



# **Wema Payment Gateway**

## **API Specification**



### Modification Log

<b>URL</b>	Payment Gateway Landing Page: <a href="https://apps.wemabank.com/WemaGatewayTest">https://apps.wemabank.com/WemaGatewayTest</a> Transaction Details Url (Webservice) : <a href="https://apps.wemabank.com/wemamerchants/TransactionStatusService.asmx">https://apps.wemabank.com/wemamerchants/TransactionStatusService.asmx</a>
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<b>Author</b>	Quality Assurance Team
<b>Reviewers</b>	
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<b>Document Version</b>	First documented version.



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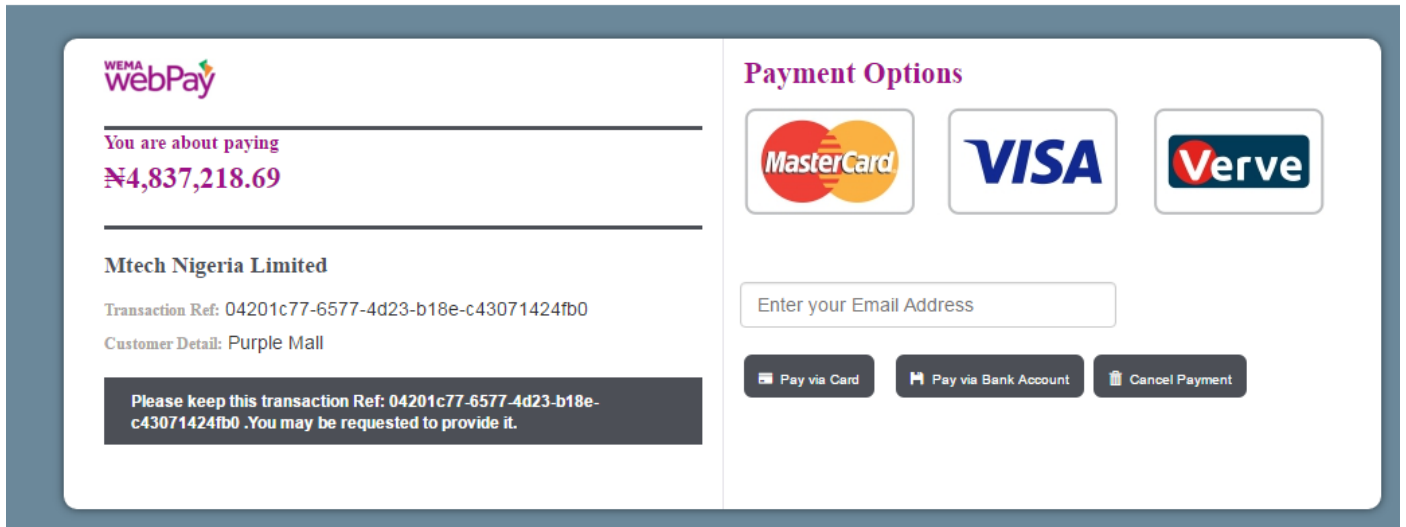
## 1 Introduction

Wema PaymentGateway is a simple page that can be called from any website seeking to offer visitors the facility to pay for goods or services by their bank issued cards or other payment tokens. It is designed for merchants who use shopping carts, have little experience in server side scripting, or who use shared web servers that do not offer secure database services.

- Easy set up: Wema PaymentGateway is easily integrated with most of the major shopping carts.
- Seamless Integration: with just a few lines of code, the merchant's website can be ready to accept payment.
- System security: End customers enter their card details on the WebPAY payment page and it takes care of the transaction security for them. Therefore, the merchant does not need to worry about cardholder security as they do not process the card data. The WebPay platform is certified under the PCI DSS (Payment Card Industry Data Security Standard)

All transaction information is held at Wema PaymentGateway, which are transmitted to WebPay securely where customers enter their card details and therefore no sensitive information needs to be taken or stored on the merchant's site, thereby removing the need for them to maintain highly secure encrypted databases, or obtain digital certificates.

