

## LMBTech Payment System - API Documentation

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## 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>

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## 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]

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## 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
amount	Amount in RWF	1000
service_paid	What they're paying for	product_purchase

Field	Description	Example
reference_id	Your unique ID (see format below)	ORDER-20260215-1234
callback_url	Your URL to receive notification	<a href="https://your-site.com/callback">https://your-site.com/callback</a>
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	<a href="https://your-site.com/card-redirect">https://your-site.com/card-redirect</a>

### 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
-

# 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

Status	Description
success	Payment completed successfully
failed	Payment failed (insufficient funds, cancelled, etc.)
cancelled	Transaction cancelled by user or system

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## 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

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### 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](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.

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# Error Handling

## Common Error Responses

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

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## 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

Operation	Method	Required Fields
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](mailto:support@lmbtech.rw)