WEBXPAY- Redirect Mechanism Integration Guide

Version 3.0

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1. Introduction

WEBXPAY Gateway offers a highly secure, mobile-responsive, and user-friendly payment solution. It supports transactions from any gateway integrated with a merchant's website, accommodating all international card brands and various local payment methods such as eZ Cash, mCash, Frimi, Upay, Genie, and DFCC Wallet. To enhance security, alerts are implemented to detect any fraudulent activities and manage chargeback processes.

This integration guide provides developers with a comprehensive understanding of the integration process and the necessary software requirements. It includes sample code snippets to assist in seamlessly integrating the gateway functionalities with the merchant's website.

1.1 Purpose

The purpose of this document is to guide developers through the integration of the WEBXPAY Gateway with merchant websites. It aims to provide clear, concise instructions and sample code snippets to ensure a smooth and efficient integration process. By following this guide, developers will be able to implement a secure, mobile-responsive, and user-friendly payment gateway that supports a wide range of international and local payment methods, enhancing the overall transaction experience for both merchants and customers.

1.2 Scope

This document encompasses the necessary steps and requirements for integrating the WEBXPAY Gateway with merchant websites. It covers the following aspects:

- Integration Overview: An introduction to the WEBXPAY Gateway and its key features.
- Supported Payment Methods: Details on the international card brands and local payment methods accepted by the gateway.
- Security Measures: Information on security alerts and fraud detection mechanisms.
- Technical Requirements: A comprehensive list of software and hardware prerequisites for successful integration.
- Integration Process: Step-by-step instructions for integrating the gateway with a merchant's website, including sample code snippets.
- Testing and Validation: Guidelines for testing the integration to ensure proper functionality.
- Troubleshooting: Common issues and solutions to assist developers in resolving potential problems.

By adhering to this guide, developers will ensure a seamless integration of the WEBXPAY Gateway, providing a secure and efficient payment experience for users.