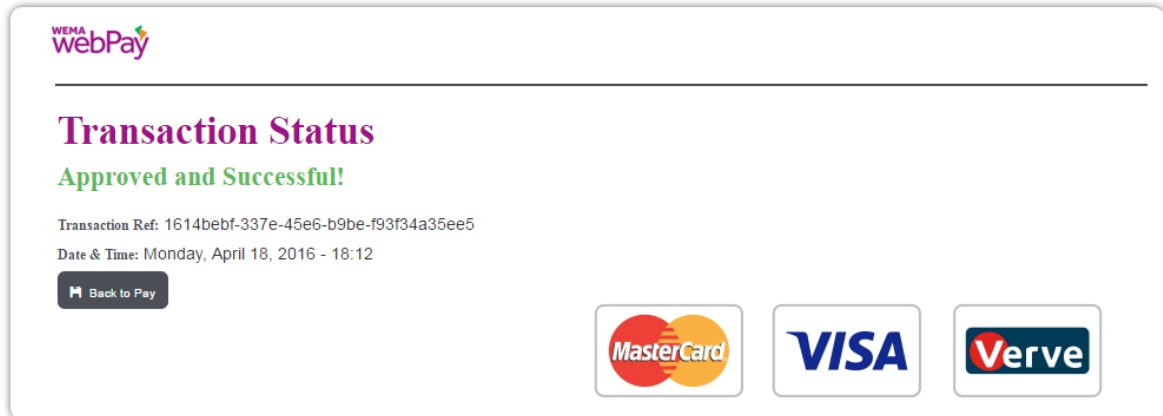
### 1.1 Wema WebPAY Landing Page



The PaymentGateway Landing Page carries the merchant's name, Transaction Ref, Customer details, Email Address, Payment option and Amount the customer is paying for, so they can remain confident on how much they are paying.

Once the customer has selected what he/she is buying from the merchant's website, on clicking the checkout button, redirects customer to the PaymentGateway landing page where the customer enters email address and choose a payment option. Once a payment option is selected, it further redirects them to the payment page where their card details will be required.

WebPAY requests authorization from the bank. Once the bank has authorized the payment, WebPAY redirects the customer back to the return page of PaymentGateway , from where the paying customer is redirected to the merchant return page. This payment information can be accessed using standard web technology by the merchant.



## 2 STANDARD FEATURES

### 2.1 Integration Overview

Wema Payment Gateway is a flexible and secure internet payment gateway that conforms to Internet standards and common integration methods.

Integrating PaymentGateway with an existing website is extremely easy and can be achieved with a few simple steps. The only requirement is to create a HTML form in the referring web page that contains a few mandatory fields.

### 2.2 Form Creation

- Create a form in the location that the "Pay" button should appear
- Set the form's action to <URL to be provided>
- Set the form's method to POST
- Create hidden fields as shown in the table below, with the following values merchCode, amnt, custDetails, uniqueRef, cancelReturnPage and hashValue

- Create a submit button in the form.

### 2.3 HTTP Post Fields

\*Note: M=Mandatory, O=Optional

Field	M/O	Description	Expected Value	FORMAT
Merchant Code	M	Merchant code unique for each merchant.	<to be provided>	alphanumeric
Amount	M	Transaction Amount (the naira equivalent) e.g N2,000.00 (Two Thousand Naira)	<variable>	alphanumeric
Customer Details	M	Name of the customer /merchant	<variable>	alphanumeric
Unique Ref	M	Transaction Reference Number. This Reference Number must be generated by your website/portal and a unique value must be sent for each transaction	<variable>	alphanumeric
Cancel Return Page	M	URL of the page on your website/portal that Users can be redirected to if they choose to cancel payment while on wema webpay landing page.	<variable>	alphanumeric
HashValue	M	A Hashed value of selected combined parameters	<variable>	alphanumeric

#### 2.3.1 Request HASH Computation

The following fields are to be combined and hashed using SHA512 algorithm and the private hash key.

- Merchant Code
- Amount (To the kobo value)
- Unique Ref (Unique transaction ref)
- MAC (The mac key to be provided)

For example, Where:

Merchant Code: GOJE00432931MTEC

Amount: ₦200000 (*Value in kobo*) for 2,000 Naira



Mac Key:

**D3D1D05AFE42AD50818167EAC73C109168A0F108F32645C8B59E897FA930DA44F9230910DAC9E20641823799A107A02068F7BC0F4CC41D2952E249552255710F**

Unique Ref: 213232EETW

```
var combinVal = string.Format("{0}{1}{2}{3}", merchCode, amount, uniqueRef, mac);
```

```
var hashVal = hashSHA512(combinVal);
```

You would therefore perform a SHA512 Hash computation on the value above and put the computed value in the 'hash' http post field.

**Note:** A unique MAC key will be given to you for test integration and migration to live (See Modification Log table above).

## 2.4 Sample Request

```
<form method= "post" action="https://apps.wemabank.com/WemaGatewayTest">
<input id="merchCode" type="hidden" value="GOJE00432931MTEC"
name= "merchCode">
<input id="amnt" type="hidden" value="3,997.80" name="amnt">
<input id="custDetails" type="hidden" value="Purple Mall" name="custDetails">
<input id="uniqueRef" type="hidden" value="a2876582-63db-46db-8aac-
8674ac61bd6c" name="uniqueRef">
<input id="hashValue" type="hidden" value="11446b261626ef4c1ffdc88d03a8623519949f264615f5
671627603b8ca1cc9fbf4b
113f7b894ffb70e987bc1a80b35efcaabfffa35def5f76097ad3676a501e" name="hashValue">
<input id="cancelReturnPage" type="hidden" value="http://172.27.4.135/PurpleMall/Cart" name="
cancelReturnPage">
</form>
```



## 2.5 Response Fields (Not Transaction Response)

The transRef is returned by PaymentGateway for real time transactions when the customer clicks on Return keyword of the merchant. At this point merchant website/portal is expected to consume transaction detail web service stated above to get the actual Transaction response in order to rout customer to the accurate page (Failure or Success page).

