



# HERITAGE BANK MULTICHOICE PAYMENT GATEWAY

As-Built by Quetzal Consults

## **DOCUMENT SUMMARY**

This document contains all the relevant Technical Information required for 3rd Party Heritage TouchPoints to integrate with the MultiChoice Payment Gateway for Payment and Fulfilment of DSTV and GOTv subscriptions

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Solution Architect

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# 1.0 Version History

<b>Document Version</b>	<b>Date</b>	<b>Description</b>	<b>Prepared By</b>	<b>Comments</b>
<b>V1.0</b>	March, 2018	Initial Version	Bola Adekoya	

## 2.0 PURPOSE

The purpose of this document is to serve as a reference point for any Application that may be required to Integrate to the HBMCN API for Heritage Bank; the document contains the Methods, End-Points and all other technical related information required for the API integration.

The document contains the below End-Points required for Integration

- Authorization End-Point
- Operations End-Point
- Transaction End-Point

## 3.0 INTENDED AUDIENCE

This document is intended for the Technical Resource for any Heritage Bank Application (Proprietary or Other-Wise) needing to integrate with MultiChoice via the Heritage Bank MCN Middleware.

### 3.1 Distribution

This Document was created by Quetzal Consults for Heritage Bank and can only be distributed by Heritage Bank except where stated otherwise.

### Heritage Bank Multichoice Payment Gateway<sup>01</sup>

[/swagger/v1/swagger.json](#)

**Auth** ▼

- POST** `/api/auth` Generates JWT that the consuming application would require in order to consume some or all the endpoints
- POST** `/api/auth/reset` Resets the client's password and sends the newly generated password to the client's email

**Operations** ▼

- GET** `/api/types` Returns available Multichoice options
- GET** `/api/{type}/bouquet` Gets available bouquet for the supplied type
- GET** `/api/{type}/accounts/{smartcardnumber}` Returns the customer information and accounts
- GET** `/api/{type}/details/{smartcardnumber}` Returns the customer information with the subscribed products and quotes
- POST** `/api/{type}/payment/{productkey}/{customernumber}/{basketId}` make payment using the customer number
- POST** `/api/{type}/payment/{productkey}/{smartcardnumber}` Make payments using the smart card number

**Transactions** ▼

- GET** `/api/transactions/{transactionNumber}` Gets transaction by the transaction number
- GET** `/api/confirmation/{transactionNumber}` Retrieves Payments Confirmation

## 4.0 AUTH END POINT

The **Auth** endpoint category manages the security of the API.

### 4.1 `{{BaseURL}}/api/auth`

Sensitive endpoints of the application are protected and API clients would have to be authenticated before they can consume these endpoints; the system uses JWT to protect these sensitive endpoints.

This endpoint validates the credentials supplied by the API client and generates a bearer token. The API Client must send, as part of the header section of any request, the bearer token; generated token lifespan is 24hours.

#### Sample Request

```
url: {{BaseURL}}/api/auth
type: POST
body: {
  "clientId": "string",
  "password": "string"
}
content-type: application/json
```

#### Sample Response

```
{
  "accessToken":
  "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1IjoiIiwiaWF0IjoiYmFkZWtveWVAcXVldHphbGNvbnN1bHRzLmNvbSIsImp0aSI6ImVINjlxMWE4LTJhMzYtNDg4ZC05OTgzLTk0Y2QyZTU2ZjhmZSIsIkIjbmNvbWVBY2NvdW50IjoilwiQ2xpZW50SW5jb21IQWNjb3VudCI6IiIsIkNsaWVudFBlcmNlbnQiOiIiwLiQwliwiZXhwIjoxNTIxMzlxNjI3LCJpc3MiOiIjODRwOiI8vbG9yYXob3N0OjM4MTA2LyIsImF1ZCI6Imh0dHA6Ly9sb2NhbGhvc3Q6MzQ6MDYyVn0.h8mZklsVUJnOxwHA72KXAd1HvIjLI1QTdTU6wcXA3Vo",
  "expirationDate": "2018-03-17T17:20:27.2900156-04:00",
```

```
"clientAppName": "Heritage Bank Mobile App (HBPadie)"  
}
```

**HTTP Response Code In Use**

#	Code	Description	Content (datatype returned and example)
1	200	Success	{ "accessToken": "string", "expirationDate": "2018-03-20T17:44:14.900Z", "clientAppName": "string" }
2	400	Bad Request	String - "Invalid APIClientId"

**4.2 {{BaseURL}}/api/auth/reset**

This endpoint resets the client's password and sends the newly generated password to the APIClient's email address.

