

Telenor Microfinance Bank

# Telenor API Gateway Developer's Guide

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## Introduction to API Gateways

An **API Gateway** is an API management server that has information about endpoints. It is also capable of performing **authentication**, **rate limiting**, **load balancing**, and more. An **API Gateway** is an important concept in micro services architecture. It acts an entry point for external clients (that is not part of the micro service system) and application.

### Why We Need API Gateway

Consider a case study of a complex page (Product page) of an e-commerce application. If we look at the below page of Amazon product listing, we can see a lot of information needed to be rendered by this specific page.

As all micro services have been deployed separately on a different server, if a client wants to access these services, at least seven (7) calls have to be requested for a single page.

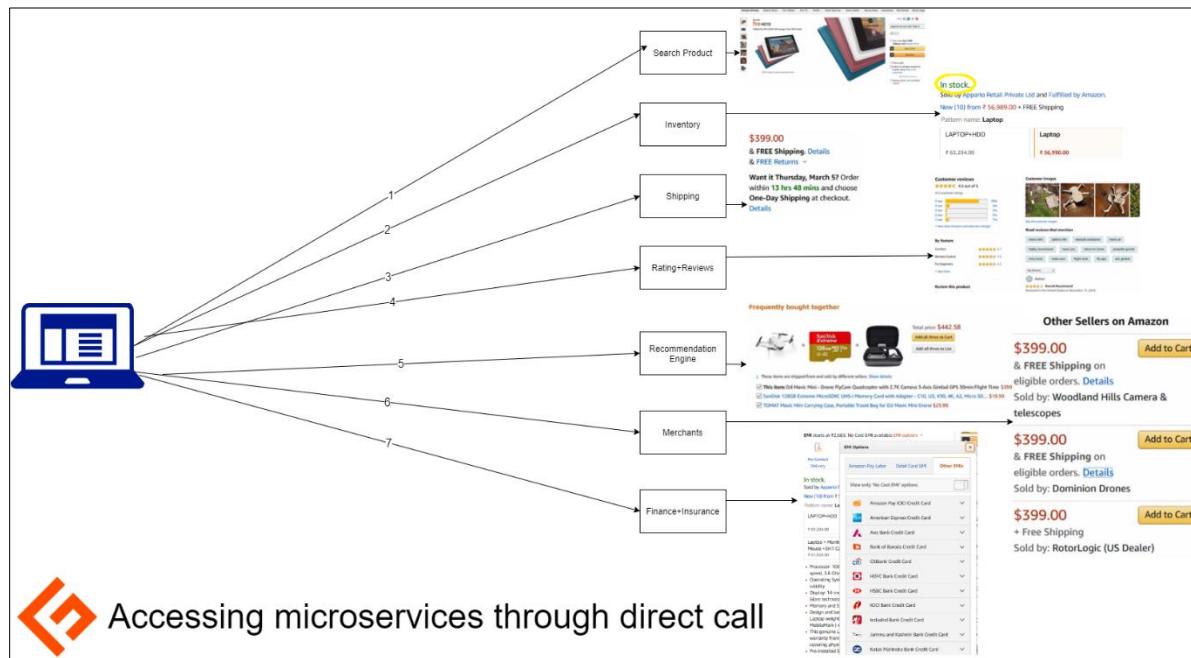


Figure 1: Accessing Microservices through direct call

Seven different calls will be made for calling serviced. Performance, resource consumption and load time will be affected. The clients are closely coupled with all the services, and if **Reviews and rating** micro services are separated in two different services, the client code needs to be updated. One call will be made to get reviews, and other to get ratings, which will affect the performance and load time.

## Resolution

The recommended solution and approach to avoid multiple call is an **API Gateway**. An **API Gateway** acts a layer between the Client and micro services. It is front-facing service for all of the micro services. Any client who wants to access the micro services, will only call API gateway. API Gateway further makes a call to the required micro services and gets the response. This process is called **API Composition**.

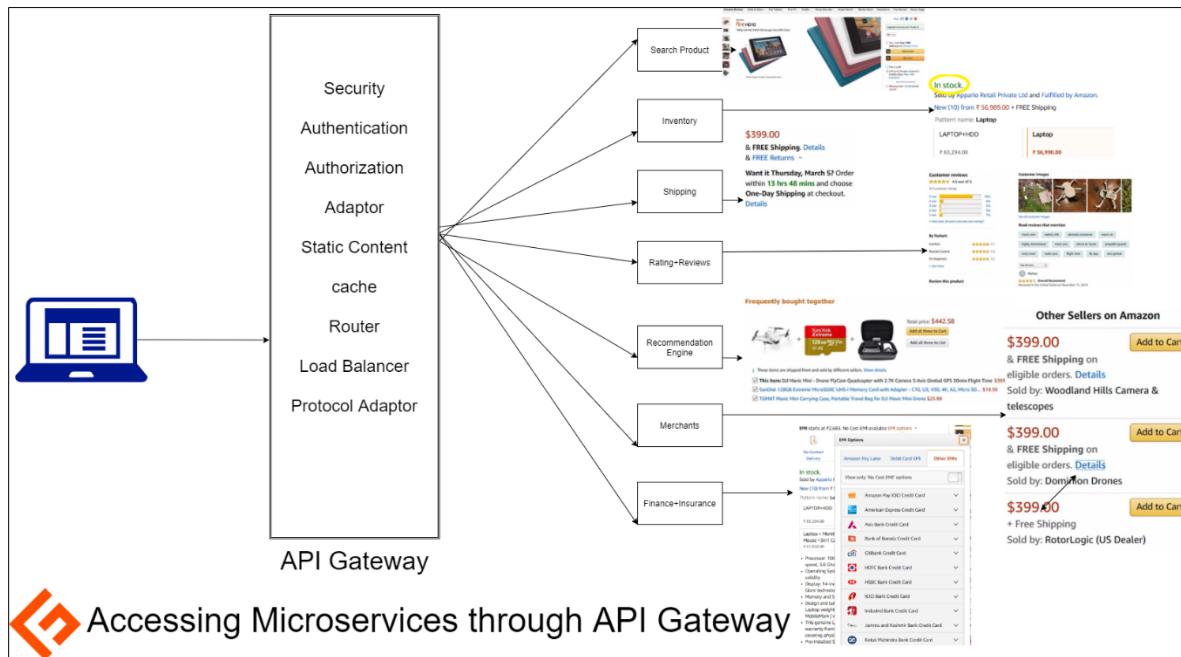


Figure 2: Accessing Microservice through API Gateway

## Overview of the API Developer's guide

This API Developer guide will help you to understand the process of getting started over Telenor Mobile Banking Open API platform. TMB Open API platform facilitate developers and different corporate clients/companies in offering digital payments services on web portals and applications, e.g. Bill Payments & Interbank funds transfer.

This document will define on-boarding process in brief and simple manner, to help external users of TMB Open API platform.

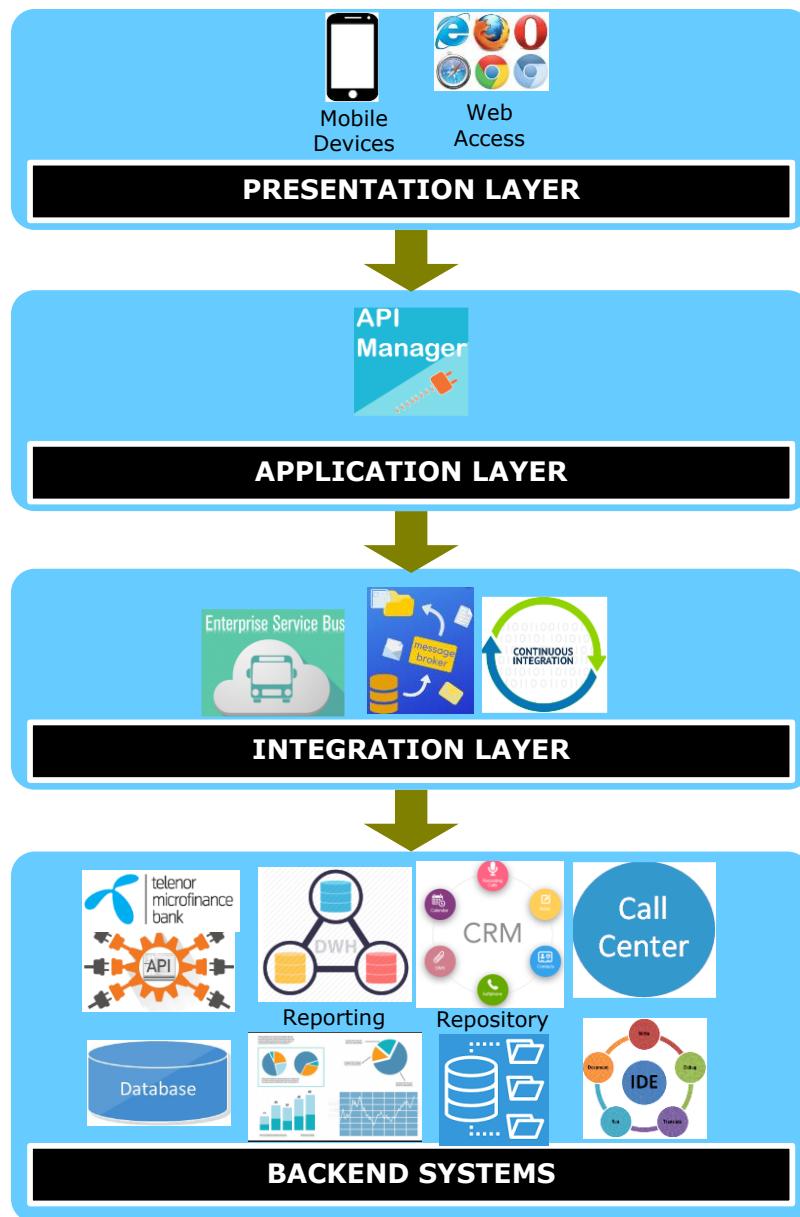


Figure 3: TMB Open API Platform

## Intended Audience of the document

- Telenor Bank Internal Users
- Telenor Bank external users/clients
- Developers
- Fintechs

## TMB Open API platform

TMB Open API is a complete, modern, intuitive and scalable API platform that allows creating, securely exposing, managing, throttling and monetizing APIs across so that users can power digital applications.

### Components of TMB Open API Platform

#### Management System (API Manager) and Gateway Service

Major components of TMB Open platform are **Management System (API Manager)** and **Gateway Service**. **TMB Open API Platform** helps organizations quickly jump into the API economy. It enables them to innovate faster, reach new customers and gain competitive advantages by facilitating the rapid delivery of applications and services.

#### Developer's Portal

The TMB Developer's Portal provides a customizable self-service web-based portal to application developers to explore, discover, and subscribe to TMB Open APIs. Application developers can access the Developer Portal UI to register their applications, discover APIs, use the required APIs in their applications (with access approval where necessary), and subsequently deploy those applications.

The Developer's Portal additional features includes Forums, Blogs, and Comments for socialization and collaboration. API consumers can also view analytics information about the APIs that are used by an application or used within a consumer organization.

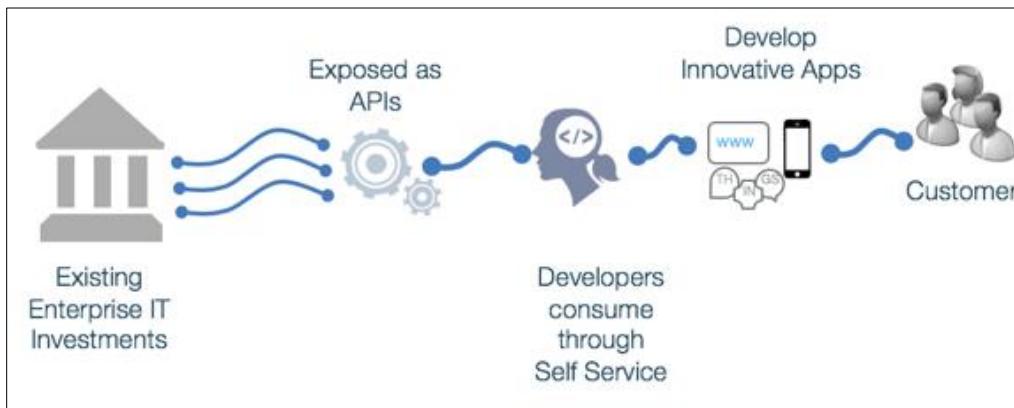


Figure 4: API Open Platform

## Getting Started

Using TMB Open API developer portal, external users can browse through the use-cases which are published by TMB as an open API service and can identify the use-case as per their need. TMB developer portal is a full solution for external users to integrate via TMB Open API's.

You can access TMB developer portal through following link.

**Sandbox Environment:** [www.sandbox.developer.easypaisa.com.pk](http://www.sandbox.developer.easypaisa.com.pk)

**Production Environment:** [www.developer.easypaisa.com.pk](http://www.developer.easypaisa.com.pk)

### 1. Browsing and Accessing API's

TMB Open API Platform facilitate users to browse through all the available API's and identify which API best fits with their requirements. Below mentioned are some examples of available open API's;

- **Bill Payments.**
- **Interbank Funds transfer.**
- **Easypaisa Account registration.**

**Specifications, Request/Response packet, Response codes** and other details are available for all available API's to give insight of API to the user.

## 2. Register & Sign up

Creating an account over TMB Open API platform is free and easy. Simple sign up and self-registration process allows the externals to create their accounts before testing any API. When an external user gets registered he will be assigned a unique **Client ID** and **Client secret**. These credentials will allow the external users to access the API's over sandbox environment. '**Contact Us**' and '**Support**' is available for users to get their integration queries clarified.

## 3. Create test application

Once the user creates account, he will be allowed to access the TMB sandbox environment API's, to experiment the integration of sample codes and API's. Documentation for each API will be available to provide insight and help the user.

Users will be able to integrate and test their applications hassle free inn sandbox environment. '**Contact Us**' and '**Support**' is available for users to for any help required.

## 4. Business Onboarding

Once you have signed up to the Easypaisa Developer's portal and want to utilize our API's, you have to get in touch with our business teams. The business onboarding will be done in parallel with the development. The business onboarding entails number of steps including;

- Vendor onboarding
- Contract signing
- Billing charges agreement and much more.

## 5. Go-live Production application

After integration and sandbox testing, user can request for production environment access, over developer portal. For production environment access, users have to sign a contract with TMB (where applicable). TMB sales or business team will get in touch for the contractual requirements with the external user and to finalize the product pricing with client against each API.

Once the user is done with business and contractual requirements, he will go to the production developer portal and create an account, once the account is created, he will be able to create apps and subscribe to production API's. Upon app creation **Client ID**, and **Client Secret** will be generated on developer portal which will be used in the header parameter of every API. Please note, **Client Secret** only appears on the screen for one time so do not miss it.

For production environment team will also provide 1 **JIRA ID** to the user where they will raise production support tickets to the team in case of any issue.

## Requesting Staging Inventory for Testing

In order to test the APIs, inventory must be created for staging. Then, this will be used to populate parameters for API requests, **for example;** Retailer user ID, PIN and MPOS, or Subscriber MSISDN and PIN pair, test bill consumer number, test bank account numbers etc.

For requesting this inventory, please visit the developer portal and sign up for an account. After confirming your developer portal account via email, please proceed to create a new application on the developer portal.

Keep the **Client ID** and **Secret** pair safe, as the client secret is only shown once. Please proceed to the **Help** section of the developer portal and go to **Contact Us**. Fill in the form with your information, make sure to provide the email address that was used to sign up on the developer portal. Then please provide the following information in the message:

- Subject: Request for Staging Inventory for Testing
- User name on developer portal
- Application Name on developer portal
- Client ID for the application
- API product name for which inventory is required
- API name for which inventory is required
- Parameters whose values are required

Upon verification of all the above information, you will receive the inventory for testing on the email address, provided in the **Contact us** form.

## Utilities

Following APIs are used in different use cases to fetch relevant data, in order to complete end to end flow of APIs.

### Get Banks List

This API returns all banks' information from configuration. The information from this API is used to populate parameters in other APIs, such as Subscriber and Retailer IBFT inquiry and transfer use cases.

There is no payload in the body of this API's request.

**Endpoint URL:** <BASE URL>/utilities/GetBanks

**Operation Name:** GetBanks

**Time-Out:** 140 Sec

#### Request Attributes

##### *Request Header Parameters*

The header parameters X-IBM-Client-Id and X-IBM-Client-Secret are mandatory for all API calls, and are used to authenticate the requester. The X-Channel parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
X-IBM-Client-Id	API Authentication credential	Yes
X-IBM-Client-Secret	API Authentication credential	Yes
X-Channel	<ul style="list-style-type: none"> <li>For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	Yes

#### Response Attributes

##### *Request Body Parameters*

Parameter Name	Description	Mandatory
ResponseCode	String	Yes
ResponseMessage	String	Yes
Banks	Array	No
BankName	String	No
BankTitle	String	No
BankShortName	String	No

## Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

### Sample Response

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
  "Banks": [
    {
      "BankName": "MOD",
      "BankTitle": "MOD",
      "BankShortName": "MOD"
    },
    {
      "BankName": "Habib Bank Limited Pakistan",
      "BankTitle": "Habib Bank Limited Pakistan",
      "BankShortName": "HBL"
    }
  ]
}
```

## CURL

```
curl -L -X POST '<BASE_URL>/utilities/GetBanks' -H 'Content-Type: application/json' -H 'X-IBM-Client-Id: 9bd84207-3310-7bc2-b8e4-b5c6aef68baf' -H 'X-IBM-Client-Secret: N6dJ8bQ6iF5xd5jg1hF3fy8fu6asS7sf0pIHpF2oX4sN2vK3bJ5' -H 'X-Channel: <Shared during onboarding>' --data-raw ''
```

## Get Billing Companies List

This API returns all billing companies' information from configuration. The information from this API is used to populate parameters in other APIs, such as Subscriber and Retailer utility bill inquiry and payment use cases.

**There is no payload in the body of this API's request.**

Categories (Sub Business) of billing companies include:

- Electricity
- Telephone
- Gas
- Internet
- Water
- Solar
- Education Fee
- Credit Card Payments
- Government Fees/Credit Card
- Investments
- Others

**Endpoint URL:** <BASE URL>/utilities/GetBillCompanies

**Operation Name:** GetBillCompanies

**Time-Out:** 140 Sec

### Request Attributes

#### *Request Header Parameters*

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>

## Response Attributes

### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>Business</b>	Array	No
<b>Name</b>	String	No
<b>SubBusiness</b>	String	No

## Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0  
**X-IBM-Client-Secret:** 79bcc980cd3268cb26ff46a50607221  
**X-Channel:** <Shared during onboarding>

### Sample Response

```
{  
    "ResponseCode": "0",  
    "ResponseMessage": "Success",  
    "Business": [  
        {  
            "Name": "FESCO",  
            "SubBusiness": "Electricity"  
        },  
        {  
            "Name": "IESCO",  
            "SubBusiness": "Electricity"  
        },  
        {  
            "Name": "PESCO",  
            "SubBusiness": "Electricity"  
        },  
        {  
            "Name": "NavaTel",  
            "SubBusiness": "Internet"  
        }  
    ]  
}
```

### CURL

```
curl -L -X POST '<BASE_URL>/utilities/GetBillCompanies' -H 'Content-Type: application/json' -  
H 'X-IBM-Client-Id: 9bd84207-3310-7bc2-b8e4-b5c6aef68baf' -H 'X-IBM-Client-  
Secret: N6dJ8bQ6iF5xd5jg1hF3fy8fu6asS7sf0pIHpF2oX4sN2vK3bJ5' -H 'X-  
Channel: <Shared during onboarding>' --data-binary ''
```

## Get Loan Companies

This API returns all loan repayment companies information from configuration. The information from this API is used to populate parameters in other APIs.

**There is no payload in the body of this API's request.**

**Endpoint URL:** <BASE URL>/utilities/GetLoanCompanies

**Operation Name:** GetLoanCompanies

**Time-Out:** 140 Sec

### Request Attributes

#### *Request Header Parameters*

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
X-IBM-Client-Id	API Authentication credential	Yes
X-IBM-Client-Secret	API Authentication credential	Yes
X-Channel	<ul style="list-style-type: none"> <li>For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	Yes

### Response Attributes

#### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
ResponseCode	String	Yes
ResponseMessage	String	Yes
Business	Array	No
Name	String	No
SubBusiness	String	No

## Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

*Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0  
**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221  
**X-Channel:** <Shared during onboarding>

*Sample Response*

```
{  
    "ResponseCode": "0",  
    "ResponseMessage": "Success",  
    "Business": [  
        {  
            "Name": "Custom1",  
            "SubBusiness": "Loan Repayment"  
        },  
        {  
            "Name": "Custom2",  
            "SubBusiness": "Fee Collection"  
        }  
    ]  
}
```

**CURL**

```
curl -L -X POST '<BASE_URL>/utilities/GetLoanFeeCompanies' -H 'Content-Type: application/json' -  
H 'X-IBM-Client-Id: 9bd84207-3310-7bc2-b8e4-b5c6aef68baf' -H 'X-IBM-Client-  
Secret: N6dJ8bQ6iF5xd5jg1hF3fy8fu6asS7sf0pIHpF2oX4sN2vK3bJ5' -H 'X-  
Channel: <Shared during onboarding>' --data-binary ''
```

## Get Fee Companies

This API returns all fee companies information from configuration. The information from this API is used to populate parameters in other APIs.

**There is no payload in the body of this API's request.**

**Endpoint URL:** <BASE URL>/utilities/GetFeeCompanies

**Operation Name:** GetFeeCompanies

**Time-Out:** 140 Sec

### Request Attributes

#### *Request Header Parameters*

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
X-IBM-Client-Id	API Authentication credential	Yes
X-IBM-Client-Secret	API Authentication credential	Yes
X-Channel	<ul style="list-style-type: none"> <li>For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	Yes

### Response Attributes

#### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
ResponseCode	String	Yes
ResponseMessage	String	Yes
Business	Array	No
Name	String	No
SubBusiness	String	No

## Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0  
**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221  
**X-Channel:** <Shared during onboarding>

### Sample Response

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
  "Business": [
    {
      "Name": "Custom1",
      "SubBusiness": "Loan Repayment"
    },
    {
      "Name": "Custom2",
      "SubBusiness": "Fee Collection"
    }
  ]
}
```

## CURL

```
curl -L -X POST '<BASE_URL>/utilities/GetLoanFeeCompanies' -H 'Content-Type: application/json' -  
H 'X-IBM-Client-Id: 9bd84207-3310-7bc2-b8e4-b5c6aef68baf' -H 'X-IBM-Client-  
Secret: N6dJ8bQ6iF5xd5jg1hF3fy8fu6asS7sf0pIHpF2oX4sN2vK3bJ5' -H 'X-  
Channel: <Shared during onboarding>' --data-raw ''
```

## BVS Login

### BVS OTP Generation

This API generates and sends a six-digit one-time password (OTP) to the specified MSISDN(retailer). This OTP can then be utilized for calling the *BVS Login* API.

**Endpoint URL:** <BASE\_URL>/RetailerBVSLogin/OTPGeneration

**Operation Name:** BVSOTPGeneration

**Time-Out:** 140 Sec

#### *Pre-Requisites*

1. MSISDN must be valid and in correct format

### Request Attributes

#### *Request Header Parameters*

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
X-IBM-Client-Id	API Authentication credential	Yes
X-IBM-Client-Secret	API Authentication credential	Yes
X-Channel	Name of the channel calling the API	Yes

#### *Request Body Parameters*

Parameter Name	Description	Mandatory
MSISDN	Retailer MSISDN starting with '92' on which the OTP is to be sent. This will be also provided at BVS Login.	Yes

## Response Attributes

### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes

## Response Codes

Response Code	Description
<b>100</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>99</b>	Client not found
<b>2035</b>	ExceptionOccurred (AKSA API)

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** bvsgateway

### *Sample Request*

```
{
  "MSISDN": "923454604889"
}
```

### *Sample Response*

```

  "ResponseCode": "100",
  "ResponseMessage": "Otp sent"
}
```

## CURL

```
curl --location --request POST '<BASE_URL>/RetailerBVSLogin/OTPGeneration' \
--header 'X-Channel: bvsgateway' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bcc980cd3268cb26ff46a50607221' \
--header 'Content-Type: application/json' \
--data-raw '{
    "MSISDN": "923454604889"
}'
```

## BVS Login

This API creates a session for the specified retailer, and returns a session ID and an OAuth token. In subsequent API calls, this session ID and OAuth token will be required.

**Endpoint URL:** <BASE\_URL>/RetailerBVSLogin/

**Operation Name:** BVSLogin

**Session Expiration:** 40 minutes

**Time-Out:** 140 Sec

### *Pre-Requisites*

1. Retailer account must be valid and active
2. OTP must be correct

### **Request Attributes**

#### *Request Header Parameters*

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	Name of the channel calling the API	<b>Yes</b>

#### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>User</b>	ID and MSISDN of the retailer in format: 92MSISDN@RetailerID	<b>Yes</b>
<b>Pin</b>	Pin of the retailer	<b>Yes</b>
<b>OTP</b>	Six digit one-time password sent in the OTP Generation API call	<b>Yes</b>

## Response Attributes

### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>AccessToken</b>	String	No
<b>SessionID</b>	String	No

## Response Codes

Response Code	Description
<b>100</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>704</b>	Client not found
<b>762</b>	OTP_NOT_MATCHED
<b>2035</b>	ExceptionOccurred (AKSA API)
<b>8215</b>	RETAILER_ACCOUNT_BLOCKED
<b>8217</b>	RETAILER_ACCOUNT_CLOSED
<b>8218</b>	RETAILER_ACCOUNT_SUSPENDED
<b>8219</b>	RETAILER_ACCOUNT HOLDER_BLOCKED
<b>8220</b>	RETAILER_ACCOUNT HOLDER_CLOSED
<b>8221</b>	RETAILER_ACCOUNT HOLDER_SUSPENDED

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** bvsgateway

### *Sample Request*

```
{
  "OTP": "12345",
  "User": "923454604889@9989",
  "Pin": "12345"
}
```

### Sample Response

```

{
  "ResponseCode": "100",
  "ResponseMessage": "Success",
  "AccessToken": "CwIM1qa5ZId_2RB6HQV5r0WUpVZlGRbiez8wR7f5k18Z1kf-y-0tV2hGE1BuCexYoCXr9_La9BG_6E_YJxKR8pYnVEpgVHnRos1nd5uSWsLaZ
  CX0Sh49aPP1q94bFgiiTOoceRuooizNNwZpms_9oVxl0gtWNSAzVNf5aEneAH5Hq19G7khy-r82h9Tm6cCnuBLF1oNZUU8tY7R-3Uz0XMG048
  3b4RzpKLgQSoJ4ci5aiok-F7Hczf20Kyzd6mxUjvpznw4ApMp70Y5AywWCoZpj1vxdXZ901L5q5k8ddu8Ki_3KLaK03GUvh7jPw4Yh8E4g3RLh
  Tc9f1Dv0IGfsc2xLFm-zet8oT6DoHtQXThy6SskkTGU50RyEl0Df54Cpr6ARxddwLn0S8p9J1C-CzsDHqiT8yZjVOZsSsw-e42QgIB0Kx0tdy_
  FopvxJvYDqW3FR7AJ0-q-AYbp7eHy-0mPvLPJuXCu3hJsyTLTPcmHeBfkALQeTZm1edGY3R0q2A25hBqRq2yWQXbBa-Zb1dt2XY9FVp5LLTyp
  XCj1YRxB9hGnC4IpwYEc9NA8NbFXE9aFJkKK8t9913qQ0aSo6ml3BIA_HbTIY2hG3iyVscsU1XJ7Lf2RP0dVZwT-MTy4K-tdcQSz_uabCJtd1
  64AGcuTz0-E9KMrsx3Xj-UZ_4JYa-o_MDPu5RQvMPhs8BAu6THZ0uqUpx6GMEBFM_gAXLyG5wYVChKPu00bjp5YChp0-Xw-zM6_Hz4DV_tsTX"
  ,
  "SessionID": "aa9c4a91b64a4d1ab8cf7b74fe4884f2"
}

```

### CURL

```

curl --location --request POST '<BASE_URL>/RetailerBVSLLogin/' \
--header 'X-Channel: bvsgateway' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'Content-Type: application/json' \
--data-raw '{
  "OTP": "12345",
  "User": "923454604889@9989",
  "Pin": "12345"
}'

```

## Login

### Encryption Guidelines

There are some values that need to be encrypted before communicating with the APIs. The parameters that need to be encrypted will state in description of how to construct the plaintext string and what to encrypt.

This section contains technical specifications of the implemented encryption and a code snippet written in Java to assist developers.

- **Encryption algorithm:** RSA
- **Complete qualifier for algorithm:** RSA/ECB/PKCS1Padding
- **Key size:** 2048-bit
- **Key:** Public key will be shared for encryption upon request

### Obtaining RSA Public Key

In order to obtain the RSA public key for encryption, please visit the developer portal and sign up for an account. After confirming your developer portal account via email, please proceed to create a new application on the developer portal.

Keep the client ID and secret pair safe, as the client secret is only shown once. Please proceed to the Help section of the developer portal and go to Contact Us. Fill in the form with your information, **taking care to provide the email address that was used to sign up on the developer portal**. Then please provide the following information in the message:

- Subject: Request for Sandbox Public RSA key
- Username on developer portal
- Application Name on developer portal
- Client ID for the application Upon verification of all the above information, you will receive the public RSA key on the email address provided in the contact us form.

## Encryption code

```
public class RSAEncryption {

    public static PublicKey getPublicKey (String filename) throws Exception {
        byte[] keyBytes = Files.readAllBytes(Paths.get(filename));
        X509EncodedKeySpec spec =
            new X509EncodedKeySpec(keyBytes);
        KeyFactory kf = KeyFactory.getInstance("RSA");
        return kf.generatePublic(spec);
    }

    public static String encrypt(String data, PublicKey publicKey) throws
Exception {
    Cipher cipher = Cipher.getInstance("RSA/ECB/PKCS1Padding");
    cipher.init(Cipher.ENCRYPT_MODE, publicKey);
    return new
String(Base64.getEncoder().encodeToString(cipher.doFinal(data.getBytes())));
}
}
```



## Encryption Function call

```
public class MainClass {
    public static void main(String[] args) {
        String inputEnc = "https://webhook.site/a6714175-6f54-4cc9-aa23-
5e1b4c4e3845";
        try {
            String outputEnc = RSAEncryption.encrypt(inputEnc,
RSAEncryption.getPublicKey("C:/public_key.der"));
            System.out.println(outputEnc);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

## Token Generation for Login

This API generates an OAuth2 Token against a specific username. This Token is valid for logging in for a specific time, after that it expires.

- **Username** – if a subscriber is logging in, the input would be MSISDN starting with 0 (e.g. 03451234567), if retailer is logging in, input would be userid@MPOS starting with 92 (e.g. 1234@923451122334)

**Endpoint URL:** <BASE URL>/LoginAPI/token

**Token Expiration:** X minutes timeout

**Time-Out:** 140 sec

Note: Another Token cannot be generated for the same username, if the already generated Token is not used or expired.

### Pre-Requisites

1. Subscriber or retailer account must be registered
2. Subscriber or retailer account must be active

## Request Attributes

### Request Header Parameters

Parameter Name	Description	Mandatory
X-Channel	X Channel will be shared at the time of onboarding.	Yes
X-Msisdn	RSA encrypted username	Yes
X-IBM-Client-Id	API Authentication credential	Yes
X-IBM-Client-Secret	API Authentication credential	Yes

## Response Attributes

### Response Body Parameters

Parameter Name	Data Type	Mandatory
ResponseCode	String	Yes
ResponseMessage	String	Yes
Token	String	No

## Response Body Parameters (Sent to Callback URL)

Parameter Name	Data Type	Mandatory
ResponseCode	String	Yes
ResponseMessage	String	Yes

## Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>3</b>	Invalid input parameters.
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-Channel:** <Shared during onboarding>

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Msisdn:**

YHNkSgm+HBuZPytYkLZJpYrAkJ8fwaWS0DUxvD/chNwa6f3ESntthaG9qAKPVd06p99w368bK46szm1lKeBhM  
FJw3VMJLos4ttXXaTJ97e2qS+f4zAspzsTr1GqHHHAKDQt+1ORxca+69PwAICLMeU2JIBy6FDMZAYIXJEpZ62il+  
tW DekBskcxPXGbKlaDYA5RFuR1q/7V98VENplUpIkYrn2wuVVPGXP07g8VSEnTt02j0zVLt5VRKa+Y3mAg5lsf  
DXpxnjk+jSXMhpwtipYyWT8z4Po7vCOiFiN48WSjdim5tyLeGvEHngvakZFqTBr9bb80hkkNSCiLQzA==

### Sample Response

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
  "Token": "AAIkZDBmYzAzMTYtZjI4ZS00YzI5LT1lMDEtNzI1NTY3MDMxOWJhyeaImwXPGc4ZmpI4xq2xWmdj
FgEAeFAV6L6VXvrfvZxB1YHtyEmfqrJy-DTGzbni4u89FsOTNWBzORysHlk8QEmUxjq42BSQ7ZG-
QFfMQS6ZgQOA_zgzUnmuVSlyn_G",
}
```

### Sample Response sent to Callback URL

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
}
```

### CURL

```
curl --location --request POST '<BASE_URL>/LoginAPI/token' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8fab0' \
--header 'X-IBM-Client-Secret: 73464a465d5dee1886f0dbf8fsbgsab0' \
--header 'X-
Msisdn: RSGTliF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBci4wFLaW6SPtWOBJBZY7FAqZAVWLJwpkG62E+NmiuY5'
```

```
EVwcY6rFfBNF1zw6uuD0Wxu1XB/qcZmBcG0iWGKKIMHXF+nJj887wHVswJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf
2qRN3J0zjEiJ+Cipr5nV8YM07aiB7VS/Tl0vWtcmYtXeIZ6ZjPRen3zES0QY5t0NlNrtw6QURC4Um4iFQgsEDASWiYQm60i1W
vt+o1dJmPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWA1c80YmVc1SA=='
```

## Login Page

This API generates an HTML page to present to the user to enter login credentials for all calls to non BVS APIs, with two text input fields:

- **Username** – if a subscriber is logging in, the input would be MSISDN starting with 0 (e.g. 03451234567), if retailer is logging in, input would be userid@MPOS starting with 92 (e.g. 1234@923451122334)
- **Password** – the pin of the user.

If Credentials are verified, then

- The OTP will be received on MSISDN.
- The OTP field will be visible on page and timer will start.
- Timer will be set to 'X' seconds and when the timer is over, resend OTP button will be available on page.

If credentials or OTP are not verified, then

- Login pin retries are allowed 'X' times, and after that Pin exhaustion prompt shows up
- Login OTP retries are allowed 'X' times, and after that MSISDN is blacklisted from backend
- Login OTP resend are allowed 'X' times.

Value of 'X' will be communicated during the Business onboarding.

**Endpoint URL:** <BASE URL>/LoginAPI/Login

**Operation Name:** LoginPage

**Session Expiration:** 5 minutes idle timeout

**Time-Out:** 140 sec

### Pre-Requisites

3. Subscriber or retailer account must be registered
4. Subscriber or retailer account must be active
5. Callback must be registered from the backend

### Request Attributes

#### Request Header Parameters

Parameter Name	Description	Mandatory
----------------	-------------	-----------

<b>X-Channel</b>	X Channel will be shared at the time of onboarding.	Yes
<b>Callback</b>	RSA encrypted callback URL to which a detailed JSON response will be sent. The Callback URL is registered during the onboarding process.	Yes
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>Authorization</b>	RSA encrypted Token returned in response of Token generation API	Yes

## Response Attributes

### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes

### Response Body Parameters (Sent to Callback URL)

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>User</b>	String	No
<b>Timestamp</b>	String	No

The *Timestamp* parameter returned in response must be stored for the generation of X-Hash-Value for every subsequent API call after login.

### Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>3</b>	Invalid input parameters.
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-Channel:** <Shared during onboarding>

**Authorization:** Bearer <RSA encrypted Token returned in response of Token generation API>

**Callback:**

```
YHNkSgm+HBuZPytYkLZJpYrAkJ8fwaWS0DUxvD/chNwa6f3ESntthaG9qAKPVd06p99w368bK46szm1lKeBhM
FJw3VMJLos4ttXXaTJ97e2qS+f4zAspzrTr1GqHHAKDQt+1ORxca+69PwAICLMeU2JIBy6FDMZAYIXJEpZ62il+
tWDeKBSkcxPXGbKlaDYA5RFuR1q/7V98VENplUpIkYrn2wuoVVPBGXP07g8VSEnTt02jozVLt5VRKa+Y3mAg5lsf
DXpxnjk+jSXMhpwtipYyWT8z4Po7vCOiFiN48WSjdim5tyLeGvEHngvakZFqTBr9bb80hkkNSCiLQzA==
```

*Sample Response*

**After user enters login credentials and clicks Submit on HTML page**

```
{
    "ResponseCode": "0",
    "ResponseMessage": "Success"
}
```

**Sample Response sent to Callback URL**

```
{
    "ResponseCode": "0",
    "ResponseMessage": "Success",
    "User": "1234@923451122334",
    "Timestamp": "2021-03-29 09:09:40.859254"
}
```

**CURL**

```
curl --location --request POST '<BASE_URL>/LoginAPI/Login' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8fab0' \
-- \
header 'Callback: RSGTliF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBjBZY7FAqZAVWLJwpkG
62E+NmiuY5EVwcY6rFfBNF1zw6uuDOWXu1XB/qcZmBcG0iWGKKIMHXF+nJj887wHVsWJjW1P3h69VhY7hU6v99KJD0NV48YPo
tG5sM6qwCf2qRN3J0zjEiJ+Cipr5nV8YM07aiB7VS/T10vWtcmYtXeIZ6ZjPRen3zES0QY5t0N1Nrtw6QURC4Um4iFQgsEDAS
WiYQm60i1Wvt+o1dJmPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWA1c80YmVc1SA==' \
--header 'Authorization: Bearer
ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBjBZY7FAqZAVWLJwpkG62E+NmiuY5EVwcY6rFfBNF1zw6uuDOWXu1XB/qcZmBcG0iW
GKKIMHXF+nJj887wHVsWJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2qRN3J0zjEiJ+Cipr5nV8YM07aiB7VS/T10vW
tcmYFqFtXeIZ6ZjPRen3zES0QY5t0N1Nrtw6QURC4Um4iFQgsEDASWiYQm60i1Wvt+o1dJmPzbYF7jT6PrF6otOFFn0uoFoF6
6GTZK0LOXWA1c80YmVc1SA=='
```

## Use cases

### Subscriber IBFT

#### Subscriber IBFT Inquiry

This API initiates an inquiry against an **Easypaisa** mobile account to bank account transfer request.

**Endpoint URL:** <BASE URL>/SubscriberIBFT/Inquiry

**Operation Name:** BankAccountInquiry

**Time-Out:** 140 Sec

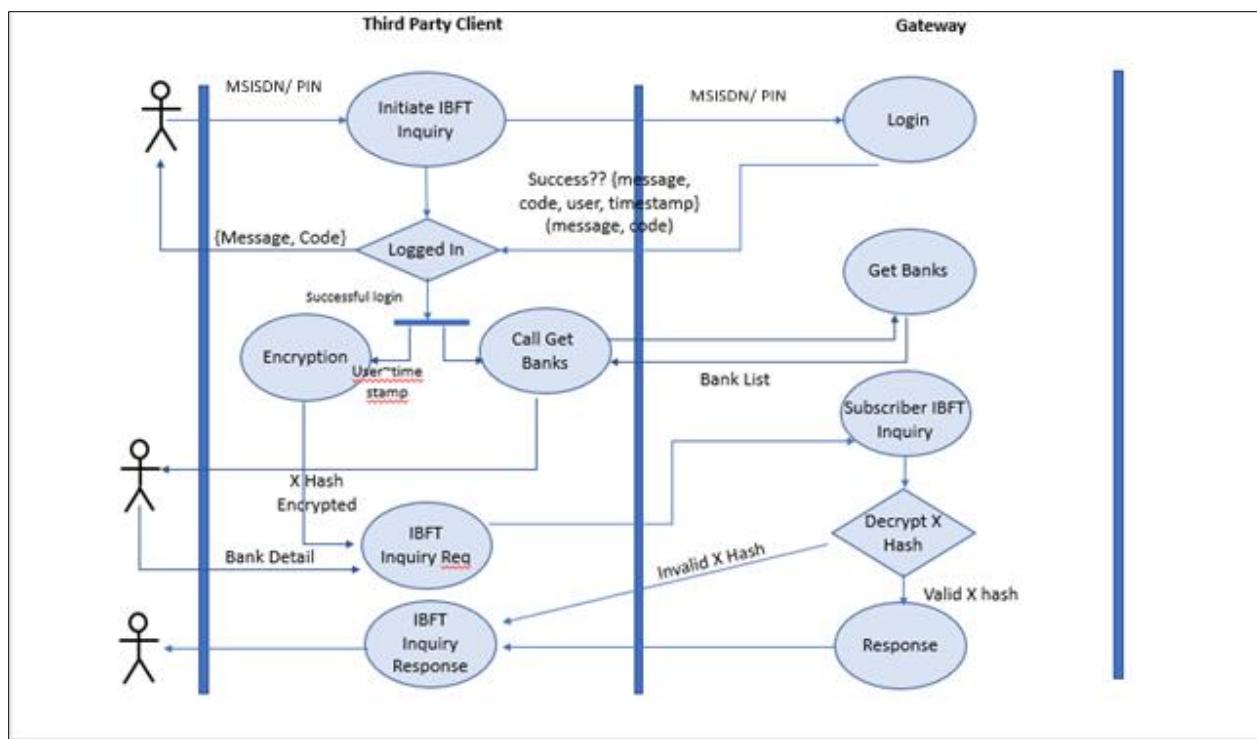


Figure 5: Subscriber IBFT Inquiry

#### Pre-Requisites

1. Subscriber must be logged in.
2. Subscriber must have sufficient funds for the transaction
3. Destination bank account details must be valid
4. Amount should be less than the receiver's available Daily, Monthly or Yearly Transaction Amount Limits

## Request Attributes

### *Request Header Parameter*

To generate the **X-Hash-Value** header, please follow the steps:

1. Concatenate subscriber **MSISDN** starting with 92 with the Timestamp parameter returned in the response of Ericsson Login use case API, and a tilde (~) sign in between. a. Example:  
923451234567~2021-03-29 09:09:40.859254
2. Encrypt this string as shown in the Encryption section of this document and assign the value to XHash-Value header.

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls and are used to authenticate the requester. The X-Channel parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>X- IBM-Client-Secret</b>	API Authentication credential	Yes
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	Yes
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	Yes

### *Request Body Parameter*

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	Yes
<b>Account Number</b>	Account number of the bank account to transfer to	Yes
<b>Bank Title</b>	Title of the bank	Yes
<b>MSISDN</b>	MSISDN of the subscriber starting with '92'	Yes
<b>RecieverMSISDN</b>	MSISDN of the receiver starting with '92'	Yes
<b>Bank Short name</b>	Short name of the bank	Yes
<b>Transaction Purpose</b>	Transaction purpose code	Yes

### *Transaction Purpose Codes*

Code	Transaction Reason
<b>0251</b>	Family Support
<b>0336</b>	Education
<b>0112</b>	Business
<b>0358</b>	Transport
<b>0307</b>	Credit Card Payment
<b>0252</b>	Medical Payment
<b>0315</b>	Online Purchase
<b>0350</b>	Miscellaneous Payments

### **Response Attributes**

#### *Response Body Parameters*

Parameter Name	Description	Mandatory
<b>Response Code</b>	String	Yes
<b>Response Message</b>	String	Yes
<b>Transaction Reference</b>	String	No
<b>Transaction Status</b>	String	No
<b>Tax Fee</b>	String	No
<b>Name</b>	String	No
<b>Bank Name</b>	String	No
<b>Branch</b>	String	No
<b>User Name</b>	String	No
<b>ReceiverIBAN</b>	String	No

### **Response Codes**

Response Code	Description
0	Successful execution
1	Error in processing request
-1	Exception occurred
2	Session Validation Failed
001	Insufficient sender balance
012	Generic error (EWP Error codes)
014	Header or Header element incorrect
015	Invalid Body or body element
401	INVALID CREDENTIALS

403	NOT AUTHORIZED
404	Not Found
500	Internal Server Error

### Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**X-Hash-Value:**

```
fC/SmlJMpKDZNytfBUsCA7kdwmsVxzExKzrLKSeriYVICx87D4pi9FeoTVeczIUoCwM4O
jSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzuclW+GvPg0jVLQ3SfU/6
pmNBt3ml7Vhlqy/ypx+tGKIW2sj4Gz50Fu1jlP/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPc
Cl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6
M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrHIA==
```

### Sample Request

```
{
  "AccountNumber": "00020000011005325",
  "BankTitle": "MOD",
  "MSISDN": "923435220042",
  "ReceiverMSISDN": "923495060643",
  "BankShortName": "MOD",
  "TransactionPurpose": "0350",
  "Amount": "100"
}
```

### Sample Response

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
  "TransactionReference": "368701",
  "TransactionStatus": "success",
  "Tax": "0",
  "Fee": "0.00",
  "Name": "ZEESHAN AHMED",
  "BankName": "MOD",
  "Branch": "1LINK MAINBRANCH PRKTOWER",
  "Username": "ZEESHAN AHMED",
  "ReceiverIBAN": ""
}
```

## CURL

```
curl --location --request POST '<BASE_URL>/SubscriberIBFT/Inquiry' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-
Value: RSGTliF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBJBZY7FAqZAVWLJwpkG62E+NmiuY5E
VwcY6rFFBNF1zw6uuDOWXulXB/qcZmBcG0iWGKKIMHXF+nJj887wHVsWJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2
qRN3J0zjEiJ+Cipr5nV8YM07aiB7VS/TlOvWtcmYFqFtXeIZ6ZjPRen3zES0QY5t0N1NrTw6QURC4Um4iFQgsEDASWiYQm60i
1Wvt+o1dJmPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWAlc80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
    "AccountNumber": "00020000011005325",
    "BankTitle": "MOD",
    "MSISDN": "923435220042",
    "ReceiverMSISDN": "923495060643",
    "BankShortName": "MOD",
    "TransactionPurpose": "0350",
    "Amount": "100"
}'
```

}

## Subscriber IBFT Transfer

This API initiates a transfer against an **Easypaisa** mobile account to bank account

**Endpoint URL:** <BASE URL>/SubscriberIBFT/Transfer

**Operation Name:** MAtoBankTransfer

**Time-Out:** 140 Sec

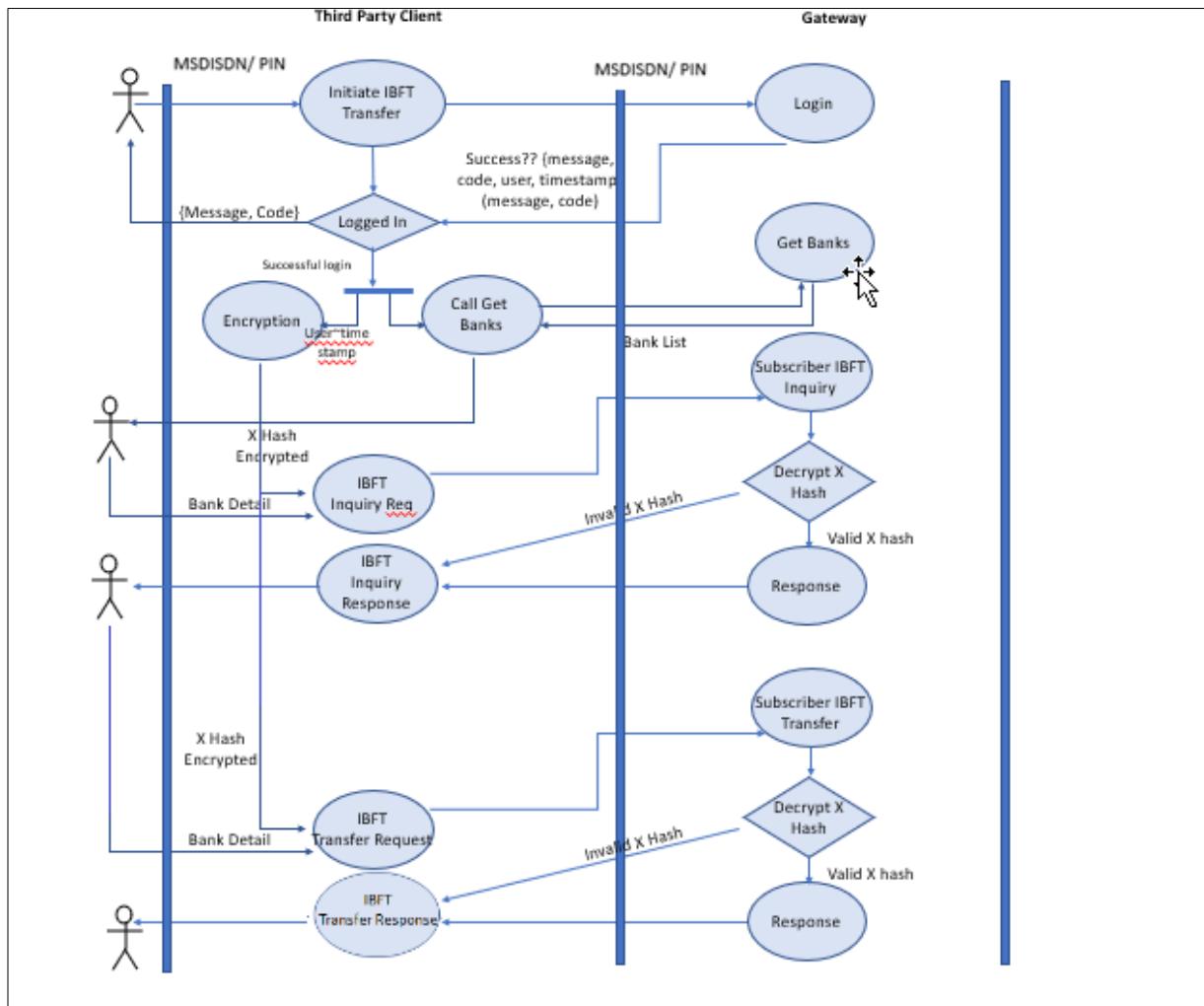


Figure 6: Subscriber IBFT Transfer

### Pre-Requisites

1. Subscriber must be logged in
2. Subscriber must have sufficient funds for the transaction
3. Destination bank account details must be valid
4. Amount should be less than the receiver's available Daily, Monthly or Yearly Transaction Amount Limits

## Request Attributes

### *Request Header Parameters*

To generate the **X-Hash-Value** header, please follow the steps:

1. Concatenate subscriber **MSISDN** starting with 92 with the Timestamp parameter returned in the response of Ericsson Login use case API, and a tilde (~) sign in between. a. Example: 923451234567~2021-03-29 09:09:40.859254
2. Encrypt this string as shown in the Encryption section of this document and assign the value to XHash-Value header.