Field	Description
txnref	The Transaction Reference initially generated & sent by the merchant site will be sent back with this variable.

## 2.6 Sample Response from PaymentGateway (Not Transaction Response)

```
ReturnUrl?transRef= a2876582-63db-46db-8aac-8674ac61bd6c
```

## 2.7 Querying for Transactions status using the web service

### 2.7.1 GetTransactionDetails

GET <https://apps.wemabank.com/wemamerchants/TransactionStatusService.asmx>

This service is used to get the current status of a transaction.

Parameter	Description	Format
Transaction Ref	Original transaction reference sent in the original request (transaction request you generated for this transaction same as what was sent to you)	Alphanumeric
Merchant Code	This is a unique reference number given to the merchant	Alphanumeric

### Sample Request (.Net)

```
protected void GetTransactionStatus()
```

```
{
```

Internal Documentation



```
string merchantcode = "GOJE00432931MTEC";  
string transactionref = "5f1b9a71-694c-4713-ab4e-3eba026fff10";
```

```
//Make call to web service
```

```
TransactionStatusService mysvc = new TransactionStatusService();//(Instance of generated webservice proxy)
```

```
//place response from service object created Transaction details object
```

```
TransactionDetails result = mysvc.GetTransactionDetails(merchantcode, transactionref);
```

```
//Place other business logic here
```

```
}
```

```
//Web service response Class.
```

```
public class TransactionDetails
```

```
{
```

```
    public string ResponseCode { get; set; }  
    public string ResponseDescription { get; set; }  
    public string Amount { get; set; }  
    public string TransactionRef { get; set; }  
    public string CustomerDetails { get; set; }  
    public string TransactionDate { get; set; }  
    public string CustomerEmail { get; set; }
```

```
}
```

### Sample Response for GetTransactionDetails(XML)

```
<GetTransactionDetailsResponse xmlns="http://tempuri.org/">  
  <GetTransactionDetailsResult>  
    <ResponseCode> 00 </ResponseCode>  
    <ResponseDescription> Transaction Successful </ResponseDescription>  
    <Amount> 10500.25 </Amount>  
    <TransactionRef> 5f1b9a71-694c-4713-ab4e-3eba026fff10 </TransactionRef>  
    <CustomerDetails> Purple Mall </CustomerDetails>  
    <TransactionDate> 2016-04-11 10:08:28.487 </TransactionDate>  
    <CustomerEmail> gbemisolafash@yahoo.com </CustomerEmail>  
  </GetTransactionDetailsResult>  
</GetTransactionDetailsResponse>
```



### 2.7.2 GetTransactionDetailsJson

GET <https://apps.wemabank.com/wemamerchants/TransactionStatusService.asmx>

This service is used to get the current status of a transaction in JSON format.

Parameter	Description	Format
Transaction Ref	Original transaction reference sent in the original request (transaction request you generated for this transaction same as what was sent to you)	Alphanumeric
Merchant Code	This is a unique reference number given to the merchant	Alphanumeric

#### Sample Request to perform HTTP Post to GetTransactionDetailsJson (IQuery)

```
$.ajax({  
    type: "POST",  
    url:'https://apps.wemabank.com/wemamerchants/TransactionStatusService.asmx/GetTransactionDetailsJson',  
    data: JSON.stringify({'merchantcode':'insert merchant code here', 'transactionref': 'insert tranx ref here'}),  
    contentType: "application/json; charset=utf-8",  
    dataType: "json",  
    success: function (msg) {  
        //handle success business logic here  
    },  
    error: function (e) {  
  
    }  
});
```



Sample Response for GetTransactionDetailsJson

```
{ "ResponseCode": "00", "ResponseDescription": "Transaction Successful", "Amount": "10500.25", "TransactionRef": "5f1b9a71-694c-4713-ab4e-3eba026fff10", "CustomerDetails": "Purple Mall", "TransactionDate": "2016-04-11 10:08:28.487", "CustomerEmail": "gbemisolafash@yahoo.com" }
```

Description of Fields

- 1) ResponseCode: The response code of the transaction e.g. 00 = Success
- 2) ResponseDescription : A description of the transaction status
- 3) Amount: Transaction Amount
- 4) TransactionRef : This is the reference number of the transaction
- 5) CustomerDetails : The Name of the Customer who performed the transaction
- 6) TransactionDate : The date transaction was performed
- 7) CustomerEmail : The Email of the customer