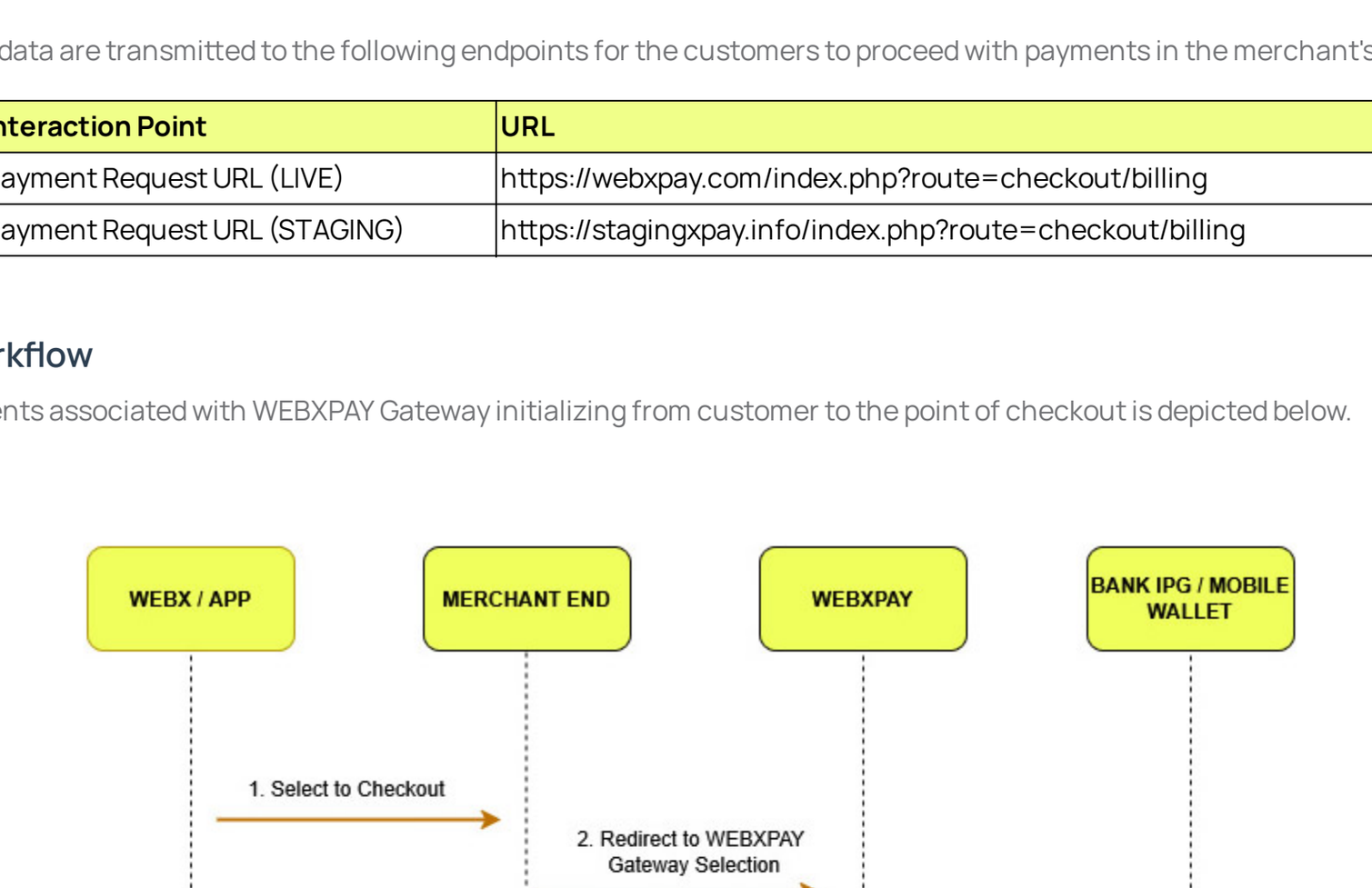
2. Integration

Customer and order data are transmitted to the following endpoints for the customers to proceed with payments in the merchant's website.

Interaction Point	URL
Payment Request URL (LIVE)	https://webxpay.com/index.php?route=checkout/billing
Payment Request URL (STAGING)	https://stagingxpay.info/index.php?route=checkout/billing

2.1 Payment Workflow

The sequence of events associated with WEBXPAY Gateway initializing from customer to the point of checkout is depicted below.



2.2 Request Parameters

The request has to be a HTTP POST request, and parameters required by WEBXPAY Gateway are as follows.

Parameter Name	Description	Mandatory	Max Character Count
first_name	Customer's first name	Yes	30
last_name	Customer's last name	Yes	30
email	Customer's email address	Yes	Valid email format
contact_number	Customer's contact number	Yes	Max 20, Min 9 Characters (Numbers and plus (+) sign only)
address_line_one	Customer's address	Yes	
address_line_two	Customer's address	No	
city	Customer's city	No	
state	Customer's state	No	
postal_code	Customer's postal code	No	
country	Customer's country	No	
secret_key	Provide upon registration. The key can be retrieved from the merchant backend under Settings > Integrations menu.	Yes	
payment	Refer section 2.5	Yes	
cms	Magento, Prestashop, Woo Commerce, Opencart, PHP, IOS, etc...	Yes	
process_currency	LKR, USD, GBP, AUD	Yes	
custom_feilds	Refer section 2.7	No	
payment_gateway_id	Refer section 2.5.1	No	

2.3 Response Parameters

Parameter Name	Description
Payment	Refer Section 2.5 Transaction Request
Signature	The checksum of payment parameter to validate the response is not tampered.
Custom Feilds	Variables passed to gateway side rather than main variables

The customer is redirected to the merchant's website with the following parameters when the payments are being processed.

2.4 Gateway Status Codes

2.4.1 Response Status Codes

Response status codes are used to track down the transaction statuses. The status codes depend on the gateways chosen by the merchant.