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls, and are used to authenticate the requester. The X-Channel parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>X-IBM-Client-Secret</b>	API Authentication credential	Yes
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	Yes
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	Yes

### *Request Body parameters*

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	Yes
<b>Account Number</b>	Account number of the bank account to transfer to	Yes
<b>Bank Title</b>	Title of the bank	Yes
<b>MSDISDN</b>	MSISDN of the subscriber starting with '92'	Yes
<b>RecieverMSDISDN</b>	MSISDN of the receiver starting with '92'	Yes
<b>Bank Short name</b>	Short name of the bank	Yes
<b>Transaction Purpose</b>	Transaction purpose code	Yes
<b>Sender Name</b>	SenderName from IBFT Inquiry response	Yes
<b>Branch</b>	Branch from IBFT Inquiry response	Yes

<b>User Name</b>	Username from IBFT Inquiry response	Yes
<b>ReceiverIBAN</b>	ReceiverIBAN from IBFT Inquiry response	Yes

#### *Transaction Purpose Codes*

<b>Code</b>	<b>Transaction Reason</b>
<b>0251</b>	Family Support
<b>0336</b>	Education
<b>0112</b>	Business
<b>0358</b>	Transport
<b>0307</b>	Credit Card Payment
<b>0252</b>	Medical Payment
<b>0315</b>	Online Purchase
<b>0350</b>	Miscellaneous Payments

#### *Response Attribute*

#### *Response Body Parameters*

<b>Parameter Name</b>	<b>Description</b>	<b>Mandatory</b>
<b>Response Code</b>	String	Yes
<b>Response Message</b>	String	Yes
<b>Transaction Reference</b>	String	No
<b>Transaction Status</b>	String	No
<b>Fee</b>	String	No
<b>Balance</b>	String	No

#### *Response Code*

<b>Response Code</b>	<b>Description</b>
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS

<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**X-Hash-Value:**

```
fC/SmlJMpKDZNytfBUGsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVeczIUoCwM4O
jSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzuclW+GvPg0jVLQ3SfU/6
pmNBt3ml7Vhlqy/ypx+tGKIW2sj4Gz50Fu1jlp/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPc
Cl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6
M+cIFHOIROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrHIA==
```

### *Sample Request*

```
{
  "AccountNumber": "00020000011005325",
  "BankTitle": "MOD",
  "MSISDN": "923435220042",
  "ReceiverMSISDN": "923495060643",
  "BankShortName": "MOD",
  "TransactionPurpose": "0350",
  "Amount": "100",
  "SenderName": "ZEESHAN AHMED",
  "Branch": "1LINK MAINBRANCH PRKTOWER",
  "Username": "ZEESHAN AHMED",
  "ReceiverIBAN": ""
}
```

### *Sample Response*

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
  "TransactionReference": "2677752",
  "TransactionStatus": "success",
  "Fee": "0",
  "Balance": "6269.31"
}
```

## CURL

```
curl --location --request POST '<BASE URL>/SubscriberIBFT/Transfer' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-
Value: RSGTliF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBJBZY7FAqZAVWLJwpkG62E+NmiuY5E
VwcY6rFFBNF1zw6uuDOWXulXB/qcZmBcG0iWGKKIMHXF+nJj887wHVsWJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2
qRN3J0zjEiJ+Cipr5nV8YM07aiB7VS/TlOvWtcmYFqFtXeIZ6ZjPRen3zES0QY5t0N1NrTw6QURC4Um4iFQgsEDASWiYQm60i
1Wvt+o1dJmPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWAlc80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
    "AccountNumber": "00020000011005325",
    "BankTitle": "MOD",
    "MSISDN": "923435220042",
    "ReceiverMSISDN": "923495060643",
    "BankShortName": "MOD",
    "TransactionPurpose": "0350",
    "Amount": "100",
    "SenderName": "ZEESHAN AHMED",
    "Branch": "1LINK MAINBRANCH PRKTOWER",
    "Username": "ZEESHAN AHMED",
    "ReceiverIBAN": ""
}
}'
```

## Subscriber IBFT OTP

### Subscriber IBFT Inquiry OTP

This API initiates an inquiry against an **Easypaisa** mobile account to bank account transfer request.

**Endpoint URL:** <BASE URL>/SubscriberIBFTOTP/Inquiry

**Operation Name:** BankAccountInquiryOTP

**Time-Out:** 140 sec

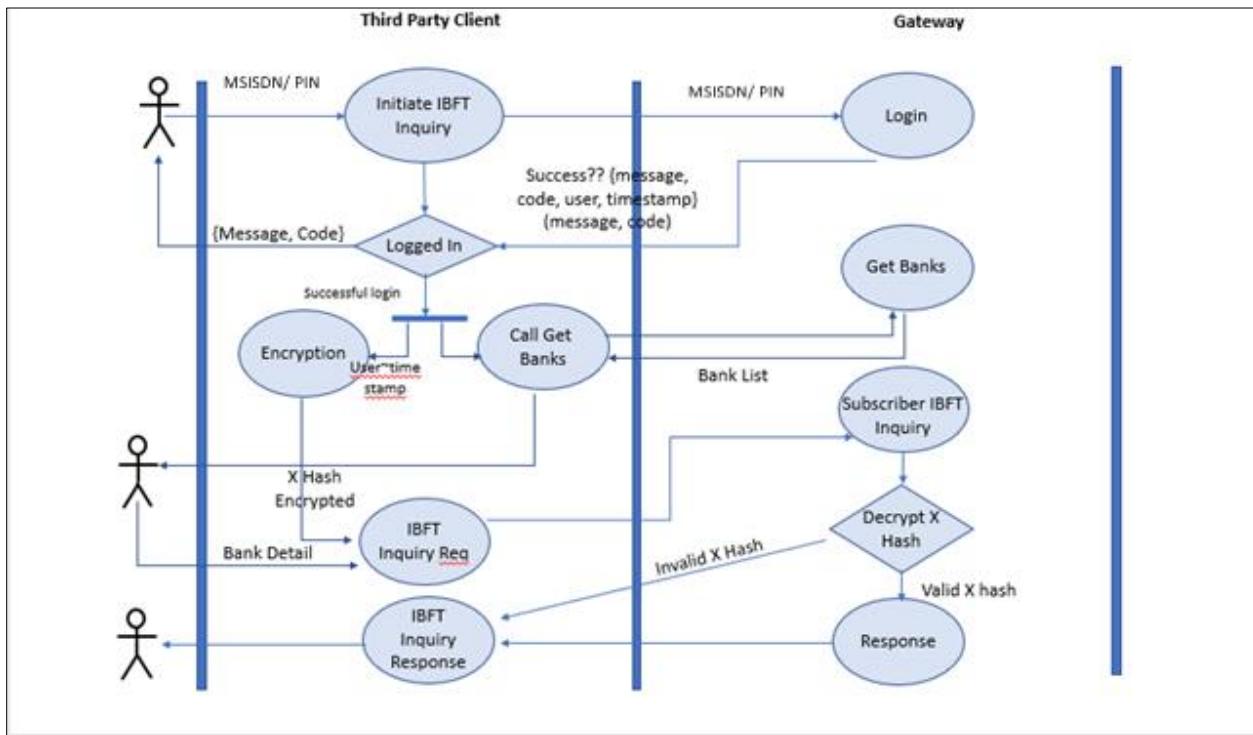


Figure 7: Subscriber IBFT Inquiry

### Pre-Requisites

5. Subscriber must be logged in.
6. Subscriber must have sufficient funds for the transaction.
7. Destination bank account details must be valid.
8. Amount should be less than the receiver's available Daily, Monthly or Yearly Transaction Amount Limits.

## Request Attributes

### *Request Header Parameter*

To generate the **X-Hash-Value** header, please follow the steps:

3. Concatenate subscriber **MSISDN** starting with 92 with the Timestamp parameter returned in the response of Ericsson Login use case API, and a tilde (~) sign in between. a. Example:  
923451234567~2021-03-29 09:09:40.859254
4. Encrypt this string as shown in the Encryption section of this document and assign the value to XHash-Value header.

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls and are used to authenticate the requester. The X-Channel parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>X- IBM-Client-Secret</b>	API Authentication credential	Yes
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	Yes
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	Yes

### *Request Body Parameter*

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	Yes
<b>Account Number</b>	Account number of the bank account to transfer to	Yes
<b>Bank Title</b>	Title of the bank	Yes
<b>MSISDN</b>	MSISDN of the subscriber starting with '92'	Yes
<b>RecieverMSISDN</b>	MSISDN of the receiver starting with '92'	Yes
<b>Bank Short name</b>	Short name of the bank	Yes
<b>Transaction Purpose</b>	Transaction purpose code	Yes

### *Transaction Purpose Codes*

Code	Transaction Reason
<b>0251</b>	Family Support
<b>0336</b>	Education
<b>0112</b>	Business
<b>0358</b>	Transport
<b>0307</b>	Credit Card Payment
<b>0252</b>	Medical Payment
<b>0315</b>	Online Purchase
<b>0350</b>	Miscellaneous Payments

### **Response Attributes**

#### *Response Body Parameters*

Parameter Name	Description	Mandatory
<b>Response Code</b>	String	Yes
<b>Response Message</b>	String	Yes
<b>Transaction Reference</b>	String	No
<b>Transaction Status</b>	String	No
<b>Tax Fee</b>	String	No
<b>Name</b>	String	No
<b>Bank Name</b>	String	No
<b>Branch</b>	String	No
<b>User Name</b>	String	No
<b>ReceiverIBAN</b>	String	No
<b>QuotId</b>	String	Yes

### **Response Codes**

Response Code	Description
0	Successful execution
1	Error in processing request
-1	Exception occurred
2	Session Validation Failed
001	Insufficient sender balance
012	Generic error (EWP Error codes)

014	Header of Header element incorrect
015	Invalid Body or body element
401	INVALID CREDENTIALS
403	NOT AUTHORIZED
404	Not Found
500	Internal Server Error

### Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**X-Hash-Value:**

fC/SmlJMpKDZNytfBUgsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVczlUoCwM4O  
jSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzucIW+GvPg0jVLQ3SfU/6  
pmNBt3ml7Vhlqy/ypx+tGKIW2sjJ4Gz50Fu1jlp/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPc  
Cl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6  
M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrHIA==

### Sample Request

```
{
  "AccountNumber": "00020000011005325",
  "BankTitle": "MOD",
  "MSISDN": "923435220042",
  "ReceiverMSISDN": "923495060643",
  "BankShortName": "MOD",
  "TransactionPurpose": "0350",
  "Amount": "100"
}
```

### Sample Response

```

{
    "ResponseCode": "0",
    "ResponseMessage": "Success",
    "TransactionReference": "840038",
    "TransactionStatus": "success",
    "Tax": "0",
    "Fee": "0.00",
    "Name": "ZEESHAN AHMED",
    "BankName": "MOD",
    "Branch": "1LINK MAINBRANCH PRKTOWER",
    "Username": "ZEESHAN AHMED",
    "ReceiverIBAN": "",
    "QuoteId": "840038"
}

```

## CURL

```

curl --location --request POST '<BASE_URL>/SubscriberIBFT/Inquiry' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-Value: RSGT1iF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/ha0Bcix4wFLaW6SPtWOBjBZY7FAqZAVWLJwpkG62E+NmiuY5EVwcY6rFfBNF1zw6uuD0Wxu1XB/qcZmBcG0iWGKKIMHXF+nJj887wHVsWJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2qRN3J0zjEiJ+Cipr5nV8YM07aiB7VS/Tl0vWtcmYFqFtXeIZ6ZjPRen3zESOQY5t0NlNrtw6QURC4Um4iFQgsEDASWiYQm60i1Wvt+o1dJmPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWAlc80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
    "AccountNumber": "00020000011005325",
    "BankTitle": "MOD",
    "MSISDN": "923435220042",
    "ReceiverMSISDN": "923495060643",
    "BankShortName": "MOD",
    "TransactionPurpose": "0350",
    "Amount": "100"
}'

```

## Subscriber IBFT Resend OTP

This API initiates an OTP against an **Easypaisa** mobile account if OTP not received in Inquiry Response.

**Endpoint URL:** <BASE URL>/SubscriberIBFTOTP/ResendOTP

**Operation Name:** BankAccountInquiryResendOTP

**Time-Out:** 140 sec

### *Pre-Requisites*

1. Subscriber must be logged in.
2. Subscriber status must be active.

## Request Attributes

### *Request Header Parameter*

To generate the **X-Hash-Value** header, please follow the steps:

5. Concatenate subscriber **MSISDN** starting with 92 with the Timestamp parameter returned in the response of Ericsson Login use case API, and a tilde (~) sign in between. a. Example:  
923451234567~2021-03-29 09:09:40.859254
6. Encrypt this string as shown in the Encryption section of this document and assign the value to XHash-Value header.

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls and are used to authenticate the requester. The X-Channel parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>X- IBM-Client-Secret</b>	API Authentication credential	Yes
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	Yes
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	Yes

### *Request Body Parameter*

Parameter Name	Description	Mandatory
<b>QuoteID</b>	Received in response of Inquiry	Yes

## Response Attributes

### *Response Body Parameters*

Parameter Name	Description	Mandatory
<b>Response Code</b>	String	Yes
<b>Response Message</b>	String	Yes

## Response Codes

Response Code	Description
00	Successful execution
1	Error in processing request
-1	Exception occurred
2	Session Validation Failed
012	Generic error (EWP Error codes)
014	Header of Header element incorrect
015	Invalid Body or body element
401	INVALID CREDENTIALS
403	NOT AUTHORIZED
404	Not Found
500	Internal Server Error

### Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**X-Hash-Value:**

```
fC/SmlJMpKDZNytfBUgsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVczlUoCwM4O
jSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzucIW+GvPg0jVLQ3SfU/6
pmNBt3ml7Vhlqy/ypx+tGKIW2sjJ4Gz50Fu1jlP/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPc
CI+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6
M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrHIA==
```

### Sample Request

```
{
  ...
  "QuoteID": "850541"
}
```

### Sample Response

```
"ResponseCode": "00",
"ResponseMessage": "OTP has been resend to your number"
```

### CURL

```
curl --location --request POST '<BASE_URL>/SubscriberIBFTOTP/ResendOTP' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-
Value: RSGTl1F/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBJBZY7FAqZAVWLJwpkG62E+NmiuY5E
VwcY6rFfBNF1zw6uuDOWXulXB/qcZmBcG0iWGKKIMHXF+nJj887wHVsWJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2
qRN3J0zJiJ+Cipr5nV8YM07aiB7VS/T10vWtcmYFqFtXeIZ6ZjPRen3zES0QY5t0N1Nrtw6QURC4Um4iFQgsEDASWiYQm60i
1Wvt+o1dJmPzbYF7jT6PrF6otOFfn0uoFoF66GTZK0LOXWA1c80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
    "QuoteID": "123456"
}'
```

## Subscriber IBFT Transfer OTP

This API initiates an OTP against an **Easypaisa** mobile account if OTP not received in Inquiry Response.

**Endpoint URL:** <BASE URL>/SubscriberIBFTOTP/Transfer

**Operation Name:** MAtoBankTransferOTP

**Time-Out:** 140 sec

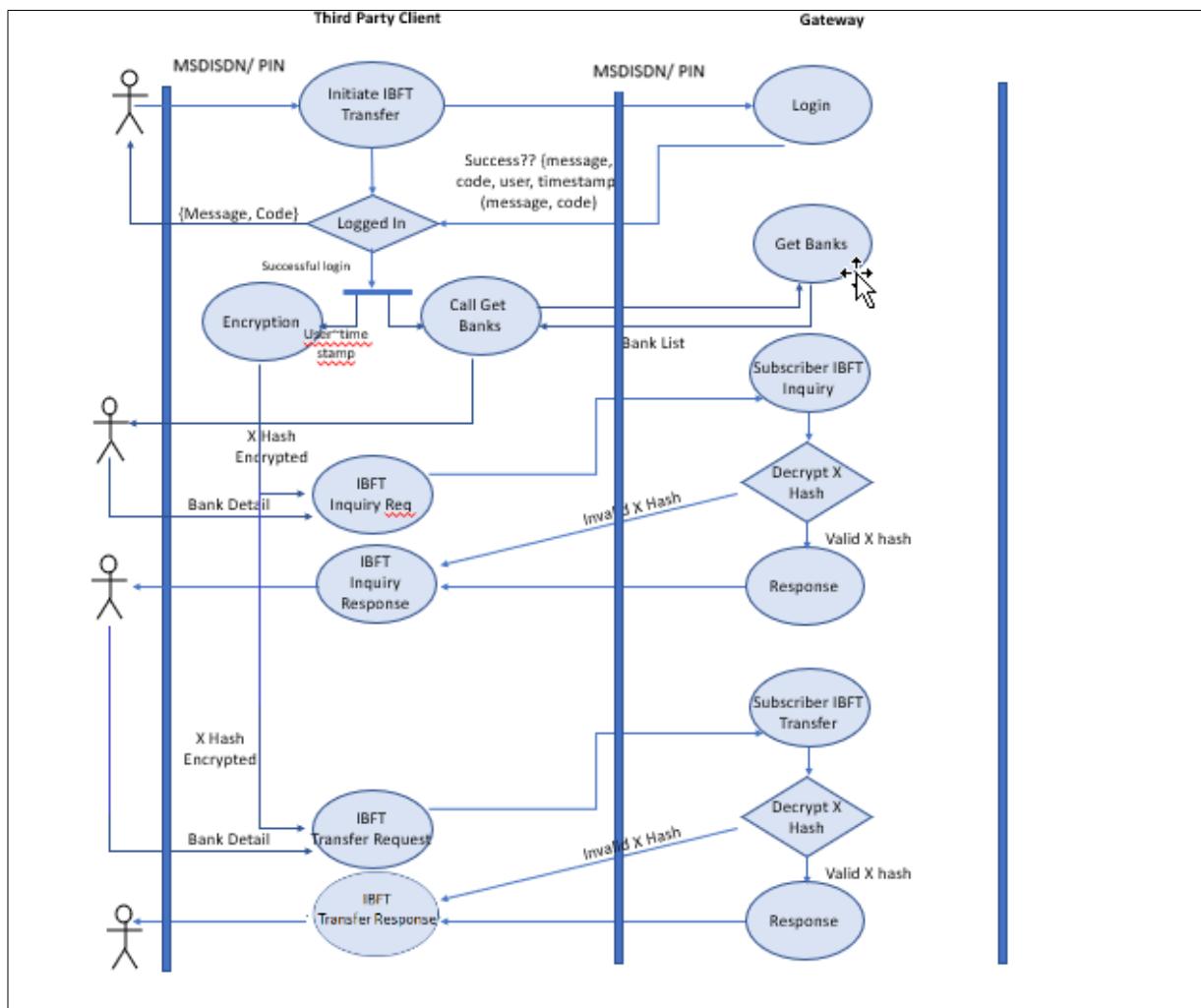


Figure 8: Subscriber IBFT Transfer

### Pre-Requisites

5. Subscriber must be logged in.
6. Subscriber must have valid OTP.

7. Subscriber must have sufficient funds for the transaction.
8. Destination bank account details must be valid.
9. Amount should be less than the receiver's available Daily, Monthly or Yearly Transaction Amount Limits.

## Request Attributes

### *Request Header Parameters*

To generate the **X-Hash-Value** header, please follow the steps:

3. Concatenate subscriber **MSISDN** starting with 92 with the Timestamp parameter returned in the response of Ericsson Login use case API, and a tilde (~) sign in between. a. Example: 923451234567~2021-03-29 09:09:40.859254
4. Encrypt this string as shown in the Encryption section of this document and assign the value to XHash-Value header.

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls, and are used to authenticate the requester. The X-Channel parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>X-IBM-Client-Secret</b>	API Authentication credential	Yes
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	Yes
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	Yes

### *Request Body parameters*

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	Yes
<b>Account Number</b>	Account number of the bank account to transfer to	Yes
<b>Bank Title</b>	Title of the bank	Yes
<b>MSDISDN</b>	MSISDN of the subscriber starting with '92'	Yes
<b>RecieverMSDISDN</b>	MSISDN of the receiver starting with '92'	Yes

<b>Bank Short name</b>	Short name of the bank	Yes
<b>Transaction Purpose</b>	Transaction purpose code	Yes
<b>Sender Name</b>	SenderName from IBFT Inquiry response	Yes
<b>Branch</b>	Branch from IBFT Inquiry response	Yes
<b>User Name</b>	Username from IBFT Inquiry response	Yes
<b>ReceiverIBAN</b>	ReceiverIBAN from IBFT Inquiry response	Yes
<b>OTP</b>	OTP received on MSISDN	Yes
<b>QuotId</b>	Received on IBFT Inquiry Response	Yes

#### *Transaction Purpose Codes*

<b>Code</b>	<b>Transaction Reason</b>
<b>0251</b>	Family Support
<b>0336</b>	Education
<b>0112</b>	Business
<b>0358</b>	Transport
<b>0307</b>	Credit Card Payment
<b>0252</b>	Medical Payment
<b>0315</b>	Online Purchase
<b>0350</b>	Miscellaneous Payments

#### **Response Attribute**

#### *Response Body Parameters*

<b>Parameter Name</b>	<b>Description</b>	<b>Mandatory</b>
<b>Response Code</b>	String	Yes
<b>Response Message</b>	String	Yes
<b>Transaction Reference</b>	String	No
<b>Transaction Status</b>	String	No
<b>Fee</b>	String	No
<b>Balance</b>	String	No

#### **Response Code**

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**X-Hash-Value:**

fC/SmlJMpKDZNytfBUgsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVeczIUoCwM4O  
jSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzuclW+GvPg0jVLQ3SfU/6  
pmNBt3mI7Vhlqy/ypx+tGKIW2sj4Gz50Fu1jlP/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPc  
Cl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6  
M+cIFHOIROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrHIA==

### *Sample Request*

```
{
    "Amount": "1",
    "MSISDN": "923376246667",
    "AccountNumber": "00020000011005325",
    "BankTitle": "MOD",
    "ReceiverMSISDN": "923477673797",
    "BankShortName": "MOD",
    "OTP": "qNuefc",
    "QuoteId": "840040"
}
```

*Sample Response*



```
"ResponseCode": "0",
"ResponseMessage": "Success",
"TransactionReference": "3415464",
"Fee": "0.00"
```



## CURL

```
curl --location --request POST '<BASE URL>/SubscriberIBFTOTP/Transfer' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-
Value: RSGTliF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBJBZY7FAqZAVWLJwpkG62E+NmiuY5E
VwcY6rFFBNF1zw6uuDOWXulXB/qcZmBcG0iWGKKIMHXF+nJj887wHVsWJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2
qRN3J0zjEiJ+Cipr5nV8YM07aiB7VS/TlOvWtcmYFqFtxeIZ6ZjPRen3zESOQY5t0N1NrTw6QURC4Um4iFQgsEDASWiYQm60i
1Wvt+o1dJmPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWAlc80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
    "AccountNumber": "00020000011005325",
    "BankTitle": "MOD",
    "MSISDN": "923435220042",
    "ReceiverMSISDN": "923495060643",
    "BankShortName": "MOD",
    "Amount": "100",
    "OTP": "Ab123c",
    "QuoteId": "850023"
}'
```

## Bill Payments

### Subscriber Utility Bill Inquiry

This API initiates a utility bill inquiry for a utility bill payment request.

**Endpoint URL:** <BASE URL>/SubscriberUtilityBill/Inquiry

**Operation Name:** BillInquiry

**Time-Out:** 140 Sec

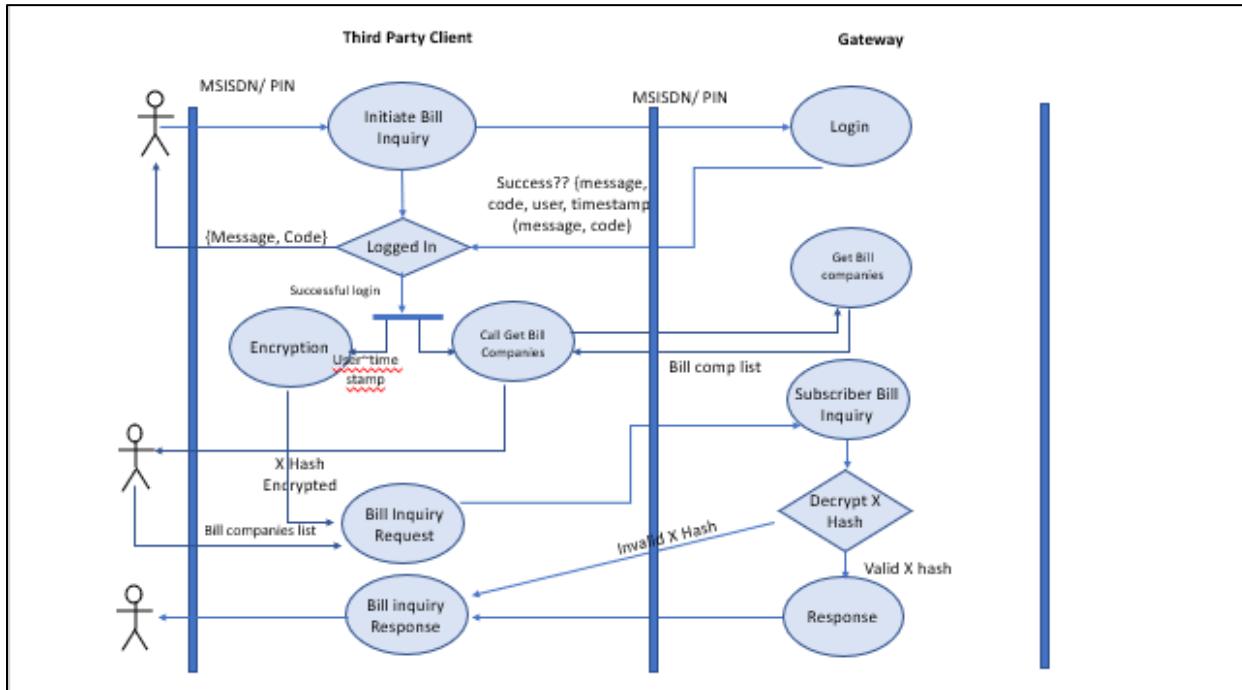


Figure 9: Subscriber Utility Bill Inquiry

#### Pre-Requisites

1. Subscriber must be logged in
2. Billing company name must be valid
3. Consumer number must be valid

#### Request Attributes

##### Request Header Parameters

To generate the **X-Hash-Value** header, please follow the steps:

1. Concatenate subscriber **MSISDN** starting with 92 with the **Timestamp** parameter returned in the

response of *Ericsson Login use case API*, and a tilde (~) sign in between.

- a. Example: 923451234567~2021-03-29 09:09:40.859254
2. Encrypt this string as shown in the *Encryption* section of this document and assign the value to *X-Hash-Value* header.

The header parameters ***X-IBM-Client-Id*** and ***X-IBM-Client-Secret*** are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

*BillStatus* parameter in response has three possible values:

- U means unpaid
- T means partial payment
- P means paid
- B means blocked bill

Parameter Name	Description	Mandatory
<b><i>X-IBM-Client-Id</i></b>	API Authentication credential	<b>Yes</b>
<b><i>X-IBM-Client-Secret</i></b>	API Authentication credential	<b>Yes</b>
<b><i>X-Channel</i></b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b><i>X-Hash-Value</i></b>	Encrypted string generated as shown in above steps	<b>Yes</b>

#### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>MSISDN</b>	MSISDN of the subscriber starting with '92'	<b>Yes</b>
<b>ConsumerNumber</b>	Consumer number to inquire utility bill against	<b>Yes</b>
<b>Company</b>	Title of the billing company	<b>Yes</b>

### *Response Attributes*

#### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>BillAmount</b>	String	No
<b>BillDueDate</b>	String	No
<b>BillStatus</b>	String	No
<b>CustomerName</b>	String	No

### *Response Codes*

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**x-Hash-Value:** fC/SmlJMpKDZNytfBUsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVeczIUoCwM4OjSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzuclW+GvPg0jVLQ3SfU/6pmNBt3ml7Vhlqy/ypx+tGKIW2sjI4Gz50Fu1jlP/LAI7ixowlG8YPJ1RQpfDLoX9w4oMPcCl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgltfE8pGegg0Zrcpn5xGrHIA==

*Sample Request*

```
{
    "MSISDN": "923435220042",
    "ConsumerNumber": "01131210076802",
    "Company": "FESCO"
}
```

*Sample Response*

```
{
    "ResponseCode": "0",
    "ResponseMessage": "Success",
    "BillAmount": "5.00",
    "BillDueDate": "210330",
    "BillStatus": "U",
    "CustomerName": "SAMIA IMAN"
}
```

**CURL**

```
curl --location --request POST '<BASE URL>/SubscriberUtilityBill/Inquiry' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-
Value: RSGTliF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBJBZY7FAqZAVWLJwpkG62E+NmiuY5E
VwcY6rFfBNF1zw6uuDOWXulXB/qcZmBcG0iWGKKIMHXF+nJj887wHVswJjW1P3h69vhY7hU6v99KJD0NV48YPotG5sM6qwCf2
qRN3J0zjEiJ+Cipr5nV8YM07aiB7VS/T10vWtcmYFqFtxeIZ6ZjPRen3zES0QY5t0N1Nrtw6QURC4Um4iFQgsEDASWiYQm60i
1Wvt+o1dJmPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWA1c80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
    "MSISDN": "923435220042",
    "ConsumerNumber": "01131210076802",
    "Company": "FESCO"
}'
```

## Subscriber Utility Bill Payment

This API initiates a utility bill payment request.

**Endpoint URL:** <BASE\_URL>/SubscriberUtilityBill/Payment

**Operation Name:** BillPayment

**Time-Out: 140 Sec**

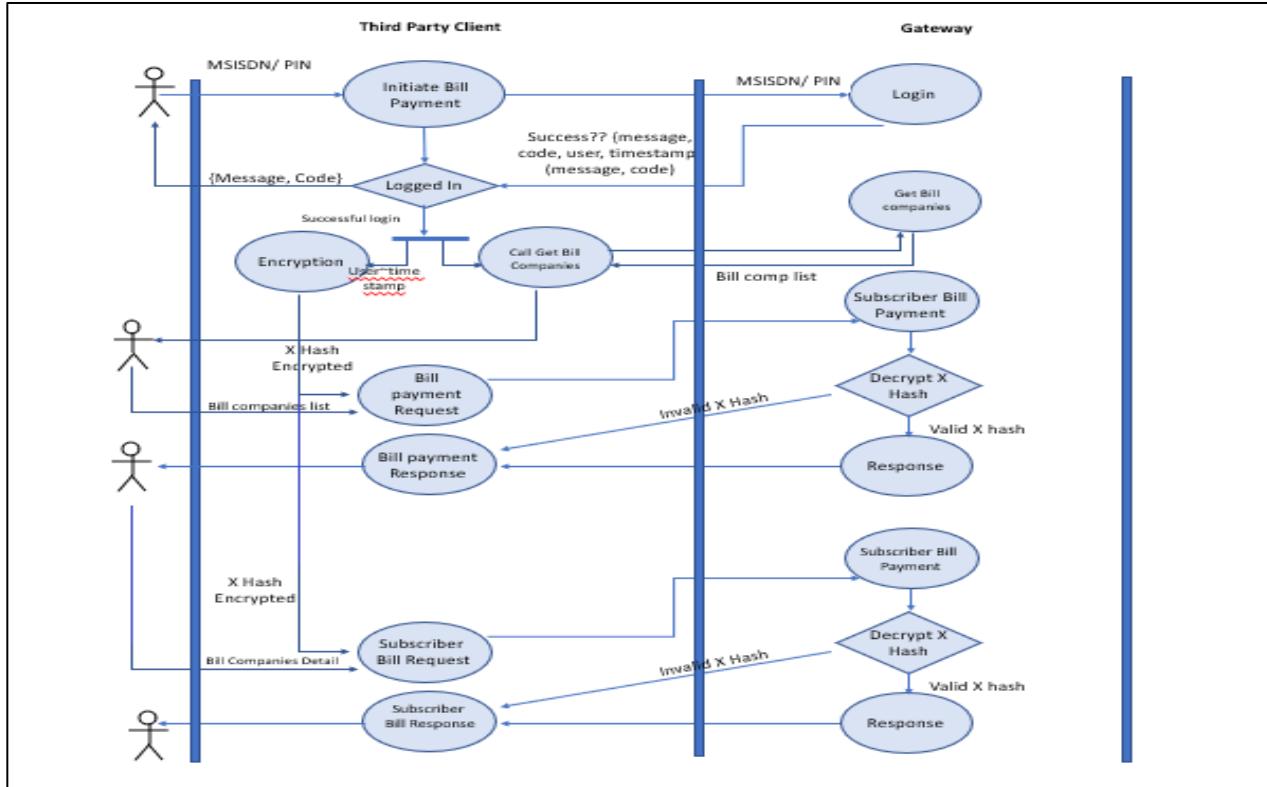


Figure 10: Subscriber Utility Bill Payment

### *Pre-Requisites*

1. Subscriber must be logged in
2. Subscriber must have sufficient funds for the transaction
3. Billing company name must be valid
4. Consumer number must be valid
5. Amount should be less than the available Daily, Monthly or Yearly Transaction Amount Limits

### *Request Attributes*

#### *Request Header Parameters*

To generate the *X-Hash-Value* header, please follow the steps:

1. Concatenate subscriber **MSISDN** starting with 92 with the *Timestamp* parameter returned in the response of *Ericsson Login use case API*, and a tilde (~) sign in between. a. Example:  
923451234567~2021-03-29 09:09:40.859254
2. Encrypt this string as shown in the *Encryption* section of this document and assign the value to *X-Hash-Value* header.

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	<b>Yes</b>

*Request Body Parameters*

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	Yes
<b>MSISDN</b>	MSISDN of the subscriber starting with '92'	Yes
<b>ConsumerNumber</b>	Consumer number to inquire utility bill against	Yes
<b>Company</b>	Title of the billing company	Yes

*Response Attributes**Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>BillAmount</b>	String	No
<b>BillDueDate</b>	String	No
<b>BillStatus</b>	String	No
<b>CustomerName</b>	String	No

*Response Codes*

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

*Sample Request Headers***X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221**X-Channel:** <Shared during onboarding>

**x-Hash-Value:** fC/SmlJMpKDZNytfBUGsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVeczlUoCwM4O  
jSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzuclW+GvPg0jVLQ3SfU/6  
pmNBt3ml7Vhlqy/ypx+tGKIW2sjJ4Gz50Fu1jlP/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPc  
Cl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6  
M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrHIA==

### Sample Request

```
{
  "Amount": "5",
  "Company": "FESCO",
  "MSISDN": "923435220042",
  "ConsumerNumber": "01131210076802"
}
```

### Sample Response

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
  "BillAmount": "5.00",
  "BillDueDate": "210330",
  "BillStatus": "U",
  "CustomerName": "SAMIA IMAN"
}
```

### CURL

```
curl --location --request POST '<BASE_URL>/SubscriberUtilityBill/Payment' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-Value: RSGT1iF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBJBZY7FAqZAVWLJwpkG62E+NmiuY5E  

VwcY6rFfBNF1zw6uuD0Wxu1XB/qcZmBcG0iWGKKIMHXF+nJj887wHVswJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2  

qRN3J0zjEiJ+Cipr5nV8YM07aiB7VS/Tl0vWtcmYFqFtXeIZ6ZjPRen3zES0QY5t0N1Nrtw6QURC4Um4iFQgsEDASWiYQm60i  

1Wvt+o1dJmPzbYF7jT6PrF6otOFfn0uoFoF66GTZK0LOXWA1c80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
  "Amount": "5",
  "Company": "FESCO",
  "MSISDN": "923435220042",
  "ConsumerNumber": "01131210076802"
}'
```

## Easypaisa Account Registration

### Subscriber New Account Registration

This API creates a new Easypaisa account.

**Endpoint URL:** <BASE URL>/NewAccountRegistration

**Operation Name:** NewAccountRegistration

**Time-Out:** 140 Sec

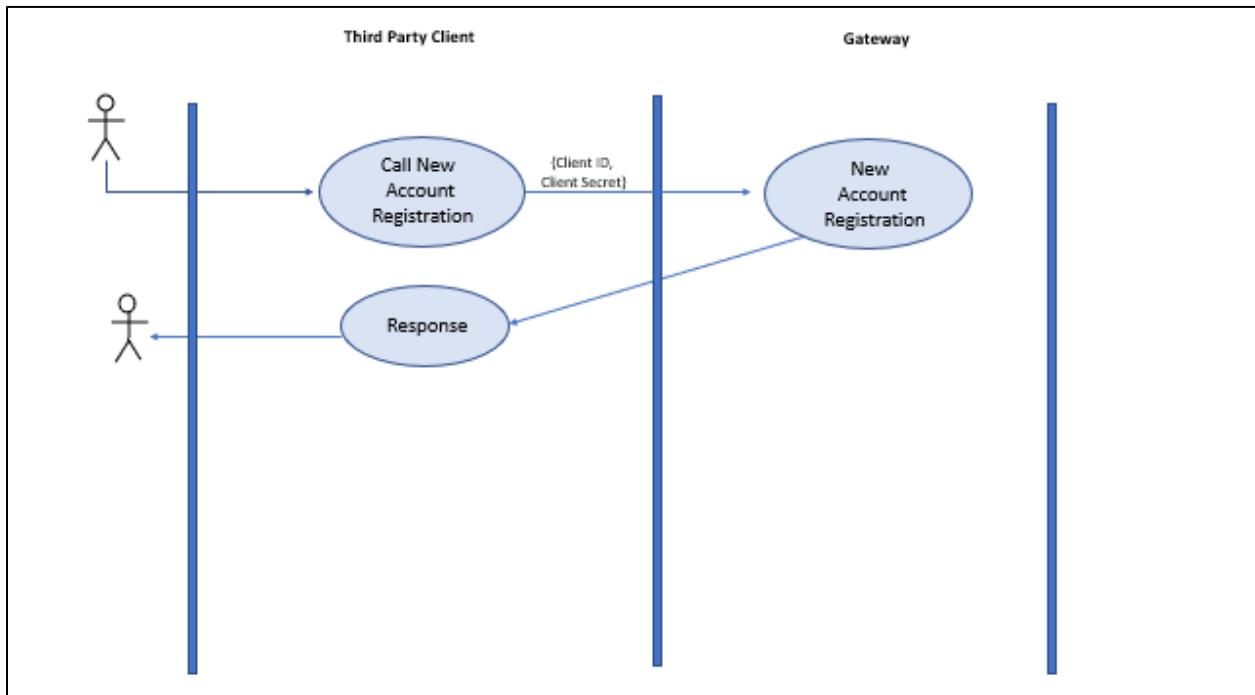


Figure 11: Subscriber New Account Registration

#### Pre-Requisites

1. CNIC must be valid and without dashes
2. MSISDN must be valid
3. CNIC issue date must be in correct format and valid

#### Request Attributes

##### Request Header Parameters

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
X-IBM-Client-Id	API Authentication credential	Yes
X-IBM-Client-Secret	API Authentication credential	Yes
X-Channel	<ul style="list-style-type: none"> <li>For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	Yes

#### *Request Body Parameters*

Parameter Name	Description	Mandatory
CNIC	CNIC of the subscriber without dashes	Yes
MSISDN	MSISDN of the subscriber starting with '0'	Yes
CNICIssueDate	Issuance date of CNIC in format dd-MM-YYYY	Yes
EmailAddress	Email address of subscriber	Yes

#### *Response Attributes*

#### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
ResponseCode	String	Yes
ResponseMessage	String	Yes

## Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element

### Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**x-Channel:** <Shared during onboarding>

### Sample Request

```
{
  "CNIC": "3740512345678",
  "MSISDN": "03451234567",
  "CNICIssueDate": "17-09-2016",
  "EmailAddress": "example@mail.com"
}
```

### Sample Response

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success"
}
```

## CURL

```
curl --location --request POST '<BASE_URL>/NewAccountRegistration' \
--header 'Content-Type: application/json' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Channel: subgateway' \
--header 'X-Hash-Value: RSGT1iF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBJBZY7FAqZAVWLJwpkG62E+NmiUY5EVwcY6rFfBNF1zw6uuDOWXu1XB/qcZmBcG0iWGKKIMHXFnJJ887wHVswJjW1P3h69vhY7hU6v99KJD0NV48YPotG5sM6qwCf2qRN3J0zjEiJ+Cipr5nV8YM07aiB7VS/Tl0vWtcmYFqFtXeIZ6ZjPRen3zES0QY5t0NlNrTw6QURC4Um4iFQgsEDA SWiYQm60i1Wvt+o1dJmPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWAlc80YmVc1SA==' \
--data-binary '{
    "CNIC": "3740512345678",
    "MSISDN": "03451234567",
    "CNICIssueDate": "17-09-2016",
    "EmailAddress": "example@mail.com"
}'
```

## Money Transfer (P2P)

### Mobile Account to Mobile Account Inquiry

This API initiates an inquiry for requesting a transfer between two Easypaisa mobile accounts.

**Endpoint URL:** <BASE URL>/MaToMA/Inquiry

**Operation Name:** MAtoMAInquiry

**Time-Out:** 140 Sec

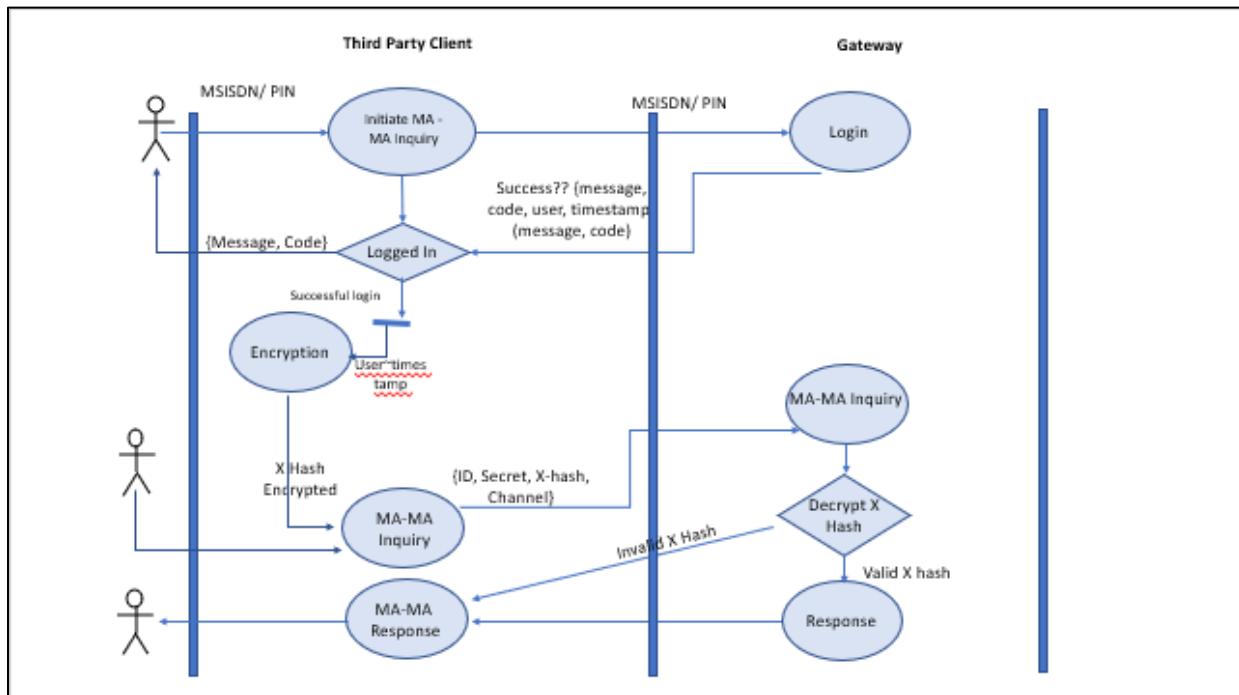


Figure 12: Mobile Account to Mobile Account Inquiry

#### Pre-Requisites

1. Subscriber must be logged in
2. Subscriber must have sufficient funds for the transaction
3. Sender and receiver must both be registered and active
4. Amount should be less than the available Daily, Monthly or Yearly Transaction Amount Limits

## Request Attributes

### *Request Header Parameters*

To generate the *X-Hash-Value* header, please follow the steps:

1. Concatenate subscriber **MSISDN** starting with 92 with the *Timestamp* parameter returned in the response of *Ericsson Login use case API*, and a tilde (~) sign in between.
  - a. Example: 923451234567~2021-03-29 09:09:40.859254
2. Encrypt this string as shown in the *Encryption* section of this document and assign the value to *X-Hash-Value* header.

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	<b>Yes</b>

### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	<b>Yes</b>
<b>MSISDN</b>	MSISDN of the subscriber starting with '92'	<b>Yes</b>
<b>ReceiverMSISDN</b>	MSISDN of the receiver starting with '92'	<b>Yes</b>

## Response Attributes

### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionReference</b>	String	No
<b>TransactionStatus</b>	String	No
<b>Tax</b>	String	No
<b>Fee</b>	String	No
<b>Name</b>	String	No

## Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**x-Hash-Value:** fC/SmlIJMpKDZNytfBUgsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVeczIUoCwM4OjSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzucIW+GvPg0jVLQ3SfU/6pmNBt3ml7Vhlqy/ypx+tGKIW2sjJ4Gz50Fu1jlp/LAI7ixowlG8YPJ1RQpfDLoX9w4oMPcCl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqllw+YGJ6M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrHIA==

*Sample Request*

```
{
  "Amount": "500",
  "MSISDN": "923451234567",
  "ReceiverMSISDN": "923462244567"
}
```

*Sample Response*

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
  "TransactionReference": "377719",
  "TransactionStatus": "success",
  "Tax": "0",
  "Fee": "0.00",
  "Name": "Hotline Ericsson"
}
```

**CURL**

```
curl --location --request POST '<BASE_URL>/MaToMA/Inquiry' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-
Value: RSGT1iF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBJBZY7FAqZAVWLJwpkG62E+NmiuY5EVwcY6rFfBNF1zw6uuDOWXulXB/qcZmBcG0iWGKKIMHXF+nJj887wHVsjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2qRN3J0zjEiJ+Cipr5nV8YM07aiB7VS/T10vWtcmYFqFtXeIZ6ZjPRen3zESOQY5t0N1Nrtw6QURC4Um4iFQgsEDASWiYQm60i1Wvt+o1dJmPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWA1c80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
  "Amount": "500",
  "MSISDN": "923451234567",
  "ReceiverMSISDN": "923462244567"
}'
```

## Mobile Account to Mobile Account Transfer

This API initiates a transfer between two Easypaisa mobile accounts.

**Endpoint URL:** <BASE URL>/MaToMA/Transfer

**Operation Name:** MAtoMATransfer

**Time-Out:** 140 Sec

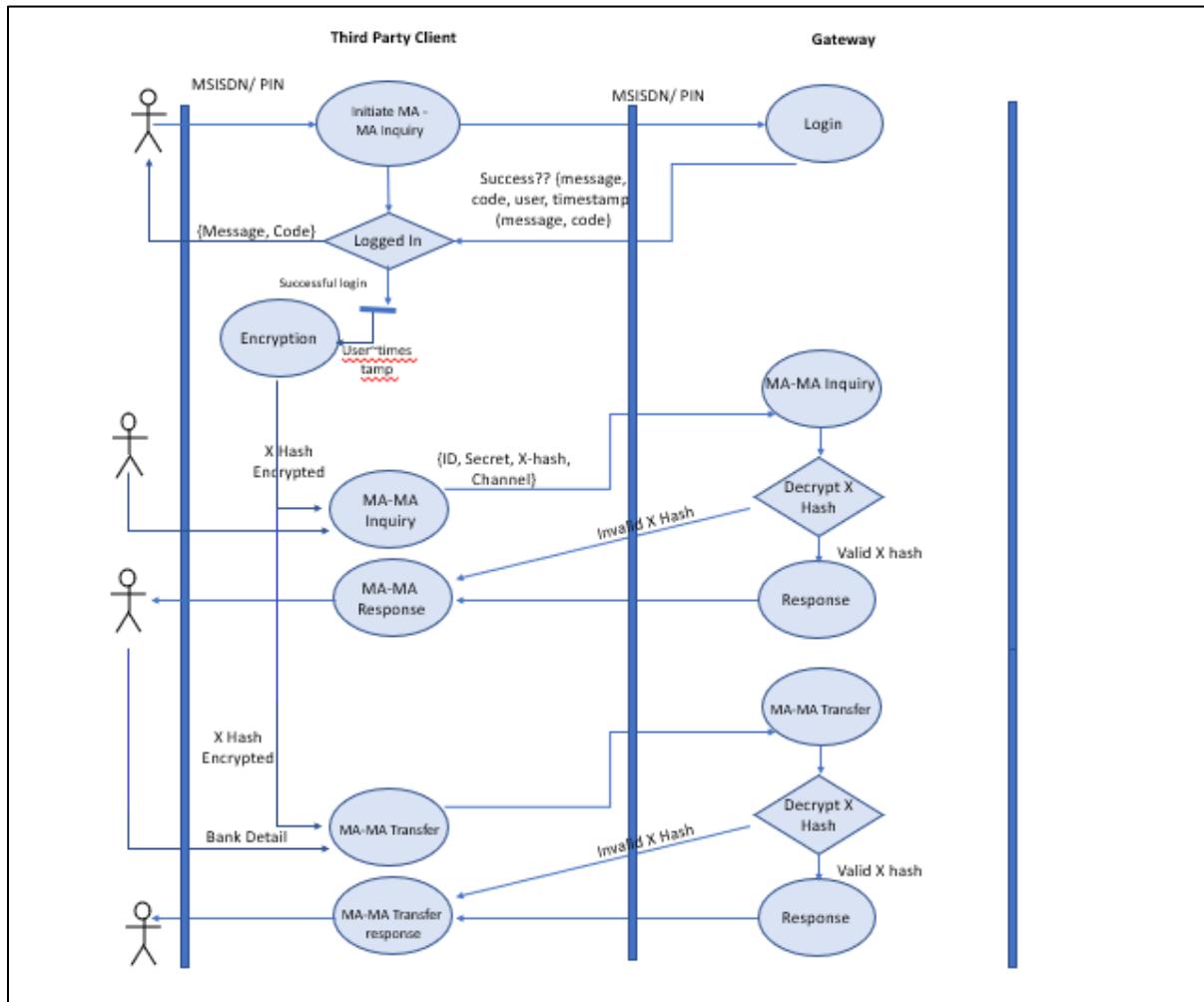


Figure 13: Mobile Account to Mobile Account Transfer

### Pre-Requisites

1. Subscriber must be logged in
2. Subscriber must have sufficient funds for the transaction

3. Sender and receiver must both be registered and active
4. Amount should be less than the available Daily, Monthly or Yearly Transaction Amount Limits

### Request Attributes

#### *Request Header Parameters*

To generate the *X-Hash-Value* header, please follow the steps:

1. Concatenate subscriber **MSISDN** starting with 92 with the *Timestamp* parameter returned in the response of *Ericsson Login use case API*, and a tilde (~) sign in between.
  - a. Example: 923451234567~2021-03-29 09:09:40.859254
2. Encrypt this string as shown in the *Encryption* section of this document and assign the value to *X-Hash-Value* header.

