Nation Code Number of Merchant Phone Number
phone_number	NUMBER	Merchant Phone Number
partner_merchant_ref	REFTEXT	Partner managed Merchant ID
virtual_account	OBJECT	Virtual Account Information of Merchant
bank_code	CODE	Virtual Account Bank Code
bank_name	TEXT	Virtual Account Bank Name
account_number	NUMBER	Virtual Account Number
source_currency_code	CODE	Currency Code of Source ('KRW' only)
source_amount	AMOUNT	Total Amount of Receipt IDs in Virtual Account
target_currency_code	CODE	Currency Code of Target ('USD' only)
quote	Object	Quote Information
quote_id	GUID	Quote ID
source_currency_code	CURRENCY	Currency Code of Partner Deposit
target_currency_code	CURRENCY	Currency Code of Partner Customer's Account
collection_quote	OBJECT	Quote of Collection

source_amount	AMOUNT	Amount of Source
target_amount	AMOUNT	Amount of Target
exchange_rate	RATE	Exchanging Rate to KRW (example: 1 USD = 1190.00 KRW)
fee_amount	AMOUNT	Fee Amount
partner_amount	AMOUNT	Estimated Amount of Collection for Partner (amount - fee)
payer_amount	AMOUNT	Estimated Amount collected from the Payer (partner's Customer)
exchange_rate_timestamp	DTZ	Timestamp received Exchange Rate from KIS
expired_timestamp	DTZ	Timestamp of Expiration for the Quote provided
receipts	LIST	Receipt List
receipt_id_in_virtual_account	GUID	Receipt ID Deposited into Virtual Account
sender	OBJECT	Sender Information
partner_sender_ref	REFTEXT	Partner managed Sender ID
type_code	CODE	Sender's Type Code
birthday	DATE	Sender's Birthday ('YYYY-MM-DD')
gender_type_code	CODE	Sender's Gender Type Code
nationality_code	COUNTRY	Sender's Nationality Code
real_name_number	TEXT	Sender's Encrypted Social Security Number
real_name_number_division_code	CODE	Sender's Social Security Number Division Code
name	TEXT	Sender's Full Name in English
phone_number_nation_code	CODE	Nation Code Number of Sender's Phone Number
phone_number	NUMBER	Sender's Phone Number except '-'
bank_account	OBJECT	Sender's Bank Account Information
account_holder_name	TEXT	Bank Account Holder's Name in Korean
nationality_code	COUNTRY	Bank's Nationality Code
bank_code	CODE	Bank Code
bank_account_number	TEXT	Bank Account Number

reason	TEXT	Reason of Collection
partner_dealing_number	REFTEXT	Partner's Dealing Number
create_at	DTZ	Timestamp of Request created
settlement_at	DTZ	Timestamp of Request done
settlement_status_code	CODE	Status Code of Settlement Request
settlement_status_message	TEXT	Status Message of Settlement Request
result_code	CODE	API Result of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .put("https://{host}/api/v1/settlement/collection/29b82cce-f426-11ea-9221-
a8a1591fb0a9")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("").asString();
```

Example Response

```
{
    "settlement_id":"29b82cce-f426-11ea-9221-a8a1591fb0a9",
    "merchant"{
        "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
        "birthday":"2010-01-01",
        "nationality_code":"KR",
        "merchant_name":"COMPANY NAME",
        "phone_number_nation_code":"+82",
        "phone_number":"01012341234",
        "partner_merchant_ref":"partner_merchant_id",
        "virtual_account": {
            "bank_code":"007",
            "bank_name":"SUHYUP BANK",
            "account_number":"90012345679100",
        },
    },
    "source_currency_code":"KRW",
    "source_amount":"10000000.00",
    "target_currency_code":"USD",
    "quote"{
        "quote_id":"9ceda6f4-f32d-11ea-9499-a8a1591fb0a9",
        "source_currency_code":"KRW",
        "target_currency_code":"USD",
        "colletion_quote":{
            "source_amount":"1190000.00",
            "target_amount":"1000.00",
            "exchange_rate":"1190.00",
            "fee_amount":"1.00",
            "partner_amount":"999.00",
```