**Sample Request**

**url:** {{BaseURL}}/api/auth/reset

**type:** POST

**body:** "hbmobile"

  

**content-type:** application/json

**Sample Response**

"Password reset and notification sent successfully."

## HTTP Response Code In Use

#	Code	Description	Content (datatype returned and example)
1	200	Success	String - "Password reset and notification sent successfully."
2	400	Bad Request	String - "API ClientId was not properly supplied"
3	403	Forbidden	String - "Client has been deactivated"
4	404	Not Found	String - "Unknown ClientId"
5	500	Internal Server Error	String - "Password reset failed"
6	503	Service Unavailable	String- "Password reset, mail could not be sent. Please contact IT support"

## 5.0 OPERATIONS END POINT

*Manages of the operations and interaction of the API*

### 5.1 [{{BaseURL}}/api/types](#)

This endpoint returns available Multichoice options.

#### Sample Request

**url:** `{{BaseURL}}/api/types`  
**type:** GET  
**content-type:** application/json

#### Sample Response

```
[
  {
    "name": "GoTV",
    "bouquetUrl": "/api/gotv/bouquet"
  },
  {
    "name": "DSTV",
    "bouquetUrl": "/api/dstv/bouquet"
  }
]
```

## HTTP Response Code In Use

#	Code	Description	Content (datatype returned and example)
1	200	Success	

### 5.2 `{{BaseURL}}/api/{type}/bouquet`

This endpoint returns the bouquet available for the type (DSTV or GoTV) supplied. This endpoint can also be reached directly from the categories endpoint *bouquetUrl*.

#### Sample Request

**url:** `{{BaseURL}}/api/gotv/bouquet`

**type:** GET

**content-type:** application/json

**\*Parameters:** `{type}` is parameter is either **GoTV** or **DSTV**

#### Sample Response

```
[
  {
    "code": "GOLITE",
    "name": "GOtv Lite (Quarterly)",
    "description": "GOtv Lite is a one stop digital TV solution for which you pay a quarterly admin
fee.",
    "currency": "NGN",
    "subscription": 1050,
    "nameAndPrice": "GOtv Lite (Quarterly) (NGN1,050.00)",
    "transFee": 50,
    "paymentUrl": "/api/gotv/payment/GOLITE"
  },
  {
    "code": "GOTVPLS",
    "name": "GOtv Plus",
    "description": "One month subscription is included in the package price",
    "currency": "NGN",
    "subscription": 1900,
    "nameAndPrice": "GOtv Plus (NGN1,900.00)",
    "transFee": 50,
    "paymentUrl": "/api/gotv/payment/GOTVPLS"
  },
  ...]
```



## HTTP Response Code In Use

#	Code	Description	Content (datatype returned and example)
1	200	Success	
2	400	Bad Request	String - "Unknown package name smtv"
3	500	Internal Server Error	String - "service unavailable"

### 5.3 [{{BaseURL}}/api/{type}/accounts/{smartcardnumber}](#)

This endpoint returns all the accounts attached to the customer.

#### Sample Request

**url:** `{{BaseURL}}/api/dstv/accounts/4119205482`

**type:** GET

**content-type:** application/json

#### \*Parameters:

- **{type}:** either GoTV or DSTV or Comm
- **{smartcardnumber}:** first 10 digits of the smart card number or device number in case of GoTV.

#### Sample Response

```
{
  "auditReferenceNo": "28f80afc-2c9c-4b57-84cc-cb7433928faa",
  "customer": {
    "lastName": "ADEKOYA JAMIU",
    "firstName": "A",
    "initial": "A",
    "customerNumber": 265739840,
    "accountNo": 0,
    "title": "Mr.",
    "mobileNo": "2348023851364",
    "emailAddress": "debolakoya@yahoo.com",
    "hasBoxOffice": false,
    "invoicePeriod": 0,
    "totalBalance": 0
  },
  "accounts": [
```

```

{
  "isPrimary": true,
  "accountType": "DStv Normal",
  "currency": "NGN",
  "amount": 0,
  "methodOfPayment": "Cash",
  "customerNumber": 24892731,
  "status": "Suspended",
  "paymentDueDate": "2001-01-01T00:00:00",
  "lastInvoiceDate": "2017-06-24T09:51:43",
  "invoicePeriod": 1,
  "hasBoxOffice": false,
  "isCommercial": false
}
]
}

```

## HTTP Response Code In Use

#	Code	Description	Content (datatype returned and example)
1	200	Success	
2	400	Bad Request	String - "One or more errors occurred. (An error occurred while sending the request.)"
3	500	Internal Server Error	String - "service unavailable"

### 5.4 [{{BaseURL}}/api/{type}/details /{smartcardnumber}](#)

This endpoint returns the customer information alongside the accounts attached to the customer.