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	<b>Yes</b>

#### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	<b>Yes</b>
<b>MSISDN</b>	MSISDN of the subscriber starting with '92'	<b>Yes</b>
<b>ReceiverMSISDN</b>	MSISDN of the receiver starting with '92'	<b>Yes</b>

## Response Attributes

### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionReference</b>	String	No
<b>TransactionStatus</b>	String	No
<b>Balance</b>	String	No
<b>Fee</b>	String	No

## Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**x- Hash-Value:** fC/SmlJMpKDZNytfBUsCA7kdwmsVxzExKzrLKSeriyVICx87D4pi9FeoTVeczIuocwM4OjSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzuciW+GvPg0jVLQ3sfU/6pmNBt3ml7Vhlqy/ypx+tGKIW2sjJ4Gz50Fu1jlP/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPcCl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgltfE8pGegg0Zrcpn5xGrHIA==

*Sample Request*

```
{  
    "Amount": "500",  
    "MSISDN": "923451234567",  
    "ReceiverMSISDN": "923462244567"  
}
```

*Sample Response*

```
{  
    "ResponseCode": "0",  
    "ResponseMessage": "Success",  
    "TransactionReference": "377719",  
    "TransactionStatus": "success",  
    "Fee": "0.00",  
    "Balance": "89881.41"  
}
```

## CURL

```
curl --location --request POST '<BASE_URL>/MaToMA/Transfer' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-Value: RSGTliF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBJBZY7FAqZAVWLJwpkG62E+NmiuY5EVwcY6rFfBNF1zw6uuDOWXu1XB/qcZmBcG0iWGKKIMHXF+nJj887wHVswJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2qRN3J0zjEiJ+Cipr5nV8YM07aiB7VS/T10vWtcmYFqFtxeIZ6ZjPRen3zESOQY5t0N1Nrtw6QURC4Um4iFQgsEDASWiYQm60i1Wvt+o1dJmPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWAlc80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
    "Amount": "500",
    "MSISDN": "923451234567",
    "ReceiverMSISDN": "923462244567"
}'
```

## Money Transfer (P2P) OTP

### Mobile Account to Mobile Account Inquiry OTP

This API initiates an inquiry for requesting a transfer between two Easypaisa mobile accounts.

**Endpoint URL:** <BASE URL>/MaToMAOTP/Inquiry

**Operation Name:** MAtoMAInquiryOTP

**Time-Out:** 140 Sec

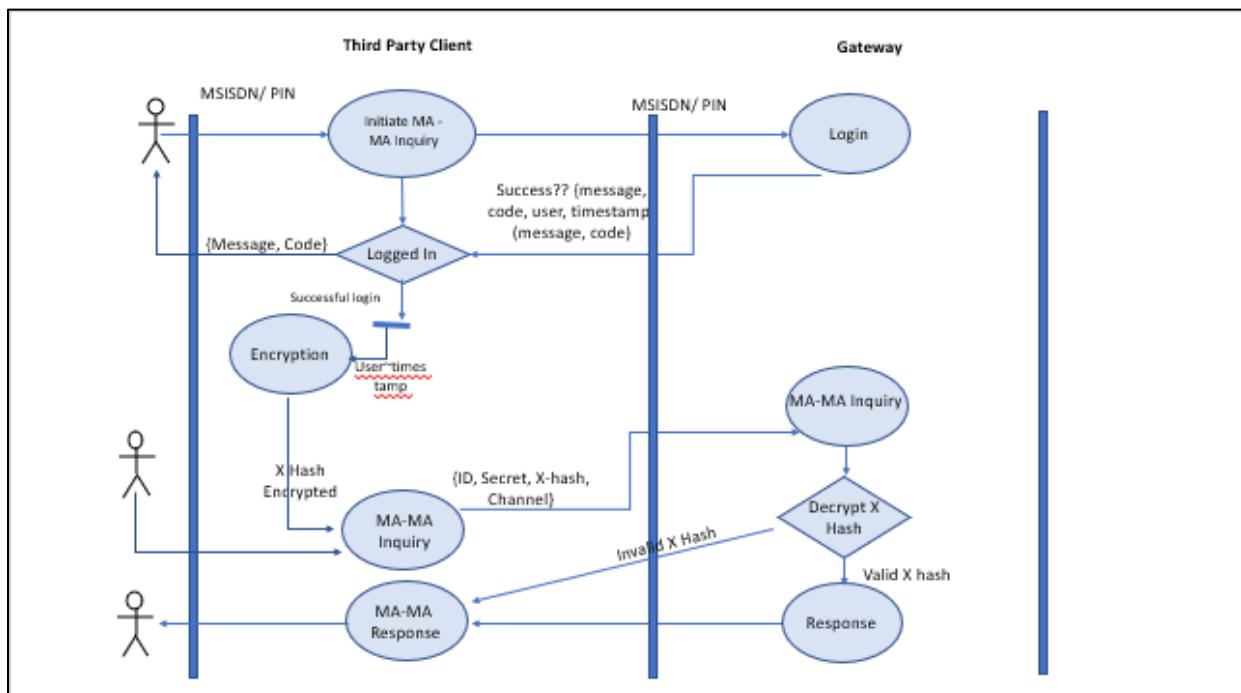


Figure 14: Mobile Account to Mobile Account Inquiry

#### Pre-Requisites

5. Subscriber must be logged in
6. Subscriber must have sufficient funds for the transaction
7. Sender and receiver must both be registered and active
8. Amount should be less than the available Daily, Monthly or Yearly Transaction Amount Limits

#### Request Attributes

##### Request Header Parameters

To generate the *X-Hash-Value* header, please follow the steps:

3. Concatenate subscriber **MSISDN** starting with 92 with the *Timestamp* parameter returned in the response of *Ericsson Login use case API*, and a tilde (~) sign in between.

- a. Example: 923451234567~2021-03-29 09:09:40.859254
4. Encrypt this string as shown in the *Encryption* section of this document and assign the value to *X-Hash-Value* header.

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	<b>Yes</b>

#### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	<b>Yes</b>
<b>MSISDN</b>	MSISDN of the subscriber starting with '92'	<b>Yes</b>
<b>ReceiverMSISDN</b>	MSISDN of the receiver starting with '92'	<b>Yes</b>

## Response Attributes

### Response Body Parameters

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionReference</b>	String	No
<b>TransactionStatus</b>	String	No
<b>Tax</b>	String	No
<b>Fee</b>	String	No
<b>QuotId</b>	String	Yes
<b>Name</b>	String	No

## Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**X-Hash-Value:** fC/SmlJMpKDZNytfBUgsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVczlUoCwM4O  
jSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzuclW+GvPg0jVLQ3SfU/6  
pmNBt3ml7Vhlqy/ypx+tGKIW2sjJ4Gz50Fu1jlP/LAI7ixowlG8YPJ1RQpfDLoX9w4oMPc  
Cl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqllw+YGJ6  
M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrHIA==

### Sample Request

```
{
    "Amount": "500",
    "MSISDN": "923451234567",
    "ReceiverMSISDN": "923462244567"
}
```

### Sample Response

```
{
    "ResponseCode": "0",
    "ResponseMessage": "Success",
    "TransactionStatus": "success",
    "TransactionReference": "840071",
    "Tax": "0",
    "Fee": "0.00",
    "QuoteId": "840071",
    "Name": "SYED MUHAMMAD MESAM RAZA"
}
```

### CURL

```
curl --location --request POST '<BASE_URL>/MaToMA/Inquiry' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-Value: RSGTliF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBJBZY7FAqZAVWLJwpkG62E+NmiuY5EVwcY6rFfBNF1zw6uuDOWXu1XB/qcZmBcG0iWGKKIMHXF+nJj887wHVswJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2qRN3JOzjEiJ+Cipr5nV8YM07aiB7VS/Tl0vWtcmYFqFtXeIZ6ZjPRen3zESOQY5t0NlNrTw6QURC4Um4iFQgsEDASWiYQm60i1Wvt+o1dJmPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWA1c80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
    "Amount": "500",
    "MSISDN": "923451234567",
    "ReceiverMSISDN": "923462244567"
}'
```

## Subscriber MAtoMA Resend OTP

This API initiates an OTP against an **Easypaisa** mobile account if OTP not received in Inquiry Response.

**Endpoint URL:** <BASE URL>/MAToMAOTP/ResendOTP

**Operation Name:** MAToMAResendOTP

**Time-Out:** 140 sec

### *Pre-Requisites*

3. Subscriber must be logged in.
4. Subscriber status must be active.

## Request Attributes

### *Request Header Parameter*

To generate the **X-Hash-Value** header, please follow the steps:

7. Concatenate subscriber **MSISDN** starting with 92 with the Timestamp parameter returned in the response of Ericsson Login use case API, and a tilde (~) sign in between. a. Example:  
923451234567~2021-03-29 09:09:40.859254
8. Encrypt this string as shown in the Encryption section of this document and assign the value to XHash-Value header.

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls and are used to authenticate the requester. The X-Channel parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>X- IBM-Client-Secret</b>	API Authentication credential	Yes
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	Yes
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	Yes

### *Request Body Parameter*

Parameter Name	Description	Mandatory
<b>QuoteID</b>	Received in response of Inquiry	Yes

## Response Attributes

### *Response Body Parameters*

Parameter Name	Description	Mandatory
<b>Response Code</b>	String	Yes
<b>Response Message</b>	String	Yes

## Response Codes

Response Code	Description
00	Successful execution
1	Error in processing request
-1	Exception occurred
2	Session Validation Failed
012	Generic error (EWP Error codes)
014	Header or Header element incorrect
015	Invalid Body or body element
401	INVALID CREDENTIALS
403	NOT AUTHORIZED
404	Not Found
500	Internal Server Error

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**X-Hash-Value:**

fC/SmlJMpKDZNytfBUGsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVeczIUoCwM4O  
jSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzuclW+GvPg0jVLQ3SfU/6  
pmNBt3ml7Vhlqy/ypx+tGKIW2sjJ4Gz50Fu1jlP/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPc  
Cl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqlw+YGJ6  
M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgltfE8pGegg0Zrcpn5xGrHIA==

### Sample Request

```
{
  "QuoteID": "850541"
}
```

### Sample Response

```
{
  "ResponseCode": "00",
  "ResponseMessage": "OTP has been resend to your number"
}
```

### CURL

```
curl --location --request POST '<BASE_URL>/MAToMAOTP/ResendOTP' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-Value: RSGTliF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/ha0Bci4wFLaW6SPtWOBJBZY7FAqZAVWLJwpkG62E+NmiuY5EVwcY6rFfBNF1zw6uuDOWXu1XB/qcZmBcG0iWGKKIMHXF+nJj887wHVsWJjW1P3h69vhY7hU6v99KJD0NV48YPotG5sM6qwCf2qRN3J0zjEiJ+Cipr5nV8YM07aiB7VS/T10vWtcmYFqFtXeIZ6ZjPRen3zESOQY5t0NlNrtw6QURC4Um4iFQgsEDASWiYQm60i1Wvt+o1dJmPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWA1c80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
  "QuoteID": "123456"
}'
```

## Mobile Account to Mobile Account Transfer OTP

This API initiates a transfer between two Easypaisa mobile accounts.

**Endpoint URL:** <BASE URL>/MaToMAOTP/Transfer

**Operation Name:** MAToMATransferOTP

**Time-Out:** 140 Sec

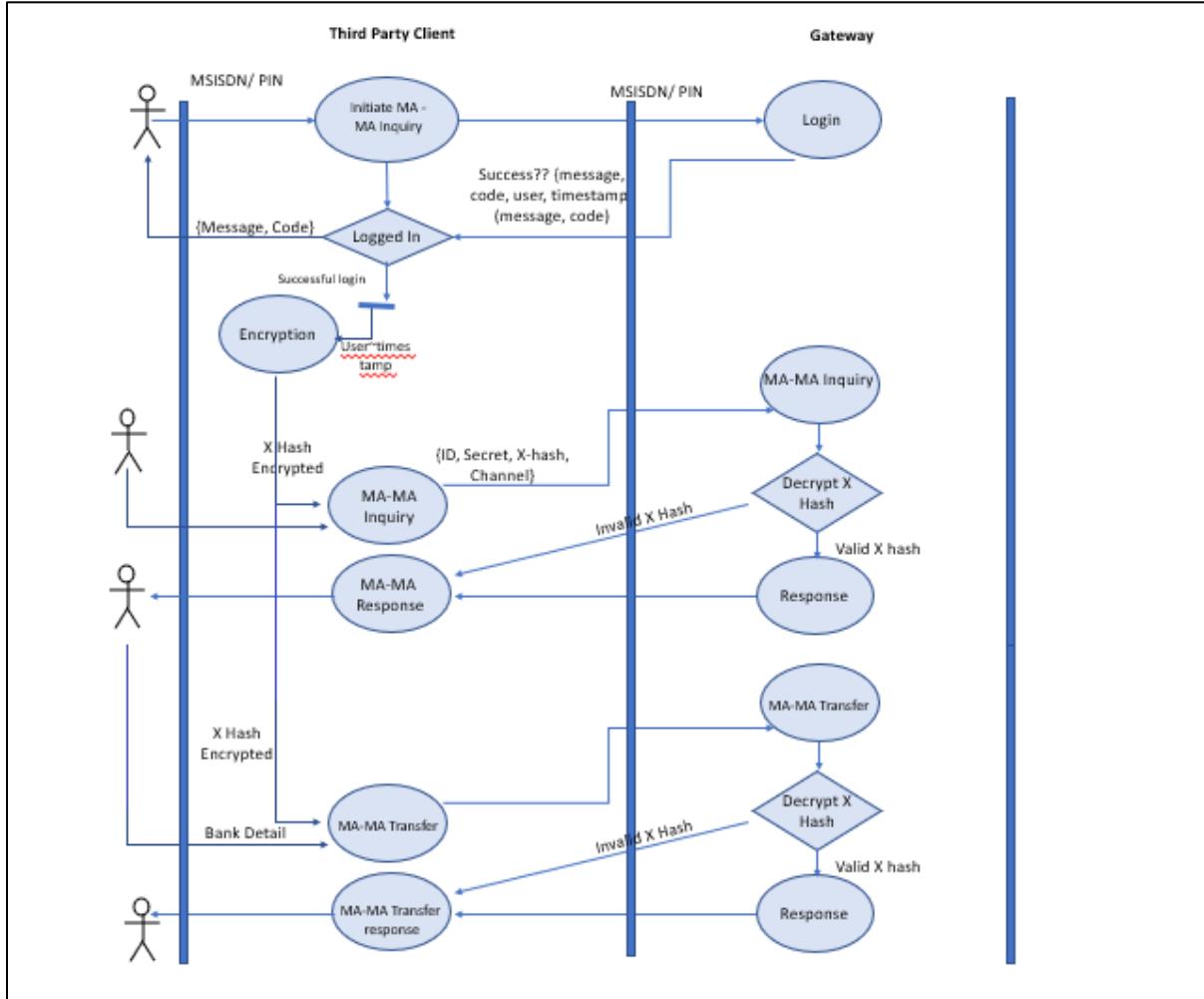


Figure 15: Mobile Account to Mobile Account Transfer

### Pre-Requisites

1. Subscriber must be logged in
2. Subscriber must have valid OTP
3. Subscriber must have sufficient funds for the transaction
4. Sender and receiver must both be registered and active
5. Amount should be less than the available Daily, Monthly or Yearly Transaction Amount Limits

### Request Attributes

#### Request Header Parameters

To generate the *X-Hash-Value* header, please follow the steps:

3. Concatenate subscriber **MSISDN** starting with 92 with the *Timestamp* parameter returned in the response of *Ericsson Login use case API*, and a tilde (~) sign in between.
  - a. Example: 923451234567~2021-03-29 09:09:40.859254
4. Encrypt this string as shown in the *Encryption* section of this document and assign the value to *X*.

*Hash-Value* header.

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls, and are used to authenticate the requester. The **X-Channel** parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	<b>Yes</b>

#### Request Body Parameters

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	<b>Yes</b>
<b>MSISDN</b>	MSISDN of the subscriber starting with '92'	<b>Yes</b>
<b>ReceiverMSISDN</b>	MSISDN of the receiver starting with '92'	<b>Yes</b>
<b>OTP</b>	OTP received on MSISDN	<b>Yes</b>
<b>QuotId</b>	Received on Inquiry Response	<b>Yes</b>

## Response Attributes

### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionReference</b>	String	No
<b>TransactionStatus</b>	String	No
<b>Balance</b>	String	No
<b>Fee</b>	String	No

## Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**XI - Hash-Value:** fC/SmlJMpKDZNytfBUsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVeczIUoCwM4OjSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzuclW+GvPg0jVLQ3SFU/6pmNBt3ml7Vhlqy/ypx+tGKIW2sjJ4Gz50Fu1Jlp/LAI7ixowlG8YPJ1RQpfDLoX9w4oMPcCl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgltfE8pGegg0Zrcpn5xGrHIA==

### Sample Request

```
[  
→   "Amount": "11",  
→   "MSISDN": "923482759987",  
→   "ReceiverMSISDN": "923115161606",  
→   ... "OTP": "568207",  
→   ... "QuoteId": "819850"  
→ ]
```

### Sample Response

```
[  
  "ResponseCode": "0",  
  "ResponseMessage": "Success",  
  "TransactionStatus": "success",  
  "TransactionReference": "3403446",  
  "Fee": "0.00",  
  "Balance": "17086.98"  
]
```

## CURL

```
curl --location --request POST '<BASE_URL>/MaToMAOTP/Transfer' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Hash- \
Value: RSGT1iF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBjBZY7FAqZAVWLJwpkG62E+NmiuY5EVwc \
Y6rFfBNF1zw6uuDOWXu1XB/qcZmBcG0iWGKKIMHXF+nJj887wHVswWJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2qRN3JO \
zjEiJ+Cipr5nV8YM07aiB7VS/T10vWtcmYFqFtXeIZ6ZjPRen3zESOQY5t0N1Nrtw6QURC4Um4iFQgsEDASWiYQm60i1Wvt+o1dJ \
mPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWAlc80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
    "Amount": "500",
    "MSISDN": "923451234567",
    "ReceiverMSISDN": "923462244567"
    "OTP": "123aVa"
    "QuoteId": "850023"
}'
```

## Money Transfer To CNIC

### Mobile Account to CNIC Inquiry

This API initiates an inquiry for requesting a transfer from an Easypaisa mobile account to a CNIC.

**Endpoint URL:** <BASE URL>/MAtoCNIC/Inquiry

**Operation Name:** MAtoCNICInquiry

**Time-Out:** 140 Sec

#### Pre-Requisites

1. Subscriber must be logged in
2. Subscriber must have sufficient funds for the transaction
3. Sender must be registered and active
4. Receiver CNIC must be valid
5. Amount should be less than the available Daily, Monthly or Yearly Transaction Amount Limits

#### Request Attributes

##### Request Header Parameters

To generate the *X-Hash-Value* header, please follow the steps:

1. Concatenate subscriber **MSISDN** starting with 92 with the *Timestamp* parameter returned in the response of *Ericsson Login use case API*, and a tilde (~) sign in between.
  - a. Example: 923451234567~2021-03-29 09:09:40.859254
2. Encrypt this string as shown in the *Encryption* section of this document and assign the value to *X-Hash-Value* header.

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	<b>Yes</b>

### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	Yes
<b>MSISDN</b>	MSISDN of the subscriber starting with '92'	Yes
<b>ReceiverMSISDN</b>	MSISDN of the receiver starting with '92'	Yes
<b>ReceiverCNIC</b>	CNIC of the receiver without dashes	Yes

### *Response Attributes*

### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionReference</b>	String	No
<b>TransactionStatus</b>	String	No
<b>Tax</b>	String	No
<b>Fee</b>	String	No

### *Response Codes*

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**X-Hash-Value:** fC/SmlJMpKDZNytfBUgsCA7kdwmsVxzExKzrLKSeriyVICx87D4pi9FeoTVeczlUoCwM4O  
jSbxV1YfVo7NI6bfQoWGEMGqp6qVALzoDp9pOmckGaSK937WCzucIW+GvPg0jVLQ3SfU/6  
pmNBt3ml7Vhlqy/ypx+tGKIW2sjJ4Gz50Fu1jlp/LAI7ixowlG8YPJ1RQpfDLoX9w4oMPc  
Cl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6  
M+cIFHOIROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgltfE8pGegg0Zrcpn5xGrHIA==

### Sample Request

```
{
  "Amount": "101",
  "MSISDN": "923335110286",
  "ReceiverMSISDN": "923467322938",
  "ReceiverCNIC": "6110184236363"
}
```

### Sample Response

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
  "TransactionStatus": "success",
  "TransactionReference": "418369",
  "Tax": "7.59",
  "Fee": "47.41"
}
```

### CURL

```
curl -L -X POST '<BASE URL>/MAtoCNIC/Inquiry' -H 'X-Channel: <Shared during onboarding>' -H 'X-Hash-Value: xCE8n6VIpVuhdAryPJ0IBYuW+2gb6nyycVidSABJZFc/ndZ1TsibfekUdHOE0JxVFEZEiEhTrANxVritEEyzvZiBahaM
LCfxknrWN+ocDPuC+Ri5Kf7/QvX73A7Y7PiGN5R7XvVzcVBR2+UrTNq0bHPHYoSaFKI181BQ2I7xChnmTKjimae4LXUGQUhaCrz/
VHEOnSQEEENS9Jjj9F4YvEYjcxXro93Le/rlytJr0o3vL8kXStGZ9pmjm/rDbIsJ1UsL9SE2tyKKFPYVIF1q4mUoGIhttpsx0dQi
q7Q7RaY3Ma/ipHR2CTvudSAThpA7PHg6E+9aq0ace8T4jh6Kw==' --data-binary '{
  "Amount": "101",
  "MSISDN": "923335110286",
  "ReceiverMSISDN": "923467322938",
  "ReceiverCNIC": "6110184236363"
}'
```

## Mobile Account to CNIC Transfer

This API initiates a transfer from an Easypaisa mobile account to a CNIC.

**Endpoint URL:** <BASE URL>/MAToCNIC

**Operation Name:** MAtoCNICTransfer

**Time-Out:** 140 Sec

### Pre-Requisites

1. Subscriber must be logged in
2. Subscriber must have sufficient funds for the transaction
3. Sender must be registered and active
4. Receiver CNIC must be valid
5. Amount should be less than the available Daily, Monthly or Yearly Transaction Amount Limits

### Request Attributes

#### Request Header Parameters

To generate the *X-Hash-Value* header, please follow the steps:

1. Concatenate subscriber **MSISDN** starting with 92 with the *Timestamp* parameter returned in the response of *Ericsson Login use case API*, and a tilde (~) sign in between.
  - a. Example: 923451234567~2021-03-29 09:09:40.859254
2. Encrypt this string as shown in the *Encryption* section of this document and assign the value to *X-Hash-Value* header.

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	<b>Yes</b>

### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	Yes
<b>MSISDN</b>	MSISDN of the subscriber starting with '92'	Yes
<b>ReceiverMSISDN</b>	MSISDN of the receiver starting with '92'	Yes
<b>ReceiverCNIC</b>	CNIC of the receiver without dashes	Yes

### **Response Attributes**

#### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionReference</b>	String	No
<b>TransactionStatus</b>	String	No
<b>Tax</b>	String	No
<b>Fee</b>	String	No
<b>Balance</b>	String	No

### **Response Codes**

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

#### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**X-Hash-Value:** fC/SmlJMpKDZNytfBUsCA7kdwmsVxzExKzrLKSeriYVICx87D4pi9FeoTVeczlUoCwM4OjSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzucIW+GvPg0jVLQ3SfU/6pmNBt3ml7Vhlqy/ypx+tGKIW2sjJ4Gz50Fu1jlp/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPcCI+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgtfE8pGegg0Zrcpn5xGrHIA==

### Sample Request

```
{
  "Amount": "101",
  "MSISDN": "923335110286",
  "ReceiverMSISDN": "923467322938",
  "ReceiverCNIC": "6110184236363"
}
```

### Sample Response

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
  "TransactionStatus": "success",
  "TransactionReference": "2744162",
  "Fee": "47.41",
  "Balance": "9740.00"
}
```

### CURL

```
curl -L -X POST '<BASE URL>/MAtoCNIC/Inquiry' -H 'X-Channel: <Shared during onboarding>' -H 'X-Hash-Value: xCE8n6VIpVuhdAryPJ0IBYuW+2gb6nyycVidSABJZFc/ndZ1TsiBfekUdHOE0JxVFEZEiEhTrANxVritEEyzvZiBahsaMLCFxknrWN+ocDPuC+Ri5Kf7/QvX73A7Y7PiGN5R7XvVzcVBR2+UrTNq0bHPHYoSaFKI181BQ2I7xChnmTKjimae4LXUGQUhaCrz/VHEOnSQQEEENS9Jjj9F4YvEYjcxXro93Le/rlytJr0o3vL8kXStGZ9pmjm/rDbIsJlUsL9SE2tyKKFPYVIF1q4mUoGIhttpsx0dQiq7Q7RaY3Ma/ipHR2CTvudSAThpA7PHg6E+9aq0ace8T4jh6Kw==' --data-raw '{
  "Amount": "101",
  "MSISDN": "923335110286",
  "ReceiverMSISDN": "923467322938",
  "ReceiverCNIC": "6110184236363"
}'
```

## Money Transfer to CNIC OTP

### Mobile Account to CNIC Inquiry OTP

This API initiates an inquiry for requesting a transfer from an Easypaisa mobile account to a CNIC.

**Endpoint URL:** <BASE URL>/MAtoCNICOTP/Inquiry

**Operation Name:** MAtoCNICInquiryOTP

**Time-Out:** 140 Sec

#### Pre-Requisites

1. Subscriber must be logged in
2. Subscriber must have sufficient funds for the transaction
3. Sender must be registered and active
4. Receiver CNIC must be valid
5. Amount should be less than the available Daily, Monthly or Yearly Transaction Amount Limits

#### Request Attributes

##### Request Header Parameters

To generate the *X-Hash-Value* header, please follow the steps:

3. Concatenate subscriber **MSISDN** starting with 92 with the *Timestamp* parameter returned in the response of *Ericsson Login use case API*, and a tilde (~) sign in between.
  - a. Example: 923451234567~2021-03-29 09:09:40.859254
4. Encrypt this string as shown in the *Encryption* section of this document and assign the value to *X-Hash-Value* header.

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	<b>Yes</b>

### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	Yes
<b>MSISDN</b>	MSISDN of the subscriber starting with '92'	Yes
<b>ReceiverMSISDN</b>	MSISDN of the receiver starting with '92'	Yes
<b>ReceiverCNIC</b>	CNIC of the receiver without dashes	Yes

### **Response Attributes**

#### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionReference</b>	String	No
<b>TransactionStatus</b>	String	No
<b>AccountTitle</b>	String	Yes
<b>ReceiverCNIC</b>	String	Yes
<b>Tax</b>	String	No
<b>Fee</b>	String	No
<b>QuotId</b>	String	Yes

### **Response Codes**

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occured
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

#### *Sample Request Headers*

X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**X-Hash-Value:** fC/SmlJMpKDZNytfBUgsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVeczIuoCwM4OjSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzuclW+GvPg0jVLQ3SfU/6pmNbT3ml7Vhlqy/ypx+tGKIW2sj4Gz50Fu1jlP/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPcCl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgnjcEn5wDqplw+YGJ6M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrHIA==

### Sample Request

```
{
  "Amount": "101",
  "MSISDN": "923335110286",
  "ReceiverMSISDN": "923467322938",
  "ReceiverCNIC": "6110184236363"
}
```

### Sample Response

```
{
  "ResponseMessage": "Success",
  "TransactionStatus": "success",
  "TransactionReference": "588026",
  "MSISDN": "923474102584",
  "AccountTitle": "MOHSIN MEHMOOD SYED",
  "ReceiverMSISDN": "923477673797",
  "ReceiverCNIC": "6110184236363",
  "Tax": "7.59",
  "Fee": "47.41",
  "Balance": "17112.98",
  "QuoteId": "588026"
}
```

### CURL

```
curl -L -X POST '<BASE URL>/MAtoCNIC/Inquiry' -H 'X-Channel: <Shared during onboarding>' -H 'X-Hash-Value: xCE8n6VIpVuhdAryPJ0IBYuW+2gb6nyycVidSABJZFc/ndZ1TsibfekUdHOE0JxVFEZEiEhTrANxVritEEyzvZiBahsaMLCFxknrWN+ocDPuC+Ri5Kf7/QvX73A7Y7PiGN5R7XvVzcVBR2+UrTNq0bHPHYoSaFKI181BQ2I7xChnmTKjimae4LXUGQUhaCrz/VHEOnSQQEEENS9Jjj9F4YvEYjcxXro93Le/rlytJr0o3vL8kXStGZ9pmjm/rDbIsJlUsL9SE2tyKKFPYVIF1q4mUoGIhttps0dQi
q7Q7RaY3Ma/ipHR2CTvudSAThpA7PHg6E+9aq0ace8T4jh6Kw==' --data-raw '{
  "Amount": "101",
  "MSISDN": "923335110286",
  "ReceiverMSISDN": "923467322938",
  "ReceiverCNIC": "6110184236363"
}'
```

## Subscriber MAtoCNIC Resend OTP

This API initiates an OTP against an **Easypaisa** mobile account if OTP not received in Inquiry Response.

**Endpoint URL:** <BASE URL>/MAtoCNICOTP/ResendOTP

**Operation Name:** MAtoCNICResendOTP

**Time-Out:** 140 sec

### *Pre-Requisites*

5. Subscriber must be logged in.
6. Subscriber status must be active.

## Request Attributes

### *Request Header Parameter*

To generate the **X-Hash-Value** header, please follow the steps:

9. Concatenate subscriber **MSISDN** starting with 92 with the Timestamp parameter returned in the response of Ericsson Login use case API, and a tilde (~) sign in between. a. Example:  
923451234567~2021-03-29 09:09:40.859254
10. Encrypt this string as shown in the Encryption section of this document and assign the value to XHash-Value header.

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls and are used to authenticate the requester. The X-Channel parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>X- IBM-Client-Secret</b>	API Authentication credential	Yes
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	Yes
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	Yes

### *Request Body Parameter*

Parameter Name	Description	Mandatory
<b>QuoteID</b>	Received in response of Inquiry	Yes

## Response Attributes

### *Response Body Parameters*

Parameter Name	Description	Mandatory
<b>Response Code</b>	String	Yes
<b>Response Message</b>	String	Yes

## Response Codes

Response Code	Description
00	Successful execution
1	Error in processing request
-1	Exception occurred
2	Session Validation Failed
012	Generic error (EWP Error codes)
014	Header of Header element incorrect
015	Invalid Body or body element
401	INVALID CREDENTIALS
403	NOT AUTHORIZED
404	Not Found
500	Internal Server Error

### Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**X-Hash-Value:**

```
fC/SmlJMpKDZNytfBUsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVeczIUoCwM4O
jSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzucIW+GvPg0jVLQ3SfU/6
pmNBt3ml7Vhlqy/ypx+tGKIW2sjJ4Gz50Fu1jlp/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPc
Cl+QsOcazrAmkTWwitKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6
M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrHIA==
```

### Sample Request

```
{
  "QuoteID": "850541"
}
```

### Sample Response

```

{
    "ResponseCode": "00",
    "ResponseMessage": "OTP has been resend to your number"
}

```

### CURL

```

curl --location --request POST '<BASE_URL>/MAToCNICOTP/ResendOTP' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-'
Value: RSGTliF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBJBZY7FAqZAVWLJwpkG62E+NmiuY5EVwc
Y6rFfBNF1zw6uuDOWXu1XB/qcZmBcG0iWGKKIMHXF+nJj887wHVsWJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2qRN3JO
zjEiJ+Cipr5nV8YM07aiB7VS/Tl0vWtcmYFqFtXeIZ6ZjPRen3zESOQY5t0NlNrtw6QURC4Um4iFQgsEDASWiYQm60i1Wvt+o1dJ
mPzbYF7jT6PrF6ot0Ffn0uoFoF66GTZK0LOXWAlc80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
    "TransactionType": "CashTransfer",
    "QuoteID": "123456",
    "msisdn": "923435220042",
}'

```

## Mobile Account to CNIC Transfer OTP

This API initiates a transfer from an Easypaisa mobile account to a CNIC.

**Endpoint URL:** <BASE URL>/MAToCNICOTP/Transfer

**Operation Name:** MAToCNICTransferOTP

**Time-Out:** 140 Sec

### *Pre-Requisites*

1. Subscriber must be logged in
2. Subscriber must have valid OTP.
3. Subscriber must have sufficient funds for the transaction
4. Sender must be registered and active
5. Receiver CNIC must be valid
6. Amount should be less than the available Daily, Monthly or Yearly Transaction Amount Limits

### **Request Attributes**

#### *Request Header Parameters*

To generate the *X-Hash-Value* header, please follow the steps:

3. Concatenate subscriber **MSISDN** starting with 92 with the *Timestamp* parameter returned in the response of *Ericsson Login use case API*, and a tilde (~) sign in between.
  - a. Example: 923451234567~2021-03-29 09:09:40.859254
4. Encrypt this string as shown in the *Encryption* section of this document and assign the value to *X-Hash-Value* header.

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	<b>Yes</b>

### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	Yes
<b>MSISDN</b>	MSISDN of the subscriber starting with '92'	Yes
<b>ReceiverMSISDN</b>	MSISDN of the receiver starting with '92'	Yes
<b>ReceiverCNIC</b>	CNIC of the receiver without dashes	Yes
<b>OTP</b>	Received on MSISDN after Inquiry call	Yes
<b>QuotId</b>	Received in response of Inquiry	Yes

### **Response Attributes**

#### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionReference</b>	String	No
<b>TransactionStatus</b>	String	No
<b>Tax</b>	String	No
<b>Fee</b>	String	No
<b>Balance</b>	String	No

### **Response Codes**

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

#### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**X-Hash-Value:** fC/SmlJMpKDZNytfBUgsCA7kdwmsVxzExKzrLKSeriyVICx87D4pi9FeoTVeczIuoCwM4OjSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzuclW+GvPg0jVLQ3SfU/6pmNBt3ml7Vhlqy/ypx+tGKIW2sjJ4Gz50Fu1Jlp/LAI7ixowlG8YPJ1RQpfDLoX9w4oMPcCl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrHIA==

### Sample Request

```
{
  "Amount": "10",
  "MSISDN": "923474102584",
  "ReceiverMSISDN": "923477673797",
  "ReceiverCNIC": "6110184236363",
  "QuoteId": "587783",
  "OTP": "868257"
}
```

### Sample Response

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
  "TransactionStatus": "success",
  "TransactionReference": "2744162",
  "Fee": "47.41",
  "Balance": "9740.00"
}
```

### CURL

```
curl -L -X POST '<BASE URL>/MAtoCNIC/Inquiry' -H 'X-Channel: <Shared during onboarding>' -H 'X-Hash-Value: xCE8n6ViPvhhdAryPJ0IBYuW+2gb6nyycVidSABJZFc/ndZ1TsiBfekUdHOE0JxVFEZEiEhTrANxVritEEyzvZiBahsaMLCfxknrWN+ocDPuC+Ri5Kf7/QvX73A7Y7PiGN5R7XvVzcVBR2+UrTNq0bHPHYoSaFKI181BQ2I7xChnmTKjimae4LXUGQUhaCrz/VHEOnSQQEENs9Jjj9F4YvEYjcxXro93Le/rlytJr0o3vL8kXStGZ9pmjm/rDbIsJ1UsL9SE2tyKKFPYVIF1q4mUoGIhttpsx0dQi
q7Q7RaY3Ma/ipHR2CTvudSATHpA7PHg6E+9aq0ace8T4jh6Kw==' --data-binary '{
  "Amount": "101",
  "MSISDN": "923335110286",
  "ReceiverMSISDN": "923467322938",
  "ReceiverCNIC": "6110184236363",
  "OTP": "12Abx2",
  "QuoteId": "850025"
}'
```

## Cash Deposit - Non BVS

### Retailer Cash Deposit

This API initiates a transfer from retailer's account to a subscriber Easypaisa account.

**Endpoint URL:** <BASE URL>/CashInOut/CashDeposit

**Operation Name:** CashDeposit

**Time-Out:** 140 Sec

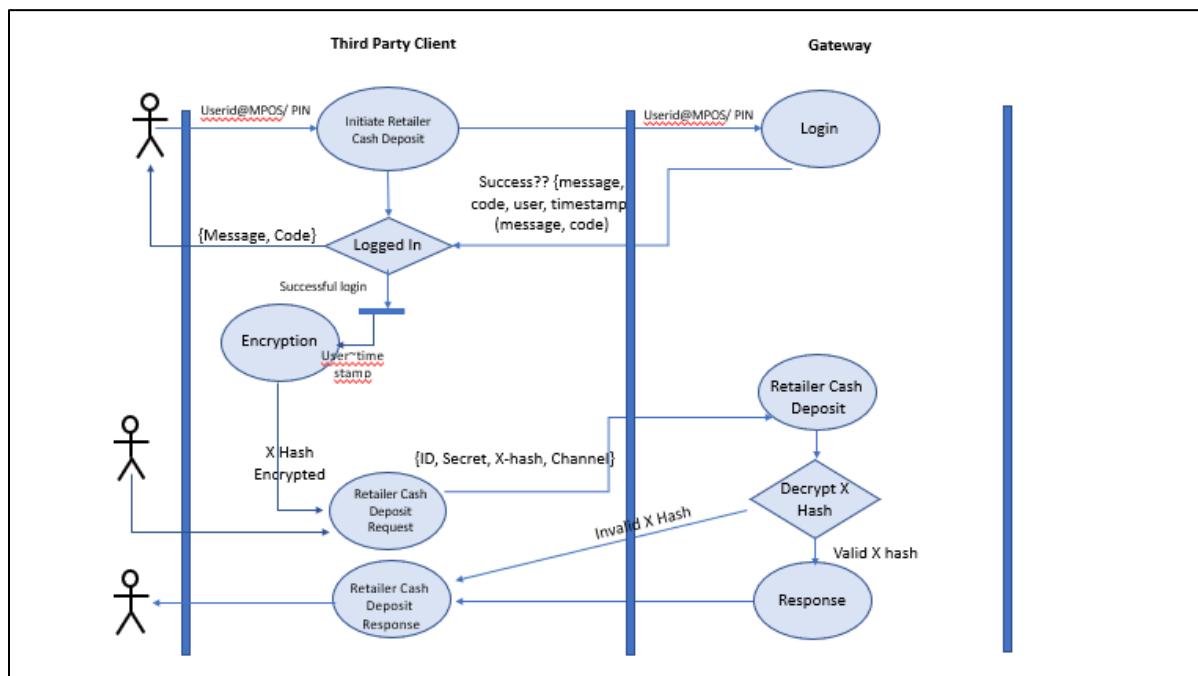


Figure 16: Retailer Cash Deposit

### Pre-Requisites

1. Retailer must be logged in
2. Retailer must have sufficient funds for the transaction
3. Amount should be less than the available Daily, Monthly or Yearly Transaction Amount Limits

### Request Attributes

#### Request Header Parameters

To generate the **X-Hash-Value** header, please follow the steps:

1. Concatenate retailer's **userid@MPOS** string with the Timestamp parameter returned in the response of Login Page use case API, and a tilde (~) sign in between.
  - a. Example: 1234@923451122334~2021-03-29 09:09:40.859254
2. Encrypt this string as shown in the *Encryption* section of this document and assign the value to **X-Hash-Value** header.

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls, and are used to authenticate the requester. The **X-Channel** parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	<b>Yes</b>

#### Request Body Parameters

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	<b>Yes</b>
<b>MSISDN</b>	MSISDN of the subscriber starting with '92'	<b>Yes</b>

## Response Attributes

### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionReference</b>	String	No
<b>TransactionStatus</b>	String	No
<b>Balance</b>	String	No
<b>Fee</b>	String	No

## Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**X-Hash-Value:**

```
fC/SmlJMpKDZNytfBUgsCA7kdwmsVxzExKZrLKSeriylVCx87D4pi9FeoTVeczlUoCwM4O
jSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzuclW+GvPg0jVLQ3SfU/6
pmNBt3ml7VhIqy/ypx+tGKIW2sjJ4Gz50Fu1jlP/LAI7ixowlG8YPJ1RQpfDLoX9w4oMPc
Cl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqllw+YGJ6
M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgltfE8pGegg0Zrcpn5xGrHIA==
```

### Sample Request

```
{
  "Amount": "500",
  "MSISDN": "923451234567"
}
```

### Sample Response

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
  "TransactionReference": "2677671",
  "TransactionStatus": "success",
  "Fee": "0.00",
  "Balance": "48038.01"
}
```

### CURL

```
curl --location --request POST '<BASE_URL>/CashDeposit' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-Value: RSGTliF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBJBZY7FAqZAVWLJwpkG62E+NmiuY5EVwc
Y6rFfBNF1zw6uuDOWXu1XB/qcZmBcG0iWGKKIMHXF+nJj887wHVsWJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2qRN3J0
zjEiJ+Cipr5nV8YM07aiB7VS/Tl0vWtcmYFqFtXeIZ6ZjPRen3zESOQY5t0NlNrtw6QURC4Um4iFQgsEDASWiYQm60i1Wvt+o1dJ
mPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWAlc80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
  "Amount": "500",
  "MSISDN": "923451234567"
}'
```

## Cash Withdrawal - Non BVS

### Retailer Cash Withdrawal

This API initiates a transfer from subscriber Easypaisa account to a retailer account.

**Endpoint URL:** <BASE\_URL>/CashInOut/CashWithdrawal

**Operation Name:** CashWithdrawalNonBVS

**Time-Out:** 140 Sec

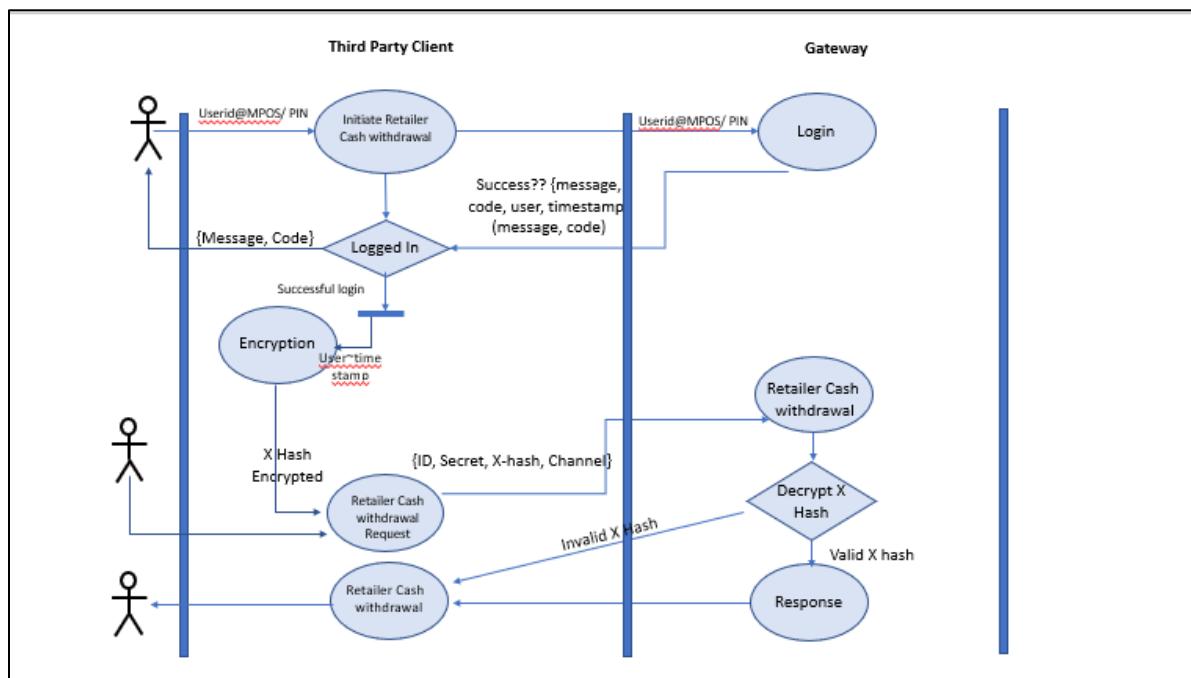


Figure 17: Retailer Cash withdrawal

### Pre-Requisites

1. Retailer must be logged in
2. Customer's Easypaisa account must have sufficient funds for the transaction
3. Amount should be less than the available Daily, Monthly or Yearly Transaction Amount Limits

### Request Attributes

#### Request Header Parameters

To generate the **X-Hash-Value** header, please follow the steps:

1. Concatenate retailer's **userid@MPOS** string with the **Timestamp** parameter returned in the response of Login Page use case API, and a tilde (~) sign in between.
  - a. Example: 1234@923451122334~2021-03-29 09:09:40.859254

2. Encrypt this string as shown in the *Encryption* section of this document and assign the value to *X-Hash-Value* header.