```
            "payer_amount":"1190000.00",
        },
        "exchange_rate_timestamp":"2020-08-01T08:00:00+0900",
        "expired_timestamp":"2020-08-01T08:05:00+0900"
    },
    "receipts": [{
        "receipt_id_in_virtual_account":"c1f4db6a-517f-11eb-8334-000c29f86a2d"
    }],
    "sender": {
        "partner_sender_ref":"partner_sender_id",
        "type_code":"COMPANY",
        "birthday":"2010-10-01",
        "gender_type_code":"COMPANY",
        "nationality_code":"KR",
        "real_name_number":"1234567890",
        "real_name_number_division_code":"BUSINESS_REGISTRATION_NUMBER",
        "name":"Hanpass Corp.",
        "phone_number_nation_code":"+82",
        "phone_number":"0212345678",
        "bank_account": {
            "account_holder_name":"(주)한패스",
            "nationality_code":"KR",
            "bank_code":"004",
            "bank_account_number":"12345678"
        },
    },
    "receipts": [{
        "receipt_id_in_virtual_account":"c1f4db6a-517f-11eb-8334-000c29f86a2d"
    }],
    "reason":"GOODS_PURCHASED",
    "partner_dealing_number":"partner_dealing_number",
    "create_at":"2020-08-01T08:00:00+0900",
    "settlement_at":"2020-08-02T11:00:00+0900",
    "settlement_status_code":"DONE",
    "settlement_status_message":"Settlement Process Done",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.9.6 Get Collection Processing Status

Use this method to query the status of collection.

Endpoint	/api/v1/settlement/collection/{settlement_id}		
Method	GET		
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8		
Header +			
Authorization		TOKEN required	Authentication Token
Response Body			

settlement_id	GUID	Settlement ID of Request
merchant	OBJECT	Merchant Information
merchant_id	GUID	Merchant ID
birthday	DATE	Merchant Establishment Date
nationality_code	COUNTRY	Merchant Nationality Code
merchant_name	TEXT	Merchant Name in English
phone_number_nation_code	CODE	Nation Code Number of Merchant Phone Number
phone_number	NUMBER	Merchant Phone Number
partner_merchant_ref	REFTEXT	Partner managed Merchant ID
virtual_account	OBJECT	Virtual Account Information of Merchant
bank_code	CODE	Virtual Account Bank Code
bank_name	TEXT	Virtual Account Bank Name
account_number	NUMBER	Virtual Account Number
source_currency_code	CODE	Currency Code of Source ('KRW' only)
source_amount	AMOUNT	Total Amount of Receipt IDs in Virtual Account
target_currency_code	CODE	Currency Code of Target ('USD' only)
quote	Object	Quote Information
quote_id	GUID	Quote ID
source_currency_code	CURRENCY	Currency Code of Partner Deposit
target_currency_code	CURRENCY	Currency Code of Partner Customer's Account
collection_quote	OBJECT	Quote of Collection
source_amount	AMOUNT	Amount of Source
target_amount	AMOUNT	Amount of Target
exchange_rate	RATE	Exchanging Rate to KRW (example: 1 USD = 1190.00 KRW)
fee_amount	AMOUNT	Fee Amount
partner_amount	AMOUNT	Estimated Amount of Collection for Partner (amount - fee)

