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WebConnect

Payment Gateway Integration Guide

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Merchant Integration Guide

1 INTRODUCTION

This document provides information required to integrate into the WebConnect Payment Gateway. It describes the enabling API and runs you through the elements and process of integration.

Overview

The integration design is based on secure server to server communication for business critical information exchange. This communication ensures that the data is contained within the exchange with no risk of external access or attack.

Payment Options

WebConnect accepts MasterCard, Visa, and Verve as payment options for payment processing. The merchant can choose not to accept a particular card scheme. A merchant can make a request to take advantage of this configuration, and disable the availability of a card scheme to its customers at payment check out.

Best Practices

- Always keep a session of all the pages visited.
- Store the **transaction ID** you send to eTranzact in case you need to follow up on a transaction and they must all be unique.
- As a matter of eTranzact security policy, you should refrain from putting the WebConnect page within an iFrame as it has a security implication one of which is cross-site scripting.
- It is advisable that your website talk to eTranzact in TLS mode during payment authorizations most especially on production.
- Your website MUST provide a callback page for a failed transaction in case of network/internet problem while expecting response from WebConnect.
- Live tests using live card information should never be used on demo environment.

Logical Procedure

1. Consumer completes checkout and initiates the payment process
2. On receiving the payment request (last step in checkout process), the merchant server contacts WebConnect's server.
3. The merchant server then pushes order request information to WebConnect's server via **HTTPS post url**. *Sample Form Method can be seen below*.
4. WebConnect server pushes the request to WebConnect's UI, which then authenticates the information. This process is compulsory.
5. WebConnect sends the details received to the card issuer for processing and **response** is returned back to WebConnect.
6. WebConnect issues a **response** and redirect back to the merchant via the Merchant's **Response_URL,** while passing the form data to the merchant.

![etranzact logo]

Integration Requirements

Integration requires that the merchant registers on the eTranzact merchant payment network. After a successful registration, and prior to going live, a merchant would be issued unique credentials (**TERMINAL_ID**) for production access.

The merchant is required to submit its **_Response_URL_** _to_ eTranzact. This URL has to be configured on eTranzact server to receive transaction notifications. All transaction related data is posted at the notification. Please note the following attributes for connection:

- **Protocol:** HTTPs Request

- **Method:** Post

- **Content:** Type: Application/www

- **Base URL**
    - **Demo:** https://demo.etranzact.com/
    - **Production:** https://www.etranzact.net/

2 ORDER REQUEST/POST

To initiate a transaction, a merchant should send a payment request to eTranzact Server. This section describes the payment request flow in detail.

Payment Process

- **Purpose**: To initiate the payment process, the merchant should post with applicable Elements/Parameters to WebConnect at the designated URL. The below table summarizes the elements which must be sent from merchant server to the WebConnect server in the Order post method.

- **Parameters/Elements:** TERMINAL_ID, TRANSACTION_ID, AMOUNT, DESCRIPTION, RESPONSE_URL, LOGO_URL, CURRENCY_CODE, EMAIL, CHECKSUM, FULL_NAME, PHONENO. **Validations** are applied to the TERMINAL_ID and CHECKSUM. Should any check fail, then appropriate error is sent to merchant.

URL Pattern: https://demo.etranzact.com/webconnect/v3/caller.jsp
- Base URL is the URL of the server, this will **change** between demo and production. Please get in touch with WebConnect admin for details of this URL.

Parameter name	Parameter value(example)	Description
TERMINAL_ID REQUIRED	0000000001	This is a 10-digit number that identifies an entity connecting to the WebConnect platform. This is assigned by eTranzact to a third part connector.

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Parameter name	Parameter value(example)	Description
TRANSACTION_ID REQUIRED	111112222333344411	A unique reference supplied by the merchant to identified transaction being passed for charge.
AMOUNT REQUIRED	1000.00	Total amount to be charged to the card holder.
DESCRIPTION	Order ref:123444;08484874;7763656	Merchant defined description appended to the standard description. This could be the Receipt or Order No.
RESPONSE_URL	https://www.samplesite.com/webconnect/result	This is the merchant url to which the WebConnect gateway sends transaction responses and/or redirects customers to your website.
LOGO_URL REQUIRED	https://www.samplesite.com/webconnect/mylogo.gif	The path to your logo on your server.
CURRENCY_CODE	NGN	This identifies the currency code for the **AMOUNT** value. If not specified, it defaults to the local currency of the country action URL.
EMAIL REQUIRED	xyz@yahoo.com	The email address to which this charge's receipt will be sent.
CHECKSUM REQUIRED	MD5 encrypt with : AMOUNT+TERMINAL_ID+TRANSACTION_ID+RESPONSE_URL+SECRETKEY	The parameters specified should be concatenated and encrypted using MD5 algorithm. SECRETKEY value to be used on demo is DEMO_KEY
FULL_NAME REQUIRED	JOHN SAMUEL DOE	This is the name of the card holder
PHONENO REQUIRED	08066345675	This is the phone number of the card/account holder as registered on their card/account.

