LMBTech Payment System - API Documentation

System Overview

The LMBTech Payment System allows you to:

- **Collect money** from customers via Mobile Money (MTN MOMO) or Card
- **Send money** to customers (payouts)
- **Check payment status** in real-time
- **Receive instant notifications** via callbacks

Base URL: https://pay.lmbtech.rw/pay/config/api

GitHub Repository:

https://github.com/danieltn889/LMBTech_Payment_System_API_Documentation.git

Sample Code & Test Files Access complete working examples, test scripts, and integration samples on

Authentication

Every API request must include your credentials in the Authorization header. This ensures that only authorized applications can access the payment system.

How Authentication Works

Step 1: Get Your Credentials

You will receive two keys from LMBTech:

- **App Key:** Identifies your application
- **Secret Key:** Proves your identity (keep this secret!)

Step 2: Combine Your Keys

Combine your App Key and Secret Key with a colon (:) between them:

app_key:secret_key

Step 3: Encode Using Base64

Convert the combined string to Base64 format. Base64 encoding turns your credentials into a safe format for HTTP headers.

Step 4: Add to Request Header

Include the encoded string in your request header:

Authorization: Basic [base64_string]

Making Payments (Collections)

Use this to accept payments from customers.

Request Format

Method: POST
Content-Type: application/json
Endpoint: Base URL

Field	Description	Example
email	Customer email	customer@example.com
name	Customer full name	John Doe
payment_method	MTN_MOMO_RWA or card	MTN_MOMO_RWA

Field	Description	Example
amount	Amount in RWF	1000
service_paid	What they're paying for	product_purchase
reference_id	Your unique ID (see format below)	ORDER-20260215-1234
callback_url	Your URL to receive notification	https://your-site.com/callback
action	Must be pay	pay

Required Fields

For Mobile Money Only

Field	Description	Example
payer_phone	Customer phone	+250785085214

For Card Payments Only

Field	Description	Example
card_redirect_url	Where to send user for card payment	https://your-site.com/card-redirect

Complete Request Examples

Mobile Money Request:

json

```
{
    "email": "customer@example.com",
    "name": "John Doe",
    "payment_method": "MTN_MOMO_RWA",
    "amount": 1000,
    "payer_phone": "+250785085214",
    "service_paid": "order_123",
    "reference_id": "ORDER-20260215-1234",
    "callback_url": "https://your-site.com/callback",
    "action": "pay"
}
```

Card Payment Request:

json

```
{
    "email": "customer@example.com",
    "name": "John Doe",
    "payment_method": "card",
    "amount": 1000,
    "service_paid": "order_123",
    "reference_id": "ORDER-20260215-1234",
    "callback_url": "https://your-site.com/callback",
    "card_redirect_url": "https://your-site.com/card-redirect",
    "action": "pay"
}
```

Response Formats

Mobile Money Success Response:

json

```
{
    "status": "success",
    "data": {
        "id": 8067,
        "reference_id": "ORDER-20260215-1234",
        "amount": "1000.00",
        "status": "pending"
    },
    "message": "Payment initiated successfully"
}
```

Card Payment Success Response:

json

```
{
    "status": "success",
    "data": {
        "reference_id": "ORDER-20260215-1234",
        "redirect_url": "https://pay.lmbtech.rw/pay/pesapal/iframe.php?reference_id=ORDER-20260215-1234"
    },
    "message": "Redirect to card payment gateway"
}
```

Error Response:

json

```
{
    "status": "fail",
    "message": "Insufficient balance for payout"
}
```

What Happens Next

For Mobile Money:

1. Customer receives a payment request on their phone
2. They enter PIN to approve
3. Your callback URL receives notification when complete

For Card Payments:

1. User is redirected to the redirect_url from response

2. They enter card details on secure Pesapal page
3. After payment, they're redirected back to your callback_url

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Sending Money (Payouts)

Use this to send money from your balance to customers.

Important Requirements

- You must have sufficient balance in your account
- Your account must have payout permissions enabled

Request Format

Method: POST
Content-Type: application/json

json

```
{
    "email": "your-account@example.com",
    "name": "Recipient Name",
    "payment_method": "MTN_MOMO_RWA",
    "amount": 500,
    "payer_phone": "+250785085214",
    "service_paid": "payout",
    "reference_id": "PAYOUT-20260215-5678",
    "callback_url": "https://your-site.com/callback",
    "action": "payout"
}
```

Response

json

```
{
    "status": "success",
    "data": {
        "reference_id": "PAYOUT-20260215-5678",
        "amount": "500.00",
        "status": "pending"
    },
    "message": "Payout initiated successfully"
}
```

Checking Payment Status

You can check the status of any payment using its reference ID.

Request Format

Method: GET
URL: Base URL with reference_id parameter

text

```
GET https://pay.lmbtech.rw/pay/config/api.php?reference_id=ORDER-20260215-1234
```

Response

json

```
{
    "status": "success",
    "data": {
        "id": 8067,
        "reference_id": "ORDER-20260215-1234",
        "transaction_id": "TXN-987654321",
        "amount": "1000.00",
        "status": "success",
        "payment_method": "MTN_MOMO_RWA",
        "payment_date": "2026-02-15 12:35:22"
    }
}
```

Status Meanings

Status	Description
pending	Transaction started, waiting for customer action
success	Payment completed successfully
failed	Payment failed (insufficient funds, cancelled, etc.)
cancelled	Transaction cancelled by user or system

Callback Implementation

This is the most important part of your integration. When a payment completes, the system sends a notification to your callback_url.