payer_amount	AMOUNT	Estimated Amount collected from the Payer (partner's Customer)
exchange_rate_timestamp	DTZ	Timestamp received Exchange Rate from KIS
expired_timestamp	DTZ	Timestamp of Expiration for the Quote provided
receipts	LIST	Receipt List
receipt_id_in_virtual_account	GUID	Receipt ID Deposited into Virtual Account
sender	OBJECT	Sender Information
partner_sender_ref	REFTEXT	Partner managed Sender ID
type_code	CODE	Sender's Type Code
birthday	DATE	Sender's Birthday ('YYYY-MM-DD')
gender_type_code	CODE	Sender's Gender Type Code
nationality_code	COUNTRY	Sender's Nationality Code
real_name_number	TEXT	Sender's Encrypted Social Security Number
real_name_number_division_code	CODE	Sender's Social Security Number Division Code
name	TEXT	Sender's Full Name in English
phone_number_nation_code	CODE	Nation Code Number of Sender's Phone Number
phone_number	NUMBER	Sender's Phone Number except '-'
bank_account	OBJECT	Sender's Bank Account Information
account_holder_name	TEXT	Bank Account Holder's Name in Korean
nationality_code	COUNTRY	Bank's Nationality Code
bank_code	CODE	Bank Code
bank_account_number	TEXT	Bank Account Number
reason	TEXT	Reason of Collection
partner_dealing_number	REFTEXT	Partner's Dealing Number
create_at	DTZ	Timestamp of Request created
settlement_at	DTZ	Timestamp of Request done
settlement_status_code	CODE	Status Code of Settlement Request

settlement_status_message	TEXT	Status Message of Settlement Request
result_code	CODE	API Result of Request
result_message	TEXT	API Result Message of Request

Example Request

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/settlement/collection/29b82cce-f426-11ea-9221-
a8a1591fb0a9")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

Example Response

```
{
    "settlement_id":"29b82cce-f426-11ea-9221-a8a1591fb0a9",
    "merchant"{
        "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
        "birthday":"2010-01-01",
        "nationality_code":"KR",
        "merchant_name":"COMPANY NAME",
        "phone_number_nation_code":"+82",
        "phone_number":"01012341234",
        "partner_merchant_ref":"partner_merchant_id",
        "virtual_account": {
            "bank_code":"007",
            "bank_name":"SUHYUP BANK",
            "account_number":"90012345679100",
        },
    },
    "source_currency_code":"KRW",
    "source_amount":"10000000.00",
    "target_currency_code":"USD",
    "quote"{
        "quote_id":"9ceda6f4-f32d-11ea-9499-a8a1591fb0a9",
        "source_currency_code":"KRW",
        "target_currency_code":"USD",
        "colletion_quote":{
            "source_amount":"1190000.00",
            "target_amount":"1000.00",
            "exchange_rate":"1190.00",
            "fee_amount":"1.00",
            "partner_amount":"999.00",
            "payer_amount":"1190000.00",
        },
        "exchange_rate_timestamp":"2020-08-01T08:00:00+0900",
        "expired_timestamp":"2020-08-01T08:05:00+0900"
    },
    "receipts": [{
        "receipt_id_in_virtual_account":"c1f4db6a-517f-11eb-8334-000c29f86a2d"
    }],
    "sender": {
        "partner_sender_ref":"partner_sender_id",
        "type_code":"COMPANY",
        "birthday":"2010-10-01",
```

```
        "gender_type_code":"COMPANY",
        "nationality_code":"KR",
        "real_name_number":"1234567890",
        "real_name_number_division_code":"BUSINESS_REGISTRATION_NUMBER",
        "name":"Hanpass Corp.",
        "phone_number_nation_code":"+82",
        "phone_number":"0212345678",
        "bank_account": {
            "account_holder_name":"(주)한패스",
            "nationality_code":"KR",
            "bank_code":"004",
            "bank_account_number":"12345678"
        },
    },
    "receipts": [{
        "receipt_id_in_virtual_account":"c1f4db6a-517f-11eb-8334-000c29f86a2d"
    }],
    "reason":"GOODS_PURCHASED",
    "partner_dealing_number":"partner_dealing_number",
    "create_at":"2020-08-01T08:00:00+0900",
    "settlement_at":"2020-08-02T11:00:00+0900",
    "settlement_status_code":"DONE",
    "settlement_status_message":"Settlement Process Done",
    "result_code":"20000",
    "result_message":"SUCCESS"
}
```

4.9.7   Get List of Collection

Use this method to check the partner's list of collection settlement.