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	<b>Yes</b>

#### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	<b>Yes</b>
<b>MSISDN</b>	MSISDN of the subscriber starting with '92'	<b>Yes</b>

#### *Response Attributes*

#### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionReference</b>	String	No
<b>TransactionStatus</b>	String	No
<b>Balance</b>	String	No
<b>Fee</b>	String	No

## Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

## Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**X-Hash-Value:**

fC/SmIJMpKDZNytfBUGsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVeczIUoCwM4OjSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9p0mckGaSK937WCzuclW+GvPg0jVLQ3SfU/6pmNBt3ml7VhIqy/ypx+tGK1W2sjJ4Gz50Fu1jIp/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPcC1+QsOcazrAmkTwWiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6M+c1FH01ROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrH1A==

### Sample Request

```
{
  "Amount": "500",
  "MSISDN": "923451234567"
}
```

### Sample Response

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
  "TransactionReference": "2677671",
  "TransactionStatus": "success",
  "Fee": "0.00",
  "Balance": "48038.01"
}
```

### CURL

```
curl --location --request POST '<BASE_URL>/CashWithdrawal' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-Value: RSGTliF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBcix4wFLaW6SPtWOBjBZY7FAqZAVWLJwpkG62E+NmiuY5EVwcY6rFFBNF1zw6uuDOWXulXB/qcZmBcG0iWGKKIMHXF+nJj887wHVsWJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2qRN3J0zjEiJ+Cipr5nV8YM07aiB7VS/Tl0vWtcmYFqFtXeIZ6ZjPRen3zES0QY5t0Nlnrtw6QURC4Um4iFQgsEDASWiYQm60i1Wvt+o1dJmPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWAlc80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
  "Amount": "500",
  "MSISDN": "923451234567"
}'
```

## Retailer Bill Payments

### OTC Bill Inquiry

This API initiates an inquiry of utility bill over-the-counter.

**Endpoint URL:** <BASE\_URL>/OTCUtilityBill/Inquiry

**Operation Name:** RetailerBillPaymentInquiry

**Time-Out:** 140 Sec

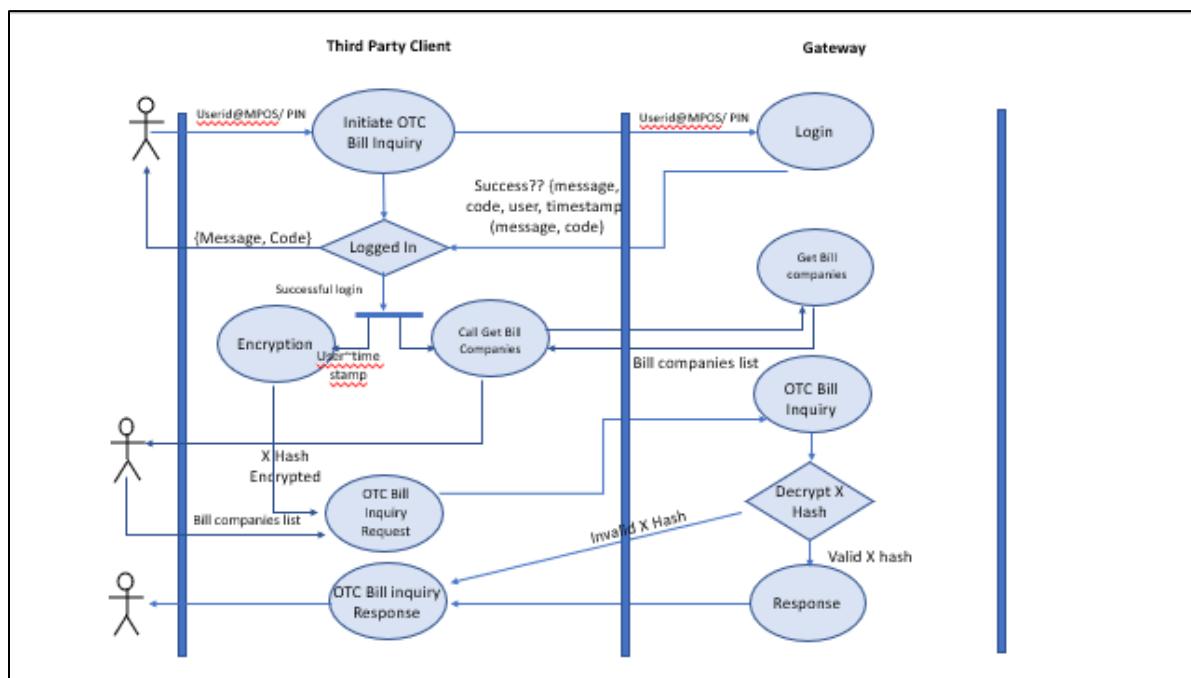


Figure 18: OTC Bill Inquiry

### Pre-Requisites

1. Retailer must be logged in
2. Billing company name must be valid
3. Consumer number must be valid
4. Sender's CNIC and MSISDN must be valid and in correct format

### Request Attributes

#### Request Header Parameters

To generate the **X-Hash-Value** header, please follow the steps:

1. Concatenate retailer's **userid@MPOS** string with the **Timestamp** parameter returned in the response of Login Page use case API, and a tilde (~) sign in between.
  - a. Example: 1234@923451122334~2021-03-29 09:09:40.859254

2. Encrypt this string as shown in the *Encryption* section of this document and assign the value to *X-Hash-Value* header.

*BillStatus* parameter in response has three possible values:

- U means unpaid
- T means partial payment
- P means paid
- B means blocked bill

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

This bill inquiry API call needs to be done two times, first time without the “Amount” request parameter, and second time with the “Amount” parameter containing the value of “BillAmount” response parameter of the first bill inquiry API call. ***This is mandatory to do in order to perform bill payment.***

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	<b>Yes</b>

#### Request Body Parameters

Parameter Name	Description	Mandatory
<b>ConsumerNumber</b>	Consumer number to inquire utility bill against	<b>Yes</b>
<b>SenderMSISDN</b>	MSISDN of the subscriber starting with ‘92’	<b>Yes</b>
<b>SenderCNIC</b>	CNIC of the subscriber without dashes	<b>Yes</b>
<b>Company</b>	Company title of the billing company	<b>Yes</b>
<b>Amount</b>	<b>Required in second inquiry call.</b> Contains the “BillAmount” parameter returned in response of the first bill inquiry API call.	<b>No</b>

## Response Attributes

### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>BillAmount</b>	String	No
<b>BillStatus</b>	String	No
<b>BillDueDate</b>	String	No
<b>CustomerName</b>	String	No
<b>QuoteID</b>	String	No

## Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header or Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0  
**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221  
**X-Channel:** <Shared during onboarding>  
**X-Hash-Value:**  
 fC/SmIJMpKDZNytfBUGsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVeczIUoCwM4O  
 jSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9p0mckGaSK937WCzuclW+GvPg0jVLQ3sfU/6  
 pmNBt3ml7VhIqy/ypx+tGK1W2sjJ4Gz50Fu1jIp/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPc  
 C1+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6  
 M+c1FH0lROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrH1A==

### *Sample Request*

```
{
  "ConsumerNumber": "01131210082100",
  "SenderMSISDN": "923451122345",
  "SenderCNIC": "3740512345678",
  "Company": "FESCO"
}
```

### *Sample Response*

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
  "BillAmount": "5.00",
  "BillDueDate": "210313",
  "BillStatus": "P",
  "QuoteID": "377715",
  "CustomerName": "M ISLAM"
}
```

## CURL

```
curl --location --request POST '<BASE_URL>/OTCUtilityBill/Inquiry' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-Value: RSGT1iF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/haOBci x4wFLaW6SPtWO BjBZY7FAqZAVWLJwpkG62E+NmiuY5EVwc
Y6rFfBNF1zw6uuDOWXu1XB/qcZmBcG0iWGKKIMHXF+nJj887wHVsWJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2qRN3JO
zjEiJ+Cipr5nV8YM07aiB7VS/T10vWtcmYFqFtXeIZ6ZjPRen3zESOQY5t0N1Nrtw6QURC4Um4iFQgsEDASWiYQm60i1Wvt+o1dJ
mPzbYF7jT6PrF6otOFFn0uoFoF66GTZK0LOXWAlc80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
    "ConsumerNumber": "01131210082100",
    "SenderMSISDN": "923451122345",
    "SenderCNIC": "3740512345678",
    "Company": "FESCO"
}'
```

## OTC Bill Payment

This API initiates a payment of utility bill over-the-counter.

**Endpoint URL:** <BASE\_URL>/OTCUtilityBill/Payment

**Operation Name:** RetailerBillPayment

**Time-Out:** 140 Sec

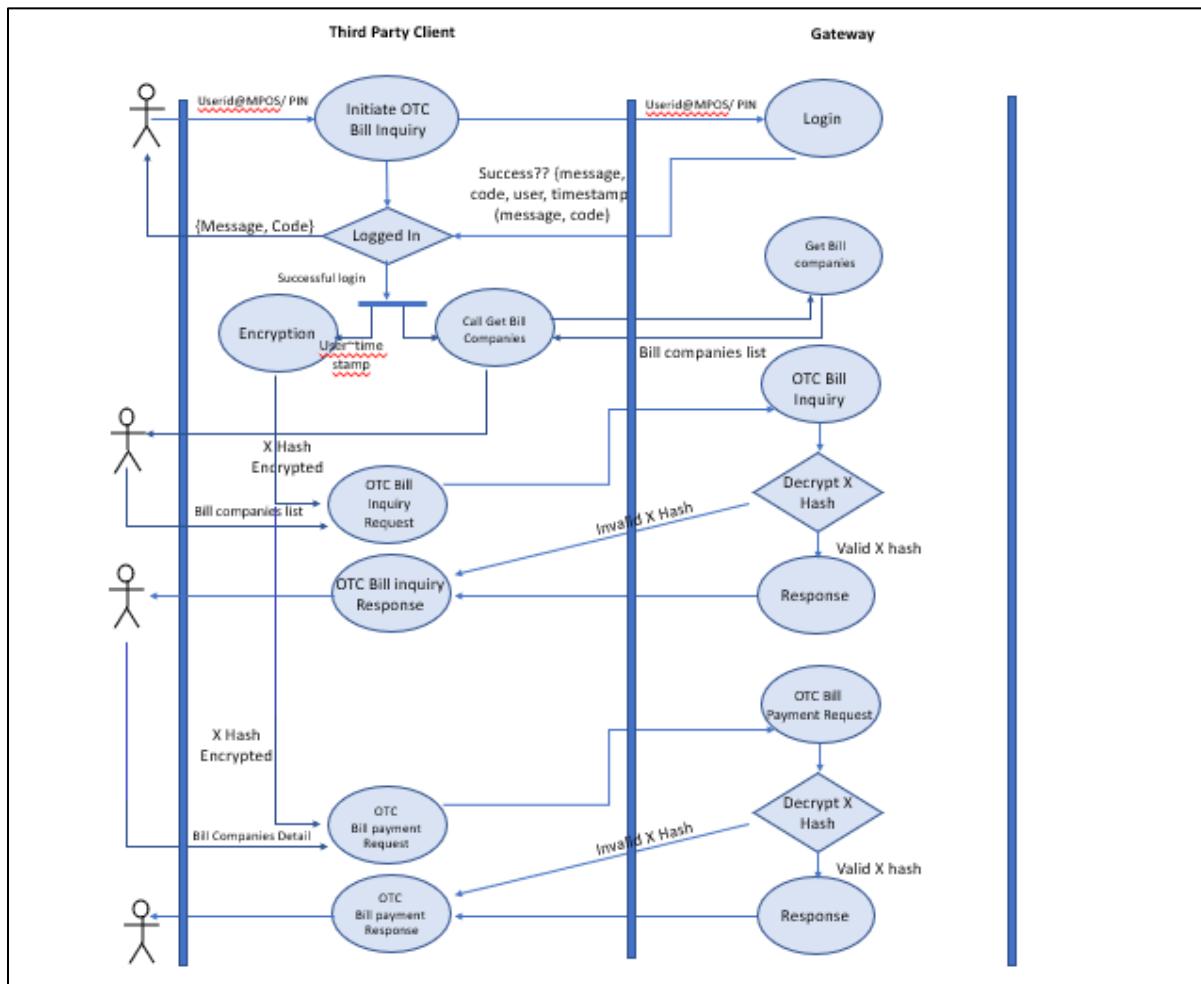


Figure 19: OTC Bill Payment

### Pre-Requisites

1. Retailer must be logged in
2. Billing company name must be valid
3. Consumer number must be valid
4. Sender's CNIC and MSISDN must be valid and in correct format
5. Retailer's account must have sufficient funds for the transaction
6. Amount should be less than the available Daily, Monthly or Yearly Transaction Amount Limits

## Request Attributes

### Request Header Parameters

To generate the *X-Hash-Value* header, please follow the steps:

1. Concatenate retailer's **userid@MPOS** string with the Timestamp parameter returned in the response of Login Page use case API, and a tilde (~) sign in between.
  - a. Example: 1234@923451122334~2021-03-29 09:09:40.859254
2. Encrypt this string as shown in the *Encryption* section of this document and assign the value to *X-Hash-Value* header.

*BillStatus* parameter in response has three possible values:

- U means unpaid
- T means partial payment
- P means paid

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	<b>Yes</b>

### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	Yes
<b>ConsumerNumber</b>	Consumer number to inquire utility bill against	Yes
<b>SenderMSISDN</b>	MSISDN of the subscriber starting with '92'	Yes
<b>SenderCNIC</b>	CNIC of the subscriber without dashes	Yes
<b>Company</b>	Company title of the billing company	Yes
<b>QuoteID</b>	Quote ID returned in response of OTC Bill Inquiry	Yes

### **Response Attributes**

#### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionReference</b>	String	No
<b>TransactionStatus</b>	String	No
<b>Fee</b>	String	No
<b>Balance</b>	String	No

### **Response Codes**

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header or Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

#### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**x- Hash-Value:** fC/SmlJMpKDZNytfBUsCA7kdwmsVxzExKzrLKSeriyVICx87D4pi9FeoTVczlUoCwM4O

```
jSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzucIW+GvPg0jVLQ3sfU/6
pmNbT3ml7Vhlqy/ypx+tGKIW2sjJ4Gz50Fu1jlP/LAI7ixowlG8YPJ1RQpfDLoX9w4oMPc
Cl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6
M+cIFH0lR0c3sn6WsZMJ1Eawf3dfASp7xdJaMCgtfE8pGegg0Zrcpn5xGrHIA==
```

### Sample Request

```
{
    "Amount": "51",
    "Company": "FESCO",
    "ConsumerNumber": "01131210083100",
    "SenderMSISDN": "923451122345",
    "SenderCNIC": "3740512345678",
    "QuoteID": "377715"
}
```

### Sample Response

```
{
    "ResponseCode": "0",
    "ResponseMessage": "Success",
    "TransactionStatus": "success",
    "TransactionReference": "2686604",
    "Fee": "0.00",
    "Balance": "47975.01"
}
```

### CURL

```
curl --location --request POST '<BASE_URL>/OTCUtilityBill/Payment' \
--header 'X-Channel: <Shared during onboarding>' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Hash-Value: RSGT1iF/UNx5x1fHuTM9/MMGu7Pk/ZvHIifn9t4J/ha0Bci x4wFLaW6SPtWOBjBZY7FAqZAVWLJwpkG62E+NmiuY5EVwc
Y6rFfBNF1zw6uuDOWXu1XB/qcZmBcG0iWGGKIMHXF+nJj887wHVsWJjW1P3h69VhY7hU6v99KJD0NV48YPotG5sM6qwCf2qRN3JO
zjEiJ+Cipr5nV8YM07aiB7VS/T10vWtcmYFqFtXeIz6ZjPRen3zESOQY5t0N1Nrtw6QURC4Um4iFQgsEDASWiYQm60i1Wvt+o1dJ
mPzbYF7jT6PrF6otOFn0uoFoF66GTZK0LOXWAlc80YmVc1SA==' \
--header 'Content-Type: application/json' \
--data-raw '{
    "Amount": "51",
    "Company": "FESCO",
    "ConsumerNumber": "01131210083100",
    "SenderMSISDN": "923451122345",
    "SenderCNIC": "3740512345678",
    "QuoteID": "377715"
}'
```

## Retailer IBFT Transfer

### OTC IBFT Inquiry

This API initiates an inquiry for over-the-counter transfer to a bank account.

**Endpoint URL:** <BASE\_URL>/OTCIBFT/Inquiry

**Operation Name:** RetailerBankAccountInquiry

**Time-Out:** 140 Sec

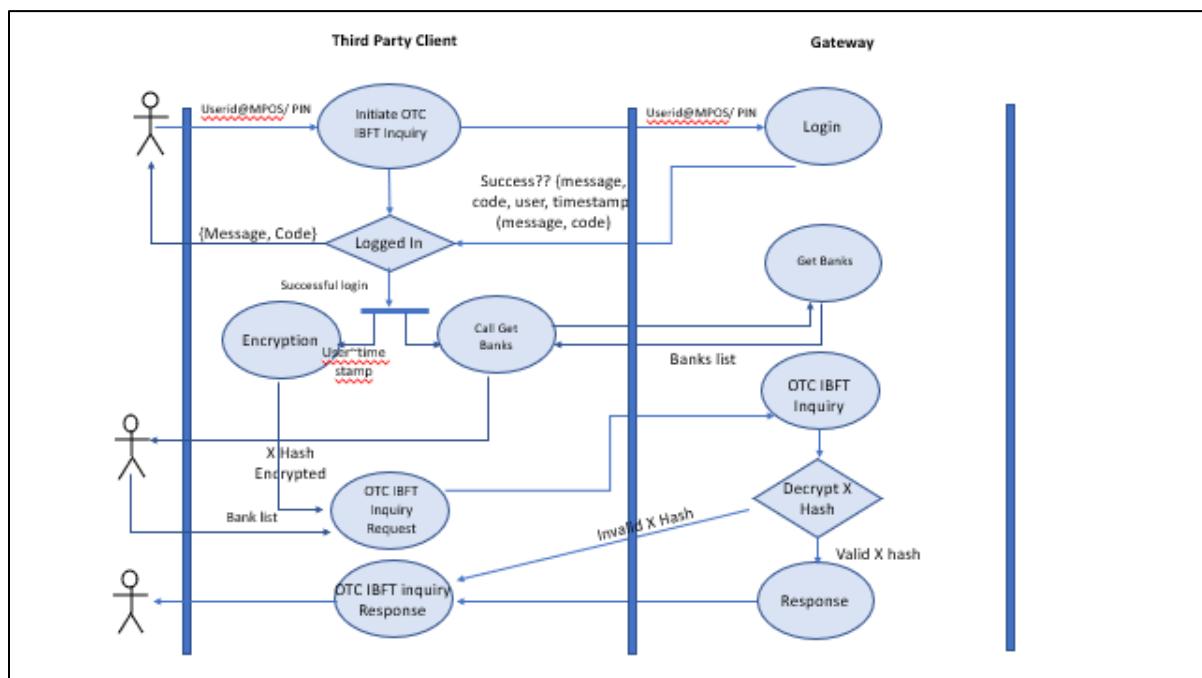


Figure 20: OTC IBFT Inquiry

### Pre-Requisites

1. Retailer must be logged in
2. Bank account details must be valid
3. Consumer number must be valid
4. Sender's CNIC and MSISDN must be valid and in correct format
5. Retailer's account must have sufficient funds for the transaction
6. Amount should be less than the available Daily, Monthly or Yearly Transaction Amount Limits

### Request Attributes

#### Request Header Parameters

To generate the X-Hash-Value header, please follow the steps:

1. Concatenate retailer's **userid@MPOS** string with the **Timestamp** parameter returned in the response of Login Page use case API, and a tilde (~) sign in between.

- a. Example: 1234@923451122334~2021-03-29 09:09:40.859254
2. Encrypt this string as shown in the *Encryption* section of this document and assign the value to *X-Hash-Value* header.

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	<b>Yes</b>

#### Request Body Parameters

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	<b>Yes</b>
<b>AccountNumber</b>	Account number of bank account to transfer to	<b>Yes</b>
<b>BankTitle</b>	Title of bank	<b>Yes</b>
<b>SenderCNIC</b>	CNIC of the subscriber without dashes	<b>Yes</b>
<b>SenderMSISDN</b>	MSISDN of the subscriber starting with '92'	<b>Yes</b>
<b>ReceiverMSISDN</b>	MSISDN of the receiver starting with '92'	<b>Yes</b>
<b>BankShortName</b>	Short name of the bank	<b>Yes</b>
<b>TransactionPurpose</b>	Purpose code of the transaction	<b>Yes</b>

#### Transaction Purpose Codes

Code	Transaction Reason
<b>0251</b>	Family Support
<b>0336</b>	Education
<b>0112</b>	Business
<b>0358</b>	Transport
<b>0307</b>	Credit Card Payment
<b>0252</b>	Medical Payment
<b>0315</b>	Online Purchase
<b>0350</b>	Miscellaneous Payments

## Response Attributes

### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionReference</b>	String	Yes
<b>TransactionStatus</b>	String	No
<b>Fee</b>	String	No
<b>Name</b>	String	No
<b>BankName</b>	String	No
<b>Branch</b>	String	No
<b>Username</b>	String	No
<b>ReceiverIBAN</b>	String	No

## Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** <Shared during onboarding>

**X-Hash-Value:**

fC/SmIJMpKDZNytfBUGsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVeczIUoCwM4OjSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9p0mckGaSK937WCzuclW+GvPg0jVLQ3sfU/6pmNBt3ml7VhIqy/ypx+tGK1W2sjJ4Gz50Fu1jIp/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPC1l+QsOcazrAmkTWWiTKA7uqqvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqplw+YGJ6M+c1FH01ROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrH1A==

### *Sample Request*

```
{
  "Amount": "100",
  "AccountNumber": "00020000011005325",
  "BankTitle": "MOD",
  "SenderCNIC": "3234345675432",
  "SenderMSISDN": "923135217042",
  "ReceiverMSISDN": "923139282625",
  "BankShortName": "MOD",
  "TransactionPurpose": "0350"
}
```

### *Sample Response*

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
  "TransactionReference": "368683",
  "TransactionStatus": "success",
  "Name": "ABDUL SHAKOOR KHAN",
  "Fee": "30.17",
  "BankName": "MOD",
  "Branch": "MOD",
  "Username": "ABDUL SHAKOOR KHAN",
  "ReceiverIBAN": ""
}
```

## CURL

```
curl -L -X POST '<BASE_URL>/OTCIBFT/Inquiry' -H 'X-IBM-Client-  
Id: 1d73464a465d5dee1886f0dbf8f67ab0' -H 'X-IBM-Client-  
Secret: 79bcc980cd3268cb26ff46a50607221' -H 'X-Hash-  
Value: fC/SmIJMpKDZNytFBUgsCA7kdwmsVxzExKzrLKSeriyVICx87D4pi9FeoTVczIUoCwM40jSbxV1YfVo7NI6b  
fQoWGEMGqp6qVALZoDp9p0mcgGaSK937WCzuc1W+GvPg0jVLQ3SfU/6pmNBt3m17VhIqy/ypx+tGK1W2sjJ4Gz50Fu1j  
Ip/LAI7ixowIG8YPJ1RQpfDL0x9w4oMpcCl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5  
wDqplw+YGJ6M+c1FH0lROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrH1A==' -H 'Content-  
Type: application/json' --data-raw '{  
    "Amount": "100",  
    "AccountNumber": "00020000011005325",  
    "BankTitle": "MOD",  
    "SenderCNIC": "3234345675432",  
    "SenderMSISDN": "923135217042",  
    "ReceiverMSISDN": "923139282625",  
    "BankShortName": "MOD",  
    "TransactionPurpose": "0350"  
}'
```

## OTC IBFT Transfer

This API initiates a transfer over-the-counter to a bank account.

**Endpoint URL:** <BASE\_URL>/OTCIBFT/Transfer

**Operation Name:** RetailerBankTransfer

**Time-Out:** 140 Sec

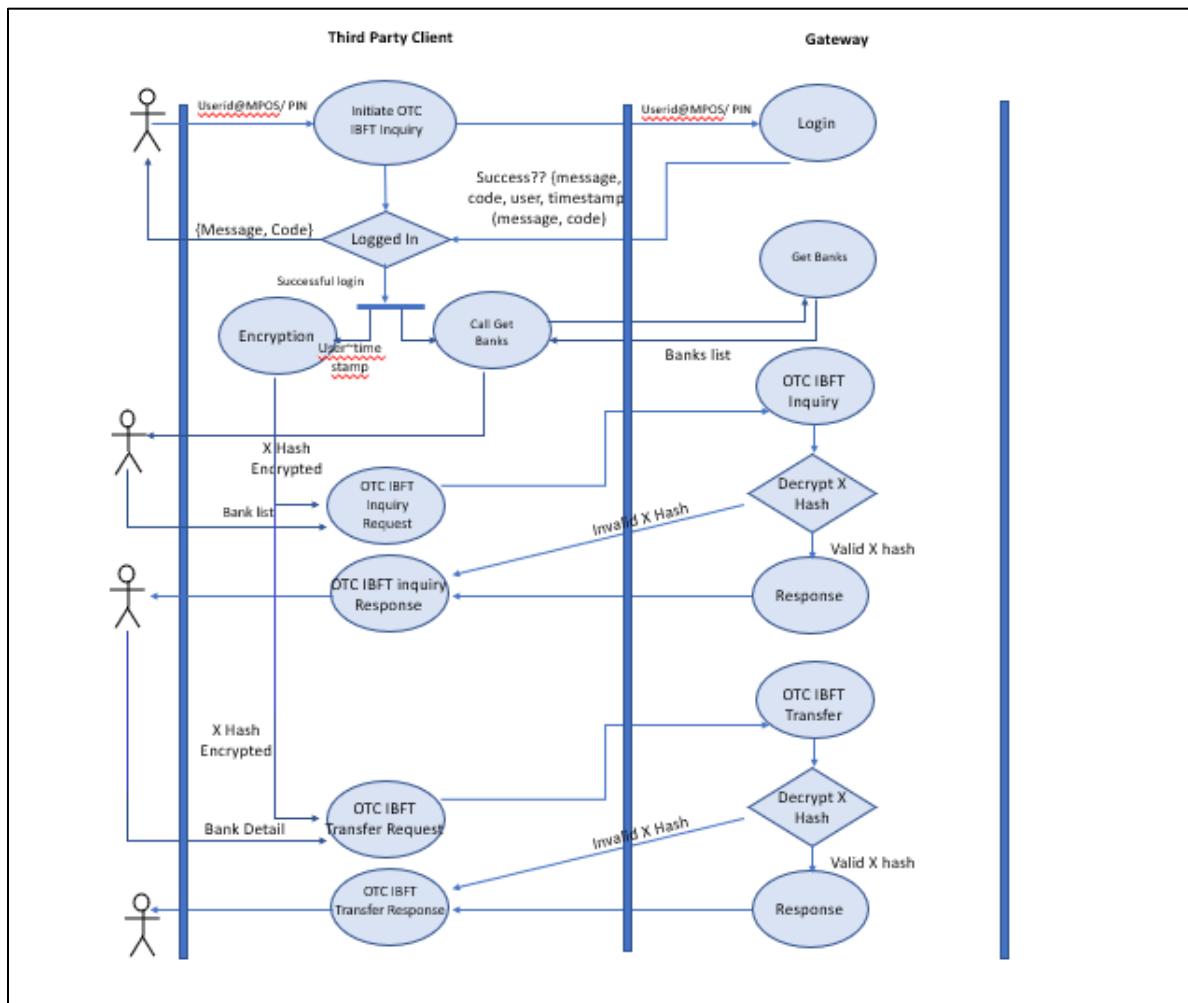


Figure 21: OTC IBFT Transfer

### Pre-Requisites

1. Retailer must be logged in
2. Bank account details must be valid
3. Consumer number must be valid
4. Sender's CNIC and MSISDN must be valid and in correct format
5. Retailer's account must have sufficient funds for the transaction
6. Amount should be less than the available Daily, Monthly or Yearly Transaction Amount Limits

## Request Attributes

### Request Header Parameters

To generate the *X-Hash-Value* header, please follow the steps:

1. Concatenate retailer's **userid@MPOS** string with the Timestamp parameter returned in the response of Login Page use case API, and a tilde (~) sign in between.
  - a. Example: 1234@923451122334~2021-03-29 09:09:40.859254
2. Encrypt this string as shown in the *Encryption* section of this document and assign the value to *X-Hash-Value* header.

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X Channel will be shared at the time of onboarding.</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Hash-Value</b>	Encrypted string generated as shown in above steps	<b>Yes</b>

### Request Body Parameters

Parameter Name	Description	Mandatory
<b>Amount</b>	Amount in rupees	<b>Yes</b>
<b>AccountNumber</b>	Account number of bank account to transfer to	<b>Yes</b>
<b>BankTitle</b>	Title of bank	<b>Yes</b>
<b>SenderCNIC</b>	CNIC of the subscriber without dashes	<b>Yes</b>
<b>SenderMSISDN</b>	MSISDN of the subscriber starting with '92'	<b>Yes</b>
<b>ReceiverMSISDN</b>	MSISDN of the receiver starting with '92'	<b>Yes</b>
<b>BankShortName</b>	Short name of the bank	<b>Yes</b>
<b>QuoteID</b>	TransactionReference from OTC IBFT Inquiry response	<b>Yes</b>
<b>TransactionPurpose</b>	Purpose code of the transaction	<b>Yes</b>

### *Transaction Purpose Codes*

Code	Transaction Reason
<b>0251</b>	Family Support
<b>0336</b>	Education
<b>0112</b>	Business
<b>0358</b>	Transport
<b>0307</b>	Credit Card Payment
<b>0252</b>	Medical Payment
<b>0315</b>	Online Purchase
<b>0350</b>	Miscellaneous Payments

### Response Attributes

#### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionReference</b>	String	Yes
<b>TransactionStatus</b>	String	No
<b>Fee</b>	String	No
<b>Balance</b>	String	No

### Response Codes

Response Code	Description
<b>0</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>2</b>	Session Validation Failed
<b>001</b>	Insufficient sender balance
<b>012</b>	Generic error (EWP Error codes)
<b>014</b>	Header of Header element incorrect
<b>015</b>	Invalid Body or body element
<b>401</b>	INVALID CREDENTIALS
<b>403</b>	NOT AUTHORIZED
<b>404</b>	Not Found
<b>500</b>	Internal Server Error

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0  
**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221  
**X-Channel:** <Shared during onboarding>  
**X-Hash-Value:**  
 fc/SmlJMpKDZNytfBugsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVczlUoCwM4O  
 jSbxV1YfVo7NI6bfQoWGEMGqp6qVALZoDp9pOmckGaSK937WCzucIW+GvPg0jVLQ3SfU/6  
 pmNBt3ml7VhIqy/ypx+tGKIW2sjJ4Gz50Fu1jlP/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPc  
 Cl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5wDqllw+YGJ6  
 M+cIFH0IROc3sn6WsZMJ1Eawf3dfASp7xdJaMCgltfE8pGegg0Zrcpn5xGrHIA==

### *Sample Request*

```
{
  "Amount": "100",
  "AccountNumber": "00020000011005325",
  "BankTitle": "MOD",
  "SenderCNIC": "3234345675432",
  "SenderMSISDN": "923135217042",
  "ReceiverMSISDN": "923139282625",
  "BankShortName": "MOD",
  "TransactionPurpose": "0350",
  "QuoteID": "368683"
}
```

### *Sample Response*

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Success",
  "TransactionReference": "368683",
  "TransactionStatus": "success",
  "Fee": "30.17",
  "Balance": "80450"
}
```

## CURL

```
curl -L -X POST '<BASE_URL>/OTCIBFT/Transfer' -H 'X-IBM-Client-  
Id: 1d73464a465d5dee1886f0dbf8f67ab0' -H 'X-IBM-Client-  
Secret: 79bbcc980cd3268cb26ff46a50607221' -H 'X-Hash-  
Value: fC/SmIJMpKDZNytFBugsCA7kdwmsVxzExKZrLKSeriyVICx87D4pi9FeoTVe...  
fQoWGEMGqp6qVALZoDp9p0mckGaSK937WCzuc1W+GvPg0jVLQ3SfU/6pmNBt3ml7VhIqy/ypx+tGKIW2sjJ4Gz50Fu1j  
Ip/LAI7ixowIG8YPJ1RQpfDLoX9w4oMPcCl+QsOcazrAmkTWwiTKA7uqgvJ9pSOKRo+4HrbpkEMq9+KeKgvJtgncjEn5  
wDqplw+YGJ6M+c1FH0lR0c3sn6WsZMJ1Eawf3dfASp7xdJaMCgItfE8pGegg0Zrcpn5xGrH1A==' -H 'Content-  
Type: application/json' --data-raw '{  
    "Amount": "100",  
    "AccountNumber": "00020000011005325",  
    "BankTitle": "MOD",  
    "SenderCNIC": "3234345675432",  
    "SenderMSISDN": "923135217042",  
    "ReceiverMSISDN": "923139282625",  
    "BankShortName": "MOD",  
    "TransactionPurpose": "0350",  
    "QuoteID": "368683"  
}'
```

## Easypaisa Account Registration - BVS

## Easypaisa Account Registration BVS

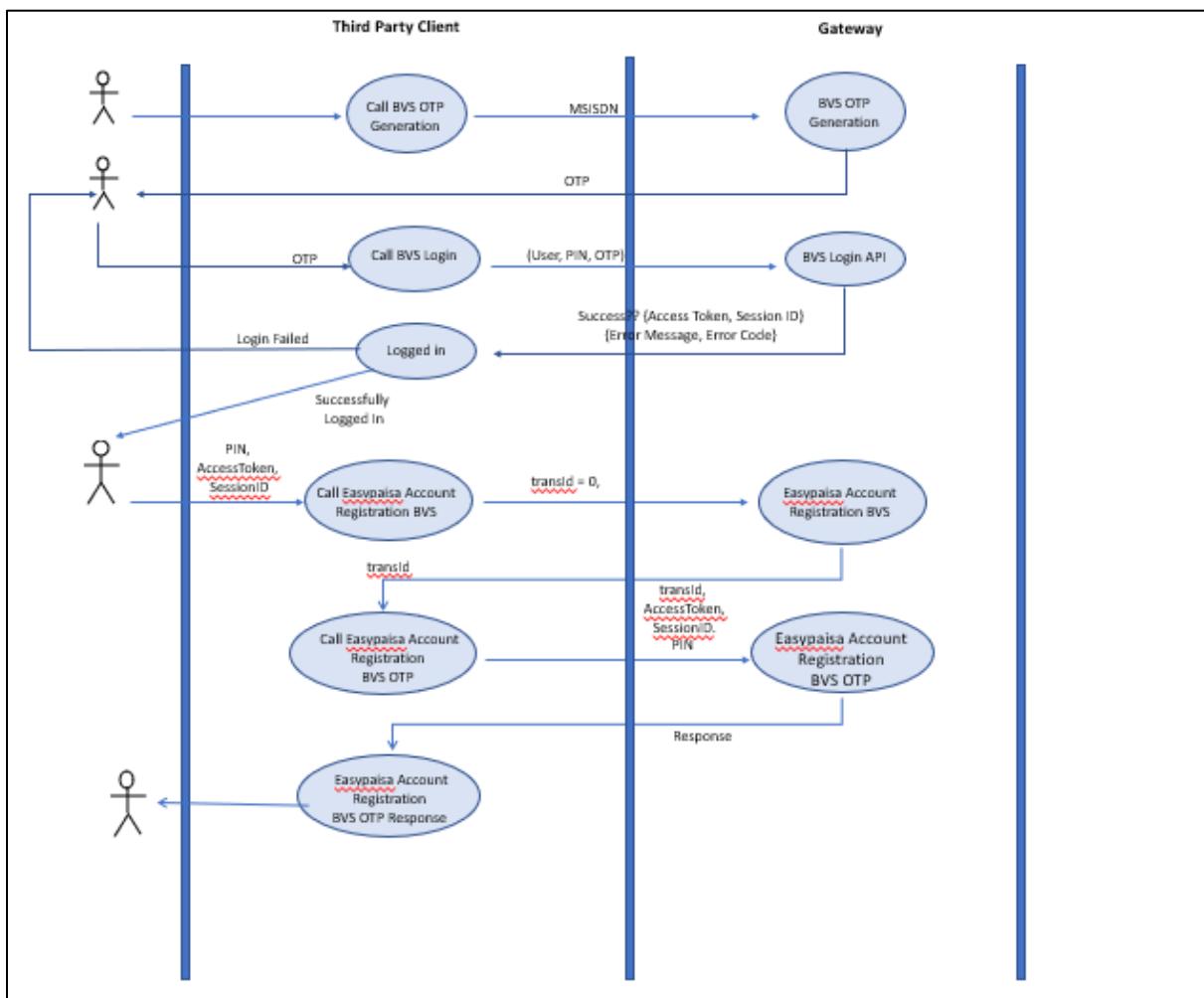
This API initiates the registration of an Easypaisa account for a customer. This is the BVS variant which requires the customer's fingerprint information as well.

**After calling this API, the *Easypaisa Account Registration BVS OTP API* is to be called with the *TransactionID* returned in the response of this API.**

**Endpoint URL:** <BASE\_URL>/BVSAccountRegistration/

## **Operation Name: OTCAccountRegistrationBVS**

## Time-Out: 140 Sec



*Figure 22: Easypaisa Account Registration BVS*

## *Pre-Requisites*

1. Retailer must be logged in
  2. Customer's CNIC and MSISDN must be valid and in correct format
  3. Customer's finger print information must be valid

## Request Attributes

### Request Header Parameters

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls, and are used to authenticate the requester. The **X-Channel** parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>For Sandbox, X-Channel = " <b>bvsgateway</b> "</li> <li>For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>Sessionid</b>	SessionID parameter returned at Login	<b>Yes</b>
<b>Authorization</b>	AccessToken returned at Login	<b>Yes</b>

### Request Body Parameters

Parameter Name	Description	Mandatory
<b>Longitude</b>	The longitude coordinate of the retailer	Yes
<b>Latitude</b>	The latitude coordinate of the retailer	Yes
<b>CustomerCNIC</b>	CNIC of the customer without dashes	Yes
<b>CustomerMSISDN</b>	MSISDN (starting with 0) of the customer	Yes
<b>AcquiredAfis</b>	Fingerprint of the customer in base64	Yes
<b>FingerNumber</b>	Finger number of the fingerprint	Yes
<b>ImageType</b>	Image type is 3 for ANSI and 4 for ISO	Yes
<b>BioDeviceName</b>	Biometric device name	Yes

## Response Attributes

### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionID</b>	String	No
<b>ExtraData</b>	String	No
<b>TermConditionMessage</b>	String	No
<b>FingerIndexes</b>	String	No

## Response Codes

Response Code	Description
<b>100</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>401</b>	Session timeout
<b>706</b>	Session expired
762	OTP_NOT_MATCHED
2000	BizPartNotAllowed
2004	MWALLET_ALT_ERROR
2017	CUSTOMER_UNDER AGE
2018	CUSTOMER_NOT_PAKISTANI
2019	CUSTOMER_CNIC_EXPIRED
2035	ExceptionOccurred
4001	EWP_ACCOUNT_BLACKLIST
4003	EWP_ACCOUNT HOLDER NOT FOUND
4004	EWP_GET_ACCOUNT_STATUS_ERROR
4006	EWP_ACCOUNT_SUSPENDED
4007	EWP_REGISTRATION_ERROR
4008	EWP_GET_POS_OWNER_ERROR
4012	EWP_ACCOUNT_DORMANT
4014	EWP_ACCOUNT_ACTIVE
4025	EWP_ACCOUNT HOLDER_ALIAS_ERROR

4029	EWP_BLACKLIST_API_ERROR
4033	EWP_ACCOUNT_BLOCKED
4034	EWP_SET_ACCOUNT HOLDER_ADDITIONAL_INFO
4035	Account already registered
4053	EWP_SET_PROFILE_ERROR
4058	EWP.REACTIVATE_ACCOUNT HOLDER
4071	EWP_SANCTION_LIST_ERROR
4074	UPDATE_KYC_ERROR
4075	EWP_REMOVE_ALIAS_ERROR
4076	EWP.REACTIVATION_ERROR
4632	AML_CHECK_AML_ERROR
8100	InvalidTransaction
8210	ErrorCreateTransaction
8215	RETAILER_ACCOUNT_BLOCKED
8217	RETAILER_ACCOUNT_CLOSED
8218	RETAILER_ACCOUNT_SUSPENDED
8219	RETAILER_ACCOUNT HOLDER_BLOCKED
8220	RETAILER_ACCOUNT HOLDER_CLOSED
8221	RETAILER_ACCOUNT HOLDER_SUSPENDED
10010	FS_ALT_EXCEPTION
2010	BIOMETRIC_ERROR
8093	BVS_INOFRMATION_ERROR
8090	NADRA_LIMIT_EXHAUST
8091	NADRA_HITS_COMPLETE

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** bvsgateway

**Sessionid:** 9a1a753d779e4032a42da040d5783c70

#### **Authorization:**

**Authorization:** Bearer hs6vB91DMz4-dSkwqZEzb\_VMvcrmUBTE1N7jsz6dv59fk38yYokPoOE5K0KQtJCp6wVpAbpE6DFVq9cYqnG144m-\_mQYaLshynG0M2NhYAPxlgU9AT9c5Knn10hJM9HjGaq-OOuT6bKTk0yg4oJrmgwyHrhsJkN7RY81JYXbS7L2YT-aASVe1tgGgYhPPUDcnREVpUOZjd5tWrtrFf8\_QYeorkYqmNjzeYm21HdZP036z5Fw\_NKMU9yLLVVZ30xmGnGQN-gG3vTFqF0Wmj8mEW\_U7X1bx6L53qquJxPrfU0P5dO1PMMD2FAfSFm5Ta7vjsNDxBTPMkj\_-XvIgFMWbdxf622RmYvUR1OJrxlBvV1pLKV491yYRpMRCf0nZA84IpcC3udIMdcRE4gJUr4Y\_NsHjnWqPbc5wc8qACyP0EpyiFckdMoi-57URQ3qNi8aR13T70fVinWXK0UDP1Cp2tUuzeeH3ChLnIsItTfz\_7H17sZK06YjWjMn0IVg-3\_uWZG\_PeKqF6VrMVT7JODIWTVldhIDZp6PqF29eN5HS1XDRek3vunlcIM6kitKGOT2QjGw4RsEZCd3QPHfaTosvOgvAfb77dw9SeIPTf6uIZo8WwkMImMqawoV6-x6oE6Qze4q2TJkMUX41FMXJEIp3saedIQBBNrAX4pyqznq74oEzcgh\_ugqFvtgnlvwH-Af\_g5xe-9tsgXSmdmEMSjjNw

### Sample Request

```
{  
    "Longitude": "31.5686808",  
    "Latitude": "74.3000874",  
    "CustomerCNIC": "3740512345678",  
    "CustomerMSISDN": "03451233456",  
    "AcquiredAfis": "abcd",  
    "FingerNumber": "2",  
    "ImageType": "4",  
    "BioDeviceName": ""  
}
```

### Sample Response

```
[{"  
    "ResponseCode": "100",  
    "ResponseMessage": "Customer kay Mobile number per bheja gaya 6 digit OTP enter kerein",  
    "TransactionID": "99101",  
    "ExtraData": null,  
    "TermConditionMessage": "Your account will be created, please enter OTP",  
    "FingerIndexes": "1,2,6,7",  
    "ShowOTP": "TRUE"  
}]
```

### CURL

```

curl --location --request POST '<BASE_URL>/BVSAccountRegistration/' \
--header 'X-Channel: bvsgateway' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'Sessionid: 9a1a753d779e4032a42da040d5783c70' \
--header 'Authorization: Bearer hs6vB91DMz4-  

dSkwqZEzb_VMvcrmUBTE1N7jsz6dv59fK38yYokPo0E5K0KQtJCp6wVpAbpE6DFVq9cYqnG144m-  

_mQYaLshynG0M2NhYAPxlg9AT9c5Knn10hJM9HjGa-0OuT6bKTk0yg4oJrmgwyHrhsJkN7RY81JYXbS7L2YT-  

aASVe1tgGgYhPPUDcnREVpUOZjd5tWrtrFF8_QYeorkYqmNjzeYm21HdZP036z5Fw_NKMU9yLLVVZ30xmGnGQN-  

gG3vTFqF0Wmj8mEW_U7X1bx6L53qquJxPrfU0P5d01PMMD2FAfSFm5Ta7vjsNDxBTPMkj_-  

XvIgFMWbdxf622RmYvUR10JrxlBvV1pLKV491yYRpMRCf0nZA84IpcC3ud1MdcRE4gJUr4Y_NsHjnWqPbc5wc8qACyP0Ep  

yiFckdMoI-57URQ3qNi8aR13T70fVinWXK0UDP1Cp2tUuzeeH3ChLnIsltTfz_7H17sZK06YjWjMn01Vg-  

3_uWZG_PeKqF6VrMVT7JOD1WTvIdh1DZp6PqF29eN5HS1XDRek3vunlcIM6kitKGOT2QjGw4RsEZCd3QPHfaTosv0gvAfb  

77dw9SeIPf6uIZo8WwkMImMqawoV6-  

x6oE6Qze4q2TJkMUX41FMXJEIp3saedIQBBNrAX4pyqznq74oEzcgh_ugqFvtgn1vwH-Af_g5xe-  

9tsgXSmdmEMSjjNw' \
--header 'Content-Type: application/json' \
--data-raw '{
    "Longitude": "31.5686808",
    "Latitude": "74.3000874",
    "CustomerCNIC": "3740512345678",
    "CustomerMSISDN": "03451233456"
}'

```

## Easypaisa Account Registration BVS OTP

This API registers an Easypaisa account for a customer. This is the BVS variant which requires the customer's fingerprint information as well.

This API takes the *TransactionID* from the response of *Easypaisa Account Registration BVS* API. It also requires the OTP sent to the **customer's MSISDN** in order to complete the registration.

**Endpoint URL:** <BASE\_URL>/BVSAccountRegistration/OT

**Operation Name:** OTCAccountRegistrationBVSOTP

**Time-Out:** 140 Sec

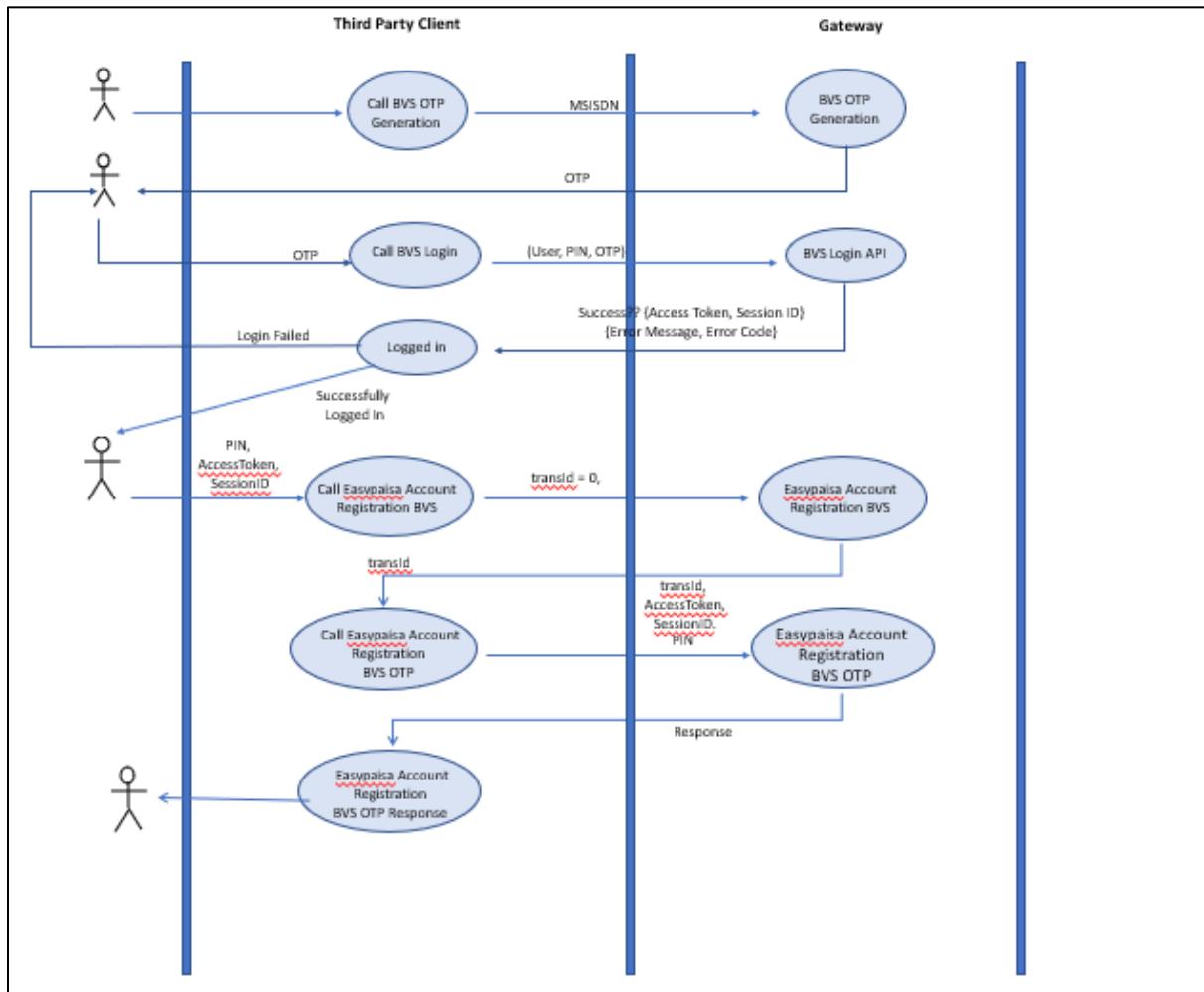


Figure 23: Easypaisa Account Registration BVS OTP

### Pre-Requisites

1. Retailer must be logged in
2. OTP must be valid and correct
3. Customer's CNIC and MSISDN must be valid and in correct format
4. Customer's finger print information must be valid

### Request Attributes

#### Request Header Parameters

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls, and are used to authenticate the requester. The **X-Channel** parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>X-IBM-Client-Secret</b>	API Authentication credential	Yes

<b>X-Channel</b>	<ul style="list-style-type: none"> <li>For Sandbox, X-Channel = " <b>bvsgateway</b> "</li> <li>For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>Sessionid</b>	SessionID parameter returned at Login	<b>Yes</b>
<b>Authorization</b>	AccessToken returned at Login	<b>Yes</b>

### Request Body Parameters

Parameter Name	Description	Mandatory
<b>TransactionID</b>	Transaction ID from the response of the first Easypaisa Account Registration BVS call	Yes
<b>OTP</b>	The OTP sent to the customer after the Easypaisa Account Registration BVS call	Yes
<b>Longitude</b>	The longitude coordinate of the retailer	Yes
<b>Latitude</b>	The latitude coordinate of the retailer	Yes
<b>CustomerCNIC</b>	CNIC of the customer whose without dashes	Yes
<b>CustomerMSISDN</b>	MSISDN (starting with 0) of the customer	Yes
<b>AcquiredAfis</b>	Fingerprint of the customer in base64	Yes
<b>FingerNumber</b>	Finger number of the fingerprint	Yes
<b>ImageType</b>	Image type is 3 for ANSI and 4 for ISO	Yes
<b>BioDeviceName</b>	Biometric device name	Yes

### Response Attributes

#### Response Body Parameters

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionID</b>	String	No
<b>ExtraData</b>	String	No
<b>TermConditionMessage</b>	String	No
<b>FingerIndexes</b>	String	No

### Response Codes

Response Code	Description
<b>100</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>401</b>	Session timeout
<b>706</b>	Session expired
<b>762</b>	OTP_NOT_MATCHED

2000	BizPartNotAllowed
2004	MWALLET_ALT_ERROR
2017	CUSTOMER_UNDER_AGE
2018	CUSTOMER_NOT_PAKISTANI
2019	CUSTOMER_CNIC_EXPIRED
2035	ExceptionOccurred
4001	EWP_ACCOUNT_BLACKLIST
4003	EWP_ACCOUNT HOLDER NOT FOUND
4004	EWP_GET_ACCOUNT_STATUS_ERROR
4006	EWP_ACCOUNT_SUSPENDED
4007	EWP_REGISTRATION_ERROR
4008	EWP_GET_POS_OWNER_ERROR
4012	EWP_ACCOUNT_DORMANT
4014	EWP_ACCOUNT_ACTIVE
4025	EWP_ACCOUNT HOLDER ALIAS_ERROR
4029	EWP_BLACKLIST_API_ERROR
4033	EWP_ACCOUNT_BLOCKED
4034	EWP_SET_ACCOUNT HOLDER ADDITIONAL_INFO
4035	Account already registered
4053	EWP_SET_PROFILE_ERROR
4058	EWP_REACTIVATE_ACCOUNT HOLDER
4071	EWP_SANCTION_LIST_ERROR
4074	UPDATE_KYC_ERROR
4075	EWP_REMOVE_ALIAS_ERROR
4076	EWP_REACTIVATION_ERROR
4632	AML_CHECK_AML_ERROR
8100	InvalidTransaction
8210	ErrorCreateTransaction
8215	RETAILER_ACCOUNT_BLOCKED
8217	RETAILER_ACCOUNT_CLOSED
8218	RETAILER_ACCOUNT_SUSPENDED
8219	RETAILER_ACCOUNT HOLDER_BLOCKED

8220	RETAILER_ACCOUNT HOLDER_CLOSED
8221	RETAILER_ACCOUNT HOLDER_SUSPENDED
10010	FS_ALT_EXCEPTION
2010	BIOMETRIC_ERROR
8093	BVS_INOFRMATION_ERROR
8090	NADRA_LIMIT_EXHAUST
8091	NADRA_HITS_COMPLETE

### Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** bvsgateway

**Sessionid:** 9a1a753d779e4032a42da040d5783c70

**Authorization:** Bearer hs6vB91DMz4-

dSkwqZEzb\_VMvcrmUBTE1N7jsz6dv59fK38yYokPoOE5K0KQtJCp6wVpAbpE6DFVq9cYqn  
 G144m-\_mQYaLshynG0M2NhYAPxlgU9AT9c5Knn10hJM9HjGa9-  
 OoUT6bKTk0yg4oJrmgwyHrhsJkN7RY81JYXbS7L2YT-  
 aASVe1tgGgYhPPUDcnREVpUOZjd5tWrtrFf8\_QYeorkYqmNjzeYm21HdZP036z5Fw\_NKMU  
 9yLLVVZ30xmGnGQN-  
 gG3vTFqF0Wmj8mEW\_U7X1bx6L53qquJxPrfU0P5do1PMMD2FAfSFm5Ta7vj sNDxBTPMkj\_-  
 -  
 XvIgFMWbdxf622RmYvUR10Jrx1BvV1pLKV491yYRpMRCf0nZA84IpcC3udlMdcRE4gJUr4  
 Y\_NsHjnWqPbc5wc8qACyP0EpyiFckdMoI-  
 57URQ3qNi8aR13T70fVinWXK0UDP1Cp2tUzeeH3ChLnIsltTfz\_7H17sZK06YjWjMn01V  
 g-  
 3\_uWZG\_PeKqF6VrMVT7JOD1WTvIdh1DZp6PqF29eN5HS1XDRek3vunlcIM6kitKGOT2QjG  
 w4RsEZCd3QPHfaTosvOgvAf77dw9SeIPTf6uIZo8WwkMImMqawoV6-  
 x6oE6Qze4q2TJkMUX41FMXJEIp3saedIQBBNrAX4pyqznq74oEzcgh\_ugqFvtgnlvwH-  
 Af\_g5xe-9tsgXSmdmEMSjjNw

### Sample Request

```
{
  "TransactionID": "84774",
  "OTP": "123456",
  "Longitude": "31.5686808",
  "Latitude": "74.3000874",
  "CustomerCNIC": "3740512345678",
  "CustomerMSISDN": "03451233456",
  "AcquiredAfis": "abcd",
  "FingerNumber": "2",
  "ImageType": "4",
  "BioDeviceName": ""
}
```

*Sample Response*

```
[{"ResponseCode": "100", "ResponseMessage": "Moaziz Customer, aap ka Easypaisa mobile account Cnic: 3740523967567 aur Mobile Number: 03335110266 pe register kar diya gaya hai", "TransactionID": "99101", "ExtraData": null, "TermConditionMessage": "", "FingerIndexes": "1,2,6,7"}]
```

## CURL

```
curl --location --request POST '<BASE_URL>/BVSAccountRegistration/OTP' \
--header 'X-Channel: bysgateway' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'Sessionid: 9a1a753d779e4032a42da040d5783c70' \
--header 'Authorization: Bearer hs6vB91DMz4-  
dSkwqZEzb_VMvcrmUBTE1N7jsz6dv59fk38yYokPoOE5K0KQtJCP6wVpAbpE6DFVq9cYqnG144m-  
_mQYaLshynG0M2NhYAPxlgU9AT9c5Knn10hJM9HjGaq-00uT6bKTk0yg4oJrmgwyHrhsJkn7RY81JYXbS7L2YT-  
aASVe1tgGgyhPPUDcnREVpUOZjd5tWrtrFf8_QYeorKYqmNjzeYm21HdZP036z5Fw_NKMU9yLLVVZ30xmGnGQN-  
gG3vTFqF0Wmj8mEW_U7X1bx6L53tqqJxPrfU0P5d01PMMD2FAfSFm5Ta7vjsNDxBTPMkj_-  
XvIgFMWbdxf622RmYvUR10JrxlBvV1pLKV491yYRpMRCf0nZA84IpcC3udlMdRE4gJUr4Y_NsHjnWqPbc5wc8qACyP0Ep  
yiFckdMoI-57URQ3qNi8aR13T70fVinwXK0UDP1Cp2tUuzeeH3ChLnIsltTfz_7H17sZK06YjWjMn01Vg-  
3_uWZG_PeKqF6VrMVT7J0D1WTvIdh1DZp6PqF29eN5HS1XDRek3vunlcIM6kitKGOT2QjGw4RsEZCd3QPHfaTosvOgvAfB  
77dw9SeIPTf6uIZo8WwkMImMqawoV6-  
x60E6Qze4q2TjkMUx41FMXJEIp3saedIQBBNrAX4pyqznq74oEzcgh_ugqFvtgnlvwH-Af_g5xe-  
9tsgX5mdmEMsjjNw' \
--header 'Content-Type: application/json' \
--data-raw '{
    "TransactionID": "84774",
    "OTP": "123456",
    "Longitude": "31.5686808",
    "Latitude": "74.3000874",
    "CustomerCNIC": "3740512345678",
    "CustomerMSISDN": "03451233456",
    "AcquiredAfis": "abcd",
    "FingerNumber": "2",
    "ImageType": "4",
    "BioDeviceName": ""
}'
```

## Easypaisa Account Registration – Non BVS

### Easypaisa Account Registration Non BVS

This API initiates the registration of an Easypaisa account for a customer.

