

KCB FUNDS TRANSFER API SPECIFICATION DOCUMENT

Version 1.4

Introduction

This document seeks to describe the specifications to integrate to the FT API. The API supports Internal Funds Transfer, Transfer to other banks via Pesalink, RTGS, EFT.

Requirements

- A KCB Bank account number.
- Indemnity form (Template to be shared by KCB Bank).
- Customer API Request Letter.
- KCB Buni Username(for whitelisting purposes).KCB will provide the test account numbers.
- Callback endpoint.

Prerequisites

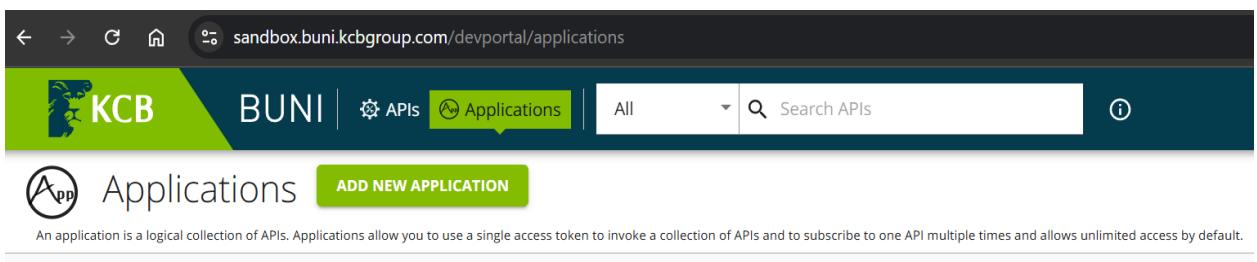
The developer/third party needs to register/create account on the KCB Buni developer portal accessible on the link: <https://sandbox.buni.kcbgroup.com/devportal/apis>. Guide on how to get started in consuming APIs is available on the following link: <https://buni.kcbgroup.com/getting-started>.

Generating a bearer token

This is the first API call to be made for authorization purposes, returns an authentication token. This API uses Oauth 2 protocol.

Token Generation

1. Create an application to manage your subscriptions.

A screenshot of a web browser displaying the KCB BUNI developer portal at <https://sandbox.buni.kcbgroup.com/devportal/applications>. The page has a dark header with the KCB logo and the word 'BUNI'. Below the header, there's a navigation bar with 'APIs' and 'Applications' tabs, and a search bar. The main content area is titled 'Applications' and features a button labeled 'ADD NEW APPLICATION'. A small note below the title says: 'An application is a logical collection of APIs. Applications allow you to use a single access token to invoke a collection of APIs and to subscribe to one API multiple times and allows unlimited access by default.'.

<https://sandbox.buni.kcbgroup.com/devportal/applications/create>

BUNI | APIs Applications All Search APIs ⓘ

Create an application
Create an application providing name, quota and token type parameters. Description is optional

Application Name * Application
Enter a name to identify the Application. You will be able to pick this application when subscribing to APIs.

Per Token Quota * Unlimited
Assign API request quota per access token. Allocated quota will be shared among all the subscribed APIs of the application.

Application Description
(512) characters remaining

SAVE **CANCEL**

2. Subscribe to an API to obtain a consumer key and consumer secret on Sandbox Keys section under subscriptions.

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Subscribe to an application and generate credentials

Application PilotTest APP Business Plan Unlimited
Select an Application to subscribe Select a Business Plan

SUBSCRIBE

Subscriptions
(Applications Subscribed to this API)

Application Name	Throttling Tier	Application Status	Actions
DefaultApplication	Unlimited	UNBLOCKED	SANDBOX KEYS PROD KEYS UNSUBSCRIBE MANAGE APP

Sandbox OAuth2 Keys

Key and Secret

Consumer Key <input type="text" value="bjQURVgnzQPVIAg8gcknPkm9TEwa"/> Consumer Key of the application	Consumer Secret <input type="text" value="*****"/> Consumer Secret of the application
--	---

3. Call the token endpoint https://uat.buni.kcbgroup.com/token?grant_type=client_credentials using HTTP Method POST and Basic Authentication. The consumer key is the Username while the consumer secret is the Password.



POST https://uat.buni.kcbgroup.com/token?grant_type=client_credentials

Send

Params Authorization Headers (9) Body Scripts Settings Cookies

Auth Type Basic Auth

Username

Password ⚡

The authorization header will be

Sample response:

```
{  
    "access_token": "eyJ4NXQi0iJNR1F6TmptelptVTFaV1k0T0dFNU5UZGpPRFU1T1RSak9ETmtaalZpWWpoaE4yRmtaamRoTUR  
    "token_type": "Bearer",  
    "expires_in": 3600  
}
```

Request specification

Description	Value
Method	POST
Content Type	application/json
Request Type	ASYNC

Request Parameter Definitions

Field	Type	Size	Description	Sample
beneficiaryDetails	String	35	The full name or identifying details of the beneficiary receiving the funds	JOHN DOE
companyCode	String	15	Parent Bank where the debit (primaryAccountNumber) account sits.	KE0010001
creditAccountNumber	String	10	Account number to be credited	123456789
currency	String	3	The Currency code of the transaction.	KES
debitAccountNumber	String	10	KCB Account number to be debited.	987654321
debitAmount	Numeric	10	Amount to be debited from debit account and credited to credit account number	100

paymentDetails	String	35	A brief description of the payment reason	School fee payment
transactionReference	String	12	A unique transaction code used to track the request lifecycle. This is generated by the 3 rd party calling the service and must be unique per transaction.	FTAPI7883TCP
transactionType	String	2	A short code to determine type of transaction, that is, KCB Internal Funds Transfer-IF, EFT-EF, RTGS-RT, Mobile etc. See Appendix 1 for all transaction type codes	IF
beneficiaryBankCode	String	20	Bank code to determine beneficiary's bank. See appendix 2 for all bank codes	01