Endpoint	/api/v1/settlement/collections		
Method	GET		
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8		
Header +			
Authorization	TOKEN required	Authentication Token	
Parameter			
from_at	DATE optional	The Start Date of 'settlement_at' in KST (Default Today 'YYYY-MM-DD')	
to_at	DATE optional	The End Date of 'settlement_at' in KST (Default Today 'YYYY-MM-DD')	
page	NUMBER optional	Page Number (Default '0', Page Size is '100')	
Response Body			
has_more	TEXT	Flag to determine if more Results ('true' or 'false')	

items	LIST	Paged Results of Collection
settlement_id	GUID	Settlement ID of Request
merchant	OBJECT	Merchant Information
merchant_id	GUID	Merchant ID
birthday	DATE	Merchant Establishment Date
nationality_code	COUNTRY	Merchant Nationality Code
merchant_name	TEXT	Merchant Name in English
phone_number_nation_code	CODE	Nation Code Number of Merchant Phone Number
phone_number	NUMBER	Merchant Phone Number
partner_merchant_ref	REFTEXT	Partner managed Merchant ID
virtual_account	OBJECT	Virtual Account Information of Merchant
bank_code	CODE	Virtual Account Bank Code
bank_name	TEXT	Virtual Account Bank Name
account_number	NUMBER	Virtual Account Number
source_currency_code	CODE	Currency Code of Source ('KRW' only)
source_amount	AMOUNT	Total Amount of Receipt IDs in Virtual Account
target_currency_code	CODE	Currency Code of Target ('USD' only)
quote	Object	Quote Information
quote_id	GUID	Quote ID
source_currency_code	CURRENCY	Currency Code of Partner Deposit
target_currency_code	CURRENCY	Currency Code of Partner Customer's Account
collection_quote	OBJECT	Quote of Collection
source_amount	AMOUNT	Amount of Source
target_amount	AMOUNT	Amount of Target
exchange_rate	RATE	Exchanging Rate to KRW (example: 1 USD = 1190.00 KRW)
fee_amount	AMOUNT	Fee Amount

	partner_amount	AMOUNT	Estimated Amount of Collection for Partner (amount - fee)
	payer_amount	AMOUNT	Estimated Amount collected from the Payer (partner's Customer)
exchange_rate_timestamp		DTZ	Timestamp received Exchange Rate from KIS
expired_timestamp		DTZ	Timestamp of Expiration for the Quote provided
receipts		LIST	Receipt List
receipt_id_in_virtual_account		GUID	Receipt ID Deposited into Virtual Account
sender		OBJECT	Sender Information
partner_sender_ref		REFTEXT	Partner managed Sender ID
type_code		CODE	Sender's Type Code
birthday		DATE	Sender's Birthday ('YYYY-MM-DD')
gender_type_code		CODE	Sender's Gender Type Code
nationality_code		COUNTRY	Sender's Nationality Code
real_name_number		TEXT	Sender's Encrypted Social Security Number
real_name_number_division_code		CODE	Sender's Social Security Number Division Code
name		TEXT	Sender's Full Name in English
phone_number_nation_code		CODE	Nation Code Number of Sender's Phone Number
phone_number		NUMBER	Sender's Phone Number except '-'
bank_account		OBJECT	Sender's Bank Account Information
	account_holder_name	TEXT	Bank Account Holder's Name in Korean
	nationality_code	COUNTRY	Bank's Nationality Code
	bank_code	CODE	Bank Code
	bank_account_number	TEXT	Bank Account Number
reason		TEXT	Reason of Collection
partner_dealing_number		REFTEXT	Partner's Dealing Number
create_at		DTZ	Timestamp of Request created
settlement_at		DTZ	Timestamp of Request done

settlement_status_code	CODE	Status Code of Settlement Request	
settlement_status_message	TEXT	Status Message of Settlement Request	
result_code	CODE	API Result of Request	
result_message	TEXT	API Result Message of Request	