After calling this API, the *Easypaisa Account Registration Non BVS OTP* API is to be called with the *TransactionID* returned in the response of this API.

**Endpoint URL:** <BASE\_URL>/NonBVSAccountRegistration/

**Operation Name:** OTCAccountRegistrationNonBVS

**Time-Out: 140 Sec**

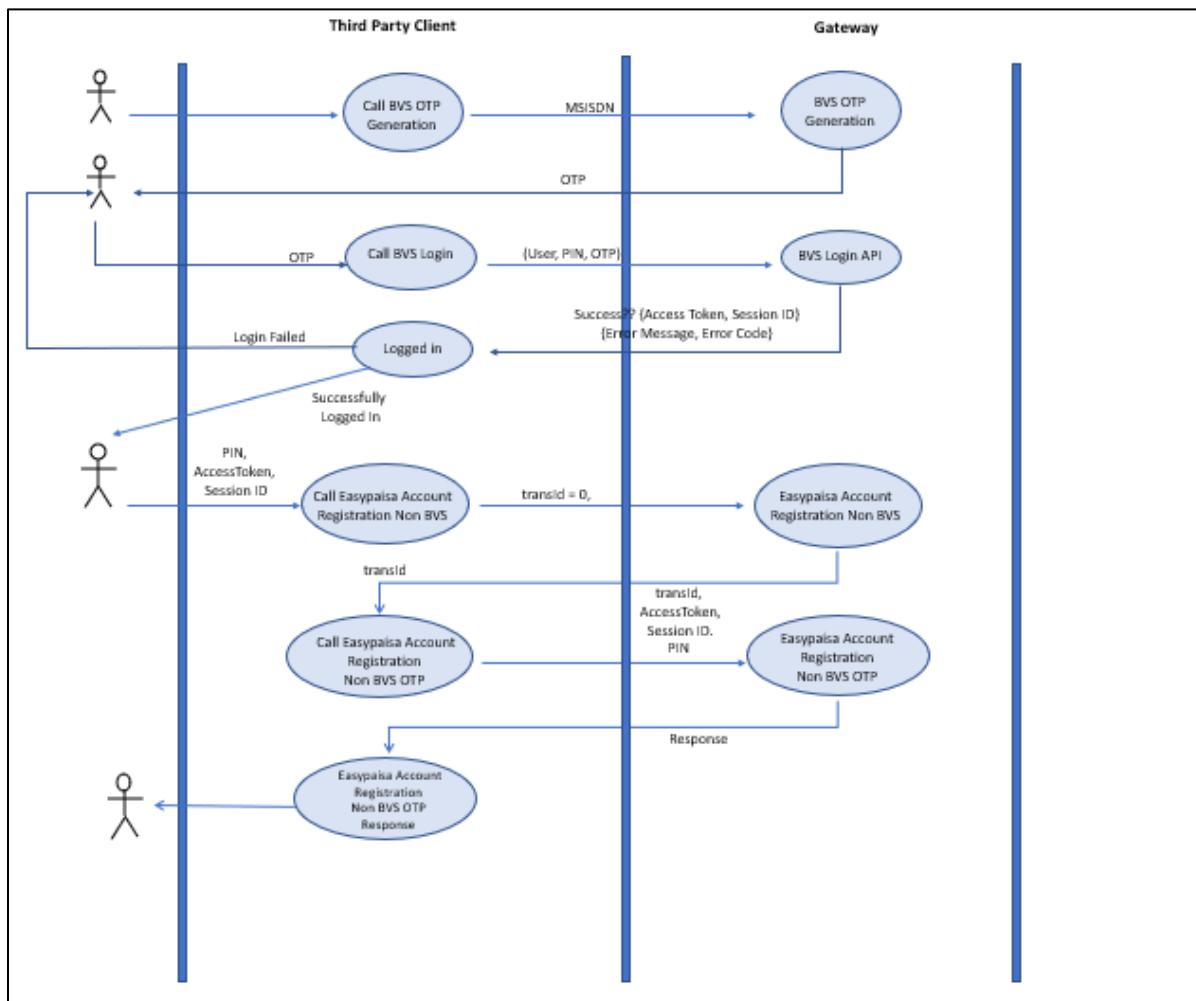


Figure 24: Easypaisa Account Registration Non BVS

### Pre-Requisites

1. Retailer must be logged in
2. Customer's CNIC and MSISDN must be valid and in correct format

### Request Attributes

#### Request Header Parameters

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls, and are used to authenticate the requester. The **X-Channel** parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>X-IBM-Client-Secret</b>	API Authentication credential	Yes
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X-Channel = " <b>bvsgateway</b> "</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	Yes
<b>Sessionid</b>	SessionID parameter returned at Login	Yes
<b>Authorization</b>	AccessToken returned at Login	Yes

#### Request Body Parameters

Parameter Name	Description	Mandatory
<b>Longitude</b>	The longitude coordinate of the retailer	Yes
<b>Latitude</b>	The latitude coordinate of the retailer	Yes
<b>CustomerCNIC</b>	CNIC of the customer without dashes	Yes
<b>CustomerMSISDN</b>	MSISDN (starting with 0) of the customer	Yes
<b>CustomerCNICIssueDate</b>	Issue date of Customer's CNIC in dd-MM-YYYY format	Yes

## Response Attributes

### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionID</b>	String	No
<b>ExtraData</b>	String	No
<b>TermConditionMessage</b>	String	No
<b>ShowOTP</b>	String	No

## Response Codes

Response Code	Description
<b>100</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>401</b>	Session timeout
<b>706</b>	Session expired
762	OTP_NOT_MATCHED
2000	BizPartNotAllowed
2004	MWALLET_ALT_ERROR
2017	CUSTOMER_UNDER AGE
2018	CUSTOMER_NOT_PAKISTANI
2019	CUSTOMER_CNIC_EXPIRED
2035	ExceptionOccurred
4007	EWP_REGISTRATION_ERROR
4014	EWP_ACCOUNT_ACTIVE
4035	Account already registered
4077	SELF_MA_SERVICE FAILED
8100	InvalidTransaction

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0  
**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221  
**X-Channel:** bvsgateway  
**Sessionid:** 9a1a753d779e4032a42da040d5783c70  
**Authorization:** Bearer hs6vB91DMz4-  
 dSkwqZEzb\_VMvcrmUBTE1N7jsz6dv59fk38yYokPoOE5K0KQtJCp6wVpAbpE6DFVq9cYqn  
 G144m-\_mQYaLshynG0M2NhYAPxlgU9AT9c5Knn10hJM9HjGaq-  
 OOuT6bKTk0yg4oJrmgwyHrhsJkN7RY81JYXbS7L2YT-  
 aASVe1tgGgYhPPUDcnREVpUOZjd5tWrtrFf8\_QYeorkYqmNjzeYm21HdZP036z5Fw\_NKMU  
 9yLLVVZ30xmGnGQN-  
 gG3vTFqF0Wmj8mEW\_U7X1bx6L53qquJxPrfU0P5dO1PMMD2FAfSFm5Ta7vjsNDxBTPMkj\_-  
 -  
 XvlgFMWbdxf622RmYvUR1OJrxlBvV1pLKV491yYRpMRCf0nZA84IpcC3udIMdcRE4gJUr4  
 Y\_NsHjnWqPbc5wc8qACyP0EpyiFckdMoi-  
 57URQ3qNi8aR13T70fVinWXK0UDP1Cp2tUzeeH3ChLnIsItTfz\_7H17sZK06YjWjMn0IV  
 g-  
 3\_uWZG\_PeKqF6VrMVT7JODIWTVldhlDZp6PqF29eN5HS1XDRek3vunlcIM6kitKGOT2QjG  
 w4RsEZCd3QPHfaTosvOgvAfb77dw9SelPTf6ulZo8WwkMImMqawoV6-  
 x6oE6Qze4q2TJkMUX41FMXJEIp3saedIQBBNrAX4pyqznq74oEzcg\_h\_ugqFvtgnlvwH-Af\_g5xe-  
 9tsgXSmdmEMSjjNw

### *Sample Request*

```
{
  "Longitude": "31.5686808",
  "Latitude": "74.3000874",
  "CustomerCNIC": "3740512345678",
  "CustomerMSISDN": "03451233456",
  "CustomerCNICIssueDate": "14-06-2016"
}
```

### *Sample Response*

```
{
  "ResponseCode": "0",
  "ResponseMessage": "Customer kay Mobile number per bheja gaya 6 digit OTP enter kerein",
  "TransactionID": "84825",
  "ExtraData": null,
  "TermConditionMessage": "Your account will be created, please enter OTP",
  "ShowOTP": "TRUE"
}
```

### *CURL*

```
curl --location --request POST '<BASE_URL>/NonBVSAccountRegistration/' \
--header 'X-Channel: bvsgateway' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'Sessionid: 9a1a753d779e4032a42da040d5783c70' \
--header 'Authorization: Bearer hs6vB91DMz4-
dSkwqZEzb_VMvcrmUBTE1N7jsz6dv59fK38yYokPo0E5K0KQtJCp6wVpAbpE6DFVq9cYqnG144m-
_mQYaLshynG0M2NhYAPxlgU9AT9c5Knn10hJM9HjGaq-0OuT6bKTk0yg4oJrmgwyHrhsJkN7RY81JYXbS7L2YT-
aASVe1tgGgYhPPUDcnREVpUOZjd5tWrtrFF8_QYeorkYqmNjzeYm21HdZP036z5Fw_NKMU9yLLVVZ30xmGnGQN-
gG3vTFqF0Wmj8mEW_U7X1bx6L53qquJxPrfU0P5d01PMMD2FAfSFm5Ta7vjsNDxBTPMkj_-
XvIgFMWbdf622RmYvUR10Jrx1BvV1pLKv491yYRpMRCf0nZA84IpcC3udlMdcRE4gJUr4Y_NsHjnWqPbc5wc8qACyP0Ep
yiFckdMoI-57URQ3qNi8aR13T70fVinWKK0UDP1Cp2tUuzeeH3ChLnIsltTfz_7H17sZK06YjWjMn01Vg-
3_uWZG_PeKqF6VrMVT7JOD1WTvIdhlDZp6PqF29eN5HS1XDRek3vunlcIM6kitKGOT2QjGw4RsEZCd3QPHfaTosv0gvAfb
77dw9SeIPTf6uIZo8WwkMImMqawoV6-
x6oE6Qze4q2TJkMUX41FMXJEIp3saedIQBBNrAX4pyqznq74oEzcgh_ugqFvtgnlvwH-Af_g5xe-
9tsgXSmdmEMsjjNw' \
--header 'Content-Type: application/json' \
--data-raw '{
    "Longitude": "31.5686808",
    "Latitude": "74.3000874",
    "CustomerCNIC": "3740512345678",
    "CustomerMSISDN": "03451233456",
    "CustomerCNICIssueDate": "14-06-2016"
}'
```

## Easypaisa Account Registration Non BVS OTP

This API registers an Easypaisa account for a customer.

This API takes the *TransactionID* from the response of *Easypaisa Account Registration Non BVS* API. It also requires the OTP sent to the **customer's MSISDN** in order to complete the registration.

**Endpoint URL:** <BASE\_URL>/NonBVSAccountRegistration/OTP

**Operation Name:** OTCAccountRegistrationNonBVSPOTP

**Time-Out:** 140 Sec

### Pre-Requisites

1. Retailer must be logged in
2. OTP must be valid and correct
3. Customer's CNIC and MSISDN must be valid and in correct format

### Request Attributes

#### Request Header Parameters

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>X-IBM-Client-Secret</b>	API Authentication credential	Yes
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X-Channel = " <b>bvgateway</b> "</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	Yes
<b>Sessionid</b>	SessionID parameter returned at Login	Yes
<b>Authorization</b>	AccessToken returned at Login	Yes

#### Request Body Parameters

Parameter Name	Description	Mandatory
<b>TransactionID</b>	Transaction ID from the response of the first Easypaisa Account Registration BVS call	Yes
<b>OTP</b>	The OTP sent to the customer after the Easypaisa Account Registration BVS call	Yes
<b>Longitude</b>	The longitude coordinate of the retailer	Yes
<b>Latitude</b>	The latitude coordinate of the retailer	Yes
<b>CustomerCNIC</b>	CNIC of the customer without dashes	Yes

<b>CustomerMSISDN</b>	MSISDN (starting with 0) of the customer	Yes
<b>CustomerCNICIssueDate</b>	Issue date of Customer's CNIC in dd-MM-YYYY format	Yes

## Response Attributes

### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionID</b>	String	No
<b>ExtraData</b>	String	No
<b>TermConditionMessage</b>	String	No

## Response Codes

Response Code	Description
<b>100</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>401</b>	Session timeout
<b>706</b>	Session expired
<b>704</b>	Client not found
<b>762</b>	OTP_NOT_MATCHED
<b>1201</b>	BVS Mismatch Repeat
<b>2000</b>	BizPartNotAllowed
<b>2035</b>	ExceptionOccurred (AKSA API)
<b>2017</b>	CUSTOMER_UNDER AGE
<b>2018</b>	CUSTOMER_NOT_PAKISTANI
<b>2019</b>	CUSTOMER_CNIC_EXPIRED
<b>4007</b>	EWP_REGISTRATION_ERROR
<b>4004</b>	EWP_GET_ACCOUNT_STATUS_ERROR
<b>4006</b>	EWP_ACCOUNT_SUSPENDED
<b>4007</b>	EWP_REGISTRATION_ERROR
<b>4008</b>	EWP_GET_POS_OWNER_ERROR
<b>4012</b>	EWP_ACCOUNT_DORMANT
<b>4014</b>	EWP_ACCOUNT_ACTIVE
<b>4025</b>	EWP_ACCOUNT HOLDER_ALIAS_ERROR
<b>4029</b>	EWP_BLACKLIST_API_ERROR
<b>4033</b>	EWP_ACCOUNT_BLOCKED
<b>4034</b>	EWP_SET_ACCOUNT HOLDER_ADDITIONAL_INFO

<b>4035</b>	Account already registered
<b>4053</b>	EWP_SET_PROFILE_ERROR
<b>4058</b>	EWP.REACTIVATE_ACCOUNT HOLDER
<b>4071</b>	EWP.SANCTION_LIST_ERROR
<b>4074</b>	UPDATE_KYC_ERROR
<b>4075</b>	EWP.REMOVE_ALIAS_ERROR
<b>4076</b>	EWP.REACTIVATION_ERROR
<b>4632</b>	AML.CHECK_AML_ERROR
<b>8100</b>	InvalidTransaction
<b>8210</b>	ErrorCreateTransaction
<b>8215</b>	RETAILER_ACCOUNT_BLOCKED
<b>8217</b>	RETAILER_ACCOUNT_CLOSED
<b>8218</b>	RETAILER_ACCOUNT_SUSPENDED
<b>8219</b>	RETAILER_ACCOUNT HOLDER_BLOCKED
<b>8220</b>	RETAILER_ACCOUNT HOLDER_CLOSED
<b>8221</b>	RETAILER_ACCOUNT HOLDER_SUSPENDED

#### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** bvsgateway

**Sessionid:** 9a1a753d779e4032a42da040d5783c70

**Authorization:** Bearer hs6vB91DMz4-

dSkwqZEzb\_VMvcrmUBTE1N7jsz6dv59fK38yYokPoOE5K0KQtJCp6wVpAbpE6DFVq9cYqn

G144m-\_mQYaLshynG0M2NhYAPxIgU9AT9c5Knn10hJM9HjGaq-

OOuT6bKTk0yg4oJrmgwyHrhsJkN7RY81JYXbS7L2YT-

aASVe1tgGgYhPPUDcnREVpUOZjd5tWrtrFf8\_QYeorkYqmNjzeYm21HdZP036z5Fw\_NKMU

9yLLVVZ30xmGnGQN-

gG3vTFqF0Wmj8mEW\_U7X1bx6L53qquJxPrfU0P5dO1PMMD2FAfSFm5Ta7vjsNDxBTPMkj\_-

XvlgFMWbdxf622RmYvUR1OJrxlBvV1pLKV491yYRpMRCf0nZA84IpcC3udIMdcRE4gJUr4

Y\_NsHjnWqPbc5wc8qACyPOEpyiFckdMoi-

57URQ3qNi8aR13T70fVinWXKOUDP1Cp2tUuzeeH3ChLnIsItTfz\_7H17sZK06YjWjMn0IV

g-

3\_uWZG\_PeKqF6VrMVT7JODIWTVldhIDZp6PqF29eN5HS1XDRek3vunlcIM6kitKGOT2QjG

w4RsEZCd3QPHfaTosvOgvAfb77dw9SeIPtf6uIZo8WwkMlmMqawoV6-

x6oE6Qze4q2TJkMUX41FMXJEIp3saedIQBBNrAX4pyqznq74oEzcgh\_ugqFvtgnlvwH-Af\_g5xe-

9tsgXSmdmEMSjjNw

*Sample Request*

```
{  
    "TransactionID": "84812",  
    "Longitude": "31.5686808",  
    "Latitude": "74.3000874",  
    "CustomerCNIC": "3740512345678",  
    "CustomerMSISDN": "03451233456",  
    "CustomerCNICIssueDate": "14-06-2016",  
    "OTP": "12345"  
}
```

*Sample Response*

```
[  
    {  
        "ResponseCode": "100",  
        "ResponseMessage": "Moaziz Customer, aap ka Easypaisa mobile account Cnic: 3740523967532 aur  
        Mobile Number: 03348887771 pe register kar diya gaya hai",  
        "TransactionID": "85089",  
        "ExtraData": null,  
        "TermConditionMessage": ""  
    }  
]
```

## CURL

```

curl --location --request POST '<BASE_URL>/NonBVSAccountRegistration/OTP' \
--header 'X-Channel: bvgateway' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'Sessionid: 9a1a753d779e4032a42da040d5783c70' \
--header 'Authorization: Bearer hs6vB91DMz4-  

dSkwqZEzb_VMvcrmUBTE1N7jsz6dv59fK38yYokPoOE5K0KQtJCp6wVpAbpE6DFVq9cYqnG144m-  

_mQYaLshynG0M2NhYAPx1gU9AT9c5Knn10hJM9HjGaq-00uT6bKTk0yg4oJrmgwYHrhsJkN7RY81JYXbS7L2YT-  

aASVe1tgGgYhPPUDcnREVpUOZjd5tWrtrFF8_QYeorkYqmNjzeYm21HdZP036z5Fw_NKMU9yLLVVZ30xmGnGQN-  

gG3vTFqF0Wmj8mEW_U7X1bx6L53qquJxPrFU0P5d01PMMD2FAfSFm5Ta7vjsNDxBTPMIkj_-  

XvIgFMWbdxf622RmYvUR10Jrx1BvV1pLKV491yYRpMRCf0nZA84IpcC3ud1MdcRE4gJUr4Y_NsHjnWqPbc5wc8qACyP0Ep  

yiFckdMoI-57URQ3qNi8aR13T70fVinWXK0UDP1Cp2tUuzeeH3ChLnIsItTfz_7H17sZK06YjWjMn01Vg-  

3_uWZG_PeKqF6VrMVT7J0D1WtVIdh1DZp6PqF29eN5HS1XDRek3vunlcIM6kitKGOT2QjGw4RsEZCd3QPHfaTosv0gvAfb  

77dw9SeIPTf6uIZo8WwkMImMqawoV6-  

x6oE6Qze4q2TJkMUX41FMXJEIp3saedIQBBNrAX4pyqznq74oEzcgh_ugqFvtgn1vwH-Af_g5xe-  

9tsgXSmdmEMSjjNw' \
--header 'Content-Type: application/json' \
--data-raw '{
    "TransactionID": "84812",
    "Longitude": "31.5686808",
    "Latitude": "74.3000874",
    "CustomerCNIC": "3740512345678",
    "CustomerMSISDN": "03451233456",
    "CustomerCNICIssueDate": "14-06-2016",
    "OTP": "12345"
}'

```

## Cash Deposit - BVS

### Cash Deposit (BVS)

This API is called to deposit amount to an Easypaisa account. The request for this API also contains fingerprint information.

After calling this API, the *Cash Deposit (BVS) T&C* use case API must be called with necessary parameters to complete the transaction end-to-end with the *TransactionID* parameter returned in the response.

**Endpoint URL:** <BASE\_URL>/BVSCashInOut/CashDepositBVS

**Operation Name:** CashDepositBVS

**Time-Out:** 140 Sec

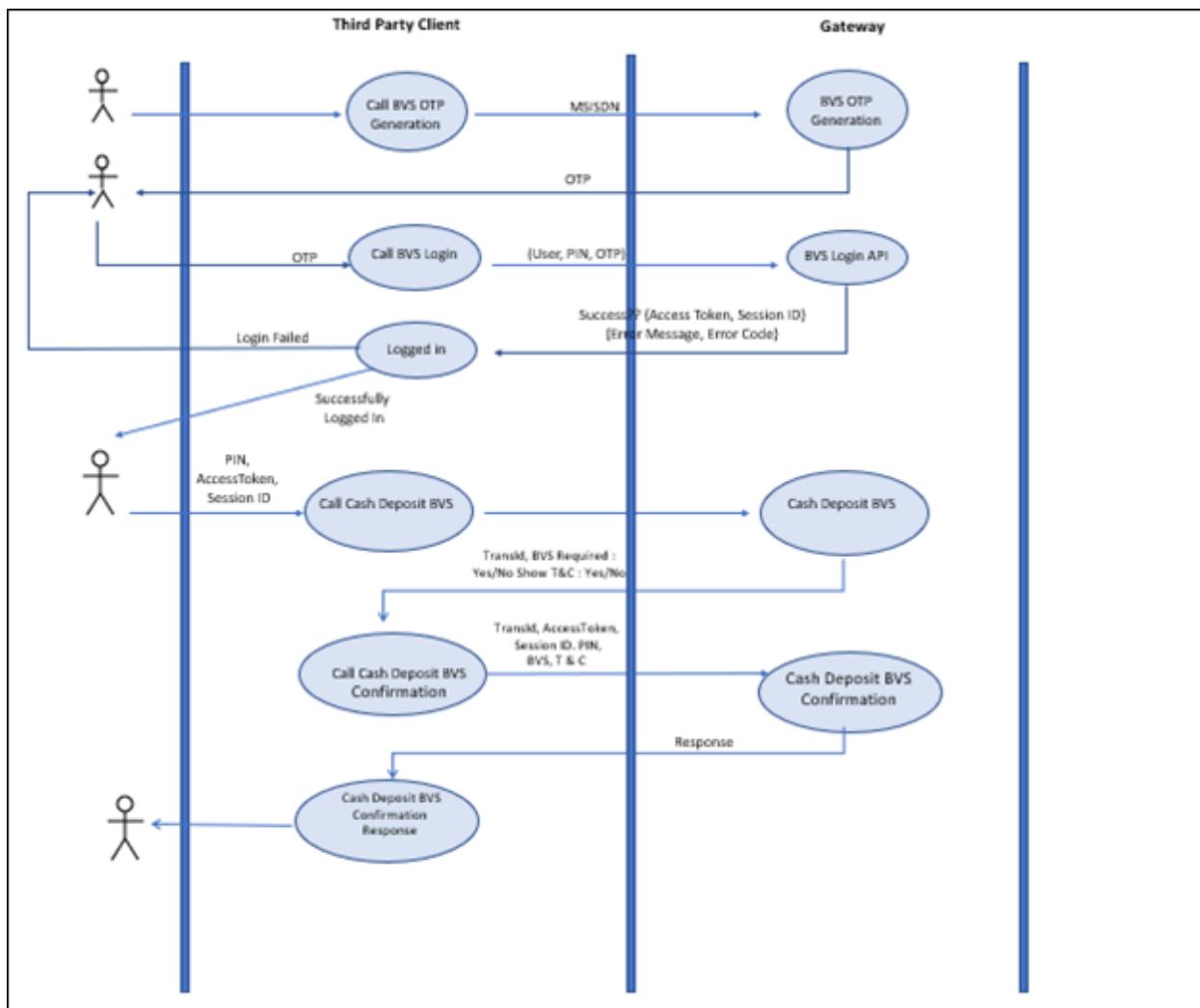


Figure 25: Cash Deposit (BVS)

### Pre-Requisites

1. Retailer must be logged in
2. Retailer's account must have sufficient funds for the transaction
3. Customer's CNIC and MSISDN must be valid and in correct format
4. Customer's finger print information must be valid
5. Amount must be less than available daily, monthly and yearly limit

## Request Attributes

### *Request Header Parameters*

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls, and are used to authenticate the requester. The **X-Channel** parameter determines the channel calling the API. The **X-Username** and **X-Password** header parameters authenticate the retailer.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X-Channel = " <b>bvsgateway</b> "</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Username</b>	MSISDN@RetailerID of the retailer	<b>Yes</b>
<b>X-Password</b>	Pin of the retailer	<b>Yes</b>
<b>Sessionid</b>	SessionID parameter returned at Login	<b>Yes</b>
<b>Authorization</b>	AccessToken returned at Login	<b>Yes</b>

*Request Body Parameters*

Parameter Name	Description	Mandatory
<b>DepositAmount</b>	The amount to be deposited	Yes
<b>Longitude</b>	The longitude coordinate of the retailer	Yes
<b>Latitude</b>	The latitude coordinate of the retailer	Yes
<b>CustomerCNIC</b>	CNIC of the customer whose account the amount will be deposited into without dashes	No
<b>CustomerMSISDN</b>	MSISDN (starting with 0) of the customer whose account the amount will be deposited into	Yes
<b>AcquiredAfis</b>	Fingerprint of the customer in base64	Yes
<b>FingerNumber</b>	Finger number of the fingerprint	Yes
<b>ImageType</b>	Image type is 3 for ANSI and 4 for ISO	Yes
<b>BioDeviceName</b>	Biometric device name	Yes

**Response Attributes***Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionID</b>	String	No
<b>ExtraData</b>	String	No
<b>ShowTermCondition</b>	String	No
<b>TermConditionMessage</b>	String	No
<b>CicoVerifyMessage</b>	String	No
<b>FingerIndexes</b>	String	No

## Response Codes

Response Code	Description
<b>100</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>401</b>	Session timeout
<b>706</b>	Session expired
2000	BizPartNotAllowed
2018	CUSTOMER_NOT_PAKISTANI
2019	CUSTOMER_CNIC_EXPIRED
4001	EWP_ACCOUNT_BLACKLIST
4003	EWP_ACCOUNT HOLDER NOT FOUND
4004	EWP_GET_ACCOUNT_STATUS_ERROR
4008	EWP_GET_POS_OWNER_ERROR
4023	EWP_CASH_IN_ERROR
4025	EWP_ACCOUNT HOLDER ALIAS_ERROR
4028	EWP_GET_ACCOUNT_TRAN_HIST_ERROR
4068	EWP_ADD_ACCOUNT_ERROR
4072	EWP_CNIC_NOT_FOUND_IN_ALIAS
4400	BVMT_AUTH_RETAILER_ERROR
4604	AA_RECEIVER_MA_LIMIT_FAIL
4610	AA_SENDER_CANCEL_T_AND_C
8100	InvalidTransaction
8210	ErrorCreateTransaction
2010	BIOMETRIC_ERROR
8093	BVS_INOFRMATION_ERROR
8090	NADRA_LIMIT_EXHAUST
8091	NADRA_HITS_COMPLETE

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0  
**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221  
**X-Channel:** bvsgateway  
**X-Username:** 923454604889@9989  
**X-Password:** 12345  
**Sessionid:** e369f8d1ed924156aa99f6273e3cbfa6  
**Authorization:** Bearer  
 CVsF5\_7mW1xhZ3lJPGyfrOzvIR2Srl2k3lejD48O8VXJx0TyZyzT4LN9kdDWgnEvA7M  
 OJWrQRwHkP4mKucVU0tyaU2KnvWIdrE4lxu8SEuQdm6-  
 Y22TP5NIZFD0IBL\_m1pJCh2xIEMV41APXAgaoj3JghPLd4-  
 zOKuvLuXMWpJx93NpEcYF2iT5uwLYDNS3PztD\_JevJ5M8WNxc\_D-2zOaWR9P-xF-  
 w6EJImKjuK0sakEMxsr\_bGidUoNd86ALT4MNRY4B5kYIEPTNA2vS9nf2oRw-  
 motvs5aAa6MCu\_eQVaMANGT4dgDnxtIQvEmKAnDBYa6-wcAsKBMBIG2-  
 W4oDoBx70NOJkj0f9AKsd\_E2Y32PLK\_gTCDntzquglqcnykqJeOt8fd2hAHiAM0a75XWc  
 2f\_LOtvU7O3-  
 8WGQpzkvOI3al7FWXfrj5TCnkdIAB7TR39At2XVVYXVWHPMd4FnkmOPx5owNQ4J6y2d1hQ  
 bnphAScpQR7js3UXExM3pdO9ju0Y0BRZp989wRD5kT4QxbKndeX1VWCKmWu9jdXw8zGc7U  
 bzcFIYEu2Rn5SWUKkLqZ3\_CBHN2ndDqRflt3wFzryP5RVAXsF8L1rZ38zu-  
 3R9M1WhiMq3v91bh70bHUMq3BBTBdrptFCNyPkdkiT7CFXhsoxzKdt-  
 goZnWOgJNDwvZHXRZO2XT4gS1gTM64ILj3\_ITgjL6hPdOUozA

### *Sample Request*

```
{
  "DepositAmount": "50",
  "Longitude": "31.5686808",
  "Latitude": "74.3000874",
  "CustomerCNIC": "3520206986433",
  "CustomerMSISDN": "03215562042",
  "AcquiredAfis": "sample",
  "FingerNumber": "2",
  "ImageType": "4",
  "BioDeviceName": "sample"
}
```

### Sample Response

```

{
    "ResponseCode": "100",
    "ResponseMessage": "Success",
    "TransactionID": "99032",
    "ExtraData": null,
    "ShowTermCondition": "FALSE",
    "TermConditionMessage": "",
    "CicoVerifyMessage": "Aap angootha laga kar apnay Easypaisa account ki tasdeeq karwa rahay hain. Tasdeeq ke baad agar aap ka account Level 0 hai tou wou Level 1 kar diya jaye ga. Level 1 account ki tafseelat jannay ke liye apnay retailer ya Easypaisa ki helpline 3737 par jaiyain",
    "FingerIndexes": "1,2,6,7",
    "CaptureBiometric": false,
    "CustomerName": "SYED MUHAMMAD MESAM RAZA",
    "CustomerCNIC": "37405437XXXX"
}

```

### CURL

```

curl --location --request POST '<BASE_URL>/BVSCashInOut/CashDepositBVS' \
--header 'X-Channel: bvgateway' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Username: 923454604889@9989' \
--header 'X-Password: 12345' \
--header 'Sessionid: 9a1a753d779e4032a42da040d5783c70' \
--header 'Authorization: Bearer hs6vB91DMz4-dSkwqZEzb_VMvcrmUBTE1N7jsz6dv59fK38yYokPo0E5K0KQtJCb6wVpAbpE6DFVq9cYqnG144m-_mQYaLshynG0M2NhYAPx1gU9AT9c5Knn10hJM9HjGaq-0OuT6bKTk0yg4oJrmgwYHrhsJkN7RY81JYxbS7L2YT-aASVe1tgGgYhPPUDcnREVpUOZjd5tWrtrFf8_QYeorkYqmNjzeYm21HdZP036z5Fw_NKMU9yLLVVZ30xmGnGQN-gG3vTFqF0Wmj8mEW_U7X1bx6L53qquJxPrfU0P5d01PMMD2FAfSFm5Ta7vjsNDxBTPMkj_-XvIgFMWbdf622RmYvUR10Jrx1BvV1pLKV491yYRpMRCf0nZA84IpcC3udlMdcRE4gJUr4Y_NsHjnWqPbc5wc8qACyP0Ep yiFckdMoI-57URQ3qNi8aR13T70fVinWXK0UDP1Cp2tUuzeH3ChLnIs1tTfz_7H17sZK06YjWjMn01Vg-3_uWZG_PeKqF6VrMVT7JOD1WTvIdh1DZp6PqF29eN5HS1XDRek3vunlcIM6kitKGOT2QjGw4RsEZCd3QPHfaTosv0gvAfb77dw9SeIPTf6uIZo8WwkMImMqawoV6-x6oE6Qze4q2TjkMUX41FMXJEIp3saedIQBBNrAX4pyqznq74oEzcgh_ugqFvtgn1vwH-Af_g5xe-9tsgXSmdmEMSjjNw' \
--header 'Content-Type: application/json' \
--data-raw '{
    "DepositAmount": "50",
    "Longitude": "31.5686808",
    "Latitude": "74.3000874",
    "CustomerCNIC": "3520206986433",
    "CustomerMSISDN": "03215562042"
}'

```

## Cash Deposit (BVS) Confirmation

This API is called to deposit amount to a dormant Easypaisa account. The request for this API also contains fingerprint information.

**This API must be called after calling Cash Deposit (BVS) use-case API to confirm the transaction. If the CaptureBiometric parameter in response of Cash Deposit (BVS) is true then the biometric data of the customer must be sent in the request of this use-case API. If the ShowTermCondition parameter in response of Cash Deposit (BVS) is true then the TermsAccepted parameter in the request of this use-case API must be set to true. The TransactionID from Cash Deposit (BVS) response must be sent in this usecase's request.**

**Endpoint URL:** <BASE\_URL>/BVSCashInOut/CashDepositBVS/Confirmation

**Operation Name:** CashDepositBVSConfirmation

**Time-Out:** 140 Sec

### Pre-Requisites

1. Retailer must be logged in
2. Retailer's account must have sufficient funds for the transaction
3. Customer's CNIC and MSISDN must be valid and in correct format
4. Customer's finger print information must be valid
5. Amount must be less than available daily, monthly and yearly limit
6. Customer must agree to terms and condition

### Request Attributes

#### Request Header Parameters

The header parameters X-IBM-Client-Id and X-IBM-Client-Secret are mandatory for all API calls, and are used to authenticate the requester. The X-Channel parameter determines the channel calling the API. The XUsername and X-Password header parameters authenticate the retailer.

Parameter Name	Description	Mandatory
X-IBM-Client-Id	API Authentication credential	Yes
X-IBM-Client-Secret	API Authentication credential	Yes
X-Channel	<ul style="list-style-type: none"> <li>• For Sandbox, X-Channel = " <b>bvsgateway</b> "</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	Yes
X-Username	MSISDN@RetailerID of the retailer	Yes
X-Password	Pin of the retailer	Yes

<b>Sessionid</b>	SessionID parameter returned at Login	Yes
<b>Authorization</b>	AccessToken returned at Login	Yes

### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>TransactionID</b>	Transaction ID from the response of the first Cash Deposit BVS call	Yes
<b>TermsAccepted</b>	Set to “true” if customer agrees to the terms and conditions. Only required if ShowTermCondition is true.	Yes
<b>DepositAmount</b>	The amount to be deposited	Yes
<b>Longitude</b>	The longitude coordinate of the retailer	Yes
<b>Latitude</b>	The latitude coordinate of the retailer	
<b>CustomerCNIC</b>	CNIC of the customer whose account the amount will be deposited into without dashes	No
<b>CustomerMSISDN</b>	MSISDN (starting with 0) of the customer whose account the amount will be deposited into	
<b>AcquiredAfis</b>	Fingerprint of the customer in base64. Only required if CaptureBiometric is true.	Yes
<b>FingerNumber</b>	Finger number of the fingerprint. Only required if CaptureBiometric is true.	Yes
<b>ImageType</b>	Image type is 3 for ANSI and 4 for ISO. Only required if CaptureBiometric is true.	Yes
<b>BioDeviceName</b>	Biometric device name. Only required if CaptureBiometric is true.	Yes

## Response Attributes

### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionID</b>	String	No
<b>ExtraData</b>	String	No
<b>ShowTermCondition</b>	String	No
<b>TermConditionMessage</b>	String	No
<b>CicoVerifyMessage</b>	String	No
<b>FingerIndexes</b>	String	No

## Response Codes

Response Code	Description
100	Successful execution
1	Error in processing request
-1	Exception occurred
<b>401</b>	Session timeout
<b>706</b>	Session expired
2000	BizPartNotAllowed
2018	CUSTOMER_NOT_PAKISTANI
2019	CUSTOMER_CNIC_EXPIRED
4001	EWP_ACCOUNT_BLACKLIST
4003	EWP_ACCOUNT HOLDER NOT FOUND
4004	EWP_GET_ACCOUNT_STATUS_ERROR
4008	EWP_GET_POS_OWNER_ERROR
4023	EWP_CASH_IN_ERROR
4025	EWP_ACCOUNT HOLDER ALIAS_ERROR
4028	EWP_GET_ACCOUNT_TRAN_HIST_ERROR
4068	EWP_ADD_ACCOUNT_ERROR
4072	EWP_CNIC_NOT_FOUND_IN_ALIAS
4400	BVMT_AUTH_RETAILER_ERROR
4604	AA_RECEIVER_MA_LIMIT_FAIL
4610	AA_SENDER_CANCEL_T_AND_C
8100	InvalidTransaction
8210	ErrorCreateTransaction

2010	BIOMETRIC_ERROR
8093	BVS_INOFRMATION_ERROR
8090	NADRA_LIMIT_EXHAUST
8091	NADRA_HITS_COMPLETE

*Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0  
**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221  
**X-Channel:** bvsgateway  
**X-Username:** 923454604889@9989  
**X-Password:** 12345  
**Sessionid:** e369f8d1ed924156aa99f6273e3cbfa6  
**Authorization:** Bearer  
 CVSf5\_7mW1xhZ31LjPgBYyfrOzvIR2Srl2k3IejD48O8VXJx0TyZyzT4LN9kdDWgnEvA7M  
 OJWrQRwHkP4mKucVU0tyaU2KnvWIdrE4lxu8SVEuQdm6-  
 Y22TP5N1ZFD0IBL\_m1pJCh2x1EMV41APXAgaoj3JghPLd4-  
 zOKuvLuXMWpJx93NpEcyF21T5uwLYDNS3PztD\_JevJ5M8WNxc\_D-2zOaWR9P-xF-  
 w6EJImKjuK0sakEMxsr\_bGidUoNd86ALT4MNRY4B5kyIEPTNA2vS9nf2oRw-  
 motvs5aAa6MCu\_eQVaMANGT4dgDnxtIQvEmKAnDBYa6-wcAsKBMBIG2-  
 W4oDoBx70N0Jkqj0f9AKsd\_E2Y32PLK\_gTCDntzquglqcnkykqJeOt8fd2hAHiAM0a75Xwc  
 2f\_LotvU703-  
 8WGQpzkvOI3a17FWXfrj5TCnkdIAB7TR39At2XVVYXVWHPmd4FnkmOPx5owNQ4J6y2d1hQ  
 bnphAScpQR7jS3UXExM3pd09ju0Y0BRZp989wRD5kT4QxbKndeX1VWCKmWu9jdXw8zGc7U  
 bzcFIYEu2Rn5SWUKkLqZ3\_CBHN2ndDqRflt3wFzryP5RVAXsF8L1rZ38zu-  
 3R9M1WhiMq3v91bh70bHUMq3BBTBdrptFCNyPkdkit7CFXhs0xzKdt-  
 goZnWOgJNDwvZHxzo2XT4gS1gTM64ILj3\_1TgjL6hPdOUozA  
 W4oDoBx70N0Jkqj0f9AKsd\_E2Y32PLK\_gTCDntzquglqcnkykqJeOt8fd2hAHiAM0a75Xwc  
 2f\_LotvU703-  
 8WGQpzkvOI3a17FWXfrj5TCnkdIAB7TR39At2XVVYXVWHPmd4FnkmOPx5owNQ4J6y2d1hQ  
 bnphAScpQR7jS3UXExM3pd09ju0Y0BRZp989wRD5kT4QxbKndeX1VWCKmWu9jdXw8zGc7U  
 bzcFIYEu2Rn5SWUKkLqZ3\_CBHN2ndDqRflt3wFzryP5RVAXsF8L1rZ38zu-  
 3R9M1WhiMq3v91bh70bHUMq3BBTBdrptFCNyPkdkit7CFXhs0xzKdt-  
 goZnWOgJNDwvZHxzo2XT4gS1gTM64ILj3\_1TgjL6hPdOUoz

*Sample Request*

```
{  
    "TransactionID": "84797",  
    "TermsAccepted": "true",  
    "DepositAmount": "50",  
    "Longitude": "31.5686808",  
    "Latitude": "74.3000874",  
    "CustomerCNIC": "3520206986433",  
    "CustomerMSISDN": "03215562042",  
    "AcquiredAfis": "sample",  
    "FingerNumber": "2",  
    "ImageType": "4",  
    "BioDeviceName": "sample"  
}
```

### Sample Response

```
{  
    "ResponseCode": "100",  
    "ResponseMessage": "Trx ID 3893692\r\nYou have successfully deposited Rs 102 to 9231151XXXX\r\nYour new Easypaisa  
balance is 992257.20\r\n",  
    "ExtraData": null,  
    "TransactionID": "99033",  
    "CicoVerifyMessage": "Aap angootha laga kar apnay Easypaisa account ki tasdeeq karwa rahay hain. Tasdeeq ke baad  
agar aap ka account Level 0 hai tou wou Level 1 kar diya jaye ga. Level 1 account ki tafseelat jannay ke liye  
apnay retailer ya Easypaisa ki helpline 3737 par jaiyain",  
    "FingerIndexes": "1,2,6,7"  
}
```

## CURL

```
curl --location --request POST '<BASE_URL>/BVSCashInOut/CashDepositBVS/Confirmation' \
--header 'X-Channel: bvsgateway' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bcc980cd3268cb26ff46a50607221' \
--header 'X-Username: 923454604889@9989' \
--header 'X-Password: 12345' \
--header 'Sessionid: 9a1a753d779e4032a42da040d5783c70' \
--header 'Authorization: Bearer hs6vb91DMz4-dskwqZEzb_VMvcrmUBTE1N7jsz6dv59fK38yYokPo0E5K0KQtJcp6wWpAbpE6DFVq9cYqnG144m-mQYaLshynG0M2NhYAPxlgU9AT9c5Knn10hJM9HjGaq-0OuT6bKTk0yg4oJrmgwyHrhsJkN7RY81JYXbS7L2YT-aASVe1tgGgYhPPUDcnREVpUOZjd5tWrtrFf8_QYeorkYqmNjzeYm21HdZP036z5Fw_NKMU9yLLVVZ30xmGnGQN-gG3vTFqF0Wmj8mEW_U7X1bx6L53qquJxPrfu0P5d01PMMD2FAfSFm5Ta7vjsNDxBTPMkj_-XvIgFMWbdxf622RmYvUR10JrxlBvV1pLKV491yYRpMRCf0nZA84IpcC3ud1MdcRE4gJUr4Y_NsHjnWqPbc5wc8qACyP0Ep yiFckdMoI-57URQ3qNi8aR13T70fVinWxk0UDP1Cp2tUzeeH3ChLnIsItTfz_7H17sZk06YjWjMn01Vg-3_uWZG_PeKqF6VrMVT7JOD1WTvIdh1DZp6Pqf29eNSHS1XDRek3vunlcIM6kitKGOT2QjGw4RsEZCd3QPHfaTosv0gvAfb77dw95eIPTf6uIZo8WwkJNIMqawoV6-x6oE6Qze4q2T3kmUX41FMXJEIp3saedIQBBNrAX4pyqznq74oEzcgh_ugqFvtgnlvwH-Af_g5xe-9tsgXSmdmEMSjjNw' \
--header 'Content-Type: application/json' \
--data-raw '{
    "TransactionID": "84797",
    "TermsAccepted": "true",
    "DepositAmount": "50",
    "Longitude": "31.5686808",
    "Latitude": "74.3000874",
    "CustomerCNIC": "3520206986433",
    "CustomerMSISDN": "03215562042",
    "AcquiredAfis": "sample",
    "FingerNumber": "2",
    "ImageType": "4",
    "BioDeviceName": "sample"
}'
```

## Cash Withdrawal - BVS

### Cash Withdrawal (BVS)

This API is called to withdraw amount from an Easypaisa account. The request for this API also contains fingerprint information.

If the Easypaisa account is dormant, after calling this API, the *Cash Withdrawal (BVS) T&C* use case API must be called to complete the transaction end-to-end with the *TransactionID* parameter returned in the response.