Sample Request

```
{
  "beneficiaryDetails": "JOHN DOE",
  "companyCode": "KE0010001",
  "creditAccountNumber": "909099090",
  "currency": "KES",
  "debitAccountNumber": "37890012",
  "debitAmount": 10,
  "paymentDetails": "fees payment",
  "transactionReference": "MHSGS7883",
  "transactionType": "IF",
  "beneficiaryBankCode": "01"
}
```

Possible Responses

Response	Description
<pre>{ "fault": { "code": 900902, "message": "Missing Credentials", "description": "Missing Credentials. Make sure your API request provides required credentials" } }</pre>	Unauthorized request. Ensure to use consumer key and consumer secret issued on the onboarding process

<pre>{ "statusCode": "0", "statusMessage": "Success", "statusDescription": "Request received for processing", "merchantID": "263eb626-3fe7-4662-813e-f6f2962219e1", "retrievalRefNumber": "PCI663RSS" }</pre>	Successful call. Your request is being processed. You will receive the outcome on the Callback URL specified during onboarding
<pre>{ "statusCode": "1", "statusMessage": "Error", "statusDescription": "Validation failed: Transaction failed due to limit rule", "merchantID": null, "retrievalRefNumber": "GB99JBOD" }</pre>	Request failed due to either daily limit or transaction limit as specified on FT portal.
<pre>{ "statusCode": "1", "statusMessage": "Error", "statusDescription": "Validation failed: Invalid crucial param", "merchantID": null, "retrievalRefNumber": "AGP46IB" }</pre>	Request failed due to either a missing field or an invalid value on the request body.
<pre>{ "statusCode": "1", "statusMessage": "Error", "statusDescription": "Validation failed: Retrieval RefNumber already exists", "merchantID": null, "retrievalRefNumber": "CSS472TCP" }</pre>	Request failed because of duplicate transactionReference. Ensure you pass a unique one per request.

Notification

After processing of the request, a notification will be sent to the callback URL provided. Partner should expect a POST request with payload as follows.

Notification Parameter Definition

Field	Description	Sample
ftReference	Core banking system transaction Id. Available for successful transactions only.	FT22017MHXT2
transactionDate	The date and time when the transaction was processed in the system.	2022-07-06T11:08:40.019Z
transactionStatus	Outcome of the request.	SUCCESS/FAILED
transactionMessage	Description of the outcome of the transaction.	Processed Successfully
beneficiaryAccountNumber	The account number of the beneficiary that received the funds.	1226938922
amount	The value of the transaction.	100

transactionReference	Unique transaction Id supplied by partner when initiating request.	CSS472TCP
merchantId	A unique identifier generated by KCB at the time the request was accepted, used to track the transaction throughout its lifecycle.	1d2b13f8-ea62-465c-twre-hasdsdvdhg
beneficiaryName	The name of the beneficiary account holder.	JOHN DOE
debitAccountNumber	The account number from which the funds were debited.	1226938933

Sample Notification Payload

```
{
  "ftReference": "FT22060GXZGY",
  "transactionDate": "2022-07-06T11:08:40.019Z",
  "amount": "100",
  "transactionStatus": "SUCCESS",
  "transactionMessage": "Processed Successfully",
  "beneficiaryAccountNumber": "1226938922",
  "beneficiaryName": "JOHN DOE",
  "transactionReference": "CSS472TCP",
  "merchantId": "1d2b13f8-ea62-465c-9fda-e18353579880",
  "debitAccountNumber": "1279258233"
}
```

Appendix

1. Transaction Type References

Code	Type
IF	Internal KCB Funds transfer
RT	RTGS
PL	PESALINK
EF	EFT
MO	MOBILE MONEY

2. Bank Codes

BANK NAME	PARTICIPANT IDENTIFICATION CODE ON THE NEW IPS (PIC)
KCB	01
Stanchart	02
ABSA	03
Bank of India	05
Bank of Baroda	06
NCBA	07
Prime Bank	10
Coop Bank	11
NBK	12
M-Oriental	14
Citi Bank	16
Habib Bank AG Zurich	17
Middle East Bank	18
Bank of Africa	19
Consolidated	23
Credit Bank	25
Access Bank	26
Stanbic Bank	31
ABC Bank	35
Eco Bank	43
SPIRE Bank	49
Paramount	50
Kingdom Bank	51
Gt Bank	53
Victoria Bank	54
Guardian Bank	55
I&M Bank	57
Development Bank	59
SBM	60
Housing finance	61
DTB	63

Mayfair Bank	65
Sidian Bank	66
Equity Bank	68
Family Bank	70
Gulf African Bank	72
First Community Bank	74
DIB Bank	75
UBA	76
KWFT	78
Faulu Bank	79
Post Bank	99
MPESA	MPESA

For any queries or support, please reach out to buni@kcbgroup.com