Example Request

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/settlement/collections
        ?from_at=2020-08-01
        &to_at=2020-08-05
        &page=0")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

Example Response

```
{
    "has_more":"false",
    "items":[{
        "settlement_id":"29b82cce-f426-11ea-9221-a8a1591fb0a9",
        "merchant"{
            "merchant_id":"e4a4a216-2ada-11eb-9143-000c29f86a2d",
            "birthday":"2010-01-01",
            "nationality_code":"KR",
            "merchant_name":"COMPANY NAME",
            "phone_number_nation_code":"+82",
            "phone_number":"01012341234",
            "partner_merchant_ref":"partner_merchant_id",
            "virtual_account": {
                "bank_code":"007",
                "bank_name":"SUHYUP BANK",
                "account_number":"90012345679100",
            },
        },
        "source_currency_code":"KRW",
        "source_amount":"10000000.00",
        "target_currency_code":"USD",
        "quote"{
            "quote_id":"9ceda6f4-f32d-11ea-9499-a8a1591fb0a9",
            "source_currency_code":"KRW",
            "target_currency_code":"USD",
            "colletion_quote":{
                "source_amount":"1190000.00",
                "target_amount":"1000.00",
                "exchange_rate":"1190.00",
                "fee_amount":"1.00",
                "partner_amount":"999.00",
                "payer_amount":"1190000.00",
            },
            "exchange_rate_timestamp":"2020-08-01T08:00:00+0900",
            "expired_timestamp":"2020-08-01T08:05:00+0900"
        },
```

```
        "receipts": [{
            "receipt_id_in_virtual_account":"c1f4db6a-517f-11eb-8334-000c29f86a2d"
        }],
        "sender": {
            "partner_sender_ref":"partner_sender_id",
            "type_code":"COMPANY",
            "birthday":"2010-10-01",
            "gender_type_code":"COMPANY",
            "nationality_code":"KR",
            "real_name_number":"1234567890",
            "real_name_number_division_code":"BUSINESS_REGISTRATION_NUMBER",
            "name":"Hanpass Corp.",
            "phone_number_nation_code":"+82",
            "phone_number":"0212345678",
            "bank_account": {
                "account_holder_name":"(주)한패스",
                "nationality_code":"KR",
                "bank_code":"004",
                "bank_account_number":"12345678"
            },
        },
        "receipts": [{
            "receipt_id_in_virtual_account":"c1f4db6a-517f-11eb-8334-000c29f86a2d"
        }],
        "reason":"GOODS_PURCHASED",
        "partner_dealing_number":"partner_dealing_number",
        "create_at":"2020-08-01T08:00:00+0900",
        "settlement_at":"2020-08-02T11:00:00+0900",
        "settlement_status_code":"DONE",
        "settlement_status_message":"Settlement Process Done"
    }],
    "result_code":"20000",
    "result_message":"Success
}
```

4.10 Code List

4.10.1 Get List of Code Data

Use this method to request a code list.

Endpoint	/api/v1/codelists		
Method	GET		
Headers	Content-Type:application/json;charset=UTF-8 Accept:application/json;charset=UTF-8		
Header +			
Authorization	TOKEN required	Authentication Token	
Parameter			
code_category_name	TEXT	Category Name of Code	

	optional	
Response Body		
code_categories	LIST	Code Category List
code_category_name	TEXT	Code Category Name
code_list	LIST	Code List in Code Category
code_value	CODE	Code Value
code_name	TEXT	Code Name
code_korean	TEXT	Code Name in Korean
result_code	CODE	API Result of Request
result_message	TEXT	API Result Message of Request
Example Request		

```
HttpResponse<String> response = Unirest
    .get("https://{host}/api/v1/codelists
        ?code_category_name=payout_bank_code")
    .header("Content-Type","application/json;charset=UTF-8")
    .header("Accept","application/json;charset=UTF-8")
    .header("Authorization","bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ2ZWxvcGVydC5jb20iLCJleHAiOiIxNDg1MjcwMDA
wMDAwIiwiaHR0cHM6Ly92ZWxvcGVydC5jb20vand0X2NsYWltcy9pc19hZG1pbiI6dHJ1ZSwidXNlcklkIjoiMTE
wMjgzNzM3MjcxMDIiLCJ1c2VybmFtZSI6InZlbG9wZXJ0In0")
    .body("{}").asString();
```