Code	Status	Description
0	Transaction Approved	The Transaction was Successful
00	Transaction Approved	The Transaction was Successful
15	Transaction Declined	The Transaction was Unsuccessful

2.4.2 Error Codes

The following are some of the most common error codes displayed on merchant websites when the required information result in failure.

Error Code	Description
401	Invalid access
402	Can't identify product
403	Invalid Secret Key
405	First name is required
406	Last name is required
407	Email Address is required
408	Contact Number is required
409	Total amount less than 1 USD / 1 LKR
410	LKR total amount exceed
411	USD total amount exceed
412	Not supported currency code
413	Can't find the Gateways
414	Selected gateway is not found
415	Error gateway ID
416	Bank Response not received
417	Currency code not defined
418	Return URL missing X Gateway
419	Transaction Blocked for this IP Address
420	Transaction Blocked for this E-mail address
421	Transaction Blocked for this merchant
423	An error has occurred while processing your payment
424	Invalid Request URL

Note:

The merchant should set the response messages on their websites regarding the statuses of each transaction. For example, when a transaction is completed, the customer should view a response as "Transaction Successful". And when a transaction is not completed, the customer should view a response saying, "Transaction Incomplete", along with other details.

2.5 Transaction Request

 # Define 'payment' parameters

The format of "payment" parameter would be as follows:

unique_order_idltotal_amount (Eg : 1200112567.50)

The above format will then be encrypted using the public key provided by WEBXPAY. This is achieved by using openssl_public_encrypt method and then needs to be encoded with base64_encode method. The public key can be retrieved from the merchant backend under Settings.

(Public and secret keys will be generated once the merchant account is activated and can be accessed via Dashboard › Settings › Integration Information › Generate keys)

```php
// unique_order_id|total_amount
$plaintext = '525|1000';
$publickey = "-----BEGIN PUBLIC KEY-----
MIGfMA0GCSqGSIb3DQEBAQUAA4GNADCBiQKBgQC9l2HykxDIDVZeyDPJU4pA0imf
3nWsvyJgb3zTsnN8B0mFX6u5squ5NQcnQ03L8uQ56b4/isHBgiyKwfMr4cpEpCTY
/t1WSdJ5EokCI/F7hCM7aSSSY85S7IYOiC6pKR4WbaOYMvAMKn5gCobEPtosmPLz
gh8Lo3b8UsjPq2W26QIDAQAB
-----END PUBLIC KEY-----";

//load public key for encrypting
openssl_public_encrypt($plaintext, $encrypt, $publickey);

//encode for data passing
$payment = base64_encode($encrypt);
```

 # Define custom parameter

The format of the 'custom_fields' parameter is as follows.

parameter1lparameter2lparameter3lparameter4

The "custom_fields" parameter consists of the above variables which then need to be encoded using **base64_encode.**

```php
//custom fields
//cus_1|cus_2|cus_3|cus_4
$custom_fields = base64_encode('cus_1|cus_2|cus_3|cus_4');
```

 # Define the payment request URL

```php
//checkout URL
$url = 'https://webxpay.com/index.php?route=checkout/billing';
```

2.5.1 Gateway ID's

If the "payment_gateway_id" parameter is set in the gateway request, corresponding payment option will be selected automatically, and the gateway payment selection page will be skipped.

Additionally, you can pass multiple payment gateway Id's by using "I" separator
Ex:

Selected Gatewayid: <input type="text" name="payment_gateway_id" value="40">

Bulk Payment Gateway IDs<input type="text" name="multiple_payment_gateway_ids" value="40I44I96" placeholder="I seperated ids">

