MOBILE MONEY PAYMENTS INTEGRATION SPECIFICATION DOCUMENT

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Scope

The purpose of this document is to provide a proper description of the usage and utilization of the mobile money payments interface by client applications to perform relevant operations like collections, disbursements, and transaction status inquiries on their customers via the telecom provided mobile money platforms.

Intended users

This document is intended to be used by people with moderate or high knowledge in information technology especially in application development, project management and most importantly in the communication of systems using APIs (Application Program Interfaces).

Available Endpoints

The end for this integration shall be in the format https://IP:PORT/{contextPath}/{endpoint} i.e. is http://IP:8006/payments/api/mobilemoney/deposit . All the endpoints are HTTP POST with JSON payloads

Authentication

The requests follow a standard authentication mechanism which recognizes unique transaction Identifier for each request except the get transaction status inquiry API. The following headers are all needed for the authentication to work

```
--header 'username: ********'
--header 'password: **********************’
--header 'Content-Type: application/json'
```

The username is a unique identity assignment provided by the owner of the system while the password is an MD5 combination of password and transaction Id being sent along the request.

```
Password = md5(password + Unique Transaction Id)
Example : username = Akankwasa, transactionId=12345
Password = md5(akankwasa12345)
```

If the authentication details are incorrect, the system will return the following

```
{
    "code": 403,
    "message": "Username or password is incorrect"
}
```

Collections

This is used by the application owner to collect funds from a customer's number i.e. from a invoice clearance, sale or other operation resulting into a customer transferring money from his account to the clients (vendors account)

Payload

The payload Is a JSON payload containing the following keys

transactionId	Unique txn id to identify a request	String	Mandatory
amount	Amount of money to charge from the customer's account	String	Mandatory
narration	Reason for the performing transaction	String	Mandatory
phoneNumber	Customer's Phone Number to be charged	String	Mandatory

Sample Payload

```
{
  "transactionId": "4023456",
  "amount": "1500",
  "narration": "Test",
  "phoneNumber": "256*********"
}
```

Sample Response

```
{
"code":0,
"message":"Hello, Your transaction of 1500 for phone number 256************
has been received.  You will be notified after processing."
}
```

Endpoint

/debit_customer, /debit, collections.

Disbursements

This is used by the application owner to send funds to a customer’s number i.e. from a refund clearance, loan or other operation resulting into a customer receiving money from a system user (vendors account)

Payload

The payload Is a JSON payload containing the following keys

transactionId	Unique txn id to identify a request	String	Mandatory
amount	Amount of money to charge from the customer’s account	String	Mandatory
narration	Reason for the performing transaction	String	Mandatory
phoneNumber	Customer’s Phone Number to be charged	String	Mandatory

Sample Payload

```
{
  "transactionId": "4023456",
  "amount": "1500",
  "narration": "Test",
  "phoneNumber": "256*********"
}
```

Sample Response

```
{
"code":0,
"message":"Hello, Your transaction of 1500 for phone number 256************
has been received.  You will be notified after processing."
}
```

Endpoint

/deposit, /disbursement, /payout, /transfer

Get Transaction Status

This is used by the application owner to inquire about the progress or status of the transaction that was sent earlier to the system. For the transaction to be considered successful, the response and message must be “0” , “successful” respectively

Payload

The payload Is a JSON payload containing the following keys

transactionId	Unique txn id to identify an earlier request	String	Mandatory

Sample Payload

```
{
  "transactionId": "4023456",
}
```

Sample Responses

```
{
    "code": 404,
    "message": "Transaction with id 4023456 was not found"
}

Successful response
{
    "code": 0,
    "message": "successful",
    "data": {
        "externalTransactionId": "8723672",
        "phoneNumber": "256787621464",
        "network": "MTN",
        "amount": 700,
        "narration": "Supermarket Purchase 700",
        "status": "successful",
        "internalComment": " successful",
        "transactionChannel": "MTN",
        "channelTransactionId": "12377239791",
        "dateCreated": 1619708086773,
        "dateCompleted": 1619708122086,
        "timeTaken": 35,
        "reversed": false,
        "reversedReason": "",
        "reversalStatus": "",
        "transactionType": "collections",
        "resultCode": 0
    }
}
```

Endpoint

/get_transaction_status, /status, /gts, /transaction_query

Known Response Codes

Code	Meaning
0	The request/Transaction is successful
401	Unauthorized/invalid credentials
403	Request source/User is forbidden
404	Information not found
500	Internal Server Error
400	Bad request