| **Example Response** | | |

```
{
    "code_categories":[{
        "code_category_name":"payout_bank_code",
        "code_list":[{
            "code_value":"002",
            "code_name":"KOREA DEVELOPMENT BANK, THE",
            "code_korean":"산업은행"
        },{
            "code_value":"003",
            "code_name":"INDUSTRIAL BANK OF KOREA",
            "code_korean":"기업은행"
        },{
            "code_value":"004",
            "code_name":"KOOKMIN BANK",
            "code_korean":"국민은행"
        },{
                                        …
        }]
    }],
    "result_code":"20000",
    "result_message":"Success
}
```

5. Code Reference Table

5.1 Social Security Number Division Code

real_name_number_division_code	
Code	**Description**
RESIDENT_REGISTRATION_NUMBER	Resident Registration Number[주민등록번호], for Korean(Nationality is 'KR')
ALIEN_REGISTRATION_NUMBER	Alien[Foreigner] Registration Number[외국인등록번호], for Foreigner (Registered in Korea)
DOMESTIC_RESIDENCE_REPORT_NUMBER	Domestic Residence Report Number[국내거소신고번호], for Foreigner (Registered in Korea)
PASSPORT_NUMBER	Passport Number[여권번호], for Foreigner
BUSINESS_REGISTRATION_NUMBER	Business Registration Number[사업자번호], for Korean Company

5.2 Nationality Code

nationality_code [Two-letter ISO 3166-2 country Code (Alpha-2)]	
Code	**Description**
KR	Korea[대한민국]
US	United States of America[미국]
CN	China[중국]
All Alpha-2 Country Code (JP, EU, etc.)	

5.3 Currency Code

from_currency_code, to_currency_code, source_currency_code, payment_currency_code [Three-letter ISO 4217 currency Code (Code 3 Byte Character)]	
Code	**Description**
KRW	Currency Code of Korea[원]
USD	Currency Code of United States of America[US달러]
EUR	Currency Code of European Union[유로]

GBP	Currency Code of United Kingdom [파운드]
JPY	Currency Code of Japan [엔]
CNY	Currency Code of China [위안]
HKD	Currency Code of Hongkong [홍콩달러]
AUD	Currency code of Australia [호주달러]

5.4 Bank Code

5.4.1 Payout (More banks to be added)

bank_code	
Code	**Description**
002	KOREA DEVELOPMENT BANK, THE[산업은행]
003	INDUSTRIAL BANK OF KOREA[기업은행]
004	KOOKMIN BANK[국민은행]
007	SUHYUP BANK[수협중앙회]
011	NONGHYUP BANK[농협중앙회]
020	WOORI BANK, SEOUL[우리은행]
023	STANDARD CHARTERED BANK KOREA LIMITED[SC제일은행]
027	CITIBANK KOREA INC[한국시티은행]
031	DAEGU BANK, LTD., THE[대구은행]
032	BUSAN BANK[부산은행]
034	KWANGJU BANK LTD, THE[광주은행]
035	JEJU BANK[제주은행]
037	JEONBUK BANK[전북은행]
039	KYONGNAM BANK[경남은행]
045	KOREA FEDERATION OF COMMUNITY CREDIT COOPERATIVE[새마을금고]
048	NATIONAL CREDIT UNION FEDERATION OF KOREA[신협]