What You Need to Do

1. Create an endpoint (URL) that can receive HTTP requests
2. This endpoint must handle both:
    - **JSON data** (for Mobile Money callbacks)
    - **Form data** (for Card payment callbacks)
3. Process the data and update your database
4. Return a success response

Callback Data Formats

Mobile Money Callback (JSON):

json

```
{
  "reference_id": "ORDER-20260215-1234",
  "transaction_id": "TXN-987654321",
  "status": "success",
  "amount": "1000.00",
  "payment_method": "MTN_MOMO_RWA",
  "payer_phone": "+250785085214"
}
```

Card Payment Callback (Form Data)

Field: pesapal_merchant_reference = ORDER-20260215-1234

Field: pesapal_transaction_tracking_id = TXN-987654321

Field: pesapal_response_data = COMPLETED

Callback Handler Logic (Pseudo-code)

```
FUNCTION handle_callback(request):
    // Step 1: Determine callback type and extract data
    IF request has form data:
        reference_id = request.form["pesapal_merchant_reference"]
        transaction_id = request.form["pesapal_transaction_tracking_id"]
        response = request.form["pesapal_response_data"]

        IF response == "COMPLETED":
            status = "success"
        ELSE:
            status = "failed"

    ELSE IF request has JSON body:
        data = parse_json(request.body)
        reference_id = data["reference_id"]
        transaction_id = data["transaction_id"]
        status = data["status"]

    ELSE:
        RETURN error_response("Invalid callback data")
    // Step 2: Validate required data
    IF reference_id is empty OR transaction_id is empty:
        RETURN error_response("Missing required fields")

    // Step 3: Update your database
    database.execute(
        "UPDATE orders SET payment_status = ?, transaction_id = ? WHERE reference_id = ?",
        [status, transaction_id, reference_id]
    )

    // Step 4: Log for debugging
    write_to_log("Callback processed: " + reference_id + ", Status: " + status)

    // Step 5: Return success acknowledgment
    RETURN success_response("Callback processed")
```

Important Notes About Callbacks

- **Callbacks may be sent multiple times** - Your handler must be idempotent (check if already processed)
- **Always validate data** before updating your database
- **Return a 200 OK response** quickly to acknowledge receipt
- **Log everything** for debugging purposes

Card Payment Flow (Step by Step)

When a customer chooses to pay by card, here's the complete flow:

Step 1: Initiate Payment

Your system sends the card payment request (as shown above).

Step 2: Get Redirect URL

Response contains redirect_url:

https://pay.lmbtech.rw/pay/pesapal/iframe.php?reference_id=ORDER-20260215-1234

Step 3: Redirect Customer

Send the customer to this URL. They will see a secure payment page.

Step 4: Customer Enters Card Details

The iframe.php page:

1. Fetches payment details from your reference
2. Gets authentication from Pesapal
3. Displays the card payment form

Step 5: Payment Processing

Customer enters card details and completes payment on Pesapal's secure servers.

Step 6: Redirect Back

After payment, customer is redirected to your callback_url with the transaction details.

Step 7: Your Callback Handler

Your callback URL receives the form data and updates your database.

Error Handling

Common Error Responses

HTTP Code	Error Message	What It Means	How to Fix
401	Unauthorized	Invalid API keys	Check your app_key and secret_key
402	Insufficient balance	Not enough money for payout	Collect more payments first

HTTP Code	Error Message	What It Means	How to Fix
400	Invalid callback data	Malformed callback	Check your callback implementation
404	Reference not found	Reference ID doesn't exist	Verify you're using correct reference

Error Response Format

json

```
{
    "status": "fail",
    "message": "Description of what went wrong"
}
```

Testing

Test Files Available

- **Card Payment**
  Test: https://pay.lmbtech.rw/test_lmbtech_pay/test_card_api.php
- **Mobile Money**
  Test: https://pay.lmbtech.rw/test_lmbtech_pay/test_momo_api.php

Test Credentials

text

```
App Key: app_68b06fca2067717563934188958
Secret Key: scrt_68b06fca206911756393418
```

Test Phone Number

+250785085214 (for MTN MOMO)

Test Amounts

Use small amounts for testing (e.g., 100, 200 RWF)

Quick Reference

API at a Glance

Operation	Method	Required Fields
Collect Money (MOMO)	POST	email, name, payment_method=MTN_MOMO_RWA, amount, payer_phone, service_paid, reference_id, callback_url, action=pay
Collect Money (Card)	POST	email, name, payment_method=card, amount, service_paid, reference_id, callback_url, card_redirect_url, action=pay
Send Money (Payout)	POST	email, name, payment_method=MTN_MOMO_RWA, amount, payer_phone, service_paid, reference_id, callback_url, action=payout
Check Status	GET	reference_id parameter
Send SMS	POST	name, tel, message, action=sms

Reference ID Format

Always use unique IDs:

text

Format: [PREFIX]-[DATE]-[RANDOM]

Example: ORDER-20260215-1234

Phone Number Format

text

For Rwanda: +2507XXXXXXXX

Example: +250785085214

Important URLs

- **API Endpoint:** https://pay.lmbtech.rw/pay/config/api.php
- **Card Payment Page:** https://pay.lmbtech.rw/pay/pesapal/iframe.php

- **Support Email:** support@lmbtech.rw