*Parameters are case-sensitive

Sample Request Script

Your request should pass a form field similar to the below script:

```
<form method = 'POST' action=' https://demo.etranzact.com/webconnect/v3/caller.jsp'>
<input type=hidden name = 'TERMINAL_ID' value='0000000001'>
<input type=hidden name = 'RESPONSE_URL' value = 'https://www.mywebsite.com/processPayment.jsp'>
<input type=hidden name = 'TRANSACTION_ID' value='12345667890023354'>
<input type=hidden name = 'AMOUNT' value='89000.00'>
<input type=hidden name = 'DESCRIPTION' value='e.g. reference'>
<input type=hidden name = 'EMAIL' value='xyz@yahoo.com'>
<input type=hidden name = 'PHONENO' value='08012345678'>
<input type=hidden name = 'FULL_NAME value='John Doe'>
<input type=hidden name = 'CURRENCY_CODE' value='NGN'>
```

```
<input type=hidden name = 'CHECKSUM' value= '48ab1ff1997435d2c47baa8de10d97bd'>

<input type=hidden name = 'LOGO_URL'
value='http://www.mywebsite.com/logo/mylogo.jpg' height="60" width="60">

</form>
```

Where

Checksum is generated using MD5 algorithm

Checksum Generation

Checksum is generated using the MD5 Algorithm. Merchant is required to concatenate the following parameters then encrypt with MD5:

AMOUNT+TEMINAL_ID+TRANSACTION_ID+RESPONSE_URL+SECRETKEY

SECRETKEY on demo environment is DEMO_KEY. The merchant will be issued a live SECRETKEY prior to going live, and after UAT.

Order Response

In response to the above post, if all parameters are correct and validated on eTranzact server, eTranzact server creates an order, and payment processing is initiated. After successful payment processing, eTranzact responds back with the payment status/response. Once the merchant receives the response notification, it is the merchant's responsibility to redirect the end user to a success/failure page.

Once a transaction is processed, a response is sent back to the **RESPONSE_URL.** This response will contain all parameters passed in the order request in addition to a few more parameters.

- **Purpose**: To receive advise of order status at the callback (**RESPONSE_URL)** URL provided by the merchant. Elements/Parameters will be passed from WebConnect server to the merchant server in the response call.

- **Parameters/Elements:**   TERMINAL_ID,   TRANSACTION_ID,   AMOUNT,   DESCRIPTION, RESPONSE_URL, LOGO_URL, CURRENCY_CODE, EMAIL, CHECKSUM, FULL_NAME, PHONENO, **SUCCESS, STATUS_REASON, RESPONSE_CODE, CARD_NO, CARD_TYPE, FINAL_CHECKSUM, TRANS_NUM**

- **URL Pattern:** N/A

Sample Response Script

Following is a (sample) notification syntax that will be posted to merchant response URL:

https://demo.etranzact.com/livemerchant/view/response.jsp?**AMOUNT**=10&**DESCRIPTION**=Test%20Merchant&**CHECKSUM**=6090ceca336251c7250b8c037d2bd2d5&**EMAIL**=ugokaine%40gmail.com&**SUCCESS**=0&**LOGO_URL**=https%3A%2F%2Fcdn.svgporn.com%2Flogos%2Fkustomer.svg&**RESPONSE_URL**=https

%3A%2F%2Fdemo.etranzact.com%2Flivemerchant%2Fview%2Fresponse.jsp&**CURRENCY_CODE**=NGN&
TERMINAL_ID=7007139456&**TRANSACTION_ID**=0026005277542643&**MERCHANT_CODE**=700602X2YQ
&**FINAL_CHECKSUM**=0A816149921DA090F4A7339ECC2C0CE9&**STATUS_REASON**=Payment%20Successf
ul&**TRANS_NUM**=01ESAUKS2ICHLUF9ZQOCASXGJ

Following is the purpose of each element in this notification script:

Parameter name	Parameter value(example)	Description
TERMINAL_ID	0000000001	This is a 10-digit number that identifies an entity connecting to the WebConnect platform. This is assigned by eTranzact to a third part connector.
TRANSACTION_ID	111112222333344411	A unique reference supplied by the merchant to identified transaction being passed for charge.
AMOUNT	1000.00	Total amount to be charged to the card holder.
DESCRIPTION	Order ref:123444;08484874;7763656	Merchant defined description appended to the standard description. This could be the Receipt or Order No.
RESPONSE_URL	https://www.samplesite.com/webconnect/result	This is the merchant URL to which the WebConnect gateway sends transaction responses and/or redirects customers to your website.
LOGO_URL	https://www.samplesite.com/webconnect/mylogo.gif	The path to your logo on your server.
CURRENCY_CODE	NGN	This identifies the currency code for the **AMOUNT** value. If not specified, it defaults to the local currency of the country action URL.
EMAIL	xyz@yahoo.com	The email address to which this charge's receipt will be sent.
CHECKSUM	MD5 encrypt with : AMOUNT+TERMINAL_ID+TRANSACTION_ID+RESPONSE_URL+SECRETKEY	The parameters specified should be concatenated and encrypted using MD5 algorithm. SECRETKEY value to be used on demo is DEMO_KEY
FULL_NAME	JOHN SAMUEL DOE	It holds the Card Holder's name
FINAL_CHECKSUM	MD5 encrypted with : SUCCESS+AMOUNT+TERMINAL_ID+TRANSACTION_ID+RESPONSE_URL+SECRETKEY	**This is a response parameter** This stores the MD5 encrypted value for the parameters specified and is returned to your RESPONSE_URL together with SUCCESS code after payment has been processed.
CARD_NO	This holds the CARD_NO.	This holds the masked card number that did that transaction. It displays the first 6 digits and last 4 digits of the card. For unsuccessful transaction, it returns SUCCESS with a value of -1 (minus one).
STATUS_REASON	Transaction Successful	It carries the transaction status code description especially for codes not listed in Appendix A below.

Parameter name	Parameter value(example)	Description
SUCCESS	From -1 to 25	SUCCESS identifies the response code for the transaction where 0 means successful, while any other code asides 0 means unsuccessful. **This parameter is being retained for backward compatibility**
RESPONSE_CODE	From -1 to 25	SUCCESS identifies the response code for the transaction where 0 means successful, while any other code asides 0 means unsuccessful.
TRANS_NUM	02ESA12345323421	This contains eTranzact's Unique reference number.
CARD_TYPE	Here are all the values. VISA, MasterCard, Verve, PocketMoni, BankIT	It holds the card type or channel used by customer to make payment.

3 Transaction Query History

If for any reason a merchant needs to requery a transaction status, a **QUERY** method is available for this purpose. There may be cases where connection is lost and a merchant has to force an update of any transaction in the pipe had they not have received a response at time of transaction.

███Transaction Requery Process

- **Purpose**: To requery the status of a transaction.

- **Parameters/Elements:** TRANSACTION_ID. Validations are applied to these parameters. Should any check fail, then appropriate error is sent to merchant

- **URL Pattern:** https://demo.etranzact.com/webconnect/v3/query.jsp

   o   Base URL is the URL of the server, this will change between demo and production. Please get in touch with WebConnect admin for details of this URL.

Parameter name	Parameter value(example)	Description
TRANSACTION_ID REQUIRED	111112222333344411	A unique reference supplied by the merchant to identified transaction being passed for charge.

███Sample Script

https://demo.etranzact.com/webconnect/v3/query.jsp

<form method = 'POST' action= 'https://demo.etranzact.com/webconnect/v3/query.jsp' >

<input type=hidden name = 'TRANSACTION_ID' value='1234325435435345345435454'>

</form>

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Transaction Requery Response

Once a transaction is processed, a response is sent back to the **RESPONSE_URL.** This response will contain all parameters passed in the order request in addition to a few more parameters.

- **Purpose**: To receive advice of order status OF A REQUERY at the callback (**RESPONSE_URL)** URL provided by the merchant. Elements / Parameters will be passed from WebConnect server to the merchant serve in the POST response call. The following are parameters o be returned.

- **Parameters/Elements:** SUCCESS, RESPONSE_CODE, STATUSTERMINAL_ID, TRANSACTION_ID, AMOUNT, DESCRIPTION, RESPONSE_URL, LOGO_URL, CURRENCY_CODE, EMAIL, CHECKSUM, FULL_NAME, PHONENO, SUCCESS, STATUS_REASON, RESPONSE_CODE, CARD_NO, CARD_TYPE, FINAL_CHECKSUM, TRANS_NUM