**Endpoint URL:** <BASE\_URL>/BVSCashInOut/CashWithdrawalBVS

**Operation Name:** CashWithdrawalBVS

**Time-Out:** 140 Sec

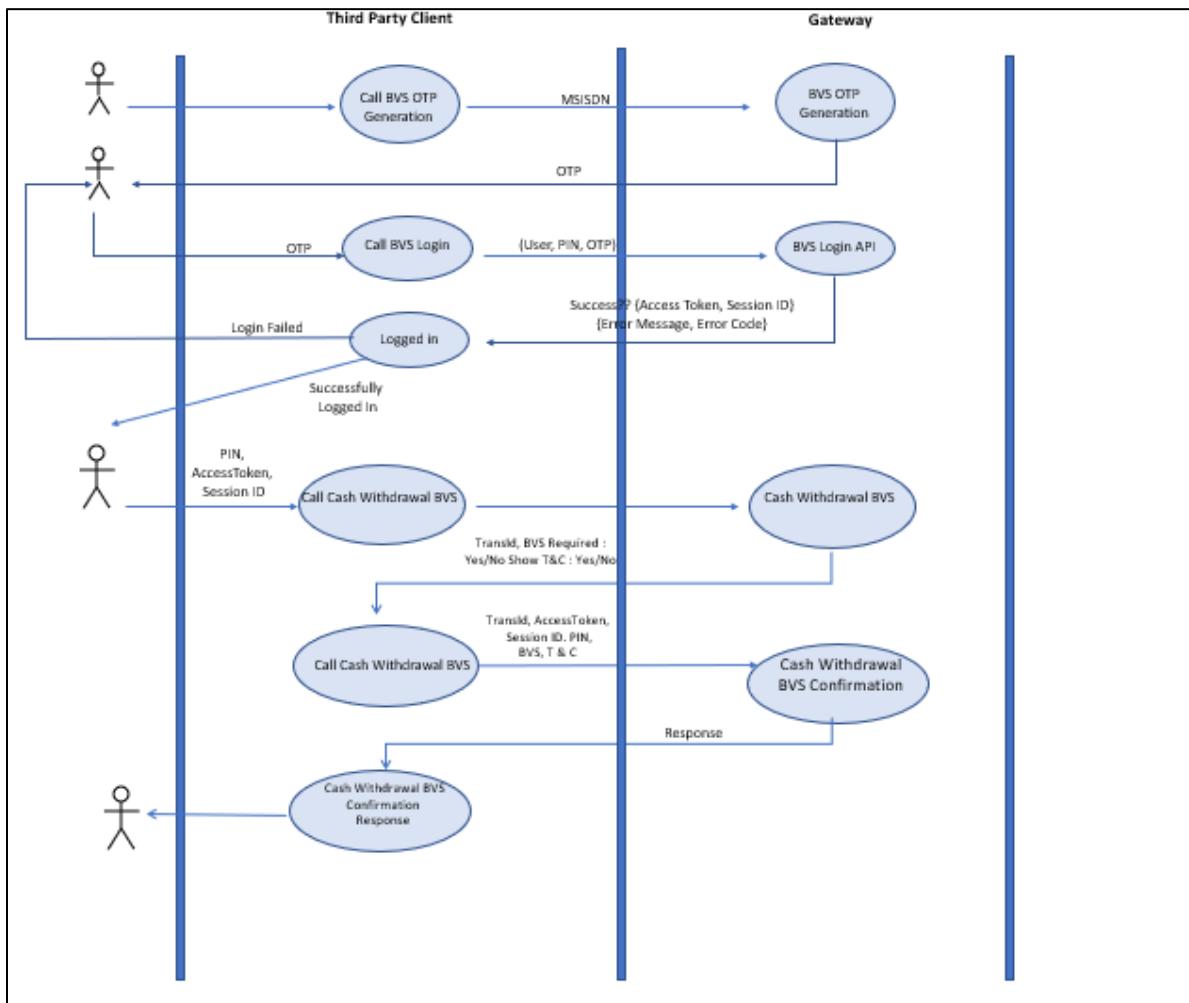


Figure 26: Cash Withdrawal (BVS)

### *Pre-Requisites*

1. Retailer must be logged in
2. Customer's account must have sufficient funds for the transaction
3. Customer's CNIC and MSISDN must be valid and in correct format
4. Customer's finger print information must be valid
5. Amount must be less than available daily, monthly and yearly limit

### **Request Attributes**

#### *Request Header Parameters*

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls, and are used to authenticate the requester. The **X-Channel** parameter determines the channel calling the API. The **X-Username** and **X-Password** header parameters authenticate the retailer.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X-Channel = " <b>bvsgateway</b> "</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Username</b>	MSISDN@RetailerID of the retailer	<b>Yes</b>
<b>X-Password</b>	Pin of the retailer	<b>Yes</b>
<b>Sessionid</b>	SessionID parameter returned at Login	<b>Yes</b>
<b>Authorization</b>	AccessToken returned at Login	<b>Yes</b>

*Request Body Parameters*

Parameter Name	Description	Mandatory
<b>WithdrawAmount</b>	The amount to be withdrawn	Yes
<b>Longitude</b>	The longitude coordinate of the retailer	Yes
<b>Latitudde</b>	The latitude coordinate of the retailer	Yes
<b>CustomerCNIC</b>	CNIC of the customer whose account the amount will be withdrawn from without dashes	No
<b>CustomerMSISDN</b>	MSISDN (starting with 0) of the customer whose account the amount will be withdrawn from	Yes
<b>AcquiredAfis</b>	Fingerprint of the customer in base64	Yes
<b>FingerNumber</b>	Finger number of the fingerprint	Yes
<b>ImageType</b>	Image type is 3 for ANSI and 4 for ISO	Yes
<b>BioDeviceName</b>	Biometric device name	Yes

*Response Attributes**Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionID</b>	String	No
<b>ExtraData</b>	String	No
<b>ShowTermCondition</b>	String	No
<b>TermConditionMessage</b>	String	No
<b>CicoVerifyMessage</b>	String	No
<b>FingerIndexes</b>	String	No

## Response Codes

Response Code	Description
<b>100</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>401</b>	Session timeout
<b>706</b>	Session expired
<b>1201</b>	BVS Mismatch Repeat
<b>2000</b>	BizPartNotAllowed
<b>2018</b>	CUSTOMER_NOT_PAKISTANI
<b>2035</b>	ExceptionOccurred
<b>4001</b>	EWP_ACCOUNT_BLACKLIST
<b>4003</b>	EWP_ACCOUNT HOLDER NOT FOUND
<b>4004</b>	EWP_GET_ACCOUNT_STATUS_ERROR
<b>4011</b>	EWP_DORMANT_TO_ACTIVE_ERROR
<b>4024</b>	EWP_CASHOUT_ERROR
<b>4025</b>	EWP_ACCOUNT HOLDER_ALIAS_ERROR
<b>4034</b>	EWP_SET_ACCOUNT HOLDER_ADDITIONAL_INFO
<b>4055</b>	EWP_ADD_ACCOUNT_ERROR
<b>4068</b>	EWP_GET_ACCOUNT_ERROR
<b>4072</b>	EWP_CNIC_NOT_FOUND_IN_ALIAS
<b>4302</b>	BISP_MA_CASH_OUT_ERROR
<b>4400</b>	BVMT_AUTH_RETAILER_ERROR
<b>4632</b>	AML_CHECK_AML_ERROR
<b>8100</b>	InvalidTransaction
<b>8210</b>	ErrorCreateTransaction
<b>10010</b>	FS_ALT_EXCEPTION
<b>2010</b>	BIOMETRIC_ERROR
<b>8093</b>	BVS_INOFRMATION_ERROR
<b>8090</b>	NADRA_LIMIT_EXHAUST
<b>8091</b>	NADRA_HITS_COMPLETE

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0  
**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221  
**X-Channel:** bvsgateway  
**X-Username:** 923454604889@9989  
**X-Password:** 12345  
**Sessionid:** e369f8d1ed924156aa99f6273e3cbfa6  
**Authorization:** Bearer  
 CVsF5\_7mW1xhZ3lJpGByfrOzvIR2Srl2k3IejD48O8VXJx0TyZyzT4LN9kdDWgnEvA7M  
 OJWrQRwHkP4mKucVU0tyaU2KnvWIdrE4lxu8SEuQdm6-  
 Y22TP5NlZFD0IBL\_m1pJCh2xIEMV41APXAgaoj3JghPLd4-  
 zOKuvLuXMWpJx93NpEcYF2lT5uwLYDNS3PztD\_JevJ5M8WNxc\_D-2zOaWR9P-xF-  
 w6EJImKjuK0sakEMxsr\_bGidUoNd86ALT4MRy4B5kYIEPTNA2vS9nf2oRw-  
 motvs5aAa6MCu\_eQVaMANGT4dgDnxtIQvEmKAnDBYa6-wcAsKBMBIG2-  
 W4oDoBx70N0Jkj0f9AKsd\_E2Y32PLK\_gTCDntzquglqcnykqjeOt8fd2hAHiAM0a75XWc  
 2f\_LOtvU7O3-  
 8WGQpzkvOI3al7FWXfrj5TCnkdIAB7TR39At2XVVYXVWHPmd4FnkmOPx5owNQ4J6y2d1hQ  
 bnphAScpQR7js3UXExM3pdO9ju0Y0BRZp989wRD5kT4QxbKndeX1VWCKmWu9jdXw8zGc7U  
 bzcfIYEu2Rn5SWUKkLqZ3\_CBHN2ndDqRflt3wFzryP5RVAXsF8L1rZ38zu-  
 3R9M1WhiMq3v91bh70bHUMq3BBTBdrptFCNyPkdkiT7CFXhsoxzKdt-  
 goZnWOgJNDwvZHXRZO2XT4gS1gTM64ILj3\_ITgjL6hPdOUozA

### *Sample Request*

```
{
  "WithdrawAmount": "50",
  "Longitude": "31.5686808",
  "Latitude": "74.3000874",
  "CustomerCNIC": "3520206986433",
  "CustomerMSISDN": "03215562042",
  "AcquiredAfis": "sample",
  "FingerNumber": "2",
  "ImageType": "4",
  "BioDeviceName": "sample"
}
```

### Sample Response

```

{
    "ResponseCode": "100",
    "ResponseMessage": "TRX ID: 3893607 \nTransaction kamyabi say mukammal ho gai hai. \nCustomer ko PKR 100 adaa kar dein. \nFee: PKR 7 customer kay account say kaat li gai hai. \nWith Holding Tax: PKR 0 izafi hai.Retailer balance: PKR 991538.92\r\n",
    "TransactionID": "99016",
    "ExtraData": null,
    "ShowTermCondition": "FALSE",
    "TermConditionMessage": "",
    "CicoVerifyMessage": "Aap angootha laga kar apnay Easypaisa account ki tasdeeq karwa rahay hain. Tasdeeq ke baad agar aap ka account Level 0 hai tou wou Level 1 kar diya jaye ga. Level 1 account ki tafseelat jannay ke liye apnay retailer ya Easypaisa ki helpline 3737 par jaiyain",
    "FingerIndexes": "1,2,6,7"
}

```

### CURL

```

curl --location --request POST '<BASE_URL>/BVSCashInOut/CashWithdrawalBVS' \
--header 'X-Channel: bvsgateway' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bcc980cd3268cb26ff46a50607221' \
--header 'X-Username: 923454604889@9989' \
--header 'X-Password: 12345' \
--header 'Sessionid: 9a1a753d779e4032a42da040d5783c70' \
--header 'Authorization: Bearer hs6vB91DMz4-dSkwqZEzb_VMvcrmUBTE1N7jsz6dv59fk38yYok-PoOE5K8QtJcp6WpAbpE6FVq9cYqnG144m-_mQYaLshynG0M2NhYAPx1gU9AT9c5Knn10hJM9HjGa-q-0OuT6bTk0yg4oJrmgwYHrhsJKn7RY81JYxbS7L2YT-aASVe1tgGgYhPPUD-cnREvpUOZjd5tWrtrFf8_QYeorkYqmNjzeYm21HdZP036z5Fw_NKMU9yLLVZ30xmGnGQN-gG3vTFqF0Wmj8mEW_U7X1bx6L53qquJx-PrfU0P5d01PMMD2FAfSFm5Ta7vj$NDxBTPMkj_-XvIgFMWbdxf622RmYvUR10Jrx1BvV1pLKV491yYRpMRCf0nZA84IpcC3udlMdcRE4gJUr4Y_NsHjnWqPbc5wc8qACyP0EpyiFckdMoI-57URQ3qNi8aR13T70fVinWK0UDP1Cp2tUzeeH3ChLnIs1tTfz_7H17sZK06YjWjMn01Vg-3_uWZG_PeKqF6VrMVT7JODlWTvIdh1DZp6PqF29eN5HS1XDRek3vunlcIM6kitKGOT2QjGw4RsEZCd3QPHfaTosvOgvAfb77dw9SeIPTf6uIZo8lwk-MImMqawoV6-x6oE6Qze4q2TJkMUX41FMXJEIp3saedIQ8BNrAX4pyqznq74oEzcgh_ugqFvtgnlvwH-Af_g5xe-9tsgXSmdmEMSjjNw' \
--header 'Content-Type: application/json' \
--data-raw '{
    "WithdrawAmount": "50",
    "Longitude": "31.5686808",
    "Latitude": "74.3000874",
    "CustomerCNIC": "3520206986433",
    "CustomerMSISDN": "03215562042",
    "AcquiredAfis": "sample",
    "FingerNumber": "2",
    "ImageType": "4",
    "BioDeviceName": "sample"
}'

```

## Cash Withdrawal (BVS) Confirmation

This API is called to withdraw amount from a dormant Easypaisa account. The request for this API also contains fingerprint information.

**This API is called if the Cash Withdrawal (BVS) call is made to a dormant Easypaisa account. The TransactionID from the response of Cash Withdrawal (BVS) use-case API is sent in this API's request, along with all the other parameters and the acceptance of the terms and conditions by the customer.**

**Endpoint URL:** <BASE\_URL>/BVSCashInOut/CashWithdrawalBVS/Confirmation

**Operation Name:** CashWithdrawalBVSConfirmation

**Time-Out:** 140 Sec

### *Pre-Requisites*

1. Retailer must be logged in
2. Customer's account must have sufficient funds for the transaction
3. Customer's CNIC and MSISDN must be valid and in correct format
4. Customer's finger print information must be valid
5. Amount must be less than available daily, monthly and yearly limit
6. Customer must agree to terms and conditions

### Request Attributes

#### *Request Header Parameters*

The header parameters X-IBM-Client-Id and X-IBM-Client-Secret are mandatory for all API calls, and are used to authenticate the requester. The X-Channel parameter determines the channel calling the API. The XUsername and X-Password header parameters authenticate the retailer.

Parameter Name	Description	Mandatory
X-IBM-Client-Id	API Authentication credential	Yes
X-IBM-Client-Secret	API Authentication credential	Yes
X-Channel	<ul style="list-style-type: none"> <li>• For Sandbox, X-Channel = " <b>bvgateway</b> "</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	Yes
X-Username	MSISDN@RetailerID of the retailer	Yes
X-Password	Pin of the retailer	Yes

<b>Sessionid</b>	SessionID parameter returned at Login	<b>Yes</b>
<b>Authorization</b>	AccessToken returned at Login	<b>Yes</b>

*Request Body Parameters*

Parameter Name	Description	Mandatory
<b>TransactionID</b>	Transaction ID from the response of the first Cash Withdrawal BVS call	<b>Yes</b>
<b>TermsAccepted</b>	Set to "true" if customer agrees to the terms and conditions	<b>Yes</b>
<b>WithdrawAmount</b>	The amount to be deposited	<b>Yes</b>
<b>Longitude</b>	The longitude coordinate of the retailer	<b>Yes</b>
<b>Latitudde</b>	The latitude coordinate of the retailer	<b>Yes</b>
<b>CustomerCNIC</b>	CNIC of the customer whose account the amount will be withdrawn from without dashes	<b>No</b>
<b>CustomerMSISDN</b>	MSISDN (starting with 0) of the customer whose account the amount will be withdrawn from	<b>Yes</b>
<b>AcquiredAfis</b>	Fingerprint of the customer in base64	
<b>FingerNumber</b>	Finger number of the fingerprint	<b>Yes</b>
<b>ImageType</b>	Image type is 3 for ANSI and 4 for ISO	<b>Yes</b>
<b>BioDeviceName</b>	Biometric device name	<b>Yes</b>

*Response Attributes**Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionID</b>	String	No
<b>ExtraData</b>	String	No
<b>ShowTermCondition</b>	String	No
<b>TermConditionMessage</b>	String	No
<b>CicoVerifyMessage</b>	String	No
<b>FingerIndexes</b>	String	No

## Response Codes

Response Code	Description
<b>100</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>401</b>	Session timeout
<b>706</b>	Session expired
<b>1201</b>	BVS Mismatch Repeat
<b>2000</b>	BizPartNotAllowed
<b>2018</b>	CUSTOMER_NOT_PAKISTANI
<b>2035</b>	ExceptionOccurred
<b>4001</b>	EWP_ACCOUNT_BLACKLIST
<b>4003</b>	EWP_ACCOUNT HOLDER NOT FOUND
<b>4004</b>	EWP_GET_ACCOUNT_STATUS_ERROR
<b>4011</b>	EWP_DORMANT_TO_ACTIVE_ERROR
<b>4024</b>	EWP_CASHOUT_ERROR
<b>4025</b>	EWP_ACCOUNT HOLDER_ALIAS_ERROR
<b>4034</b>	EWP_SET_ACCOUNT HOLDER_ADDITIONAL_INFO
<b>4055</b>	EWP_ADD_ACCOUNT_ERROR
<b>4068</b>	EWP_GET_ACCOUNT_ERROR
<b>4072</b>	EWP_CNIC_NOT_FOUND_IN_ALIAS
<b>4302</b>	BISP_MA_CASH_OUT_ERROR
<b>4400</b>	BVMT_AUTH_RETAILER_ERROR
<b>4632</b>	AML_CHECK_AML_ERROR
<b>8100</b>	InvalidTransaction
<b>8210</b>	ErrorCreateTransaction
<b>10010</b>	FS_ALT_EXCEPTION
<b>2010</b>	BIOMETRIC_ERROR
<b>8093</b>	BVS_INOFRMATION_ERROR
<b>8090</b>	NADRA_LIMIT_EXHAUST
<b>8091</b>	NADRA_HITS_COMPLETE

*Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0  
**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221  
**X-Channel:** bvsgateway

**X-Username:** 923454604889@9989  
**X-Password:** 12345  
**Sessionid:** e369f8d1ed924156aa99f6273e3cbfa6  
**Authorization:** Bearer  
 CVsF5\_7mW1xhZ3lJjPgBYyfrOzvIR2Srl2k3lejD48O8VXJx0TyYzT4LN9kdDWgnEvA7M  
 OJWrQRwHkP4mKucVU0tyaU2KnvWldrE4lxu8SVEuQdm6-  
 Y22TP5NIZFD0IBL\_m1pJCh2xIEMV41APXAgaoj3JghPLd4-  
 zOKuvLuXMWpJx93NpEcYF2iT5uwLYDNS3PztD\_JevJ5M8WNxc\_D-2zOaWR9P-xF-  
 w6EJImKjuK0sakEMxsr\_bGidUoNd86ALT4MNRY4B5kYIEPTNA2vS9nf2oRw-  
 motvs5aAa6MCu\_eQVaMANGT4dgDnxtIQvEmKAnDBYa6-wcAsKBMBIG2-  
 W4oDoBx70N0Jkj0f9AKsd\_E2Y32PLK\_gTCDntzquglqcnykqJeOt8fd2hAHiAM0a75XWc\_2f\_LOtvU703-  
 8WGQpzkvOI3al7FWXfrj5TCnndlAB7TR39At2XVVYXVWPmd4FnkmOPx5owNQ4J6y2d1hQ  
 bnphAScpQR7js3UXExM3pdO9ju0Y0BRZp989wRD5kT4QxbKndeX1VWCKmWu9jdXw8zGc7U  
 bzcFIYEu2Rn5SWUKkLqZ3\_CBHN2ndDqRflt3wFzryP5RVAXsF8L1rZ38zu-  
 3R9M1WhiMq3v91bh70bHUMq3BBTBdrptFCNyPkdkIt7CFXhsoxzKdt-  
 goZnWOgJNDwvZHXR02XT4gS1gTM64ILj3\_ITgjL6hPdOUozA

*Sample Request*

```
{
  "TransactionID": "84891",
  "TermsAccepted": "true",
  "DepositAmount": "50",
  "Longitude": "31.5686808",
  "Latitude": "74.3000874",
  "CustomerCNIC": "3520206986433",
  "CustomerMSISDN": "03215562042",
  "AcquiredAfis": "sample",
  "FingerNumber": "2",
  "ImageType": "4",
  "BioDeviceName": "sample"
}
```

### Sample Response

```
{  
    "ResponseCode": "100",  
    "ResponseMessage": "Success",  
    "ExtraData": null,  
    "TransactionID": "99089",  
    "CicoVerifyMessage": "Aap angootha laga kar apnay Easypaisa account ki tasdeeq karwa rahay hain.  
        Tasdeeq ke baad agar aap ka account Level 0 hai tou wou Level 1 kar diya jaye ga. Level 1  
        account ki tafseelat jannay ke liye apnay retailer ya Easypaisa ki helpline 3737 par  
        jaiyain",  
    "FingerIndexes": "1,2,6,7"  
}
```

## CURL

```
curl --location --request POST '<BASE_URL>/BVSCashInOut/CashWithdrawalBVS/Confirmation' \
--header 'X-Channel: bvsgateway' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bcc980cd3268cb26ff46a50607221' \
--header 'X-Username: 923454604889@9989' \
--header 'X-Password: 12345' \
--header 'Sessionid: 9a1a753d779e4032a42da040d5783c70' \
--header 'Authorization: Bearer hs6vB91DMz4-dSkwqZEzb_VMvcrmUBTE1N7jsz6dv59fk38yYok- \
PoOE5K0KQtJCp6wVpAbpE6DFVq9cYqnG144m-_mQYaLshynG0M2NhYAPx1gU9AT9c5Knn10hJM9HjGaq- \
00UT6bKTk0yg4oJrmgwYHrhsJKN7RY81JYXbS7L2YT-aASVe1tgGgYhPPUD- \
cnREvpUOZjd5tWrtrFf8_QYerkYqmNjzeYm21HdZP036z5Fw_NKMU9yLLVVZ30xmGnGQN-gG3vTFqF0Wmj8mEW_U7X1bx6L53qquJx- \
PrfU0P5d01PMMD2FAfSFm5Ta7vjsNDxBTPMkj_- \
XvIgFMWbdxf622RmYvUR10Jrx1BvV1pLV491yYRpMRCf0nZA84IpcC3udlMdcRE4gJUr4Y_NsHjnWqPbc5wc8qACyP0EpyiFckdMoI- \
57URQ3qNi8aR13T70fVinwXK0UDP1Cp2tUuzeH3ChLnIs1tTfz_7H17sZK06YjWjMn01Vg- \
3_uWZG_PeKqF6VrMVT7JOD1WTv1dh1DZp6PqF29eNSHS1XDRek3vunlcIM6kitKGOT2QjGw4RsEZCd3QPHfaTosvOgvAfb77dw9SeTPTf6uIZo8lwk- \
MImMqawoV6-x6oF6Qze4q2TJkMUX41FMXJEIp3saedIQ8BNrAX4pyqznq74oEzcgh_ugqFvtgnlvwH-Af_g5xe-9tsgXSmdmEMSjjNw' \
--header 'Content-Type: application/json' \
--data-raw '{
    "TransactionID": "84891",
    "TermsAccepted": "true",
    "DepositAmount": "50",
    "Longitude": "31.5686808",
    "Latitude": "74.3000874",
    "CustomerCNIC": "3520206986433",
    "CustomerMSISDN": "03215562042",
    "AcquiredAfis": "sample",
    "FingerNumber": "2",
    "ImageType": "4",
    "BioDeviceName": "sample"
}'
```

## CNIC to CNIC Sending (MTS + Agent Assisted)

### OTC Send Money CNIC to CNIC

This API initiates a transfer between two customer CNICs.

**After calling this API, the *OTC Send Money CNIC to CNIC OTP T&C* use case API must be called to complete the transaction end-to-end with the *TransactionID* parameter returned in the response.**

**Endpoint URL:** <BASE\_URL>/CNICToCNIC/SendMoney

**Operation Name:** RetailerSendMoney

**Time-Out: 140 Sec**

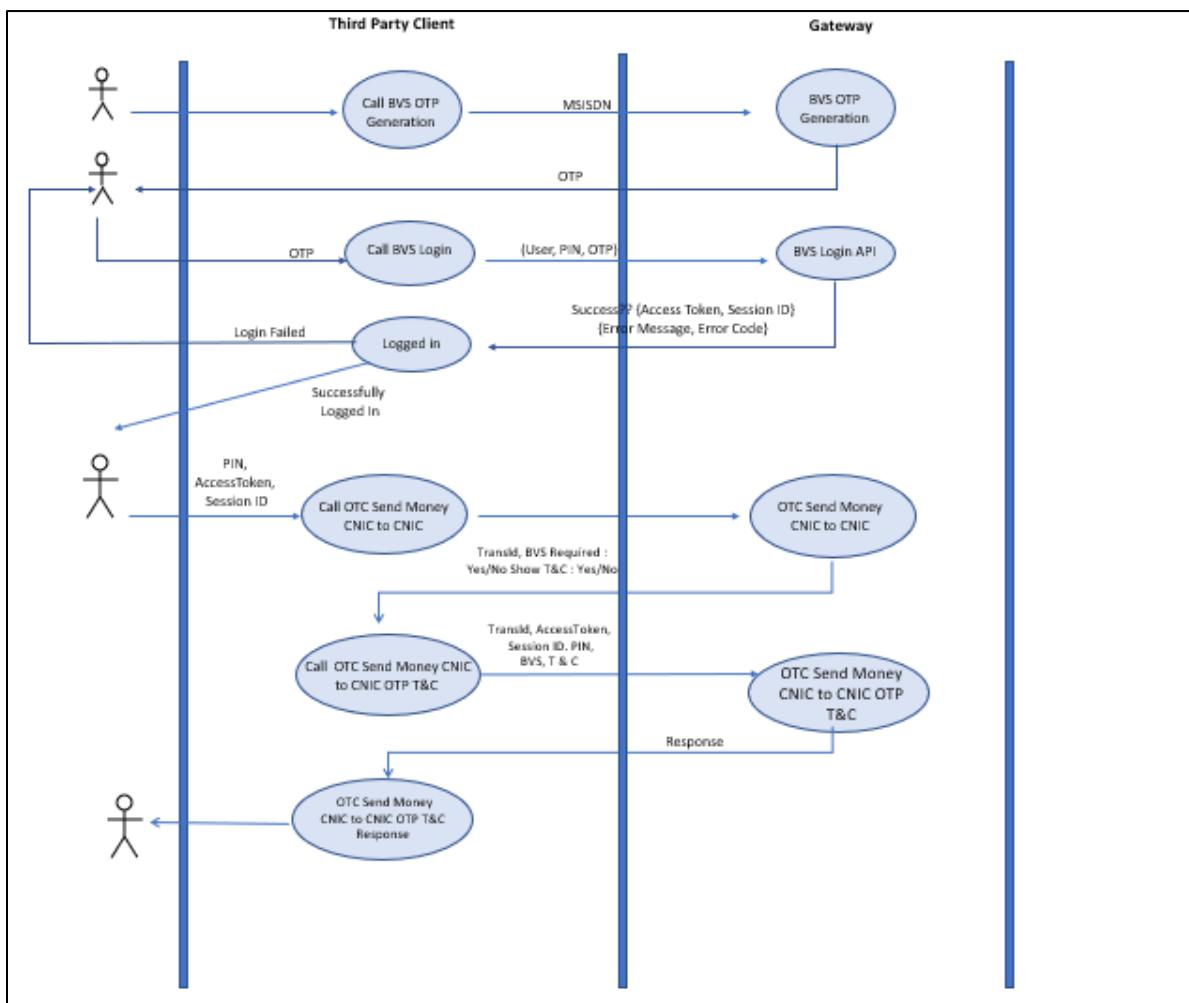


Figure 27: OTC Send Money CNIC to CNIC

#### Pre-Requisites

1. Retailer must be logged in

2. Retailer's account must have sufficient funds for the transaction
3. Sender and receiver CNIC and MSISDN must be valid and in correct format
4. Customer's finger print information must be valid
5. Amount must be less than available daily, monthly and yearly limit

## Request Attributes

### *Request Header Parameters*

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API. The *X-Username* and *X-Password* header parameters authenticate the retailer.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	For Sandbox, X-Channel = "arcana" For Production, X Channel will be shared at the time of Production onboarding.	<b>Yes</b>
<b>X-Username</b>	MSISDN@RetailerID of the retailer	<b>Yes</b>
<b>X-Password</b>	Pin of the retailer	<b>Yes</b>
<b>Sessionid</b>	SessionID parameter returned at Login	<b>Yes</b>
<b>Authorization</b>	AccessToken returned at Login	<b>Yes</b>

*Request Body Parameters*

Parameter Name	Description	Mandatory
<b>TransferAmount</b>	The amount to be transferred	Yes
<b>Longitude</b>	The longitude coordinate of the retailer	Yes
<b>Latitude</b>	The latitude coordinate of the retailer	Yes
<b>PurposeOfTransaction</b>	Purpose of transaction from list	Yes
<b>SenderCNIC</b>	CNIC of the sender without dashes	Yes
<b>SenderMSISDN</b>	MSISDN (starting with 0) of the sender	Yes
<b>ReceiverCNIC</b>	CNIC of the receiver without dashes	Yes
<b>ReceiverMSISDN</b>	MSISDN (starting with 0) of the receiver	Yes
<b>AcquiredAfis</b>	Fingerprint of the customer in base64	Yes
<b>FingerNumber</b>	Finger number of the fingerprint	Yes
<b>ImageType</b>	Image type is 3 for ANSI and 4 for ISO	Yes
<b>BioDeviceName</b>	Biometric device name	Yes

*Response Attributes**Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionID</b>	String	No
<b>ExtraData</b>	String	No
<b>IsAccountDormant</b>	String	No
<b>TermConditionMessage</b>	String	No
<b>MaxAmount</b>	String	No
<b>ShowOTP</b>	String	No
<b>PurposeOfTransactionList</b>	String	No
<b>FingerIndexes</b>	String	No

## Response Codes

Response Code	Description
<b>100</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>401</b>	Session timeout
<b>706</b>	Session expired
2000	BizPartNotAllowed
8210	ErrorCreateTransaction
4400	BVMT_AUTH_RETAILER_ERROR
4601	AA_GENERAL_VALIDATION_ERROR
2018	CUSTOMER_NOT_PAKISTANI
4001	EWP_ACCOUNT_BLACKLIST
4600	AA_SEND_ERROR
4602	AA_RECEIVER_GLOBAL_LIMIT_FAIL
1201	BVS Mismatch Repeat
4631	AML_CHECK_CNIC_ERROR
4634	AML_TRUE_HIT
4633	AML_PENDING
10010	FS_ALT_EXCEPTION
4018	EWP_CREATE_CASH_VOUCHER_ERROR
2035	ExceptionOccurred
2010	BIOMETRIC_ERROR
8093	BVS_INOFRMATION_ERROR
8090	NADRA_LIMIT_EXHAUST
8091	NADRA_HITS_COMPLETE

## Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** bvsgateway

**X-Username:** 923454604889@9989

**X-Password:** 12345

**Sessionid:** e369f8d1ed924156aa99f6273e3cbfa6

**Authorization:** Bearer

CVsF5\_7mW1xhZ3lLjPgBYyfrOzvIR2Srl2k3IejD48O8VXJx0TyYzT4LN9kdDWgnEvA7M

OJWrQRwHkP4mKucVU0tyaU2KnvWldrE4lxu8SVEuQdm6-

Y22TP5NIZFD0IBL\_m1pJCh2xIEMV41APXAgaoj3JghPLd4-

zOKuvLuXMWpJx93NpEcyF2iT5uwLYDNS3PztD\_JevJ5M8WNxc\_D-2zOaWR9P-xF-w6EJImKjuKOsakEMxsr\_bGidUoNd86ALt4MNRY4B5kYIEPTNA2vS9nf2oRw-motvs5aAa6MCu\_eQVaMAnGT4dgDnxtIQvEmKAnDBYa6-wcAsKBMBIG2-W4oDoBx70N0Jkj0f9AKsd\_E2Y32PLK\_gTCDntzquglqcnykqJeOt8fd2hAHiAM0a75XWc2f\_L0tvU7O3-8WGQpzkvOl3al7FWXfrj5TCnkdlAB7TR39At2XVVYXVWHPmd4FnkmOPx5owNQ4J6y2d1hQbnphAScpQR7js3UXExM3pdO9ju0Y0BRZp989wRD5kT4QxbKndeX1VWCKmWu9jdXw8zGc7UbzcFIYEu2Rn5SWUKkLqZ3\_CBHN2ndDqRflt3wFzryP5RVAXsF8L1rZ38zu-3R9M1WhiMq3v91bh70bHUMq3BBTBdrptFCNyPkdkIt7CFXhsoxzKdt-goZnWOgJNDwvZHXB02XT4gS1gTM64ILj3\_ITgjL6hPdOUozA

### *Sample Request*

```
{
  "TransferAmount": "50",
  "Longitude": "31.5686808",
  "Latitude": "74.3000874",
  "PurposeOfTransaction": "Others",
  "ReceiverCNIC": "6110162598117",
  "ReceiverMSISDN": "03454604889",
  "SenderCNIC": "3740523967537",
  "SenderMSISDN": "03335110286",
  "AcquiredAfis": "sample",
  "BioDeviceName": "sample",
  "FingerNumber": "2",
  "ImageType": "4"
}
```

### *Sample Response*

```
[
  {
    "ResponseCode": "100",
    "ResponseMessage": "TRX ID: 680636982\nFIN ID: 3893728\nAccount Activated: No \nCNIC 6110162598117 customer say
      Rs. 120.0 wasool kar lein.\nTransaction amount: Rs. 50.0.\nFee: Rs. 70.\nMerchant Balance: 992143.68.\n",
    "TransactionID": "99039",
    "ExtraData": null,
    "IsAccountDormant": "FALSE",
    "TermConditionMessage": "",
    "MaxAmount": "0E+0",
    "ShowOTP": "FALSE",
    "PurposeOfTransactionList": "Select Purpose of transaction|Business|Gift|Remittance for personal / domestic use|
      Online Purchases|Utility Bill Payments|Loan Repayment|
      Others

      ",
    "FingerIndexes": "1,2,6,7"
  }
]
```

## CURL

```
curl --location --request POST '<BASE_URL>/CNICToCNIC/SendMoney' \
--header 'X-Channel: bvsgateway' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Username: 923454604889@9989' \
--header 'X-Password: 12345' \
--header 'Sessionid: 9a1a753d779e4032a42da040d5783c70' \
--header 'Authorization: Bearer hs6vB91DMz4-dSkwqZEzb_VMvcrmUBTE1N7jsz6dv59fK38yYokPo0E5K0KQtJCp6wWpAbpE6DFVq9cYqn6144m- \
_mQYaLshynG0M2NhYAPx1gU9AT9c5Knn10hJM9HjGaq-00uT6bKTk0yg4oJrmgwYHrhsJkN7RY81JYXb57L2YT-aASVe1tgGgYhPPUD- \
cnREVpUOZjd5tWrtrFf8_QYeorkYqmNjzeYm21HdZP036z5Fw_NKMU9yLLVVZ30xmGnGQN-g63vTFqF0Wmj8mEW_U7X1bx6L53qquJx- \
Pr-fU0P5d01PMMD2FAFSfm5Ta7vjsNDxBTPMkj_- \
XvIgFMWbdx622RmYvUR10Jrx1BvV1pLKV491yYRpMRCf0nZA84IpcC3ud1MdcRE4gJUr4Y_NsHjnWqPbc5wc8qACyP0EpyiFckdMoI-57URQ3qNi8aR13T70FVin- \
WKK0UDP1cp2tUuzeH3ChLnIs1tTfz_7H17sZK06YjWjMn01Vg-3_uWZG_PeKqF6VrMVT7J0D1WTv1dh1DZp6PqF29eN5HS1XDRek3vun- \
lcIM6kitKGOT2QjGw4RsEZCd3QPHfaTosv0gvAfb77dw95eIPTf6uIZo8WwkMIMlqawoV6-x6oE6Qze4q2TJKMUX41FMXJEIp3saedIQBBNrAX4pyqznq74oEz- \
cgh_ugqFvtgnlvwH-AF_g5xe-9tsgXSmdmEMSjjNw' \
--header 'Content-Type: application/json' \
--data-raw '{
    "TransferAmount": "50",
    "Longitude": "31.5686808",
    "Latitude": "74.3000874",
    "PurposeOfTransaction": "Others",
    "ReceiverCNIC": "6110162598117",
    "ReceiverMSISDN": "03454604889",
    "SenderCNIC": "3740523967537",
    "SenderMSISDN": "03335110286",
    "AcquiredAfis": "sample",
    "BioDeviceName": "sample",
    "FingerNumber": "2",
    "ImageType": "4"
}'
```

## OTC Send Money CNIC to CNIC OTP T&C

This API confirms a transfer between two customer CNICs.

The ***TransactionID*** parameter returned in ***OTC Send Money CNIC to CNIC*** use-case API must be passed as a request parameter here. Customer must agree to terms and conditions and enter the OTP sent to the provided MSISDN.

**Endpoint URL:** <BASE\_URL>/CNICToCNIC/SendMoney/OTPTnc

**Operation Name:** RetailerSendMoneyOTPTnc

**Time-Out:** 140 Sec

### Pre-Requisites

1. Retailer must be logged in
2. Retailer's account must have sufficient funds for the transaction
3. Sender and receiver CNIC and MSISDN must be valid and in correct format
4. Customer's finger print information must be valid
5. Amount must be less than available daily, monthly and yearly limit
6. OTP must be valid and correct
7. Customer must agree to terms and conditions

### Request Attributes

#### Request Header Parameters

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls, and are used to authenticate the requester. The **X-Channel** parameter determines the channel calling the API. The **X-Username** and **X-Password** header parameters authenticate the retailer.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X-Channel = " <b>bvgateway</b> "</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Username</b>	MSISDN@RetailerID of the retailer	<b>Yes</b>

<b>X-Password</b>	Pin of the retailer	<b>Yes</b>
<b>Sessionid</b>	SessionID parameter returned at Login	<b>Yes</b>
<b>Authorization</b>	AccessToken returned at Login	<b>Yes</b>

### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>TransactionID</b>	Transaction ID from the response of the first Cash Withdrawal BVS call	Yes
<b>TermsAccepted</b>	Set to “true” if customer agrees to the terms and conditions	Yes
<b>OTP</b>	The OTP sent to customer’s MSISDN	
<b>TransferAmount</b>	The amount to be transferred	Yes
<b>Longitude</b>	The longitude coordinate of the retailer	Yes
<b>Latitude</b>	The latitude coordinate of the retailer	Yes
<b>PurposeOfTransaction</b>	Purpose of transaction from list	Yes
<b>SenderCNIC</b>	CNIC of the sender without dashes	Yes
<b>SenderMSISDN</b>	MSISDN (starting with 0) of the sender	Yes
<b>ReceiverCNIC</b>	CNIC of the receiver without dashes	Yes
<b>ReceiverMSISDN</b>	MSISDN (starting with 0) of the receiver	Yes
<b>AcquiredAfis</b>	Fingerprint of the customer in base64	Yes
<b>FingerNumber</b>	Finger number of the fingerprint	Yes
<b>ImageType</b>	Image type is 3 for ANSI and 4 for ISO	Yes
<b>BioDeviceName</b>	Biometric device name	Yes

### *Response Attributes*

### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionID</b>	String	No
<b>ExtraData</b>	String	No
<b>IsAccountDormant</b>	String	No
<b>TermConditionMessage</b>	String	No
<b>MaxAmount</b>	String	No
<b>ShowOTP</b>	String	No
<b>PurposeOfTransactionList</b>	String	No
<b>FingerIndexes</b>	String	No

## Response Codes

Response Code	Description
<b>100</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>401</b>	Session timeout
<b>706</b>	Session expired
2000	BizPartNotAllowed
8210	ErrorCreateTransaction
4400	BVMT_AUTH_RETAILER_ERROR
4601	AA_GENERAL_VALIDATION_ERROR
2018	CUSTOMER_NOT_PAKISTANI
4001	EWP_ACCOUNT_BLACKLIST
4600	AA_SEND_ERROR
4602	AA_RECEIVER_GLOBAL_LIMIT_FAIL
1201	BVS Mismatch Repeat
4631	AML_CHECK_CNIC_ERROR
4634	AML_TRUE_HIT
4633	AML_PENDING
10010	FS_ALT_EXCEPTION
4018	EWP_CREATE_CASH_VOUCHER_ERROR
2035	ExceptionOccurred
2010	BIOMETRIC_ERROR
8093	BVS_INOFRMATION_ERROR
8090	NADRA_LIMIT_EXHAUST
8091	NADRA_HITS_COMPLETE

## Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**X-Channel:** bvsgateway

**X-Username:** 923454604889@9989

**X-Password:** 12345

**Sessionid:** e369f8d1ed924156aa99f6273e3cbfa6

**Authorization:** Bearer

CVsF5\_7mW1xhZ3lLjPgBYyfrOzvIR2Srl2k3IejD48O8VXJx0TyZyzT4LN9kdDWgnEvA7M

OJWrQRwHkP4mKucVU0tyaU2KnvWlDrE4lxu8SVEuQdm6-

Y22TP5NIZFD0IBL\_m1pjCh2xIEMV41APXAgaoj3JghPLd4-

zOKuvLuXMWpJx93NpEcyF2iT5uwLYDNS3PztD\_JevJ5M8WNxc\_D-2zOaWR9P-xF-

w6EJImKjuK0sakEMxsr\_bGidUoNd86ALT4MNRy4B5kYIEPTNA2vS9nf2oRw-motvs5aAa6MCu\_eQVaMANGT4dgDnxtIQvEmKAnDBYa6-wcAsKBMBIG2-W4oDoBx70N0Jkqj0f9AKsd\_E2Y32PLK\_gTCDntzquglqcnykqJeOt8fd2hAHiAM0a75XWc2f\_LOtvU7O3-8WGQpzkvOI3al7FWXfrj5TCnkdlAB7TR39At2XVVYXVWHPmd4FnkmOPx5owNQ4J6y2d1hQbnphAScpQR7js3UXExM3pdO9ju0Y0BRZp989wRD5kT4QxbKndeX1VWCKmWu9jdXw8zGc7UbzcFIYEu2Rn5SWUKkLqZ3\_CBHN2ndDqRflt3wFzryP5RVAXsF8L1rZ38zu-3R9M1WhiMq3v91bh70bHUMq3BBTBdrptFCNyPkdkiT7CFXhsoxzKdt-goZnWOgJNDwvZHXBZ02XT4gS1gTM64ILj3\_ITgjL6hPdOUozA

### Sample Request

```
{  
    "TransactionID": "84862",  
    "TermsAccepted": "true",  
    "OTP": "123456",  
    "TransferAmount": "50",  
    "Longitude": "31.5686808",  
    "Latitude": "74.3000874",  
    "PurposeOfTransaction": "Others",  
    "ReceiverCNIC": "6110162598117",  
    "ReceiverMSISDN": "03454604889",  
    "SenderCNIC": "3740523967537",  
    "SenderMSISDN": "03335110286",  
    "AcquiredAfis": "sample",  
    "BioDeviceName": "sample",  
    "FingerNumber": "2",  
    "ImageType": "4"  
}
```

### Sample Response

```
{  
    "ResponseCode": "100",  
    "ResponseMessage": "TRX ID: 818065068\\nFIN ID: 3893730\\nAccount Activated: No \\nCNIC 6110162598117 customer say  
        Rs. 120.0 wasool kar lein.\\nTransaction amount: Rs. 50.0.\\nFee: Rs. 70.\\nMerchant Balance: 992030.16.\\n",  
    "TransactionID": "99039",  
    "ExtraData": null,  
    "IsAccountDormant": "FALSE",  
    "TermConditionMessage": "",  
    "MaxAmount": "0E+0",  
    "ShowOTP": "FALSE"  
}
```

## CURL

```

curl --location --request POST '<BASE_URL>/CNICToCNIC/SendMoney/OTPIac' \
--header 'X-Channel: bvgateway' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Username: 923454604889@9989' \
--header 'X-Password: 12345' \
--header 'SessionId: 9a1a753d779e4032a42da040d5783c70' \
--header 'Authorization: Bearer hs6vB91DMz4-  

dSkwqZEzb_VMvcrmUBTE1N7jsz6dv59FK38yYokPoOE5K0KQtJCP6wVpAbpE6DFVq9cYqnG144m-  

_mQYaLshynG0M2NhYAPxlgU9AT9c5Knn10hJ3M9HjGaQ-O0uT6bKTk0yg4oJrmgwyHrhsJkN7RY81JYXbS7L2YT-  

aASVe1tgGgYhPPUDcnREVpUOZjd5tWrtrFF8_QYeorKYqmNjzeYm21HdZP036z5Fw_NKMU9yLLVVZ30xmGrGQN-  

gG3vTFqF0Wmj8mEW_U7X1bx6L53qquJxPrFU0P5d01PMMD2FAFSFm5Ta7vjsNDxBTPMkj_-  

XvIgFMWbdxf622RmYvUR10Jrx1BvV1pLKV491yYRpMRCf0nZA84IpcC3ud1MdcRE4gJUr4Y_NsHjnWqPbc5wc8qACyP0Ep  

yiFckdMoI-57URQ3qNi8aR13T70PVinWXK0UDP1Cp2tUzeeH3ChLnIsItTfz_JH17sZK06YjWjMn01Vg-  

3_uWZG_PeKqF6VrMVT7JOD1WTvIdh1DZp6PqF29eN5HS1XDRek3vunlcIM6kitKGOT2QjGw4RsEZCd3QPHFaTosvOgvAfb  

77dw9SeIPTf6uIZo8WwkMImMqawoV6-  

x6oE6Qze4q2TJkMUX41FMXJEIp3saedIQBBNrAX4pyqznq74oEzcgh_ugqFvtgnlvwH-AF_g5xe-  

9tsgXSmdmEMSjjNw' \
--header 'Content-Type: application/json' \
--data-raw "{  

    "TransactionID": "84862",  

    "TermsAccepted": "true",  

    "OTP": "123456",  

    "TransferAmount": "50",  

    "Longitude": "31.5686888",  

    "Latitude": "74.3000874",  

    "PurposeOfTransaction": "Others",  

    "ReceiverCNIC": "6110162598117",  

    "ReceiverMSISDN": "03454604889",  

    "SenderCNIC": "3740523967537",  

    "SenderMSISDN": "03335110286",  

    "AcquiredAFis": "sample",  

    "BioDeviceName": "sample",  

    "FingerNumber": "2",  

    "ImageType": "4"  

}"

```

## CNIC to CNIC Receiving (MTS + Agent Assisted + MA - OTC Receiving)

### OTC Receive Money CNIC to CNIC

This API initiates a transfer between two customer CNICs (receiving step).

