Kpay

Api Developer's Guide

Contents

Get started

Introduction

Item	Value
Live	pay.esicia.rw
Sandbox	pay.esicia.com
Port	443
Protocol	HTTPS
Authentication	Basic authorization
Administrator Page	TBA

Authentication

API access is granted by the use of the Basic Authorization Header.

In your request, add the Authorization Basic HTTP header.

CURL EXAMPLE

```
curl --user name:password https://pay.esicia.com/
```

The system uses also IP whitelisting, the client need to submit a list of IPs where his application will be sending the request from.

Supported payment methods

For now the following payment methods are supported

1. MTN Mobile Money
2. Airtel Money
3. Visa Card
4. MasterCard
5. Spenn
6. SmartCash

Payment request

To send a payment request to a mobile number or other payment method:

POST data are sent as json

Parameter	Severity	Type	Description
action	Required	string	pay; checkstatus
msisdn	Required	string	The mobile phone number starting with country code and no + sign. Also referred to sometimes as MSISDN.
email	Required	String	Email of the paying client
details	Required	string	Details of the payment to do
refid	Required	string	Payment reference from your system (unique)
amount	Required	integer	The amount of the payment to do (in RWF)
currency		String	Will be RWF if not set (supported are RWF and USD)
cname	Required	string	The name of the person paying
cnumber	Required	String	Customer number at the Payment processor Level
pmethod	Required	string	The payment method (cc Credit Card, momo – mobile money bank – for bank payment, spenn for SPENN, smartcash)
retailerid	Required	String	The unique retailer ID
returl	Required	String	Return url for postback of the asynchronous response (sometimes referred as webhook)
redirecturl	Required	String	Redirection url after payment
bankid	Required	String	The id of the Financial Institution used in payment (refer to table bank codes)
logourl	Optional	String	url to the logo image to be used on card checkout page

In case of a successful payment request (awaiting to be paid) a retcode = 0 is returned.

Request body

```
{"msisdn":"0783300000","details":"order","refid":"15947234071471114","amount"
:4200,"currency":"RWF","email":"user@user.rw","cname":"CUSTOMER
NAME","cnumber":"123456789","pmethod":"momo","retailerid":"02","returl":"http
s://iduka.rw/api/paymentack","redirecturl":"https://www.iduka.rw","bankid":"1
30"}
```

Response

- Data
- Description

```
{"reply":"PENDING","url":"https://pay.esicia.com/checkout/A12343983489","success":1,"authkey":"m43snbf9oivnmersqh6mn1lbh5","tid":"E6974831594723691","refid":"15947234071471114","retcode":0}
```

Some payments are automatically processed, in that case the system will immediately send a response of success

Response

```
{"tid":"E6974821594723662","refid":"15947234071471114","momtransactionid":"2785640192","statusdesc":"SUCCESSFUL","statusid":"01","retcode":0}
```

Additional parameters can be added based on method of payment (such as masked card, etc)

Errors

If something terrible were to happen. We will send back a neat array of error codes and descriptions.

Test cards

If something terrible were to happen. We will send back a neat array of error codes and descriptions.

Card Number	Card Type
5101 1800 0000 0007	Commercial Credit
2222 4000 7000 0005	Commercial Debit
5577 0000 5577 0004	Consumer
5136 3333 3333 3335	Consumer
5585 5585 5585 5583	Consumer
5555 4444 3333 1111	Consumer
2222 4107 4036 0010	Corporate
5555 5555 5555 4444	Corporate
2222 4107 0000 0002	Corporate Credit
2222 4000 1000 0008	Credit
2223 0000 4841 0010	Credit
2222 4000 6000 0007	Debit
2223 5204 4356 0010	Debit
5500 0000 0000 0004	Debit
2222 4000 3000 0004	Fleet Credit
6771 7980 2500 0004	Mastercard
5100 0600 0000 0002	Premium Credit
5100 7050 0000 0002	Premium Debit

Card Number	Card Type
5103 2219 1119 9245	Prepaid

Visa cards

Card Number	Card Type
4988 4388 4388 4305	Classic
4166 6766 6766 6746	Classic
4646 4646 4646 4644	Classic
4000 6200 0000 0007	Commercial Credit
4000 0600 0000 0006	Commercial Debit
4293 1891 0000 0008	Commercial Premium Credit
4988 0800 0000 0000	Commercial Premium Debit
4111 1111 1111 1111	Consumer
4444 3333 2222 1111	Corporate
4001 5900 0000 0001	Corporate Credit
4000 1800 0000 0002	Corporate Debit
4000 0200 0000 0000	Credit
4000 1600 0000 0004	Debit
4002 6900 0000 0008	Debit
4400 0000 0000 0008	Debit
4484 6000 0000 0004	Fleet Credit
4607 0000 0000 0009	Fleet Debit
4977 9494 9494 9497	Gold
4000 6400 0000 0005	Premium Credit
4003 5500 0000 0003	Premium Credit
4000 7600 0000 0001	Premium Debit
4017 3400 0000 0003	Premium Debit
4005 5190 0000 0006	Purchasing Credit
4131 8400 0000 0003	Purchasing Debit
4035 5010 0000 0008	Visa
4151 5000 0000 0008	Visa Credit
4571 0000 0000 0001	Visa Dankort
4199 3500 0000 0002	Visa Proprietary