#### Sample Request

**url:** [{{BaseURL}}/api/dstv/details/4119205482](#)

**type:** GET

**content-type:** application/json

**\*Parameters:**

- **{type}:** either **GoTV** or **DSTV** or **Comm**

- **{smartcardnumber}**: first 10 digits of the smart card number or device number in case of GoTV.

### Sample Response

```
{
  "customer": {
    "lastName": "JACKSON",
    "firstName": "E",
    "initial": "E",
    "customerNumber": 313467282,
    "accountNo": 71704942,
    "accountStatus": "Open",
    "hasBoxOffice": false,
    "invoicePeriod": 1,
    "totalBalance": -301
  },
  "products": [
    {
      "currency": "NGN",
      "subscription": 14700,
      "productKey": "PRWE36",
      "productName": "DStv Premium W/Afr E36",
      "nameAndPrice": "DStv Premium W/Afr E36 (NGN14,700.00)",
      "activeOnAccount": true,
      "transFee": 50,
      "paymentUrl": "/api/dstv/payment/PRWE36/4288705565"
    },
    {
      "currency": "NGN",
      "subscription": 16530,
      "productKey": "PRWASIE36",
      "productName": "DStv Premium W/Afr + Asian Bouquet E36",
      "nameAndPrice": "DStv Premium W/Afr + Asian Bouquet E36 (NGN16,530.00)",
      "activeOnAccount": false,
      "transFee": 50,
      "paymentUrl": "/api/dstv/payment/PRWASIE36/4288705565"
    },
    {
      "currency": "NGN",
      "subscription": 19680,
      "productKey": "PRWFRNSE36",
      "productName": "DStv Premium W/Afr + French Bonus Bouquet E36",
      "nameAndPrice": "DStv Premium W/Afr + French Bonus Bouquet E36 (NGN19,680.00)",
      "activeOnAccount": false,
    }
  ]
}
```

```
"transFee": 50,
"paymentUrl": "/api/dstv/payment/PRWFRNSE36/4288705565"
}
]
}
```

### HTTP Response Code In Use

#	Code	Description	Content (datatype returned and example)
1	200	Success	
2	400	Bad Request	String - "One or more errors occurred. (An error occurred while sending the request.)"
3	500	Internal Server Error	String - "service unavailable"

### 5.5 [{{BaseURL}}/api/{type}/payment/{productkey}/{customernumber}/{basketId}}](#)

This endpoint is used to make payment with the customer number.

**Sample Request**

**url:** [{{BaseURL}}/api/dstv/payment/COMPLETE36/265739840/](#)

**type:** POST

**content-type:** application/json

**header:**

**Authorization: bearer**

eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1IjoiYm90dHA6Ly9sb2NhbGhvc3Q6MzgzMDYvIn0.h8mZklsvUJnOxwHA72KXAd1HvIjLI1QTdTU6wcXA3Vo

**body:**

```
{
  "amount": 9900,
  "invoicePeriod": 1,
```

```

    "emailAddress": "a@b.com",
    "accountNumber": "1234567890",
    "mobileNumber": "08012345678",
    "paymentMode": "cash"
  }

```

**\*Parameters:**

- **{type}**: either GoTV or DSTV or Comm
- **{productkey}**: the bouquet code retrieved by `{{BaseURL}}/api/{type}/bouquet`.
- **{Customernumber}**: the customer number, supplied by the customer or retrieved by `{{BaseURL}}/api/{type}/number/{smartcardnumber}` or `{{BaseURL}}/api/{type}/details/{smartcardnumber}`
- **{BasketId}**: basketId as retrieved from `{{BaseURL}}/api/{type}/details/{smartcardnumber}`. This field is nullable

**Sample Response**

```

....
Location → {{url}}/api/confirmation/100000016
....

```

**Body**

```

{
  "auditReferenceNo": "6f290440-f800-47e7-9066-d5b3d932f743",
  "transactionNumber": "100000016",
  "receiptNumber": "4567895244",
  "date": "2018-03-24T18:00:00-04:00",
  "message": "",
  "success": true
}

```

**HTTP Response Code In Use**

#	Code	Description	Content (datatype returned and example)
1	201	Success	
2	400	Bad Request	String - "Bad Request"
3	400	Bad Request	Dictionary - { "additionalProp1": "string",