**After calling this API, the *OTC Receive Money CNIC to CNIC OTP T&C* use case API must be called to complete the transaction end-to-end with the *TransactionID* parameter returned in the response.**

**Endpoint URL:** <BASE\_URL>/CNICToCNIC/ReceiveMoney

**Operation Name:** RetailerReceiveMoney

**Time-Out: 140 Sec**

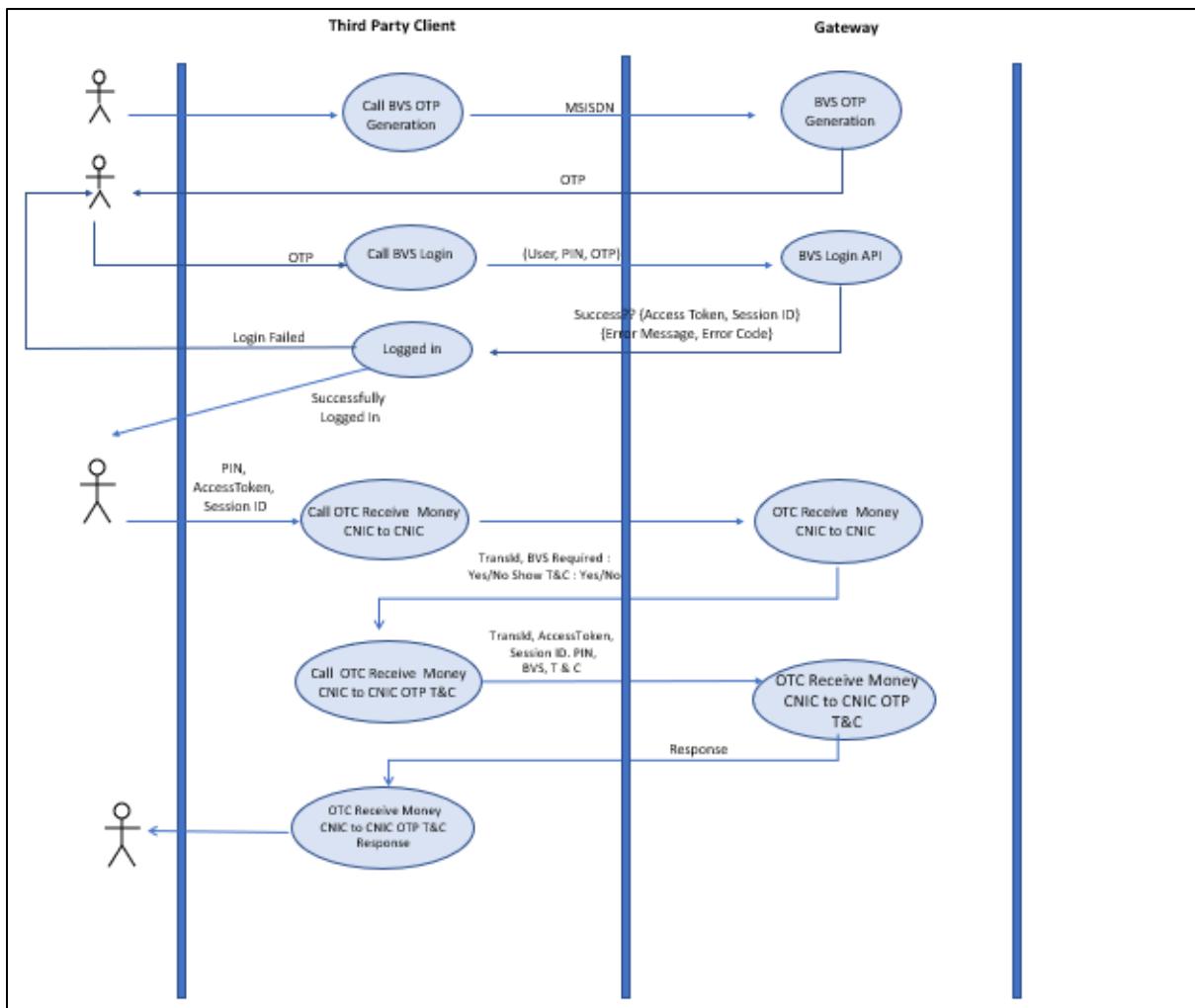


Figure 28: OTC Receive Money CNIC to CNIC

### *Pre-Requisites*

1. Retailer must be logged in
2. Voucher ID must be valid
3. Receiver CNIC and MSISDN must be valid and in correct format
4. Customer's finger print information must be valid

### **Request Attributes**

#### *Request Header Parameters*

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester. The *X-Channel* parameter determines the channel calling the API. The *X-Username* and *X-Password* header parameters authenticate the retailer.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X-Channel = " <b>bvsgateway</b> "</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Username</b>	MSISDN@RetailerID of the retailer	<b>Yes</b>
<b>X-Password</b>	Pin of the retailer	<b>Yes</b>
<b>Sessionid</b>	SessionID parameter returned at Login	<b>Yes</b>
<b>Authorization</b>	AccessToken returned at Login	<b>Yes</b>

*Request Body Parameters*

Parameter Name	Description	Mandatory
<b>VoucherID</b>	TRX ID received as SMS on customer's MSISDN	Yes
<b>Longitude</b>	The longitude coordinate of the retailer	Yes
<b>Latitude</b>	The latitude coordinate of the retailer	Yes
<b>ReceiverCNIC</b>	CNIC of the receiver without dashes	Yes
<b>ReceiverMSISDN</b>	MSISDN (starting with 0) of the receiver	Yes
<b>AcquiredAfis</b>	Fingerprint of the customer in base64	Yes
<b>FingerNumber</b>	Finger number of the fingerprint	Yes
<b>ImageType</b>	Image type is 3 for ANSI and 4 for ISO	Yes
<b>BioDeviceName</b>	Biometric device name	Yes

*Response Attributes**Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionID</b>	String	No
<b>ExtraData</b>	String	No
<b>SenderCNIC</b>	String	
<b>SenderMSISDN</b>	String	
<b>IsAccountDormant</b>	String	No
<b>TermConditionMessage</b>	String	No
<b>ShowOTP</b>	String	No
<b>FingerIndexes</b>	String	No

## Response Codes

Response Code	Description
<b>100</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>401</b>	Session timeout
<b>706</b>	Session expired
2000	BizPartNotAllowed
8210	ErrorCreateTransaction
4400	BVMT_AUTH_RETAILER_ERROR
4601	AA_GENERAL_VALIDATION_ERROR
2018	CUSTOMER_NOT_PAKISTANI
4001	EWP_ACCOUNT_BLACKLIST
4600	AA_SEND_ERROR
4602	AA_RECEIVER_GLOBAL_LIMIT_FAIL
1201	BVS Mismatch Repeat
4631	AML_CHECK_CNIC_ERROR
4634	AML_TRUE_HIT
4633	AML_PENDING
10010	FS_ALT_EXCEPTION
4018	EWP_CREATE_CASH_VOUCHER_ERROR
2035	ExceptionOccurred
4019	EWP_REDEEM_VOUCHER_ERROR
2010	BIOMETRIC_ERROR
8093	BVS_INOFRMATION_ERROR
8090	NADRA_LIMIT_EXHAUST
8091	NADRA_HITS_COMPLETE

### *Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0  
**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221  
**X-Channel:** bvsgateway  
**X-Username:** 923454604889@9989  
**X-Password:** 12345  
**Sessionid:** e369f8d1ed924156aa99f6273e3cbfa6  
**Authorization:** Bearer  
 CVsF5\_7mW1xhZ3lJPGByfrOzvIR2Srl2k3IejD48O8VXJx0TyZyzT4LN9kdDWgnEvA7M  
 OJWrQRwHkP4mKucVU0tyaU2KnvWIdrE4lxu8SEuQdm6-  
 Y22TP5NIzFD0IBL\_m1pJCh2xLEMV41APXAgaoj3JghPLd4-  
 zOKuvLuXMWpJx93NpEcYF2IT5uwLYDNS3PztD\_JevJ5M8WNxc\_D-2zOaWR9P-xF-  
 w6EJImKjuKOsakEMxsr\_bGidUoNd86ALT4MNRY4B5kYIEPTNA2vS9nf2oRw-  
 motvs5aAa6MCu\_eQVaMANGT4dgDnxtIQvEmKAnDBYa6-wcAsKBMBIG2-  
 W4oDoBx70N0Jkj0f9AKsd\_E2Y32PLK\_gtCDntzquglqcnkykqjeOt8fd2hAHiAM0a75XWc  
 2f\_LOtvU7O3-  
 8WGQpzkvOI3al7FWXfrj5TCnkdIAB7TR39At2XVVYXVWHpmD4FnkmOPx5owNQ4J6y2d1hQ  
 bnphAScpQR7js3UXExM3pdO9ju0Y0BRZp989wRD5kT4QxbKndeX1VWCKmWu9jdXw8zGc7U  
 bzcFIYEu2Rn5SWUKkLqZ3\_CBHN2ndDqRflt3wFzryP5RVAXsF8L1rZ38zu-  
 3R9M1WhiMq3v91bh70bHUMq3BBTBdrptFCNyPkdkiT7CFXhsoxzKdt-  
 goZnWOgJNDwvZHXRZO2XT4gS1gTM64ILj3\_ITgjL6hPdOUozA

### *Sample Request*

```
{
  "VoucherID": "790124458",
  "Longitude": "31.5686808",
  "Latitude": "74.3000874",
  "ReceiverCNIC": "6110162598117",
  "ReceiverMSISDN": "03454604889",
  "AcquiredAfis": "sample",
  "FingerNumber": "2",
  "BioDeviceName": "sample",
  "ImageType": "4"
}
```

### Sample Response

```
{
  "ResponseCode": "100",
  "ResponseMessage": "",
  "TransactionID": "99098",
  "ExtraData": null,
  "SenderCNIC": "3740560590999",
  "SenderMSISDN": "03345876677",
  "IsAccountDormant": "FALSE",
  "TermConditionMessage": "",
  "ShowOTP": "FALSE",
  "FingerIndexes": "1,2,6,7"
}
```

### CURL

```
curl --location --request POST '<BASE_URL>/CNICToCNIC/ReceiveMoney' \
--header 'X-Channel: bvsgateway' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Username: 923454604889@9989' \
--header 'X-Password: 12345' \
--header 'Sessionid: 9a1a753d779e4032a42da040d5783c70' \
--header 'Authorization: Bearer hs6vB91DMz4-
dSkwqZEzb_VMvcrmUBTE1N7jsz6dv59fK38yYokPoOE5K0KQtJCb6wVpAbpE6DFVq9cYqnG144m-
_mQYaLshynG0M2NhYAPxlgU9AT9c5Knn10hJM9HjGaq-00uT6bKTk0yg4oJrmgwyHrhsJkN7RY81JYXbS7L2YT-
aASVe1tgGgYhPPUDcnREVpUOZjd5tWrtrFf8_QYeorkYqmNjzeYm21HdZP036z5Fw_NKMU9yLLVVZ30xmGnGQN-
gG3vTFqF0Wmj8mEW_U7X1bx6L53qquJxPrfU0P5d01PMMD2FAfSFm5Ta7vjsNDxBTPMkj_-
XvIgFMWbdxf622RmYvUR10JrxlBvV1pLKV491yYRpMRCf0nZA84IpcC3udlMdcRE4gJUr4Y_NsHjnWqPbc5wc8qACyP0Ep
yiFckdMoI-57URQ3qNi8aR13T70fVinWXK0UDP1Cp2tUzeeH3ChLnIs1tTfz_7H17sZK06YjWjMn01Vg-
3_uWZG_PeKqF6VrMVT7JOD1WTvIdh1DZp6PqF29eN5HS1XDRek3vunlcIM6kitKGOT2QjGw4RsEZCd3QPHfaTosv0gvAfb
77dw9SeIPTf6uIZo8WwkMImMqawoV6-
x6oE6Qze4q2TjkMUX41FMXJEIp3saediQBBNrAX4pyqznq74oEzcgh_ugqFvtgn1vwH-Af_g5xe-
9tsgXSmdmEMSjjNw' \
--header 'Content-Type: application/json' \
--data-raw '{
  "VoucherID": "790124458",
  "Longitude": "31.5686808",
  "Latitude": "74.3000874"
}'
```

## OTC Receive Money CNIC to CNIC OTP T&C

This API completes a transfer between two customer CNICs (receiving step).

The ***TransactionID*** parameter returned in ***OTC Receive Money CNIC to CNIC*** use-case API must be passed as a request parameter here. Customer must agree to terms and conditions and enter the OTP sent to the provided MSISDN.

**Endpoint URL:** <BASE\_URL>/CNICToCNIC/ReceiveMoney/OTPTnc

**Operation Name:** RetailerReceiveMoneyOTPTnc

**Time-Out:** 140 Sec

### Pre-Requisites

1. Retailer must be logged in
2. Voucher ID must be valid
3. Receiver CNIC and MSISDN must be valid and in correct format
4. Customer's finger print information must be valid
5. OTP must be valid and correct
6. Customer must agree to terms and conditions

### Request Attributes

#### Request Header Parameters

The header parameters **X-IBM-Client-Id** and **X-IBM-Client-Secret** are mandatory for all API calls, and are used to authenticate the requester. The **X-Channel** parameter determines the channel calling the API. The **X-Username** and **X-Password** header parameters authenticate the retailer.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>X-Channel</b>	<ul style="list-style-type: none"> <li>• For Sandbox, X-Channel = " <b>bvgateway</b> "</li> <li>• For Production, X Channel will be shared at the time of Production onboarding.</li> </ul>	<b>Yes</b>
<b>X-Username</b>	MSISDN@RetailerID of the retailer	<b>Yes</b>

<b>X-Password</b>	Pin of the retailer	Yes
<b>Sessionid</b>	SessionID parameter returned at Login	Yes
<b>Authorization</b>	AccessToken returned at Login	Yes

### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>TransactionID</b>	Transaction ID from the response of the first Cash Withdrawal BVS call	Yes
<b>TermsAccepted</b>	Set to "true" if customer agrees to the terms and conditions	Yes
<b>OTP</b>	The OTP sent to customer's MSISDN	
<b>TransferAmount</b>	The amount to be transferred	Yes
<b>Longitude</b>	The longitude coordinate of the retailer	Yes
<b>Latitude</b>	The latitude coordinate of the retailer	Yes
<b>PurposeOfTransaction</b>	Purpose of transaction from list	Yes
<b>SenderCNIC</b>	CNIC of the sender without dashes	Yes
<b>SenderMSISDN</b>	MSISDN (starting with 0) of the sender	Yes
<b>ReceiverCNIC</b>	CNIC of the receiver without dashes	Yes
<b>ReceiverMSISDN</b>	MSISDN (starting with 0) of the receiver	Yes
<b>AcquiredAfis</b>	Fingerprint of the customer in base64	Yes
<b>FingerNumber</b>	Finger number of the fingerprint	Yes
<b>ImageType</b>	Image type is 3 for ANSI and 4 for ISO	Yes
<b>BioDeviceName</b>	Biometric device name	Yes

### **Response Attributes**

#### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>ResponseCode</b>	String	Yes
<b>ResponseMessage</b>	String	Yes
<b>TransactionID</b>	String	No
<b>ExtraData</b>	String	No
<b>IsAccountDormant</b>	String	No
<b>TermConditionMessage</b>	String	No
<b>MaxAmount</b>	String	No
<b>ShowOTP</b>	String	No
<b>PurposeOfTransactionList</b>	String	No
<b>FingerIndexes</b>	String	No

## Response Codes

Response Code	Description
<b>100</b>	Successful execution
<b>1</b>	Error in processing request
<b>-1</b>	Exception occurred
<b>401</b>	Session timeout
<b>706</b>	Session expired
2000	BizPartNotAllowed
8210	ErrorCreateTransaction
4400	BVMT_AUTH_RETAILER_ERROR
4601	AA_GENERAL_VALIDATION_ERROR
2018	CUSTOMER_NOT_PAKISTANI
4001	EWP_ACCOUNT_BLACKLIST
4600	AA_SEND_ERROR
4602	AA_RECEIVER_GLOBAL_LIMIT_FAIL
1201	BVS Mismatch Repeat
4631	AML_CHECK_CNIC_ERROR
4634	AML_TRUE_HIT
4633	AML_PENDING
10010	FS_ALT_EXCEPTION
4018	EWP_CREATE_CASH_VOUCHER_ERROR
2035	ExceptionOccurred
4019	EWP_REDEEM_VOUCHER_ERROR
2010	BIOMETRIC_ERROR
8093	BVS_INOFRMATION_ERROR
8090	NADRA_LIMIT_EXHAUST
8091	NADRA_HITS_COMPLETE

## Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0  
**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221  
**X-Channel:** bvsgateway  
**X-Username:** 923454604889@9989  
**X-Password:** 12345  
**Sessionid:** e369f8d1ed924156aa99f6273e3cbfa6  
**Authorization:** Bearer  
 CVsF5\_7mW1xhZ3lLjPgBYyfrOzvIR2Srl2k3IejD48O8VXJx0TyYzT4LN9kdDWgnEvA7M  
 OJWrQRwHkP4mKucVU0tyaU2KnvWIdrE4lxu8SEuQdm6-  
 Y22TP5NlZFD0IBL\_m1pjCh2xIEMV41APXAgaoj3JghPLd4-  
 zOKuvLuXMWpJx93NpEcyF2IT5uwLYDNS3PztD\_JevJ5M8WNxc\_D-2zOaWR9P-xF-  
 w6EJImKjuK0sakEMxsr\_bGidUoNd86ALT4MNRY4B5kYIEPTNA2vS9nf2oRw-  
 motvs5aAa6MCu\_eQVaMANGT4dgDnxtIQvEmKAnDBYa6-wcAsKBMBIG2-

W4oDoBx70N0Jkqj0f9AKsd\_E2Y32PLK\_gTCDntzquglqcnykqJeOt8fd2hAHiAM0a75XWc  
 2f\_LOtvU7O3-  
 8WGQpzkvOI3al7FWXfrj5TCnkdIAB7TR39At2XVVYXVWHPmd4FnkmOPx5owNQ4J6y2d1hQ  
 bnphAScpQR7js3UXExM3pdO9ju0Y0BRZp989wRD5kT4QxbKndeX1VWCKmWu9jdXw8zGc7U  
 bzcfIYEu2Rn5SWUKkLqZ3\_CBHN2ndDqRflt3wFzryP5RVAXsF8L1rZ38zu-  
 3R9M1WhiMq3v91bh70bHUMq3BBTBdrptFCNyPkdkiT7CFXhsoxzKdt-  
 goZnWOgJNDwvZHXRZO2XT4gS1gTM64ILj3\_ITgjL6hPdOUozA

### *Sample Request*

```
{
  "TransactionID": "84891",
  "OTP": "123456",
  "TermsAccepted": "true",
  "VoucherID": "493563533",
  "Longitude": "31.5686808",
  "Latitude": "74.3000874",
  "ReceiverCNIC": "3740523967537",
  "ReceiverMSISDN": "03335110286",
  "AcquiredAfis": "sample",
  "FingerNumber": "2",
  "BioDeviceName": "sample",
  "ImageType": "4"
}
```

### *Sample Response*

```
[
  {
    "ResponseCode": "100",
    "ResponseMessage": "",
    "TransactionID": "99099",
    "ExtraData": null,
    "SenderCNIC": "",
    "SenderMSISDN": "",
    "IsAccountDormant": "FALSE",
    "TermConditionMessage": "",
    "ShowOTP": "FALSE",
    "FingerIndexes": "1,2,6,7"
  }
]
```

### CURL

```
curl --location --request POST '<BASE_URL>/CNICToCNIC/ReceiveMoney/OTPTrn' \
--header 'X-Channel: bvsgateway' \
--header 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' \
--header 'X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221' \
--header 'X-Username: 923454604889@9989' \
--header 'X-Password: 12345' \
--header 'Sessionid: 9a1a753d779e4032a42da040d5783c70' \
--header 'Authorization: Bearer hs6vB91DMz4-dSkwqZEzb_VMvcrmUBTE1N7jsz6dv59fK38yYokPo0E5K0KQtJCb6wWpAbpE6DFVq9cYqn6144m-\
_mQYaLshynG0M2NhYAPxIgU9AT9c5Knn10hJM9HjGaQ-0OuT6bKTk0yg4oJrmgwYHrhsJkN7RY81JYXb57L2YT-aASVe1tgGgYhPPUD-\
cnREVpUOZjd5tWrtrFF8_QYeorkYqmNjzeYm21hdZP036z5Fw_NKMU9yLLVZ30xmGnGQN-gG3vTFqF0Wmj8mEW_U7X1bx6L53qquJx-\
Prfu0P5d01PMMD2FAfSFm5Ta7vjsNDxBTPMKj-\
XvIgFMWbxf622RmYvUR10Jrx1BvV1pLKv491yYRpMRCf0nZA84IpcC3udlMdcRE4gJUr4Y_NsHjnWqPbc5wc8qACyP0EpyiFckdMoI-57URQ3qNi8aR13T70fVin-\
WXK0UDP1Cp2tUzeeH3ChLnIs1tTfz_7H17sZK06YjWjMn01Vg-3_uWZG_PeKqF6VrMVT7JOD1WTvIdh1DZp6PqF29eN5HS1XDRek3vun-\
lcIM6kitKGOT2QjGw4RsEZCd3QPHfaTosv0gvAfB77dw9SeIPTf6uIZo8lwkMImMqawoV6-x6oE6Qze4q2TjkNUX41FMXJEIp3saedIQBBNrAX4pyqznq74oEz-\
cgh_ugqFvtgnlvwH-Af_g5xe-9tsgX5mdmEMSjjNw' \
--header 'Content-Type: application/json' \
--data-raw '{
    "TransactionID": "84891",
    "OTP": "123456",
    "TermsAccepted": "true",
    "VoucherID": "493563533",
    "Longitude": "31.5686808",
    "Latitude": "74.3000874",
    "ReceiverCNIC": "3740523967537",
    "ReceiverMSISDN": "03335110286",
    "AcquiredAfis": "sample",
    "FingerNumber": "2",
    "BioDeviceName": "sample",
    "ImageType": "4"
}'
```

## Payment Solutions

### Encryption Guidelines

In order to use the web-services of OPS, it is necessary for the client to send a digital signature along with each API request. This signature is used by Easypay to authenticate the client before processing the request.

The steps required to perform this encryption are described below.

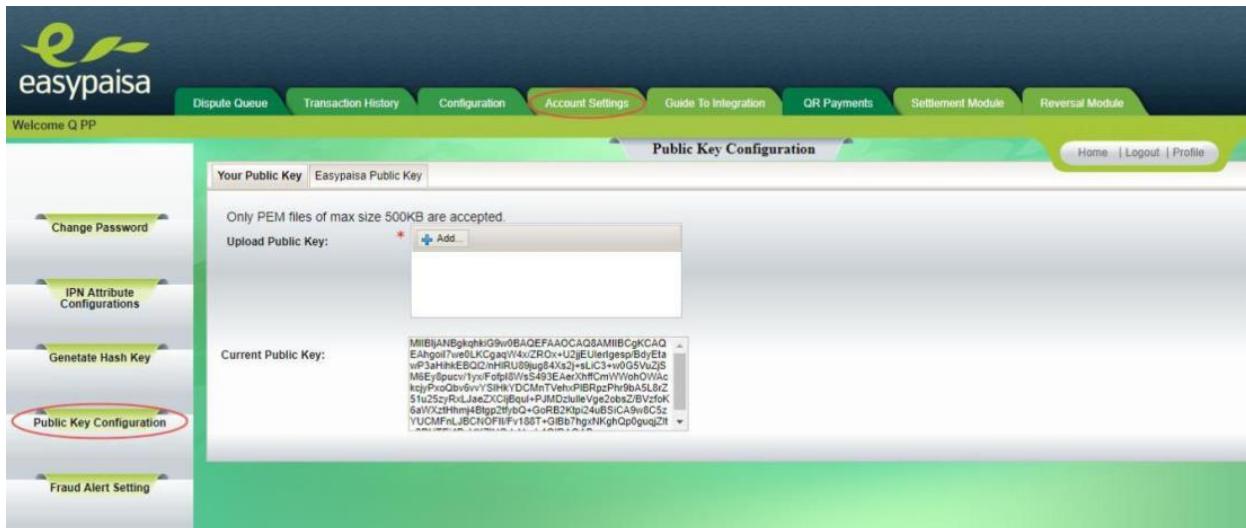
Client and Easypaisa must exchange RSA keys before making API calls, and the length of RSA key must be 2048 bits. When making API call to Easypaisa, client uses the RSA private key to sign the API request. After receiving the API request, Easypay will use the client's RSA public key to verify whether the signature is matched to the content of API request. Similarly, when client receives the API response, it is highly recommended that client verifies the signature of API response by using Easypay's RSA public key.

#### 1.1 Public/Private Key Exchange

An RSA key pair contains the private key and the public key. The private key is required for generating the signature, while the public key is used for verifying the signature. Many tools can be used to generate the RSA key pair. After the RSA2 key pair is generated, you must exchange the public key with the Easypay server for signature verification by completing the following steps:

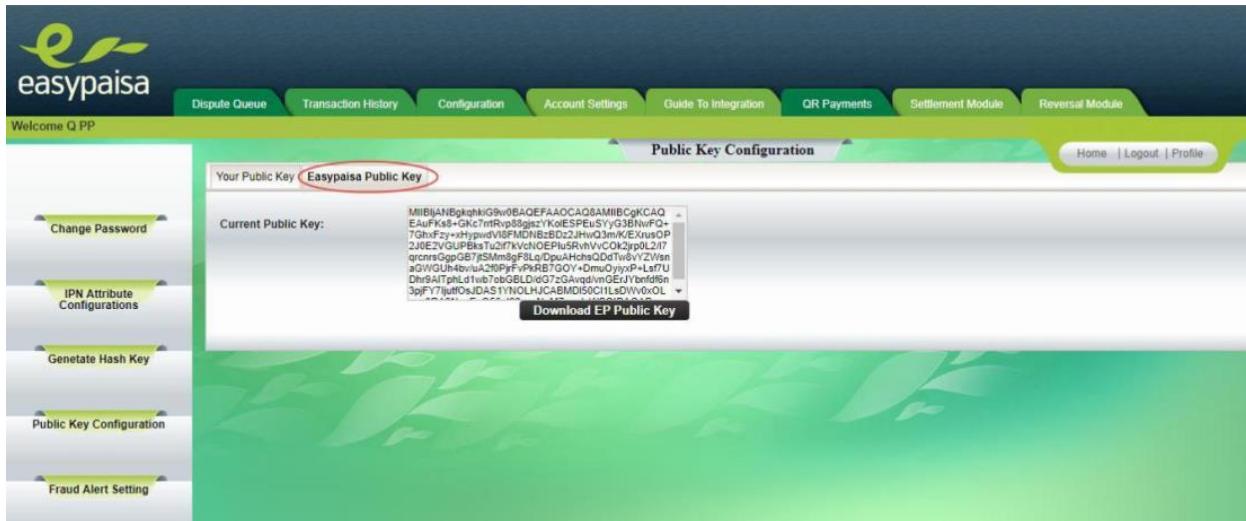
##### 1. Upload your public key in Easypay merchant portal.

Log in to the portal and visit the following path: “*Account Settings -> Public Key Configuration -> Upload Public Key*”. Upload your public key here.



## 2. Download Easypaisa public key. [OPTIONAL]

On the same path, enter the “Easypaisa Public Key” tab and click on the download button to download Easypaisa public key.



### 1.2 Signature Generation

The following figure illustrates a sample API request. The content enclosed by the two curly braces (inclusive) is what needs to be signed to create the RSA signature. And the generated signature is put in the *signature* parameter.

```

POST https://easypaystg.easypaisa.com.pk/easypay-service/rest/v5/inquire-transaction
Send Save
Params Authorization Headers (10) Body Pre-request Script Tests Settings Cookies Code Comments (0)
none form-data x-www-form-urlencoded raw binary GraphQL BETA JSON
1 {
2   "request": {
3     "orderId": "MSUATMA302",
4     "accountNum": "HSRAC-2034543",
5     "storeId": "641"
6   }
7   "signature": "IAOtyTRDaT7mzYDxDxZy1VxIXGj1KsJxGFuhaRX+JshG14cb/by/PNzCeP1yOxx+QZV+H
+Xb1xewIzb38U1j42YSNrUbxmXeuqwIMFM08AmjG6f15k3huanIflit1cgilqy61ahcVpzwMjnV3Zdy9xTARoIAVPOjy4D73RkxEoY8sIdwv3Z8JpXIuRabMngmKPurdAVULWlpIVo
HhAC2r0j/52HuRHIVKck47hbutok4672FE1HzE8JfhuBfBrq8D131UF16p1C3MwCkVbzZhTRHoxR02MLAKE4Emw1L/rubxBq6APjLMuRw2KvJ/LDEwsCzxfn5SqxRwx9JQ=="
8 }
9
10
  
```

The content enclosed by these two curly braces (inclusive) is what needs to be signed to create the signature

The generated string is put into the parameter: "signature", and sent as part of API request

1. Extract the content to be signed in JSON format and trim un-necessary spaces, so that it looks like this:  
`{"orderId":"ZS109","accountNum":"HSRAC-2034543","storeId":"641"}`

2. Hash the above mentioned JSON content by using the SHA256withRSA algorithm. Then use the client's RSA private key to sign the value to obtain the signature. To achieve a better security level, the length of the RSA key/pairs must be 2048 bits. The following sample illustrates a raw signature:

`sXSGdA4tR4B0wnF6Nr8ShpfNMtHISWuzLpdKoNWskIgCcspMVFFzgkez4BrmtYXkMqZh1tyz/8sNNU3F2VTu0f0`

```
x+ZP4CnmVjNu8bcu4hTtnytA3Y1GZ/yXAUD+mVYGXeyD03fHrqDdI7k3xV/Q8FC0d0culTsN6RRMxMZq+oqR2x
+Ej0Xvofp7BZJwhQE8Us4A1573FQz5EHDvCLx351q2hoMhXLCVLVDBHcpCgotuY4mg91MXh/qqcFGY/hQKhGdWA
bZ9tcp2Q5s2ESh37rqxn0wZrrepK8NC6vMBPUiSPxQefpev2nG0JzAH0jRPbBXYw1XBS6RBYKAmuFZZiQ==
```

3. Base64-encode the signature. A sample result is listed below:

```
c1hTR2RBNHRSNEIwd25GNk5yOFNocGZOTXRISVNXdXpMcGRLb05Xc2tJZ0Njc3BNVkJGemdRZXo0QnJtdFlYa01
xWmgxdH16LzhzTk5VM0YyV1R1MGZPeCtaUDRDbm1Wak510GJjaXU0aFR0bn10QTNZMUDA31YQVVEK21WWUdYZX
1ETzNmSHJxRGRJN2szeFYvUThGQ09kMGN1bFRzTjZSUk14TVpxK29xUjJ4K0VqT1hWb2ZwN0JaSndoUUU4VXM0Q
Ww1NzNGUXo1RUhEdkNMeDM1bHEyaG9NaFhMQ1ZMVkRCSGNwQ2dvdHZNG1nOTFNWGgvcXFjRkdZL2hRS2hHZFdB
Ylo5dGNwM1E1czJFU2gzN3JxeG5Pd1pycmVwSzh0QzZ2TUJQVW1TUhhRZWZXYybkcwSnpBSE9qU1BiQ1hZdzF
YQ1M2UkJZS0FtdWZaWmlRPT0=
```

4. Use the obtained string as the value of the Signature parameter.

### 1.3 Signature Verification

A sample response is shown as below.

```
{
  "orderId": "MSUATMA300",
  "accountNum": "10034",
  "storeId": 641,
  "storeName": "Saadiz Store",
  "transactionStatus": "PAID",
  "transactionAmount": 4255.25,
  "transactionDateTime": "22/05/2019 04:15 PM",
  "msisdn": "03451234567",
  "paymentMode": "MA",
  "responseCode": "0000",
  "responseDesc": "SUCCESS"
}

{
  "signature": "IAOtyTRDaT7mzYDxdXzY1VxIXGj1KsjxFuhaRX+JshG14cb/by/PNzCeP1y0Xx+QZv+H
  +XXb1xeWzb38U1j4ZYSNrUbxmKeuqwIMfM09AmjG6fISk3huanIJFwt1cgWqv61AhVCPzwMjnV3Zdy9xTARoIAVP0jy4D7JRKxEoY8sIdwv3Z8JpXiuRabMngmKPurdAVULWlpIVo
  HhAC2rOj/52MuRHIVKck47hbutoK4672FE1hZeY8JfhubfBRq8D131UFi6p1C3MwicVbZInTRHoxR02MVLake4Eomw1L/ru8x8Q6APjLMuRw2KvJ/LDEwsCzxfn5SqxRwx9JQ=="
}
```

After receiving a response, perform the following steps to verify the signature:

1. Split the full response contents to 2 parts, the response JSON string and the signature string, by using the regular expression instead of JSON object.
2. Trim any un-necessary spaces (if any) from and hash the response JSON string by using the SHA256 algorithm to obtain a message digest. Be sure not to change the order of the response parameters.
3. Use the public key to decrypt the signature to a message digest.
4. Compare the two message digests obtained in step 2 and step 3. If the digests are the same, then it indicates that the signed data has not been changed.

## Generate QR RSA API

This API Generates a QR code to make a payment from the customer's mobile account.

Following steps are to populate the *Credentials* header for this API:

1. Create a new string containing the username and password provided by Easypaisa, with a colon in between, like so: *username:password*
2. Encode this string to base64 and put the resulting encoded string in the *Credentials* header.

The QR Code bit stream that is returned by the API includes following information about the merchant and/or transaction:

- Payload Format Indicator (mandatory)
- Point of initiation method (optional)
- Merchant Identifier (mandatory)
- Merchant Category Code (mandatory)
- Transaction Currency Code (mandatory)
- Transaction Amount (optional)
- Country Code (mandatory)
- Merchant Name (mandatory)
- Merchant City (mandatory)
- Additional Data Field (mandatory)
  - Store ID (mandatory) – ID of that store
  - Order reference number (optional) – Order ID of the merchant as sent in the request.
  - Transaction Point ID (optional) – Necessary for retail merchants
  - Product Id (optional) – ID of the product as stored in EasyPaisa. For Partial QR codes.
- CRC (mandatory)

In order to convert the QR code into an image, developers can use any online plugin, freely available on the web. Following is the URL to one possible plugin: <https://codebeautify.org/base64-to-image-converter>

**Endpoint URL:** <BASE\_URL>/generate-qr

**Operation Name:** GenerateQR

**Time-Out:** 140 Sec

### *Pre-Requisites*

1. Credentials must be valid.

### **Request Attributes**

#### *Request Header Parameters*

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>Credentials</b>	Base64 encoded username:password string as described in the steps above	<b>Yes</b>

#### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>request</b>	Request Object	Yes
<b>request.storeId</b>	Store ID assigned by EasyPaisa	Yes
<b>request.paymentMethod</b>	Payment method. Value: QR_PAYMENT_METHOD	Yes
<b>request.orderRefNum</b>	Merchant's system generated OrderID	Yes
<b>request.amount</b>	Total amount of the transaction in PKR, if not given, a static QR will be generated	No
<b>request.transactionPointNum</b>	Transaction point number assigned by EasyPaisa	No
<b>request.productNumber</b>	Identifier of the product being purchased	No
<b>signature</b>	Signature generated as shown in <a href="#">Encryption Guideline</a>	Yes

## Response Attributes

### Response Body Parameters

Parameter Name	Data Type	Mandatory
<b>responseCode</b>	String	Yes
<b>responseDesc</b>	String	Yes
<b>qrCode</b>	String	No

## Response Codes

Response Code	Description
<b>0000</b>	SUCCESS
<b>0002</b>	REQUIRED_FIELD_MISSING
<b>0003</b>	INVALID_ORDER_ID
<b>0006</b>	INVALID_STORE_ID
<b>0010</b>	INVALID_CREDENTIALS
<b>0023</b>	SIGNATURE_ERROR
<b>0024</b>	SIGNATURE_INVALID

### Sample Request Headers

X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0

X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221

Credentials: eHl6OmYyNDFkMmU1ZWU5ZDRkNzRlYmZjN2UyY2Y1OGI0ZDlh

```
{
  "request": {
    "storeId": "9517",
    "paymentMethod": "QR_PAYMENT_METHOD",
    "orderRefNum": "Saad123",
    "amount": "100",
    "transactionPointNum": "",
    "productNumber": ""
  },
  "signature": "JojvKm58uTIByB95sN4EmszDGo9w5Cf37GEHjZm1tjub115oaI61m/ZMA1lE6by20oo0AXb9T9V1
3mXM6q509w264uUf00LClq+1lnNA4WNsgN4ihdoSPU8pT99qDA4fQRQpZtv9qXniZ190q6Xqw2txXs2Q9L03BsrdE6ss7x
uw9yTfPuHbWj5/eOxM18n5wdAj++kN3/a7W71dcrzk0i0US28XY+k7pFiZvCut3aJdK/ywM7qUpuCWFT3cMzJwr1Fn6StD
hJbLK5DRQz1WsJtK+toVW9Qnh6xocJBzhT3YnZBeLZZyOibymStEn0QnhLTf7HDVWld1hmB4yeF/oQ=="
}
```

### *Sample Response*

```
{  
    "response": {  
        "qrCode": "iVBORw0KGgoAAAANSUhEUgAAQAAH0CAIAAAE+EjdAAAPs01EQVR42u3cwXUjMRBDQeWftDa  
IfIXDYP37SG0SXdTJn68kaa6PjZAKuEuS4C5JgrskCe6SJLhLEtw1SXCYJMFdkgR3SRLcJQnukiS4S5LgLkmCuyQJ7pIKu  
Es3CVJcJckwV2SBHdJEtw1Ce6SJLhLkuAuSYK7JAnukiS4SxLcJU1wlyTBXZIEd0kS3CUJ7pIKuEuS4C5JgrskCe6SJLh  
LEtw1SXCYJMFdkgR3SRLcJQnuCe8x19Vq/M8n/+7Zq50TeepeW2ezD3cbDHe4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7  
nCH09zhDne4m32422C4wx3uZh/ucIc730E0d7jDHe5whzvc4Q53uMMd7nDv0zqNrDQCvffJV9fG3jqbfbjDHe5whzvc4Q5  
3uMMd7ryC09zhDne4w91iwR3ucIc730G0w30E0d7MPdxsMd7jDHe5whzvc4Q53uMMd7nCH09zhbrHgDne4wx3ufVA2jt1rF  
BrRhHVuxN3swx3ucIc730E0d7jDHe5wh7sNhjvc4W724W6D4Q53uJt9uNtguMMd7mYf7jYY7nCH09zhDne4wx3ucIc730E  
Od7MPdxsMd7jD3ezD/a0N3juULpW/+YuuupoFuMMd7nCH09zhDne4wx3ucIc73L0z30E0d7jDHe5wh7s5gjvc4Q53ujsju  
MMd7nCH09zhDne4wx3ucIe7Qw13uMMd7nB3KOEd7jD3Qbfc9a4zq+dq8yrLwOT4Q53uMMd7nCH09zhDne4wx3ucIc730F  
u9uFug+E0d7ibfbjDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0dxsMd7jD3ezDvWCxQg5148VwtZKNF9HexW/24  
Q53uMMd7nCH09zhDne48wrucIc730E0d4sFd7jDHe5whzvc4Q53uMPdbsMd7nCH09zhDne4wx3ucIc730E0d7hbLLjDHe5  
wh/vNYjW2N0ie9WzaD53G2Yc73D3rWc/CHe5w96xn4Q53uMPds56F09zhDnfPehbucIe7Afaz+E0d7h71r0ehTvc4e5Zz  
8Id7nCHu2c9C3e4wx3unvUs30GuxIsw83v3hn9vjzL/IseD7nCH09wFd7jDHe5wh7vgDne4wx3ugjvc4S64C+5wh7vgLrj  
DHe6C09zhDne4w11whzvc4Q53wR3ucIc73N8a4l13fm1/G6/JvXPV+Czc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDH  
e5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uM09o73hb2Q0E7s9KBsvpD2CK9yA09zhDne4wx3  
ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730GOM7jDHe5whzvc4Q53uMMd7nCH09zhDne4hx67q/F+7  
Xv3dnCP1dd+QnXACHF1wh3ucIc730E0d7jDHe5whzvc4Q53uMPd98Id7oI730E0d7gL7nCH09zhDne4QxbucIc730E0d7j  
DHe5wh7vvhTvc4Q53rCTw7zr8m30VuUd7z8Id7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4w  
x3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09z3cc8cpCs49tY5850zf6y89q0hcbcRhDne4wx3ucIc730E0d7jDHe5whzv  
c4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3uHaw0bmEmdp18N65V4+xduL+Nz  
8Id7nCH09zhDne4wx3ucIc730E0d7jDHe5wBxbc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nC  
H09z3cc+EmvNgZb5z41tdPdt4Pb82ZXCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc73  
0E0d7jDHe5whzvc4Q53uMMd7nCH09zhDvcUdF6jsPGT/WhoPxuN0w13uMMd7nCH09zhDne4wx3ucIc730E0d+cZ7nA3DHC  
3g3CH09zRAHe4wx3ucIc730E0d7jDHe5whzvc4Q53uMPdeYY73A0D302g8wz3mzF7bbwz/97Gq92F1D6/cIc730E0d7jDH  
e5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0947jvvdwjqQM  
Myvx191bbXsEd7nCHu7eC09zhDne4wx3ucIc730E0d7jDHTpwhzvc4Q53uMMd7nCH09zhbp3hDne4wx3ucPdwIcIc730E0d  
7jDHe5whztG4f4i7pkHKzN71MB342oMgDVwMcAd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne  
4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09wX4Hht+6+g3Bvvq4thniRXHdzDne4wx3ucIc730E0d7jDHe5whzvc4  
Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4w318Cz9zGb0E8/xaexMKd7jDHe6C09z  
hDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nBF0057JF0dr  
MZhyKRh70Jq3KP5Hxxwhzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc  
730E0d7jDHe5whzvc4Q73T+b2Z15I0Mm/2hszv3WTAn4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3uc  
Ic730E0dwTDHe5whzvc4Q53uMMd7nD3yXB300A0d7jDHe6V/0KgcUQb93dvnV/b/b3Zhzcvc4Q53uMMd7nCH09zhDne4wx3  
ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc73  
0E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5  
w/+Db8J8f973hz7xiMyelca0q6Ic730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53u  
MMd7nCH09zhDne4wx3ucIc730E0d7h/rY487hnu/ eiHqrfPorkIU730GOUbjDHe5whzvc4Q53uMMd7nCH09zhDne4wx3  
ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7iH4n5F0u+OeyYrV8+CI+F+FsNP50e3wX4A53uMMd7  
nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7p8rOPa  
unMwL+LV3bjzPjXzvzSDc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc73  
0E0d7jDHe5whzvc4Q53uMP97w5H5vf+7kD7502fI51/b+zV17gacIe7T4Y730E0d7j7ZLjDHe5whzvc4Q53uMMd7nCH09z  
hDncEwx3ucIc73BEmd7jDHe5w981whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7p8rOPa  
ME4WgLJ9NSrohzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4w907wx3ucIc7  
KOE0d7jDHe6ghDvc4Q53uMMd7nCH09zhDne4w/27N/yZI2r  
ME4WgLJ9NSrohzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d
```

```

7jDHe5whzvc4Q53uIfinknD1R41Qrl32hsvJOcK7nCH09zh7lzbHe5whzvc4Q53uMMd7nCH09zhbgjhDne4wx3uhhDucIc
730E0d7g7V3CH09zhDnfCu5whzvc4Q53uMMd7nCH09zh7vPd6gBMcv1ipz9xu/F+5whw7c4Q53IQnucIc73AV3uFtnuMNdc
Ic730E0d7jDHe5whzvc4Q4duMMd7nCH09zhDne4C+5wt85wh7vgbiXhDne4p4xZ4wC/NvyNF2EjK2ahjm+4wx3ucIc730E
0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5
whzvc4Q53uMMd7nCH+wLumdhdfMVwT65/bTvnefMSYE730E0d7jDHe5whzvc4Q53uMMdwXCH09zhDne4wx3ucIc730E0d
7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDve/Z3+1R5qhkcpa5v43T3Xhy4A53uMMd7nCH09zhDne4wx3
ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d
E/e089whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5
whzvc4Q731KPz2oWUuZKZ203tQuM67105cIc730FuneE0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe5
e5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc73F0Gf2+A99557+/1syDhYmi8cuA0d7jDHe5whzvc4Q53uMMd7nCH09zhDne
4wx3ucIc730E0d7jDHe5whzvc4Q53uMMd7nCH09zhDne4wx3ucIc730E0d7jDHe6SJLhLkuAuSYK7JAnukgR3SRLcJUlw1
yTBXZIEd0kS3CUJ7pIkuEuS4C5JgrskCe6SBhdJEtw1SXCXJMFDkgR3SRLcJQnukiS4S5LgLkmCuyQJ7pIED0kS3CVJcJc
kwV2SBHdJEtw1Ce6SJLhLkuAuSYK7JAnukgR3SRLcJUlw1yTBXZIEd0kS3CUJ7pKuv4B8J8AHnktuc0AAAAASUVORK5CY
II=",
    "responseCode": "0000",
    "responseDesc": "SUCCESS",
    "shopifyRedirectURL": ""
},
"signature": "b7rCnIVdTlIdSdJ8RUcxnaLRznfzJyoxU061wwsGIYj4lXYTZGTAsaL0jqGT1BDhE2iur3fMrQBC
bDSQqTlWKd+sIxTEAu/1yknb48txgLCaXsbv+iBKqtKt+Rx1CsxUYIK7swfPGZoVu6Ih25AvBDp4D4dfQ8pYKzXe4V6GFm
dQCUic15W5Dzs9GDuJkRAu0U+QzhZNeyHSJUc2gX/dnnI9XCJkP2tYKnciAjspd0C20DLmz/+oxW6bKhiwCQ/E7euKV8Tq
CyR86QJxwMG2uV3/XEt8WCAhwYVcahIYqPPCP7gZmmPJH8RoFE2w0HjC5EoYD9WlIBdbDxZrfMVGw=="
}

```

## CURL

```

curl -L -X POST '<BASE_URL>/generate-qr' -H 'X-IBM-Client-
Id: 1d73464a465d5dee1886f0dbf8f67ab0' -H 'X-IBM-Client-
Secret: 79bcc980cd3268cb26ff46a50607221' -
H 'Credentials: eHl60mYyNDFkMmU1ZWU5ZDRkNzR1YmZjN2UyY2Y10GI0ZDlh' -H 'Content-
Type: application/json' --data-raw '{
    "request": {
        "storeId": "9517",
        "paymentMethod": "QR_PAYMENT_METHOD",
        "orderRefNum": "Saad123",
        "amount": "100",
        "transactionPointNum": "",
        "productNumber": ""
    },
    "signature": "JojvKm58uTIByB95sN4EmszDGo9w5CF37GEHjZm1tjub115oaI61m/ZMA11E6by20oo0AXb9T9V1
3mXM6q509w264uUF00LC1q+1lnNA4WNsgN4ihdoSPU8pT99qDA4fQRQpZtv9qXniZ190q6Xqw2txXs2Q9L03BsrdE6ss7x
uw9yTfPuHbWj5/e0xM18n5wdAj++kN3/a7W71drZkOi0US28XY+k7pFiZvCut3aJdK/ywM7qUpuCWFT3cMzJwr1Fn6StD
hJbLK5DRQz1WsJtK+toVW9Qnh6xocJBzhT3YnZBeLZZyOibymStEn0QnhLTf7HDVwlldhmB4yeF/oQ=="
}'

```

## Initiate MA Transaction

This API initiates a mobile account payment transaction.

Following steps are to populate the *Credentials* header for this API:

1. Create a new string containing the username and password provided by Easypaisa, with a colon in between, like so: *username:password*
2. Encode this string to base64 and put the resulting encoded string in the *Credentials* header.

**Endpoint URL:** <BASE\_URL>/initiate-ma-transaction

**Operation Name:** InitiateMATransaction

**Time-Out:** 140 Sec

### Pre-Requisites

1. Credentials must be valid.

### Request Attributes

#### Request Header Parameters

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>X-IBM-Client-Secret</b>	API Authentication credential	Yes
<b>Credentials</b>	Base64 encoded <i>username:password</i> string as described in the steps above	Yes

*Request Body Parameters*

Parameter Name	Description	Mandatory
<b>request</b>	Request Object	Yes
<b>request.orderId</b>	Merchant's system generated order ID	Yes
<b>request.storeId</b>	Store ID assigned by EasyPaisa	Yes
<b>request.transactionAmount</b>	Total Transaction amount	Yes
<b>request.transactionType</b>	Type of Transaction. Value: MA	Yes
<b>request.mobileAccountNo</b>	Format: 03xxxxxxxx (11 digits)	Yes
<b>request.emailAddress</b>	Format: abc@xyz.com	Yes
<b>signature</b>	Signature generated as shown in <a href="#">Encryption Guideline</a>	Yes

**Response Attributes***Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>responseCode</b>	String	Yes
<b>responseDesc</b>	String	Yes
<b>qrCode</b>	String	No
<b>orderId</b>	String	No
<b>storeId</b>	String	No
<b>transactionId</b>	String	No
<b>transactionDateTime</b>	String	No
<b>optional1</b>		No
<b>optional2</b>		No
<b>optional3</b>		No
<b>optional4</b>		No
<b>optional5</b>		No

## Response Codes

Response Code	Description
<b>0000</b>	SUCCESS
<b>0001</b>	SYSTEM_ERROR
<b>0002</b>	REQUIRED_FIELD_MISSING
<b>0003</b>	INVALID_ORDER_ID
<b>0005</b>	MERCHANT_ACCOUNT_NOT_ACTIVE
<b>0006</b>	INVALID_STORE_ID
<b>0007</b>	STORE_NOT_ACTIVE
<b>0008</b>	PAYMENT_METHOD_NOT_ENABLED
<b>0010</b>	INVALID_CREDENTIALS
<b>0013</b>	LOW_BALANCE
<b>0014</b>	ACCOUNT_DOES_NOT_EXIST
<b>0023</b>	SIGNATURE_ERROR
<b>0024</b>	SIGNATURE_INVALID

### Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0

**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221

**Credentials:** eHl6OmYyNDFkMmU1ZWU5ZDRkNzRlYmZjN2UyY2Y1OGI0ZDlh

```
{
  "request": {
    "orderId": "saad_123",
    "storeId": "11723",
    "transactionAmount": "1",
    "transactionType": "MA",
    "mobileAccountNo": "03467171252",
    "emailAddress": "saad.zikria@telenorbank.pk"
  },
  "signature": "Wx2luYCtkOMnTjWMu2FJzYsLEJwHgJGsrWHeKUErp6zdsSIZswc2vH2pm06hmeq/HZZCDjeVbrYX
sV6pixq31SILoJ4Gdv0j57AHzhw50o+7wS61fh/psM6i3puD7zD0ySy8mU3NCLqkGNZnj3e3Kqmi60X0gKc16rHy4HL9dU
i74A1MuW7RdiJRq8WMYfFa9c3fJFm+LaaGkoFzMR9kLxMN9BWYxJStiTQaKG9hslwz6msG5g7GBi/ci57s0hcaIv990Qvq
dTDSX6oE+oMcKhMYYL6tJbkJmqk0Q+H46ZiLISkge/IGRJn19Kso+L0w2veRyw7xEHzokzrqaRCmbQ=="
}
```

### Sample Response

```
{
  "signature": "1MWUBdNaOXcLCYLDa4gDCGfk1ZE/1ff1vx3FLkb7M4g9c6iLCOq0MhM/Brqjz/vt/HxRGVLWz0h0
QGzn/gCiAH00XLSuHbpzeuHE5WNm8AWbU2hEtBbmgJ2pHZlB2wKEP1M10HfI8+gljry4lZ0eRjTvGYhIIwokzvJ5RjLkbT
B6faNZnUaTCdi0RGbdCEGp+QQb5oocG4DmZAhcgioVbe1R9px6y0ZuseaX4r+kPDYqp9GYzn0hj22Jf01hFC0/f+TBdHtc
tB6FSu/txnjBBRBXK6IyMlvfivcQ/uEuYWcHgUB0sGk3qV6+Tuz2KVCBazxktuVLQvyMzu41PTZbWg==",
  "response": {
    "orderId": "saad_123",
    "storeId": "11723",
    "transactionId": "2724750",
    "transactionDateTime": "26/04/2021 02:20 PM",
    "responseCode": "0000",
    "responseDesc": "SUCCESS"
  }
}
```

### CURL

```
curl -L -X POST '<BASE_URL>/initiate-ma-transaction' -H 'X-IBM-Client-
Id: 1d73464a465d5dee1886f0dbf8f67ab0' -H 'X-IBM-Client-
Secret: 79bcc980cd3268cb26ff46a50607221' -
H 'Credentials: eH160mYyNDFkMmU1ZWU5ZDRkNzR1YmZjN2UyY2Y10GI0ZDlh' -H 'Content-
Type: application/json' --data-raw '{
  "request": {
    "orderId": "saad_123",
    "storeId": "11723",
    "transactionAmount": "1",
    "transactionType": "MA",
    "mobileAccountNo": "03467171252",
    "emailAddress": "saad.zikria@telenorbank.pk"
  },
  "signature": "Wx2luYCtk0MnTjWMu2FJzYsLEJwHgJGsrWHeKUErp6zdsSIZswc2vH2pm06hmeq/HZZCDjeVbrYX
sV6pixq31SIloJ4Gdv0j57AHzhw50o+7wS61fh/psM6i3puD7zD0ySy8mU3NCLqkGNZnj3e3Kqmi60X0gKc16rHy4HL9dU
i74A1MuW7RdijRq8WMYFFa9c3fJFm+LaaGkoFzMR9kLxMN9BWYxJStiTQaKG9hsWwz6msG5g7GBi/ci57s0hcaIv990Qvq
dTDSX6oE+oMcKhMYYL6tJbkJmqk0Q+H46ZiLISkge/IGRJnl9Kso+L0w2veRyw7xEMzokzrqr0RCmbQ=="'
}'
```

## Reversal RSA

This API initiates a reversal of a mobile account payment transaction.