Following is the available gateway ID's

Gateway ID	IPG	Display
2	eZ Cash (LKR)	eZ Cash (LKR)
3	mCash (LKR)	mCash (LKR)
4	Nations Trust Bank - AMEX (LKR)	AMEX (LKR)
8	Nations Trust Bank - AMEX (USD)	AMEX (USD)
5	Sampath Viswa (LKR)	Sampath Viswa (LKR)
47	Hatton National Bank (USD)	HNB (USD)
46	Hatton National Bank (LKR)	HNB (LKR)
16	DFCC Wallet (LKR)	DFCC - Wallet (LKR)
35	FriMi (LKR)	FriMi (LKR)
36	Seylan Bank (LKR)	Seylan Bank (LKR)
37	Seylan Bank (USD)	Seylan Bank (USD)
38	Commercial Token (LKR)	Commercial Token (LKR)
39	Commercial Token (USD)	Commercial Token (USD)
40	Commercial Bank MPGS (LKR)	Commercial Bank MPGS (LKR)
41	Commercial Bank MPGS (USD)	Commercial Bank MPGS (USD)
42	Genie Visa Master (LKR)	Genie Visa Master (LKR)
43	Cargils Bank Visa Master (LKR)	Cargils Bank Visa Master (LKR)
44	Cargills Bank Token (LKR)	Cargills Bank Token (LKR)
45	UPay (LKR)	UPay (LKR)
52	Promotional Gateway	V/M Promotional (LKR)
96	Lanka QR	Lanka QR

2.5.2 EMI Gateway ID's

Gateway ID	Bank	Tenor
23	NTB - AMEX	EMI 03 Month (LKR)
24	NTB - AMEX	EMI 06 Month (LKR)
25	NTB - AMEX	EMI 12 Month (LKR)
26	NTB - AMEX	EMI 20 Month (LKR)
27	NTB - AMEX	EMI 24 Month (LKR)
28	NTB - AMEX	EMI 36 Month (LKR)
48	HNB	EMI 3 Month (LKR)
49	HNB	EMI 6 Month (LKR)
50	HNB	EMI 12 Month (LKR)
51	HNB	EMI 24 Month (LKR)
53	DFCC	EMI 3 Month (LKR)
54	DFCC	EMI 6 Month (LKR)
66	DFCC	EMI 7 Month (LKR)
67	DFCC	EMI 9 Month (LKR)
55	DFCC	EMI 12 Month (LKR)
68	DFCC	EMI 15 Month (LKR)
69	DFCC	EMI 18 Month (LKR)
56	DFCC	EMI 24 Month (LKR)
70	DFCC	EMI 27 Month (LKR)
71	DFCC	EMI 36 Month (LKR)
72	DFCC	EMI 41 Month (LKR)
61	Commercial Bank	EMI 3 Month (LKR)
57	Commercial Bank	EMI 6 Month (LKR)
62	Commercial Bank	EMI 9 Month (LKR)
58	Commercial Bank	EMI 12 Month (LKR)
59	Commercial Bank	EMI 18 Month (LKR)
60	Commercial Bank	EMI 24 Month (LKR)
63	Commercial Bank	EMI 36 Month (LKR)
64	Commercial Bank	EMI 48Month (LKR)
65	Commercial Bank	EMI 60 Month (LKR)
75	NDB	EMI 6 Month (LKR)
76	NDB	EMI 9 Month (LKR)
77	NDB	EMI 12 Month (LKR)
78	NDB	EMI 18 Month (LKR)
79	NDB	EMI 24 Month (LKR)
80	NDB	EMI 36 Month (LKR)
81	NDB	EMI 60 Month (LKR)
90	Seylan	EMI 6 Month (LKR)
91	Seylan	EMI 12 Month (LKR)
92	Seylan	EMI 24 Month (LKR)
97	Union Bank	EMI 3 Month (LKR)
98	Union Bank	EMI 6 Month (LKR)
99	Union Bank	EMI 12 Month (LKR)
100	Union Bank	EMI 18 Month (LKR)
101	Union Bank	EMI 24 Month (LKR)
102	Union Bank	EMI 36 Month (LKR)