Response

```
{"reply":"TARGET_AUTHORIZATION_ERROR","url":"
","success":0,"authkey":"rttdr2vr1hrdho853nfuvdkq01","tid":"E6974691594723427
","refid":"15947234071471114","retcode":606}
```

Post back asynchronous

In order to get the payment confirmation, our API sends the reply in an asynchronous mode. The client needs to have setup a listener to which we will be posting responses as we get payments information.

Successful payment case of mobile money

Success payment

```
{
"tid":"A441489693051",
"refid":"1489693046",
"momtransactionid":"616730887",
"payaccount":"0783300000",
"statusid":"01",
"statusdesc":"Successfully processed transaction."

}
```

Parameter	Type	Description
tid	string	K-Pay internal payment reference number
refid	string	Payment reference from your system (unique)
momtransactionid	String	Transaction ID from the concerned financial institution
statusid	string	01: successful ; 02: Failed
statusdesc	String	Details of transaction status
payaccount	String	Bank account / mobile number used to pay

Failed payment

```
{
"tid":"A2431476355795",
"refid":"1476293424",
"momtransactionid":"",
"statusid":"682",
"statusdesc":"An internal error caused the operation to fail"
}
```

Response expected

```
{
"tid":"A441489693051",
"refid":"1489693046",
"reply":"OK"
}
```

Note that statusid 01 is a complete transaction while any other value is the error code from mobile money.

Successful payment case of visa / mastercard

In case of Visa / mastercard payments, the client is redirected to the redirect url with the response sent to return url – your application has to read status of transaction in redirect url

Check transaction status

The client can at any time check the status of a transaction by using either internal reference and / or external refid.

request

user can send either TID or refid; action is mandatory and always has value checkstatus

```
{
"tid":"A441489693051",
"refid":"1489693046",
"action":"checkstatus",
}
```

Response

Is same as data in postback

```
{
"tid":"A2431476355795",
"refid":"1476293424",
"momtransactionid":"",
"statusid":"02",
"statusdesc":"An internal error caused the operation to fail"
}
```

Transaction not found

```
{"tid":"",
"refid":"",
"momtransactionid":"",
"statusid":"611",
"statusdesc":"Transaction not found"
}
```

We always recommend to rely on check status rather than post back data

KPay error / return code

Codes that represent message status retcode (payment request) and statusid (postback).

Id	Description
0	No error. Transaction being processed
01	Successful payment
02	Payment failed
03	Pending transaction
401	Missing authentication header
500	Non HTTPS request
600	Invalid username / password combination
601	Invalid remote user
602	Location / IP not whitelisted
603	Empty parameter. - missing required parameters
604	Unknown retailer
605	Retailer not enabled
606	Error processing
607	Failed mobile money transaction
608	Used ref id – error uniqueness
609	Unknown Payment method
610	Unknown or not enabled Financial institution
611	Transaction not found

Bank codes

bankid	BANK NAME	SHORT NAME
010	INVESTMENT AND MORTGAGE BANK	IMBANK RWANDA
040	BANQUE DE KIGALI	BK
070	GUARANTY TRUST BANK (RWANDA)	GTBANK RWANDA
100	ECOBANK RWANDA	ECOBANK
115	ACCESS RWANDA	ACCESS
130	COMPAGNIE GENERALE DE BANQUES	COGEBANQUE
145	URWEGO OPPORTUNITY BANK	UOB
160	KENYA COMMERCIAL BANK	KCB RWANDA
192	EQUITY BANK	EQUITY
400	BANQUE POPULAIRE DU RWANDA	BPR
750	BANQUE RWANDAISE DE DEVELOPEMENT	BRD
800	ZIGAMA CREDIT AND SAVINGS SCHEME	ZIGAMA
900	BANK OF AFRICA RWANDA	BOA RWANDA
950	UNGUKA BANK	UNGUKA
951	BANQUE NATIONALE DU RWANDA	BNR
63510	MTN MOBILE MONEY	MTN MOMO
63514	AIRTEL MONEY	AIRTEL MONEY
000	VISA - MASTERCARD	CARDS
63501	MOBICASH	MOBICASH
63502	SPENN	SPENN