Following steps are to populate the *Credentials* header for this API:

1. Create a new string containing the username and password provided by Easypaisa, with a colon in between, like so: *username:password*
2. Encode this string to base64 and put the resulting encoded string in the *Credentials* header.

**Endpoint URL:** <BASE\_URL>/reversalBusiness

**Operation Name:** ReversalRSA

**Time-Out:** 140 Sec

### Pre-Requisites

1. Credentials must be valid.

### Request Attributes

#### Request Header Parameters

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>X-IBM-Client-Secret</b>	API Authentication credential	Yes
<b>Credentials</b>	Base64 encoded <i>username:password</i> string as described in the steps above	Yes

*Request Body Parameters*

Parameter Name	Description	Mandatory
<b>request</b>	Request Object	Yes
<b>request.externalSystemId</b>	External System (EP App or Some other App) sending the transaction request.	No
<b>request.storeId</b>	Store ID assigned by EasyPaisa	Yes
<b>request.reversalAmount</b>	Total amount to be reversed	Yes
<b>request.orderId</b>	Merchant generated order reference number	Yes
<b>request.orderDate</b>	Format: dd/MM/YYYY	Yes
<b>request.cnic</b>	Format: 37405xxxxxxxx (no dashes). Required for OTC reversal	Conditional
<b>signature</b>	Signature generated as shown in <a href="#">Encryption Guideline</a>	Yes

*Response Attributes**Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>responseCode</b>	String	Yes
<b>responseDesc</b>	String	Yes
<b>transactionId</b>	String	No
<b>merchantName</b>	String	No

*Response Codes*

Response Code	Description
<b>0000</b>	SUCCESS
<b>0001</b>	TRANSACTION_DOES_NOT_EXIST
<b>0002</b>	TRANSACTION_IS_NOT_SETTLED
<b>0003</b>	TRANSACTION_ALREADY_REVERSED

### Sample Request Headers

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0  
**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221  
**Credentials:** eHI6OmYyNDFkMmU1ZWU5ZDRkNzRlYmZjN2UyY2Y1OGI0ZDlh

```
{
  "request": {
    "externalSystemId": "01",
    "storeId": "11723",
    "reversalAmount": "4",
    "orderId": "saad_123",
    "orderDate": "12/04/2021",
    "cnic": "1730140447356"
  },
  "signature": "bP+gxGwema/F0nZFzNQzzNmIPN5F00GzlePsF0iRNDIcpt/2qQNbX897gGyIMNsJ5APXznvpEIiF1EX3ATnxKZRIp8p/zSAqDRtfmBXUdZcLHu77DW8N22ueZa2Y5ubMKDLZcctoR7MoARP55fisRTciqBnxEe2Js2DZPrkthRDaqmwWlkcBitLsLof/4exMMOFK5GZIc6RibcqNGb9HEldug4/BIQ0+vMIQiJHF1S5t/BaKeMWqq/mjsiBqUic4JbMuEfY8ubbu3BKuRL1JR8XiP2m1ErvXmPmsLr+u1jHh9hA4minv14GiXoKTqkvjYFge50LjvrIrUXfkT5qkJQ=="
}
```

### Sample Response

```
{
  "response": {
    "responseCode": "0000",
    "responseDesc": "SUCCESS",
    "transactionId": "321096",
    "merchantName": "Saad Bin Zikria"
  },
  "signature": "0t2cCaNnP BXkyBL7rQ5ouEgNdUEfBF1ZqJB0Pb4wCwhuSd6uEcoX2nlgdT0272mnGqhmfhk41cn63eodjc0zzKn6Ycb9HnjybgXYGXcVyE1NxVvBuAz1G2Rbq4JHMvdZmI1T29AKVzoJSbzUrQQuTbS12nciL0TxshfBQGf+IZHZ7XZZei9PlZD+xLVgLsd8cJ3tf+PJFO3cz8vo2ZFHkzHKS101dNSkoeduYji5c/i/zVj9m1tRYSIr7X5mrVel/m2J3aUL6UEgq5pqnwe0gwtrcUwoL5sJKM4oGA2aCeTYoeDJMGiuUkx6r24rYbhw95TTpA7T6jzVjRFlaUqWA=="
}
```

## CURL

```
curl -L -X POST '<BASE_URL>/reversalBusiness' -H 'X-IBM-Client-  
Id: 1d73464a465d5dee1886f0dbf8f67ab0' -H 'X-IBM-Client-  
Secret: 79bcc980cd3268cb26ff46a50607221' -  
H 'Credentials: eHl60mYyNDFkMmU1ZWU5ZDRkNzRlYmZjN2UyY2Y10GI0ZDlh' -H 'Content-  
Type: application/json' --data-raw '{  
    "request": {  
        "externalSystemId": "01",  
        "storeId": "11723",  
        "reversalAmount": "4",  
        "orderId": "saad_123",  
        "orderDate": "12/04/2021",  
        "cnic": "1730140447356"  
    },  
    "signature": "bP+gxGwema/F0nZFzNQzZNmIPN5F00GzlePsF0iRNDIcpt/2qQNbX897gGyIMNsJ5APXznvpEIiF  
1EX3ATnxKZRIp8p/zSAqDRtfmBXUdZcLHu77DW8N22ueZa2Y5ubMKDLZcctoR7MoARP55fisRTciqBnxEe2Js2DZPrkth  
RDaqmwWkcBitLsLof/4exMMOFK5GZIc6RibcqNGb9HEldug4/BIQO+vMIQiJHF1S5t/BaKeMWqq/mjsiBqUic4JbMuEfY8  
ubbu3BKuRL1JR8XiP2mlErvXmPmsLr+u1jHh9hA4minvl4GiXoKTqkvjYFge50LjvrIrUXfkT5qkJQ=="  
}'
```

## Inquire Transaction

This API inquires about a mobile account payment transaction.

Following steps are to populate the *Credentials* header for this API:

1. Create a new string containing the username and password provided by Easypaisa, with a colon in between, like so: *username:password*
2. Encode this string to base64 and put the resulting encoded string in the *Credentials* header.

**Endpoint URL:** <BASE\_URL>/inquire-transaction-rsa

**Operation Name:** InquireTransactionRSA

**Time-Out:** 140 Sec

### Pre-Requisites

1. Credentials must be valid.

### Request Attributes

#### Request Header Parameters

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>X-IBM-Client-Secret</b>	API Authentication credential	Yes
<b>Credentials</b>	Base64 encoded <i>username:password</i> string as described in the steps above	Yes

### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>request</b>	Request Object	Yes
<b>request.orderId</b>	Merchant generated order reference number	Yes
<b>request.accountNum</b>	Merchant's Easypaisa merchant account number	Yes
<b>request.storeId</b>	Store ID assigned by EasyPaisa. Should be same ID which is associated with partner account credentials sent in the header.	Yes
<b>signature</b>	Signature generated as shown in <a href="#">Encryption Guideline</a>	Yes

### *Response Attributes*

#### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>responseCode</b>	String	Yes
<b>responseDesc</b>	String	Yes
<b>orderId</b>	String	No
<b>accountNum</b>	String	No
<b>storeId</b>	String	No
<b>storeName</b>	String	No
<b>transactionStatus</b>	String	No
<b>transactionAmount</b>	String	No
<b>transactionDateTime</b>	String	No
<b>msisdn</b>	String	No
<b>paymentMode</b>	String	No

### *Response Codes*

Response Code	Description
<b>0000</b>	SUCCESS
<b>0002</b>	REQUIRED_FIELD_MISSING
<b>0003</b>	INVALID_ORDER_ID
<b>0006</b>	INVALID_STORE_ID
<b>0010</b>	INVALID_CREDENTIALS
<b>0023</b>	SIGNATURE_ERROR
<b>0024</b>	SIGNATURE_INVALID

*Sample Request Headers*

**X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0  
**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221  
**Credentials:** eHl6OmYyNDFkMmU1ZWU5ZDRkNzRlYmZjN2UyY2Y1OGI0ZDlh

```
{
  "request": {
    "orderId": "miniapp_saad_123456",
    "accountNum": "1041178",
    "storeId": "11723"
  },
  "signature": "H2zY/r9/Cyh3L9fSI6KmqH3n7ljoOK1gBEqTOLmJ/b6Eif12k0rvJDN3BUNL94n4R4TPAdd4ajNIh1JhcCb1ONi4A+uAGDZwmfHrpbbbrWwjU9ThdmoSYc7CrSipQU+T7L+7pkMQyKyLW5dYH9BqX+/m10MC5p+vYTZ1z4F1MUmF1Pd9rEBfMpI7/VkIaom15XjfBs72IGTuuZWPLJRniD6d5dcDOEmFEnTVw31ZdhMjRapt4TS1DtV846RC8G9b91MEeUvRm/DkAB3a4hgHanlroNC3jL8mOJChdimfTR5Bal10pgAGI0+ATKdKyokFE20uGReHzaVw8XAR7vZHg=="
}
```

*Sample Response*

```
{
  "response": {
    "orderId": "miniapp_saad_123456",
    "accountNum": "1041178",
    "storeId": 11723,
    "storeName": "TestSaad",
    "transactionStatus": "PAID",
    "transactionAmount": 786.0,
    "transactionDateTime": "29/03/2021 01:55 PM",
    "msisdn": "03467171252",
    "paymentMode": "MA",
    "responseCode": "0000",
    "responseDesc": "SUCCESS"
  },
  "signature": "ANKEJV9BPXFGV/YyxFcJ+2twctFJdtQoNRipNkGHVNJOi1H0mEBF40+xjuvKuSOagAYK0fTDaS0jQjtKwdEKmk6Q9iARbXTCsZucaikaPHZyHxiqyoGWVkpAwhw8LuIGcAKScbxF3p1emVQXEOGj9osuuQo786MPE4LhDjZtmv6F+NpzLeuR2eNsx4TovakhSsT9yD2zRNSnyFYHaVBEmJ+rM8yZjuls5vHfdiGbIglWDZhdEaZNqw0G0tCZN0p0pHtXhpgC+PqzimaBZwpaaHwaKbgP0FsEh2Lu1dcp250qES+K59FD9WB5LeKo0LJP+QZqYz8GZnnPz5rBmWZbVQ=="
}
```

## CURL

```
curl -L -X POST '<BASE_URL>/inquire-transaction-rsa' -H 'X-IBM-Client-  
Id: 1d73464a465d5dee1886f0dbf8f67ab0' -H 'X-IBM-Client-  
Secret: 79bbcc980cd3268cb26ff46a50607221' -  
H 'Credentials: eHl60mYyNDFkMmU1ZWU5ZDRkNzRlYmZjN2UyY2Y10GI0ZDlh' -H 'Content-  
Type: application/json' --data-raw '{  
    "request": {  
        "orderId": "miniapp_saad_123456",  
        "accountNum": "1041178",  
        "storeId": "11723"  
    },  
    "signature": "H2zY/r9/Cyh3L9fSI6KmqH3n7ljoOK1gBEqTOLmJ/b6Eif12k0rvJDN3BUNL94n4R4TPAdd4ajNI  
h1JhcCb1ONi4A+uAGDZwmfHrpbbbrWwjU9ThdmoSYc7CrSipQU+T7L+7pkMQyKyLW5dYH9BqX+/m10MC5p+vYTZ1z4F1MU  
mFlPd9rEBfMpI7/VkIaoml5XjfBs72IGTuuZWPLJRniD6d5dcDOEmFEnTVw31ZdhMjRapt4TS1DtVkB846RC8G9b91MEeUv  
Rm/DkAB3a4hgHanlroNC3jL8m0JChdimfTR5Bal10pgAGl0+ATKdKyokFE20uGReHzaVW8XAR7vZHg=="  
}'
```

## Pinless Mobile Account Payment

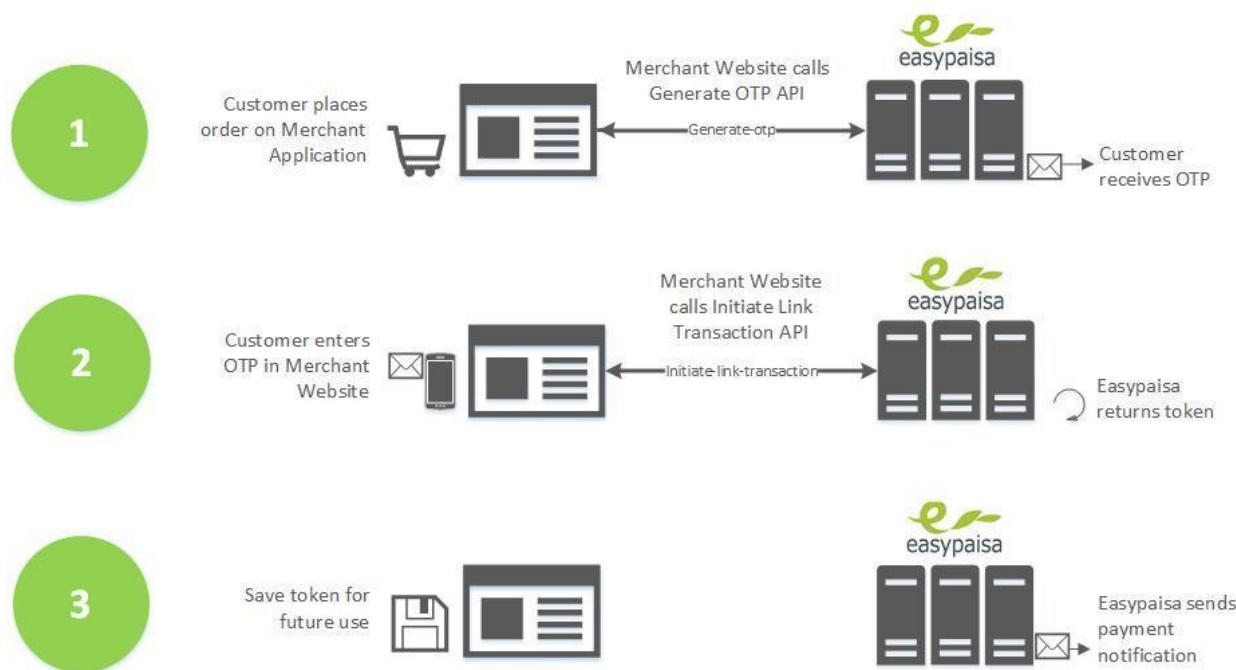
Easypaisa Pinless MA APIs enables online merchants/webstores to allow their customers to pay from their Easypaisa Mobile Accounts (MA), but without being prompted for the PIN. Merchant applications can use these APIs to generate a token for Easypaisa customers and then use these tokens to create pay.

### 1. Transaction Flow

There are two main transaction flows that merchant applications must use.

#### 1.1 Linking the Customer

When an Easypaisa Mobile Account (MA) user wants to use pinless transactions and has agreed to the terms and conditions, the merchant website must link the customers' easypaisa account with their own, before they can allow Pinless MA transactions. In order to do this, the merchant application must use the following method of integration.



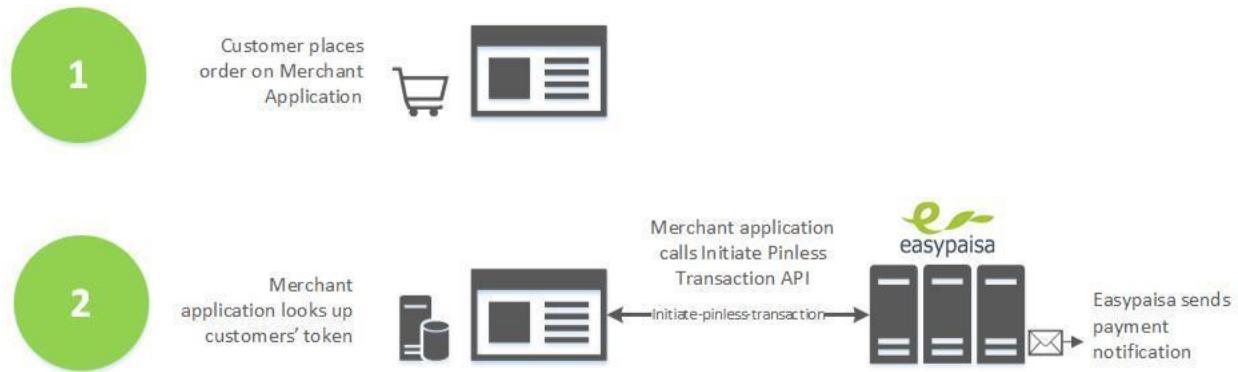
Action	System Response
Merchant website calls Generate OTP API	Easypaisa sends an OTP (One time password) to customer. Easypaisa returns acknowledgement to merchant website. Easypaisa expires OTP after 15 minutes.
Merchant website collects OTP from customer and calls Debit Link API	Easypaisa verifies customer through OTP If verified, Easypaisa performs MA transaction (prompts customer for PIN) and sends payment notification to customer. Easypaisa links the customer's and merchant's Easypaisa accounts in its repository, for future reference. Easypaisa returns a unique token to the merchant, representing the link with the customer.
Merchant website saves customers' token number	

The first transaction performed during the linking process requires customers to enter the PIN. Once the transaction is performed successfully, the customer and merchant accounts are paired in Easypaisa. Once the customer and merchant accounts have been paired in Easypaisa, then the customer can perform pinless MA transactions on that particular merchant website.

After a customer and a merchant have been paired in Easypaisa, then the merchant application can no longer use the same transaction flow for the customer. For future transactions from the customer, the merchant application must use the token number assigned to their pair with the customer and follow the steps mentioned below.

### 3.2 Pinless MA Payments

This method of integration is used to perform Pinless transactions with Easypaisa, given that the customer and merchant have been paired in Easypaisa (see section above for information about pairing/linking). When a paired Easypaisa Mobile Account user requests a Pinless transactions on a merchant application, then the merchant application must use the following steps of integration.



Action	System Response
Customer Places order on Merchant Application	
Merchant application looks up the customers' token and sends it to Easypaisa in Initiate-pinless-transaction API.	Easypaisa identifies the customers' token and verifies the link. If verified, Easypaisa performs the Pinless MA transaction (without prompting for PIN) and sends payment notification to customer. Easypaisa returns acknowledgement to merchant application.

## Pinless Payment - Generate OTP API

This API inquires about a mobile account payment transaction.

Following steps are to populate the *Credentials* header for this API:

1. Create a new string containing the username and password provided by Easypaisa, with a colon in between, like so: *username:password*
2. Encode this string to base64 and put the resulting encoded string in the *Credentials* header.

**Endpoint URL:** <BASE\_URL>/pinless/generate-otp

**Operation Name:** PinlessGenerateOTP

**Time-Out:** 140 Sec

### Pre-Requisites

1. Credentials must be valid.

### Request Attributes

#### Request Header Parameters

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>X-IBM-Client-Secret</b>	API Authentication credential	Yes
<b>Credentials</b>	Base64 encoded <i>username:password</i> string as described in the steps above	Yes

### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>request</b>	Request Object	Yes
<b>request.storeId</b>	Store ID assigned by EasyPaisa.	Yes
<b>request.mobileAccountNo</b>	Format: 03xxxxxxxxx	Yes
<b>signature</b>	Signature generated as shown in <a href="#">Encryption Guideline</a>	Yes

### **Response Attributes**

#### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>responseCode</b>	String	Yes
<b>responseDesc</b>	String	Yes

### **Response Codes**

Response Code	Description
<b>0000</b>	SUCCESS
<b>0001</b>	SYSTEM_ERROR
<b>0002</b>	REQUIRED_FIELD_MISSING
<b>0003</b>	INVALID_ORDER_ID
<b>0004</b>	INVALID_MERCHANT_ACCOUNT_NO
<b>0005</b>	MERCHANT_ACCOUNT_NOT_ACTIVE
<b>0006</b>	INVALID_STORE_ID
<b>0007</b>	STORE_NOT_ACTIVE
<b>0008</b>	PAYMENT_METHOD_NOT_ENABLED
<b>0009</b>	CC_TRANSACTION_FAILED
<b>0010</b>	INVALID_CREDENTIALS
<b>0011</b>	WRONG_PIN_ENTERED
<b>0012</b>	PIN_NOT_ENTERED
<b>0013</b>	LOW_BALANCE
<b>0014</b>	ACCOUNT_DOES_NOT_EXIST
<b>0015</b>	INVALID_TOKEN_EXPIRY
<b>0016</b>	TOKEN_EXPIRY_BEFORE_CURRENT
<b>0017</b>	SETTLEMENT_NOT_CONFIGURED
<b>0018</b>	TOKEN_ALREADY_EXISTS
<b>0019</b>	TOKEN_DOES_NOT_EXIST
<b>0020</b>	PINLESS_NOT_ENABLED
<b>0021</b>	INVALID_PAYMENT_METHOD

<b>0022</b>	JSON_INVALID
<b>0023</b>	SIGNATURE_ERROR
<b>0024</b>	SIGNATURE_INVALID
<b>0025</b>	KEY_NOT_UPLOADED
<b>0026</b>	INVALID_MOBILE_NUMBER
<b>0027</b>	INVALID_EMAIL_ADDRESS
<b>0028</b>	INVALID_TXN_AMOUNT
<b>0029</b>	TXN_AMOUNT_BEYOND_LIMITS
<b>0030</b>	INVALID OTP
<b>0031</b>	OTP_CREATION_FAILED
<b>0032</b>	INTERNAL_ID_DOES_NOT_EXIST
<b>0033</b>	INTERNAL_ID_INCORRECT
<b>0034</b>	OTP_EXPIRED
<b>0035</b>	LINK_ALREADY_INACTIVE

*Sample Request Headers***X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221**Credentials:** eHl6OmYyNDFkMmU1ZWU5ZDRkNzRlYmZjN2UyY2Y1OGI0ZDlh

```
{
  "request": {
    "storeId": "2200",
    "mobileAccountNo": "03333436301"
  },
  "signature": "hkpcXzCdY7H5GddJOY3o5UUUY1Khfehfs17I1hu5h+LZGI0btugySxkVM80sioLZIYT1P02zUfe9
MrT/qz0kxYqW3ViAKY1E16IwIx3+jHfVhNvKok5k5F4q83FK97nQOPmQf5AheJfdm6vj7vvQ7E7Er/eNM/uYV/kwGsjoE
ksk09qnQGghgdPaU1M9T44xmF8+y1EV0c+rabXrgwq8N6/k7tP1wLJNx27msr7g/HzTdDKRdP90ibp7AFEppH1K24+qXb
+GrDSDPerEz/SPJJ1KMriPtEr6S2CXF5CdBUDvIlASC68djUbfe7iKsJ1EKAXBWzvurH/3E9EJE950Q=="
}
```

*Sample Response*

```
{
  "response": {
    "responseCode": "0000",
    "responseDesc": "SUCCESS",
  },
  "signature": "rwxg/lZSAq+PNkaN/j7q/0AJ8McQhTjIw+TBSdnGt5bFshH1/EranrCro01BfQHbPratVIfg14iy
6So+P20UJeUT1AmQBQnAxhff9cZJ4kwEQDzcBDszPcqem1UBTIkAzeE3Dsh0IuAhFHqmLNZUo3Be5nXUHyDwmmyR3HELcW
f1iQyLAHyyvoBYII/hFze1P+fIKniSw1VmdJb1EAiMDKoZyYUWPmR9TGfvKA+RN553oNH5jMJgI/aa4YR7tiTBfyVXzzk7
Rgs9pn/6ipyTwB1g7nTDR9aMvbA/kTPdfpY5/B5WE/FBVYM0eNGSM1UnjWBj0vwP2e0jjE1JgKBiT=
```

## CURL

```
curl -L -X POST '<BASE_URL>/pinless/generate-otp' -H 'X-IBM-Client-  
Id: 1d73464a465d5dee1886f0dbf8f67ab0' -H 'X-IBM-Client-  
Secret: 79bbcc980cd3268cb26ff46a50607221' -  
H 'Credentials: eHl60mYyNDFkMmU1ZWU5ZDRkNzRlYmZjN2UyY2Y10GI0ZDlh' -H 'Content-  
Type: application/json' --data-raw '{  
  
    "request": {  
        "storeId": "2200",  
        "mobileAccountNo": "03333436301"  
    },  
    "signature": "hkpcXzCdY7H5GddJOY3o5UUUY1Khfehfs17I1hu5h+LZGIObtugySxkVM80sioLZIYT1P02zUfe9  
MrT/qz0kxYqW3ViAKY1EI6IwIx3+JHfvhNvKok5k5F4q83FK97nQOPmQf5AheJfdm6vj7vvQ7E7Er/eNM/uYV/kwGsjoE  
ksK09qnQGghgdPaU1M9T44xmF8+y1EV0c+rabXrgwq8N6/k7tPlwLJNx27msr7g/HzTdDKRdP90ibp7AFEppH1K24+qXb  
+GrDSPerEz/SPJJ1KMriPtEr6S2CXF5CdBUDvIlASC68djUbfe7iKsJ1EKAXBWzvurH/3E9EJE950Q=="  
}'
```

## Pinless Payment - Initiate Link Transaction API

This API is used to verify the customers OTP, perform a normal transaction for the first time, and upon successful fund transfer, link customer and merchant for future pinless transactions.

Following steps are to populate the *Credentials* header for this API:

1. Create a new string containing the username and password provided by Easypaisa, with a colon in between, like so: *username:password*
2. Encode this string to base64 and put the resulting encoded string in the *Credentials* header.

**Endpoint URL:** <BASE\_URL>/pinless/initiate-link-transaction

**Operation Name:** PinlessInitiateLinkTransaction

**Time-Out: 140 Sec**

### Pre-Requisites

1. Credentials must be valid.
2. OTP must be valid.
3. Mobile account must be valid.
4. Mobile account must have sufficient balance.

### Request Attributes

#### Request Header Parameters

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	Yes
<b>X-IBM-Client-Secret</b>	API Authentication credential	Yes
<b>Credentials</b>	Base64 encoded <i>username:password</i> string as described in the steps above	Yes

***Request Body Parameters***

Parameter Name	Description	Mandatory
<b>request</b>	Request Object	Yes
<b>request.orderId</b>	Order ID	Yes
<b>request.storeId</b>	Store ID assigned by EasyPaisa.	Yes
<b>request.transactionAmount</b>	Transaction Amount	Yes
<b>request.transactionType</b>	Payment Method. Value: MA	Yes
<b>request.mobileAccountNo</b>	Format: 03xxxxxxxx	Yes
<b>request.emailAddress</b>	Customer's email address.	Yes
<b>request.otp</b>	Customer's OTP from <a href="#">Generate OTP API</a> .	Yes
<b>signature</b>	Signature generated as shown in <a href="#">Encryption Guideline</a>	Yes

***Response Attributes******Response Body Parameters***

Parameter Name	Data Type	Mandatory
<b>responseCode</b>	String	Yes
<b>responseDesc</b>	String	Yes
<b>orderId</b>	String	No
<b>storeId</b>	String	No
<b>transactionId</b>	String	No
<b>transactionDateTime</b>	String	No
<b>mobileAccountNo</b>	String	No
<b>emailAddress</b>	String	No
<b>tokenNumber</b>	String	No

***Response Codes***

Response Code	Description
<b>0000</b>	SUCCESS
<b>0001</b>	SYSTEM_ERROR
<b>0002</b>	REQUIRED_FIELD_MISSING
<b>0003</b>	INVALID_ORDER_ID
<b>0004</b>	INVALID_MERCHANT_ACCOUNT_NO
<b>0005</b>	MERCHANT_ACCOUNT_NOT_ACTIVE
<b>0006</b>	INVALID_STORE_ID
<b>0007</b>	STORE_NOT_ACTIVE
<b>0008</b>	PAYMENT_METHOD_NOT_ENABLED
<b>0009</b>	CC_TRANSACTION_FAILED
<b>0010</b>	INVALID_CREDENTIALS

<b>0011</b>	WRONG_PIN_ENTERED
<b>0012</b>	PIN_NOT_ENTERED
<b>0013</b>	LOW_BALANCE
<b>0014</b>	ACCOUNT_DOES_NOT_EXIST
<b>0015</b>	INVALID_TOKEN_EXPIRY
<b>0016</b>	TOKEN_EXPIRY_BEFORE_CURRENT
<b>0017</b>	SETTLEMENT_NOT_CONFIGURED
<b>0018</b>	TOKEN_ALREADY_EXISTS
<b>0019</b>	TOKEN_DOES_NOT_EXIST
<b>0020</b>	PINLESS_NOT_ENABLED
<b>0021</b>	INVALID_PAYMENT_METHOD
<b>0022</b>	JSON_INVALID
<b>0023</b>	SIGNATURE_ERROR
<b>0024</b>	SIGNATURE_INVALID
<b>0025</b>	KEY_NOT_UPLOADED
<b>0026</b>	INVALID_MOBILE_NUMBER
<b>0027</b>	INVALID_EMAIL_ADDRESS
<b>0028</b>	INVALID_TXN_AMOUNT
<b>0029</b>	TXN_AMOUNT_BEYOND_LIMITS
<b>0030</b>	INVALID OTP
<b>0031</b>	OTP_CREATION_FAILED
<b>0032</b>	INTERNAL_ID_DOES_NOT_EXIST
<b>0033</b>	INTERNAL_ID_INCORRECT
<b>0034</b>	OTP_EXPIRED
<b>0035</b>	LINK_ALREADY_INACTIVE

### Sample Request Headers

X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0

X-IBM-Client-Secret: 79bcc980cd3268cb26ff46a50607221

Credentials: eHI6OmYyNDFkMmU1ZWU5ZDRkNzRlYmZjN2UyY2Y1OGI0ZDlh

```
{
  "request": {
    "orderId": "Pinless_MA_Q_1",
    "storeId": "16025",
    "transactionAmount": "30",
    "transactionType": "MA",
    "mobileAccountNo": "03451234567",
    "emailAddress": "theresa.may@easypay.com",
    "otp": "4136"
  },
  "signature": "Gs1bw7z8EzaT1W2UfeEVpYqEErisEWisEI7JIkREjRpnop+4W/twLXeomy/GM6AOIOLEYkC/QSzhevULJX+7AjYM6nHrhXydDh/1rmmbL1/ECd3vV2tej3DuSjNnNdDSeGc0kazc8TL5h9N1cvAQwS0JC02pdMGT5qf814NhfZG2oVotgn1qTuMR3c9UotevQ8K9S02a4ETyOQDdtQA1nqYpKfa5xH036FKzI9g1AoIpbtQA1PMEMSUjkuZHdQvbc6wBGF5Y6TM4Tuy921frq6SooLe07+tewMsSGfNKRObQLbzKsKeJBLVUslwU2ymUob7bRrTDD3UJyi0aha10A=="
}
```

### Sample Response

```
{
  "response": {
    "orderId": "Pinless_MA_Q_1",
    "storeId": "16025",
    "transactionId": "941167850",
    "transactionDateTime": "20/02/2019 01:17 PM",
    "tokenNumber": "0000002951",
    "mobileAccountNo": "03451234567",
    "emailAddress": "theresa.may@easypay.com",
    "responseCode": "0000",
    "responseDesc": "SUCCESS"
  },
  "signature": "sdjNfhr00A1z0Slfq7E4f54eUFJC/IluwSOS1xs11i+R9zsSfQi0edd1FCPLTWa0xsn3DF+tcQ6K91dxlpQlMihN+Fsi76ctv9Wzd8hZBniTNgBmUBuA1uMRs6NjMtjzQtumOfIc01Ps1yq58x6i0P2cxrldKRU8FyWOpX9MPiwNOXJGzJilgISGjHAvvoh0axrEhqoDyWdkxP1JL6QR+piK0ymF4aeqLa4RwQKP65Xdv7e0D/j1KCzAQ6hhjFqpWUHwhEU1XRN81EFHB94wf1Hnru8F6aCzu6hrLliojfj8oQ+TsaQJrA2PeTrqcTH+715eVAe/1y6xhOxJUSVtw=="
}
```

### CURL

```
curl -L -X POST '<BASE_URL>/pinless/initiate-link-transaction' -H 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' -H 'X-IBM-Client-Secret: 79bcc980cd3268cb26ff46a50607221' -H 'Credentials: eH160mYyNDFkMmU1ZWU5ZDRkNzR1YmZjN2UyY2Y10GI0ZDlh' -H 'Content-Type: application/json' --data-raw '{
  "request": {
    "orderId": "Pinless_MA_Q_1",
    "storeId": "16025",
    "transactionAmount": "30",
    "transactionType": "MA",
    "mobileAccountNo": "03451234567",
    "emailAddress": "theresa.may@easypay.com",
    "otp": "4136"
  },
  "signature": "Gs1bw7z8EZaT1W2UfeEVpYqEErisEWisEI7JIkREjRpnop+4W/twLXeomy/GM6AOIOLEYkC/QSzhuVULJX+7AjYM6nHrhXydDh/lrmmbL1/ECd3vV2tej3DuSjNnNdDSegcOkazc8TL5h9N1cvAQwS0JC02pdMGT5qf814NhdfZG2oVotgnlqTuMR3c9UotevQ8K9S02a4ETy0QDdtQA1nqYpKfa5xH036FKzI9g1AoIpbtQA1PMEMSUjkuzHdQvbc6wBGF5Y6TM4Tuy921frq6SooLe07+tewMsdSGfNKRObQLbzKsKeJBLVUswU2ymUob7bRrTDd3UJyi00aha10A=="
}'
```

## Pinless Payment - Initiate Pinless Transaction

This API is used to perform pinless MA transactions.

Following steps are to populate the *Credentials* header for this API:

1. Create a new string containing the username and password provided by Easypaisa, with a colon in between, like so: *username:password*
2. Encode this string to base64 and put the resulting encoded string in the *Credentials* header.

**Endpoint URL:** <BASE\_URL>/pinless/initiate-pinless-transaction

**Operation Name:** PinlessInitiateTransaction

**Time-Out:** 140 Sec

### Pre-Requisites

1. Credentials must be valid.
2. Token number must be valid.
3. Mobile account must be valid.
4. Mobile account must have sufficient balance.

### Request Attributes

#### Request Header Parameters

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>Credentials</b>	Base64 encoded <i>username:password</i> string as described in the steps above	<b>Yes</b>

### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>request</b>	Request Object	Yes
<b>request.orderId</b>	Order ID	Yes
<b>request.storeId</b>	Store ID assigned by EasyPaisa.	Yes
<b>request.transactionAmount</b>	Transaction Amount	Yes
<b>request.transactionType</b>	Payment Method. Value: MA	Yes
<b>request.mobileAccountNo</b>	Format: 03xxxxxxxx	Yes
<b>request.emailAddress</b>	Customer's email address.	Yes
<b>request.tokenNumber</b>	Token number from the response of <a href="#">Initiate Link Transaction API</a>	Yes
<b>signature</b>	Signature generated as shown in <a href="#">Encryption Guideline</a>	Yes

### *Response Attributes*

#### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>responseCode</b>	String	Yes
<b>responseDesc</b>	String	Yes
<b>orderId</b>	String	No
<b>storeId</b>	String	No
<b>transactionId</b>	String	No
<b>transactionDateTime</b>	String	No
<b>mobileAccountNo</b>	String	No
<b>emailAddress</b>	String	No
<b>tokenNumber</b>	String	No

### *Response Codes*

Response Code	Description
<b>0000</b>	SUCCESS
<b>0001</b>	SYSTEM_ERROR
<b>0002</b>	REQUIRED_FIELD_MISSING
<b>0003</b>	INVALID_ORDER_ID
<b>0004</b>	INVALID_MERCHANT_ACCOUNT_NO
<b>0005</b>	MERCHANT_ACCOUNT_NOT_ACTIVE
<b>0006</b>	INVALID_STORE_ID
<b>0007</b>	STORE_NOT_ACTIVE
<b>0008</b>	PAYMENT_METHOD_NOT_ENABLED
<b>0009</b>	CC_TRANSACTION_FAILED

<b>0010</b>	INVALID_CREDENTIALS
<b>0011</b>	WRONG_PIN_ENTERED
<b>0012</b>	PIN_NOT_ENTERED
<b>0013</b>	LOW_BALANCE
<b>0014</b>	ACCOUNT_DOES_NOT_EXIST
<b>0015</b>	INVALID_TOKEN_EXPIRY
<b>0016</b>	TOKEN_EXPIRY_BEFORE_CURRENT
<b>0017</b>	SETTLEMENT_NOT_CONFIGURED
<b>0018</b>	TOKEN_ALREADY_EXISTS
<b>0019</b>	TOKEN_DOES_NOT_EXIST
<b>0020</b>	PINLESS_NOT_ENABLED
<b>0021</b>	INVALID_PAYMENT_METHOD
<b>0022</b>	JSON_INVALID
<b>0023</b>	SIGNATURE_ERROR
<b>0024</b>	SIGNATURE_INVALID
<b>0025</b>	KEY_NOT_UPLOADED
<b>0026</b>	INVALID_MOBILE_NUMBER
<b>0027</b>	INVALID_EMAIL_ADDRESS
<b>0028</b>	INVALID_TXN_AMOUNT
<b>0029</b>	TXN_AMOUNT_BEYOND_LIMITS
<b>0030</b>	INVALID OTP
<b>0031</b>	OTP_CREATION_FAILED
<b>0032</b>	INTERNAL_ID_DOES_NOT_EXIST
<b>0033</b>	INTERNAL_ID_INCORRECT
<b>0034</b>	OTP_EXPIRED
<b>0035</b>	LINK_ALREADY_INACTIVE

### Sample Request Headers

X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0

X-IBM-Client-Secret: 79bbcc980cd3268cb26ff46a50607221

Credentials: eHI6OmYyNDFkMmU1ZWU5ZDRkNzRlYmZjN2UyY2Y1OGI0ZDlh

```
{
  "request": {
    "orderId": "Pinless_MA_0_1",
    "storeId": "16025",
    "transactionAmount": "30",
    "transactionType": "MA",
    "mobileAccountNo": "03451234567",
    "emailAddress": "theresa.may@easypay.com",
    "tokenNumber": "0000002951"
  },
  "signature": "Gs1bw7z8EZaT1W2UfeEVpYqEErisEWisEI7JIkREjRpnop+4W/twLXeomy/GM6AOIOLEYkC/QSzh
vULJX+7AjYM6nHrhXydDh/lrmmbL1/ECd3vV2tej3DuSjNnNdDSeGcOkazc8TL5h9N1cvAQwS0JC02pdMGT5qf814NhdfZ
G2oVotgnlqTuMR3c9UotevQ8K9S02a4ETyOQDdtQA1nqYpKfa5xH036FKzI9g1AoIpbtQA1PMEMSUjkuzHdQvbc6wBGF5Y
6TM4Tuy921frq6SooLe07+tewMsdSGfNKRObQLbzKsKeJBLVUswU2ymUob7bRrTDd3UJyi00aha10A=="
}
```

### Sample Response

```
{
  "response": {
    "orderId": "Pinless_MA_Q_1",
    "storeId": "16025",
    "transactionId": "941167850",
    "transactionDateTime": "20/02/2019 01:17 PM",
    "tokenNumber": "0000002951",
    "mobileAccountNo": "03451234567",
    "emailAddress": "theresa.may@easypay.com",
    "responseCode": "0000",
    "responseDesc": "SUCCESS"
  },
  "signature": "sdjNfhr00A1z0Slfq7E4f54eUFJC/IluwSOS1xs11i+R9zsSfQi0edd1FCPLTWa0xsn3DF+tcQ6K91dxlpQlMihN+Fsi76ctv9Wzd8hZBniTNgBmUBuA1uMRs6NjMtjzQtumOfIc01Ps1yq58x6i0P2cxrldKRU8FyWOpX9MPiwnNOXJGzJilgISGjHAvvoh0axrEhqoDyWdkxP1JL6QR+piK0ymF4aeqLa4RwQKP65Xdv7e0D/j1KCzAQ6hhjFqpWUHwhEU1XRN81EFHB94wf1Hnru8F6aCzu6hrLliojfj8oQ+TsaQJrA2PeTrqcTH+715eVAe/1y6xhOxJUSVtw=="
}
```

### CURL

```
curl -L -X POST '<BASE_URL>/pinless/initiate-pinless-transaction' -H 'X-IBM-Client-Id: 1d73464a465d5dee1886f0dbf8f67ab0' -H 'X-IBM-Client-Secret: 79bcc980cd3268cb26ff46a50607221' -H 'Credentials: eH160mYyNDFkMmU1ZWU5ZDRkNzR1YmZjN2UyY2Y10GI0ZDlh' -H 'Content-Type: application/json' --data-raw '{
  "request": {
    "orderId": "Pinless_MA_Q_1",
    "storeId": "16025",
    "transactionAmount": "30",
    "transactionType": "MA",
    "mobileAccountNo": "03451234567",
    "emailAddress": "theresa.may@easypay.com",
    "tokenNumber": "0000002951"
  },
  "signature": "Gs1bw7z8EZaT1W2UfeEVpYqEErisEWisEI7JIkREjRpnop+4W/twLXeomy/GM6AOIOLEYkC/QSzhevVULJX+7AjYM6nHrhXydDh/lrmmbL1/ECd3vV2tej3DuSjNnNdDSegcOkazc8TL5h9N1cvAQwS0JC02pdMGT5qf814NhdfZG2ovotgnlqTuMR3c9UotevQ8K9S02a4ETy0QDdtQA1nqYpKfa5xH036FKzI9g1AoIpbtQA1PMEMSUjkuzHdQvbc6wBGF5Y6TM4Tuy921frq6SooLe07+tewMsdSGfNKRObQLbzKsKeJBLVUswU2ymUob7bRrTDd3UJyi00aha10A=="
}'
```

## Pinless Payment – Deactivate Link

This API is used to break the link/pair between customer and merchant.

Following steps are to populate the *Credentials* header for this API:

1. Create a new string containing the username and password provided by Easypaisa, with a colon in between, like so: *username:password*
2. Encode this string to base64 and put the resulting encoded string in the *Credentials* header.

**Endpoint URL:** <BASE\_URL>/pinless/deactivate-link

**Operation Name:** PinlessDeactivateLink

**Time-Out:** 140 Sec

### Pre-Requisites

1. Credentials must be valid.
2. Token number must be valid.
3. Mobile account must be valid.

### Request Attributes

#### Request Header Parameters

The header parameters *X-IBM-Client-Id* and *X-IBM-Client-Secret* are mandatory for all API calls, and are used to authenticate the requester.

Parameter Name	Description	Mandatory
<b>X-IBM-Client-Id</b>	API Authentication credential	<b>Yes</b>
<b>X-IBM-Client-Secret</b>	API Authentication credential	<b>Yes</b>
<b>Credentials</b>	Base64 encoded <i>username:password</i> string as described in the steps above	<b>Yes</b>

### *Request Body Parameters*

Parameter Name	Description	Mandatory
<b>request</b>	Request Object	Yes
<b>request.orderId</b>	Order ID	Yes
<b>request.tokenNumber</b>	Token number from the response of <a href="#">Initiate Link Transaction API</a>	Yes
<b>request.mobileAccountNo</b>	Format: 03xxxxxxxxx	Yes
<b>signature</b>	Signature generated as shown in <a href="#">Encryption Guideline</a>	Yes

### **Response Attributes**

#### *Response Body Parameters*

Parameter Name	Data Type	Mandatory
<b>responseCode</b>	String	Yes
<b>responseDesc</b>	String	Yes

### **Response Codes**

Response Code	Description
<b>0000</b>	SUCCESS
<b>0001</b>	SYSTEM_ERROR
<b>0002</b>	REQUIRED_FIELD_MISSING
<b>0003</b>	INVALID_ORDER_ID
<b>0004</b>	INVALID_MERCHANT_ACCOUNT_NO
<b>0005</b>	MERCHANT_ACCOUNT_NOT_ACTIVE
<b>0006</b>	INVALID_STORE_ID
<b>0007</b>	STORE_NOT_ACTIVE
<b>0008</b>	PAYMENT_METHOD_NOT_ENABLED
<b>0009</b>	CC_TRANSACTION_FAILED
<b>0010</b>	INVALID_CREDENTIALS
<b>0011</b>	WRONG_PIN_ENTERED
<b>0012</b>	PIN_NOT_ENTERED
<b>0013</b>	LOW_BALANCE
<b>0014</b>	ACCOUNT_DOES_NOT_EXIST
<b>0015</b>	INVALID_TOKEN_EXPIRY
<b>0016</b>	TOKEN_EXPIRY_BEFORE_CURRENT
<b>0017</b>	SETTLEMENT_NOT_CONFIGURED
<b>0018</b>	TOKEN_ALREADY_EXISTS
<b>0019</b>	TOKEN_DOES_NOT_EXIST
<b>0020</b>	PINLESS_NOT_ENABLED
<b>0021</b>	INVALID_PAYMENT_METHOD

<b>0022</b>	JSON_INVALID
<b>0023</b>	SIGNATURE_ERROR
<b>0024</b>	SIGNATURE_INVALID
<b>0025</b>	KEY_NOT_UPLOADED
<b>0026</b>	INVALID_MOBILE_NUMBER
<b>0027</b>	INVALID_EMAIL_ADDRESS
<b>0028</b>	INVALID_TXN_AMOUNT
<b>0029</b>	TXN_AMOUNT_BEYOND_LIMITS
<b>0030</b>	INVALID OTP
<b>0031</b>	OTP_CREATION_FAILED
<b>0032</b>	INTERNAL_ID_DOES_NOT_EXIST
<b>0033</b>	INTERNAL_ID_INCORRECT
<b>0034</b>	OTP_EXPIRED
<b>0035</b>	LINK_ALREADY_INACTIVE

*Sample Request Headers***X-IBM-Client-Id:** 1d73464a465d5dee1886f0dbf8f67ab0**X-IBM-Client-Secret:** 79bbcc980cd3268cb26ff46a50607221**Credentials:** eHl6OmYyNDFkMmU1ZWU5ZDRkNzRIYmZjN2UyY2Y1OGI0ZDlh

```
{
  "request": {
    "storeId": "2200",
    "mobileAccountNo": "03333436301",
    "tokenNumber": "0000002991"
  },
  "signature": "hkpcXzCdY7H5GddJOY3o5UUUY1Khfehfs17I1hu5h+LZGIObtugySxkVM80sioLZIYT1P02zUfe9
MrT/qzOkxYqW3ViAKY1EI6IwIx3+JHfVhNvKok5k5F4q83FK97nQOPmQf5AheJfdm6vj7vvQ7E7Er/eNM/uYV/kwGsjoE
ksk09qnQGghgdPaU1M9T44xmF8+y1EV0c+rabXrgwq8N6/k7tP1wLJNcx27msr7g/HzTdDKRdP90ibp7AFEppH1K24+qXb
+GrDSPerEz/SPJJ1KM+IPtEr6S2CXF5CdBUDvI1ASC68djUbfe7iKsJ1EKAXBWzvurH/3E9EJE950Q=="
}
```

*Sample Response*

```
{
  "response": {
    "responseCode": "0000",
    "responseDesc": "SUCCESS"
  },
  "signature": "XkKOa2/8G3sAl8eR+diorIcfQwZlnzs7oOcnXgmZiwxX9B0c0xdNjy0Jfy6VQyDvz7kM1GffBkBn
w3jldpJLAUw1xj5EGSxS7rVOELSRA2yMPfGAYZQmZeq00+Qainjk9GGJaZNL6a8oMxBR371x9jh8loH+QUe1saX0qzD3L
WEqtyoxhrpKdum4yhLbc90cmW/HJ9wXItohZ6Q1FuYmRB9Hid+5slzupTh68i1xJCJF2xfVTCWH1PRdz/5EgN6Z82B0WeZ
/1ESdKFm0gpxr0cUVL1BaHv0vIJ25zCMgmZLf+eJAKYQawD1QERK1OeHDCMXVVvaLmj/cWvnun1oeQ=="
}
```

## CURL

```
curl -L -X POST '<BASE_URL>/pinless/initiate-pinless-transaction' -H 'X-IBM-Client-  
Id: 1d73464a465d5dee1886f0dbf8f67ab0' -H 'X-IBM-Client-  
Secret: 79bcc980cd3268cb26ff46a50607221' -  
H 'Credentials: eHl60mYyNDFkMmU1ZWU5ZDRkNzRlYmZjN2UyY2Y10GI0ZDlh' -H 'Content-  
Type: application/json' --data-raw '{  
  
    "request": {  
        "storeId": "2200",  
        "mobileAccountNo": "03333436301",  
        "tokenNumber": "0000002991"  
    },  
    "signature": "hkpcXzCdY7H5GddJ0Y3o5UUUY1Khfehfs17I1hu5h+LZGIObtugySxkVM8OsioLZIYT1P02zUfe9  
MrT/qzOkxYqW3ViAKY1EI6IwIx3+JHfVhNvKok5k5F4q83FK97nQOPmQf5AheJfdm6vj7vvQ7E7Er/eNM/uYV/kwGsjoE  
ksK09qnQGghgdPaU1M9T44xmF8+y1EV0c+rabXrgwq8N6/k7tPlwLJNcx27msr7g/HzTdDKRdP90ibp7AFEppH1K24+qXb  
+GrDSPerEz/SPJJ1KMrIPtEr6S2CXF5CdBUDvIlASC68djUbfe7iKsJ1EKAXBWzvurH/3E9EJE950Q=="  
}'
```