



Wing Rest API

For Partners

Version 1.1

Overview

The wing API documentation provides pragmatic access to wing system. This document is a technical specification for interaction between wing systems with third party. It describes how message is defined and transmitted between Wing and Third party.

HTTP Methods and Response Codes

All actions taken through the API are follow REST conventions via HTTPS using standard HTTPS methods: GET (to retrieve an object), POST (to create).

Input/output Format

Request body data is expected to be in **JSON**, and the response body data is returned as **JSON**.

Requests and Responses

Every request has to send with access token in the header of request (Authorization: Bearer access_token) no matter **POST** or **GET** request (exclude for request token's request).

Example Requests and Responses

With every API method we provided a sample request and a sample response in plain text format.

Authentication

To be able to access to wing API username, password, Client ID, Client Secret are required to authenticate request. Once authentication fail, any access from third party would be blocked.

Token

Access token is generated by Wing API and provided to third party software client to identify the request identity. Once token authentication fail, any access from third party would be blocked.

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1 General Information

1.1 Authentication Information

Name	Third party
username	to be provided later
password	to be provided later
client_id	third_party
client_secret	16681c9ff419d8ecc7cfe479eb02a7a

1.2 Testing Server

This is our back end testing server:

URL: <http://110.74.218.219:8080/RestEngine>

1.3 Token Expiration

For access token we set expiration time to **5 minute**

1.4 Sending token with request

Every request need to send along with token in header as described in below example:

```
curl -H "Authorization: Bearer OAUTH-TOKEN"  
http://110.74.218.219:8080/RestEngine
```

2 Token

2.1 Request Access Token

- Request

Method	POST (with x-www-form-urlencoded content type)
URL	/oauth/token
Request Parameter	Request parameter: <code>username</code> : End user's username (third party's username) <code>password</code> : End user's password <code>client_id</code> : The client id <code>client_secret</code> : The client secret key <code>grant_type</code> : Grant type, for this request value should be (password)

- Reponses

Key	Description
<code>access_token</code>	Access token that acts as a session ID that the application uses for making requests. This token should be protected as though it were user credentials.
<code>expires_in</code>	Token expiration time (in second)
<code>token_type</code>	Token type

Response sample

```
{
  "access_token": "22cb0d50-5bb9-463d-8c4a-8ddd680f553f",
  "token_type": "bearer",
  "expires_in": 119
}
```

2.2 Authentication failed

- Response

```
{
  "error": "invalid_client",
  "error_description": "Bad client credentials"
}
```

3 Wing Services

3.1 Bill Payment

3.1.1 Validate Transaction

Request

Method	POST
URL	/api/v3/billpayments/validate
Request Parameter	None, has only request body

Fields	Description
wing_account	Customer's wing account (Payer)
biller_code	Biller Code of Company (Payee)
consumer_id	Unique Biller ID (invoice#, outlet ID, ...)
amount	Amount to be paid (USD or KHR base on biller's account currency)
security_code	6-digits security code of the customer's wing account

Request sample

```
{
  "wing_account": "00001122",
  "biller_code": "7500",
  "amount": 20000,
  "consumer_id": "1415910",
  "security_code": "987602"
}
```

Response

Attributes	Description
amount	Paid amount
total	Transferred amount
fee	Payment fee
consumer_id	Unique Biller ID (invoice#, outlet ID, ...)
consumer_name	Name of the consumer of the invoice or outlet ID (only display if have consumer name from company system)
biller_name	Name of the Company
exchange_rate	Exchange rate (optional, it display only for cross currency transaction)

Response sample

```
{
  "amount " : "KHR 10,000",
  "fee" : "0",
  "total" : "USD 2.46",
  "consumer_id" : "1415910",
  "consumer_name" : "John Doe",
  "exchange_rate" : "USD 1.00 = KHR 4,046",
  "biller_name": "ABC Co LTD"
}
```

3.1.2 Commit Transaction

Request

Method	POST
URL	/api/v3/billpayments/commit
Request Parameter	None

Request sample

```
{
  /* required only authorization header */
}
```

Response

Attributes	Description
biller_name	Name of the Company
biller_code	Unique Identifier of Company
amount	paid amount
total	Total transferred amount
consumer_id	Unique Biller ID (invoice#, outlet ID, ...)
fee	Payment fee
exchange_rate	Exchange rate (optional, it display only for cross currency transaction)
transaction_id	Transaction ID