			<pre>"additionalProp2": "string", "additionalProp3": "string" }</pre>
<b>4</b>	401	Unauthorized	
<b>5</b>	500	Internal Server Error	String - "Server Error"
<b>6</b>	500		<pre>Response - { "referenceNumber": "string", "code": "string", "message": "string", "developerMessage": "string", "moreInfo": "string" }</pre>
<b>7</b>	503		<pre>Response- { "referenceNumber": "string", "code": "string", "message": "string", "developerMessage": "string", "moreInfo": "string" }</pre>
<b>8</b>	503		<pre>String - { "referenceNumber": "string", "code": "string", "message": "string", "developerMessage": "string", "moreInfo": "string" }</pre>

## **5.6 {{BaseURL}}/api/{type}/payment/{productkey}/{smartcardnumber}}**

This endpoint is used to make payment with the smart card number.

### **Sample Request**

**url:** {{BaseURL}}/api/**dstv**/payment/**COMPLE36/4119205482**

**type:** POST



```

"auditReferenceNo": "6f290440-f800-47e7-9066-d5b3d932f743",
"transactionNumber": "100000016",
"receiptNumber": "4567895244",
"date": "2018-03-24T18:00:00-04:00",
"message": "",
"success": true
}

```

**HTTP Response Code In Use**

#	Code	Description	Content (datatype returned and example)
1	201	Success	
2	400	Bad Request	String - "Bad Request"
3	400	Bad Request	Dictionary - { "additionalProp1": "string", "additionalProp2": "string", "additionalProp3": "string" }
4	401	Unauthorized	
5	500	Internal Server Error	String - "Server Error"
6	500		Response - { "referenceNumber": "string", "code": "string", "message": "string", "developerMessage": "string", "moreInfo": "string" }
7	503		Response- { "referenceNumber": "string", "code": "string", "message": "string", "developerMessage": "string", "moreInfo": "string" }
8	503		String - { "referenceNumber": "string",



			<pre> "code": "string", "message": "string", "developerMessage": "string", "moreInfo": "string" } </pre>
--	--	--	--

## 6.0 TRANSACTION INQUIRIES END POINTS

This group of endpoints are used to query the system for payment transactions

### 6.1 `{{BaseURL}}/api/transactions/{id}`

This endpoint retrieves transaction information from the application log.

#### Sample Request

**url:** `{{BaseURL}}/api/confirmation/100102303`

**type:** GET

**content-type:** application/json

**\*Parameters:** `{id}` transaction number returned when payment was consummated

#### Sample Response

```

{
  "id": 100000001,
  "accountNumber": "0013331239",
  "transactionDate": "2018-03-18T09:49:14.333315",
  "apiClientId": "HBPadie",
  "customerNumber": "",
  "deviceNumber": "265739840",
  "packageCode": "PRWASIE36",
  "businessType": "dstv",
  "emailAddress": "debolakoya@eatwest.com",
  "mobileNumber": "08012345678",
  "amount": 12000,
  "transFees": 50,

```

```

"posted": false,
"auditReferenceNo": "00000000-0000-0000-0000-000000000000",
"success": false,
"url": "/api/confirmation/100000001"
}

```

## HTTP Response Code In Use

#	Code	Description	Content (datatype returned and example)
1	200	Success	
2	400	Bad Request	String - "Unknown package name smtv"
3	500	Internal Server Error	String - "service unavailable"

## 6.2 {{BaseURL}}/api/confirmation/{id}

This endpoint returns the bouquet available for the type (DSTV or GoTV) supplied. This endpoint can also be reached directly from the categories endpoint *bouquetUrl*.

### Sample Request

**url:** {{BaseURL}}/api/confirmation/100000001

**type:** GET

**content-type:** application/json

**\*Parameters:** {id} transaction number

### Sample Response

```

{
  "transactionNumber": 100000000,
  "receiptNumber": 2345678,
  "date": "2018-03-24T18:00:00-04:00",
  "message": "Transaction not found",
  "sucess": false,
  "auditReferenceNo": "6f290440-f800-47e7-9066-d5b3d932f743"
}

```

## HTTP Response Code In Use

<b>#</b>	<b>Code</b>	<b>Description</b>	<b>Content (datatype returned and example)</b>
<b>1</b>	200	Success	
<b>2</b>	40	Bad Request	String - "Unknown package name smtv"
<b>3</b>	500	Internal Server Error	String - "service unavailable"