071	KOREA POST BANK[우체국]
081	KEB HANA BANK[KEB 하나은행]
088	SHINHAN BANK[신한은행]
089	K BANK[케이뱅크]
090	KAKAO BANK[카카오뱅크]

5.4.2   Collection (More banks to be added)

bank_code	
Code	**Description**
002	KOREA DEVELOPMENT BANK, THE[산업은행]
003	INDUSTRIAL BANK OF KOREA[기업은행]
004	KOOKMIN BANK[국민은행]
007	SUHYUP BANK[수협중앙회]
011	NONGHYUP BANK[농협중앙회]
020	WOORI BANK, SEOUL[우리은행]
023	STANDARD CHARTERED BANK KOREA LIMITED[SC제일은행]
027	CITIBANK KOREA INC[한국시티은행]
031	DAEGU BANK, LTD., THE[대구은행]
032	BUSAN BANK[부산은행]
034	KWANGJU BANK LTD, THE[광주은행]
035	JEJU BANK[제주은행]
037	JEONBUK BANK[전북은행]
039	KYONGNAM BANK[경남은행]
045	KOREA FEDERATION OF COMMUNITY CREDIT COOPERATIVE[새마을금고]
048	NATIONAL CREDIT UNION FEDERATION OF KOREA[신협]
071	KOREA POST BANK[우체국]

081	KEB HANA BANK[KEB 하나은행]
088	SHINHAN BANK[신한은행]
089	K BANK[케이뱅크]
090	KAKAO BANK[카카오뱅크]

5.5 Customer Type Code

type_code	
Code	**Description**
PERSON	Person [개인]
COMPANY	Company [회사/법인/업체]

5.6 Gender Type Code

gender_type_code	
Code	**Description**
MALE	Male [남성]
FEMALE	Female [여성]
COMPANY	Company [회사/법인/업체]

5.7 Status Code (May change later)

Code	Description
SETTLEMENT COLLECTION STATUS CODE	
DONE	Settlement Process Done [정산완료]
NOT_VALID_SENDER	Not Valid Sender [입금자확인실패] (No Sender ID or Not Valid Sender)
SETTEMENT_READY	Prepare Settlement for Collection Request [정산준비]
REMITTANCE_REDAY	Awaiting Remittance to Partner [송금대기]

SETTLEMENT PAYOUT STATUS CODE	
DONE	Settlement Process Done [정산완료]
INSUFFICIENT_BALANCE	Insufficient Partner Deposit Balance [예치금부족]
NOT_VALID_BENEFICIARY	Not Valid Beneficiary [수취자확인실패] (No Beneficiary ID or Not Valid Beneficiary)
DELAY	Remittance Delay [송금대기] (IT IS PROCESSING TO THIRD PARTY)
REMITTANCE_FAILURE	Remittance Failure [송금실패]

6. Data Encrypt

6.1 Authentication Information Encryption

HANPASS authenticates requests using a client ID and client secret, and authentication information is managed by HANPASS PG API Service. Partners must encrypt the client ID and client secret value provided by HANPASS with the public key of HANPASS using RSA algorithm to issue the Authentication Token in HANPASS, then encode it in Base64 and include it in the HTTP request header.

The procedure to compute the signature is as follows:

    A.   Client ID, client secret, public key information received from HANPASS.

    B.   Client ID with plain text

    C.   Encoding with Base64 after encrypting the Client Secret with Public Key (RSA Algorithm)

    D.   Set the each value in the 'h-client-id' and 'h-client-secret' field of the HTTP request header.

Example

```
[STEP A. Receives partner information(client id, client secret and public key) for API
service from HANPASS.]

[Client ID]: "client_id"
[Client Secret]: "client_secret"
[Public Key] :
"MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAokwEmXbMRnKl7SaVkOgdZk8jRxcNAcLXx/wiPCsBifG
avhcgMSw9/jZCB9XNpGiYb0vb03N/RW+dAYs8ZUzZLetPa86pTDTNrQk75vrVABXNmCkzWyX0d2oCtcR09K9dfHs
hPpYFBR3498vc4P5beSP7yPLAOxKPm0N2k6McFCBP7KEZlyTMBte/wYoruMnP4YuLRnjcyy/fMCnqhqmbXij6LSw
7jkvHfnxhAK32PLGM4Uf/IWR4YN3UblQ3sUKKwbXcaCC9l1maAGJiQNO7rCg0TJVpxUTvS5wIdoHptzKN3m4h//F
TzeNUI5ck0vil8/D9ntqeUf4ZY7M/j7lPRQIDAQAB"
```

```
[STEP B. Encrypt client secret with public key and encode it as BASE64.]

RSA ENCRYPTION (payload: [Client Secret], key: [Public Key])

[Encrypted Secret] :
"esdjILGHADohwVo1xp5nOTzmfQRvTXflm/xrfiuD6H3rVrHB8hxYgaTXo+w7/PWjosjXaMgXaHpKQyKqi6XWDg+
PYPxdXzeX21aVjuerOefHNNsvqaV/c/OCZ3zF567h5O2UH1PwwEUKPKl1jIpevmNQs5tlgsI2vKlPf6PLlPL+bw0
aYlgdGrS5p8dLw6qybdFUpOVAHUYpRzCO2EeLksTqPZyZN9AAdvsqvSgoe5I6Z6LxsFsBIuxrYW+4/EBsblVKC32
CIVi+xp5MC3g0DC9f7VVYuMtrE04rtIXMs8CKKaXHmfruKRokHiYIzyzPqWXDKTfPHkEPtEfjmrPOUg=="
```

```
[STEP C. Set encrypted value in the 'h-client-id' and 'h-client-secret' field of the
HTTP request header.]

HttpHeaders headers = new HttpHeaders();
headers.set("h-client-id", "[Client ID]");
headers.set("h-client-secret", "[Encrypted Secret]");
```

6.2 API Signature

Partners must include a signature to check whether data is forged.

The procedure to compute the encrypted data is as follows:

    A.   After One-way encryption of payload with SHA-256 using client secret as salt, convert One-way encryption result to hexadecimal string.

    B.   Set the signature value in the 'h-signature' field of the HTTP request header.

Example

```
[STEP A. One-way encryption of payload with SHA-256 using client secret as salt]

[Payload]: "{\"deposit_id\":\"ddb07821-f32d-11ea-9499-a8a1591fb0a9\"}"
[Client Secret]: "client_secret"

SHA-256 One-way ENCRYPTION (payload: [Payload], salt: [Client Secret])

HEX (SHA-256 One-way Encryption Result)

[Signature]: "747c1a55bad8952ede15aa88861b3eef205216da6fb47e82df806085e9af7689"
```

```
[STEP B. Set the signature value in the 'h-signature' field of the HTTP request header]

HttpHeaders headers = new HttpHeaders();
headers.set("h-signature", [Signature]);
```

6.3 Sample Code

```
[RSA Sample]

public static String encryptRSA(String plainText, String base64PublicKey) throws
Exception {
    KeyFactory keyFactory = KeyFactory.getInstance("RSA");
    X509EncodedKeySpec spec1 = new
X509EncodedKeySpec(Base64.getDecoder().decode(base64PublicKey));
    PublicKey publicKey = keyFactory.generatePublic(spec1);
    Cipher cipher = Cipher.getInstance("RSA");
    cipher.init(Cipher.ENCRYPT_MODE, publicKey);
    return Base64.getEncoder().encodeToString(cipher.doFinal(plainText.getBytes()));
}
```

```
[SHA-256 Sample]

public byte[] encrypt(String c, String salt) {
    try {
            Mac HMacCrypto = Mac.getInstance("HmacSHA256");
            HMacCrypto.init(new SecretKeySpec(salt.getBytes(), "HmacSHA256"));
            return HMacCrypto.doFinal(c.getBytes());
    }
    catch (NoSuchAlgorithmException | InvalidKeyException e) {
```

```
        return null;
    }
}
```

7. Notice

HANPASS provides ID for each transaction and partners can retrieve transaction status through API.

Partners must provide a callback API in HANPASS to receive status for virtual account receipt notification and deposit approval, etc.