- **URL Pattern:** N/A

Parameter name	Parameter value(example)	Description
TRANSACTION_ID	111112222333344411	A unique reference supplied by the merchant to identified transaction being passed for charge.
AMOUNT	1000.00	Total amount to be charged to the card holder.
DESCRIPTION	Order ref:123444;08484874;7763 656	Merchant defined description appended to the standard description. This could be the Receipt or Order No.
CARD_NO	This holds the CARD_NO.	This holds the masked card number that did that transaction. It displays the first 6 digits and last 4 digits of the card. For unsuccessful transaction, it returns SUCCESS with a value of -1 (minus one).
STATUS_REASON	Transaction Successful	It carries the transaction status code description especially for codes not listed in Appendix A below.
SUCCESS	From -1 to 25	SUCCESS identifies the response code for the transaction where 0 means successful, while any other code asides 0 means unsuccessful. **This parameter is being retained for backward compatibility**
RESPONSE_CODE	From -1 to 25	SUCCESS identifies the response code for the transaction where 0 means successful, while any other code asides 0 means unsuccessful.
TRANS_NUM	02ESA12345323421	This contains eTranzact Unique reference number.
CARD_TYPE	Here are all the values. VISA, MasterCard, Verve, PocketMoni, BankIT	It holds the card type or channel used by customer to make payment.
CARD_NO	This holds the CARD_NO.	This holds the masked card number that did that transaction. It displays the first 6 digits and last 4 digits of the card. For unsuccessful transaction, it returns SUCCESS with a value of -1 (minus one).

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4 Error Codes & Messages

Following is a list of standard error codes but not it is not exhaustive. Other error codes not listed below will have their description contained in the "message" parameter in WebConnect response.

RESPONSE CODE	MESSAGE
-1	Transaction timeout or invalid parameters or unsuccessful transaction in the case of Query History
0	Transaction Successful or Approved
1	Destination Card Not Found
2	Card Number Not Found
3	Invalid Card PIN
4	Card Expiration Incorrect
5	Insufficient balance
6	Spending Limit Exceeded
7	Internal System Error Occurred, please contact the service provider
8	Financial Institution cannot authorize transaction, please try later
9	PIN tries Exceeded
10	Card has been locked
11	Invalid Terminal Id
12	Payment Timeout
13	Destination card has been locked
14	Card has expired
15	PIN change required
16	Invalid Amount
17	Card has been disabled
18	Unable to credit this account immediately, credit will be done later
19	Transaction not permitted on terminal
20	Exceeds withdrawal frequency
21	Destination Card has expired
22	Destination Card Disabled
23	Source Card Disabled
24	Invalid Bank Account
25	Insufficient Balance
ESA 1002	CHECKSUM/FINAL_CHECKSUM validation failed
ESA 1003	ECHODATA parameter is mandatory
B	The transaction was blocked by the payment server because it didn't pass all the risk checks.
P	Pending
F	The card holder was not authorized to make payment.
MX	Card not permitted on this terminal
ML	Monthly Transaction Limit Exceeded, please contact merchant

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Note: These are the standard eTranzact error codes and narration above, users may experience a few error codes from any of the Network Schemes or payment gateways WebConnect supports with detailed error message narration.

5 Testing Details

This section provides testing data that will be useful in completing integration.

███ Base Card URL

The base URL is:

- **Demo**: https://demo.etranzact.com/
- **Production**: https://www.etranzact.net/

███ Test Card

███ Verve Test Card 1

- **Card Number:** 5060 6666 6666 6666 666
- **Expiry Date:** any date in the future
- **CVV:** 123
- **PIN:** 1234
- **OTP:** 123456

███ Verve Test Card 2

- **Card Number:** 5078 5078 5078 5078 4
- **Expiry Date:** any date in the future
- **CVV:** 884
- **PIN:** 0000
- **Phone:** If less than 10 numeric characters, Transaction will fail.
- **OTP:** 123456

███ Support Contact

For any issues, contact Technical.support@etranzactng.com.

6 FAQ

- **Can I re-use a transaction id?**
  - The TRANSACTION_ID is only valid for one transaction and cannot be re-used. It should be unique for every transaction.
- **Can I use the same HTTP Request URL for Demo and Production?**
  - No you cannot. The demo base URL is https://demo.etranzact.com, while the production base URL is https://www.etranzact.net
- **What is a Terminal ID and why do I need it?**
  - A Terminal ID uniquely maps your merchant account on our platform. It is gives you connection access to the WebConnect platform and should not be shared with anyone.

You can use terminal ID 0000000001 during development but will need to request for live credentials when planning to move to your live environment.

- **What happens if I don't pass a RESPONSE_URL?**
    o We will output the response to the client in a plain form without html formats
- **What is the number of incorrect pin retry attempts?**
    o Number of attempts for a customer to retry pin entry can be customized. However, the default is 3.
- **Can my logo be any size?**
    o No. All merchant logo passed in the logo_url should be 60x60.
- **How do I get my SECRET_KEY?**
    o Your SECRET_KEY is issued along with your TERMINAL_ID. You can make this request through your account officer.