Existing parameter values will be posted via the html form below.

```html
<form action="<?php echo $url; ?>" method="POST">
  First name: <input type="text" name="first_name" value="John"><br>
  Last name: <input type="text" name="last_name" value="Doe"><br>
  Email: <input type="text" name="email" value="customer_email@email.com"><br>
  Contact Number: <input type="text" name="contact_number" value="0777888999"><br>
  Address Line 1: <input type="text" name="address_line_one" value="46/46, Green Lanka Buildin
g"><br>
  Address Line 2: <input type="text" name="address_line_two" value="Nawam Mawatha"><br>
  City: <input type="text" name="city" value="Colombo"><br>
  State: <input type="text" name="state" value="Western"><br>
  Zip/Postal Code: <input type="text" name="postal_code" value="10300"><br>
  Country: <input type="text" name="country" value="Sri Lanka"><br>
  Currency: <input type="text" name="process_currency" value="LKR"><br>
  Selected Gateway ID: <input type="text" name="payment_gateway_id" value=""><br>
  Bulk Payment Gateway IDs: <input type="text" name="multiple_payment_gateway_ids" value="" plac
eholder="| separated ids"><br>
  CMS: <input type="text" name="cms" value="PHP"><br>
  Custom: <input type="text" name="custom_fields" value="<?php echo $custom_fields; ?>"><br>
  Mechanism: <input type="text" name="enc_method" value="JCs3J+6oSz4V0LgE0zi/Bg=="><br>

  <!-- POST parameters -->
  <input type="hidden" name="secret_key" value="630be963-59e2-447a-8f3b-93b3d7a3bf25">
  <input type="hidden" name="payment" value="<?php echo $payment; ?>">

  <input type="submit" value="Pay Now">
</form>
```

Note:

If the "payment_gateway_id" parameter is set in the gateway request, corresponding payment option will be selected automatically, and the gateway payment selection page will be skipped.

2.6 Transaction Response

After payment process is completed along with the whole transaction process, the customer will be redirected to the callback URL. (You can set the call back URL from WEBXPAY Dashboard › Settings › Website Integration › on Add Return URL field)

The callback process posts the following data to display the transaction status.

payment
signature
custom_fields

The "payment" parameter should be decode using base64_decode method and then should be decrypted with openssl_public_decrypt methoc. The signature is included to avoid man-in-the middle attacks.

The format of the "payment" parameter would be as follows after decoding and decrypt methods are used.

order_idlorder_refference_numberldate_time_transactionlstatus_codelcommentlpayment_gateway_used

E.g.

12001IT372016I24522I 2016-04-20 09:57:52I15I No such issuerI1

You need to compare the decoded payment value against the decoded and decrypted signature in order to confirm the posted parameters' authenticity. (signature status)

```php
//decode & get POST parameters
$payment = base64_decode($_POST["payment"]);
$signature = base64_decode($_POST["signature"]);
$custom_fields = base64_decode($_POST["custom_fields"]);

//load public key for signature matching
$publickey = "-----BEGIN PUBLIC KEY-----
MIGfMA0GCSqGSIb3DQEBAQUAA4GNADCBiQKBgQC9l2HykxDIDVZeyDPJU4pA0imf
3nWsvyJgb3zTsnN8B0mFX6u5squ5NQcnQ03L8uQ56b4/isHBgiyKwfMr4cpEpCTY
/t1WSdJ5EokCI/F7hCM7aSSSY85S7IYOiC6pKR4WbaOYMvAMKn5gCobEPtosmPLz
gh8Lo3b8UsjPq2W26QIDAQAB
-----END PUBLIC KEY-----";

openssl_public_decrypt($signature, $value, $publickey);

$signature_status = false;

if($value == $payment) {
    $signature_status = true;
}
```

If the signature status is true, you can proceed to further steps.

2.7 Custom Fields

The format of the "custom_fields" parameter would be as follows.

E.g. parameter1lparameter2lparameter3lparameter4

The "custom_fields" parameter will consist of the above variables which would be decoded using base64_decode.

3. Sample Code (PHP)

Download Request Download Response