Response sample

```
{
  "biller_name ": "ABC Co LTD",
  "biller_code": "7500",
  "consumer_id": "1415910",
  "amount": "USD 5.00",
  "total ": "USD 5.00",
  "exchange_rate" : "USD 1.00 = KHR 4,046",
  "fee": "USD 0.00",
  "transaction_id": "INT000001"
}
```

3.2 Send Money Wing

Request

Method	POST
URL	/api/v1/v1/sendmoney/wing/commit
Request Parameter	None, has only request body

Fields	Description
currency	KHR or USD (base on Payer's currency)
amount	Amount to be transfer
receiver_account	Receiver's wing account

Request sample

```
{
  "currency": "USD",
  "amount": 5,
  "receiver_account": "00009911"
}
```

Response

Attributes	Description
Currency	Currency
Amount	Amount
Fee	Fee charge (optional, if there is no fee it won't display)
Total	Total amount
Exchange_rate	Exchange rate (optional, display only for cross currency transaction)
account_name	Name of the receiver account
Transaction_id	Transaction id
Balance	Sender's remaining balance

Response sample

```
{
  "currency" : "USD",
  "amount" : " 10.00USD",
  "fee" : " 0.25USD",
  "total" : "10.25USD",
  "exchange_rate" : "",
  "transaction_id" : " EAB000001",
  "balance" : "100.00USD",
  "account_name" : "Sok Dara"
}
```

3.3 Get Receiver Account Currency

You can use this service to determine the receiver account if it is USD or KHR before process the payment.

Request

Method	GET
URL	/api/v1/user/currency/{wing_account}
Request Parameter	None

Response

Attributes	Description
wing_account	Receiver Wing Account number
wallet_currency	Account currency
account_name	Wing Account name

Response sample

```
{
  "wing_account": "00001243",
  "wallet_currency": "USD",
  "account_name": "John Doe"
}
```

3.3.1 Check Account Balance

Request

Method	POST
URL	/api/v1/user/info
Request Parameter	None

Request sample

```
{  
  /* required only authorization header */  
}
```

Response

Attributes	Description
balance	Balance Remaining
wallet_currency	Wallet currency (KHR / USD)
company_name	Name of the company/organization
wing_account	Prefund account number at Wing

Response sample

```
{  
  "balance": "100.50",  
  "wallet_currency": "USD",  
  "company_name": "ABC Ltd",  
  "wing_account": "00900012"  
}
```

4 Message Code

Each of the function provided, in case of success it will response with **200** http code.

The following error code are generated from our system when there is an error occur:

Message Code	Description
00067	Sender account has been blocked, please call WING at 023 999 989.
00335	Security Code & Wing Account mismatch.
00340	Security Code Expired.
000030	General Fail Exception.
00002	Token is expired
006035	Transaction not found
E0204	ERROR: Not enough wallet balance to do transactions.
00210	You have exceeded the number of attempts allowed. Account blocked, please call WING at 023 999 989.
000038	Biller/Merchant not found.
00066	User not found.
00092	Account Number is Invalid.
00940	Requested Amount Is more than Maximum Transfer Allowed
00941	Amount is Less than Minimum Transfer Allowed
60050011	Maximum count of transaction per month for payer reached
60050012	Maximum count of transaction per week for payer reached
60050013	Maximum count of transaction per day for payer reached
60050021	Maximum count of transaction per month for payee reached
60050022	Maximum count of transaction per week for payee reached
60050023	Maximum count of transaction per day for payee reached
60060011	Maximum amount of transaction per month for payer reached
60060012	Maximum amount of transaction per week for payer reached
60060013	Maximum amount of transaction per day for payer reached
60060021	Maximum amount of transaction per month for payee reached
60060022	Maximum amount of transaction per week for payee reached
60060023	Maximum amount of transaction per day for payee reached
E0200	ERROR: This service is not allowed for you.
E0203	ERROR: Wallet threshold not exist for this class of service.
APPE0001	Invalid Token Value.