



API Document

(Form 4)

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Audience : Developers and System integrator

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1. Overview

Document is hereby introducing the reader to ZynlePay Gateway API that allow for different systems to securely integrate into ZynlePay with the sole purpose of receiving credit/debit card payment on-line.

The document specifically states the **RESTFUL** API that developers and system integrator alike can develop e-commerce modules or plug-ins for their system or websites.

Requirements

In order to use ZynlePay API, integrator will need to sign-up for and api_id, private key and user_id for authentication and authorization to the ZynlePay server.

2. Work-flow

- 1) Customer makes transaction
- 2) VISA hold customer funds
- 3) VISA transfer funds to Zynle pool merchant account
- 4) Zynle transfer funds to Merchant account with any bank in Zambia

This entire process takes place withing 72 hours.

3. Technologies

ZynlePay API is a simple, secure and easy to develop. Any technology that is be able to make RESTFUL request can be used to integrate with ZynlePay payment gateway service. ZynlePay does not offer the integration libraries yet but efforts are being made to come up with the standard

development toolkit (SDK) in different programming languages and technologies of integration with techniques like soap, xml-rpc, json combra among others.

4. Requests

Below are different RESTFUL request that would make the integration possible and easier. The format of the request is

https://api.zynlemoney.com:8060/zynlepay/zpay/api/{method}?api_id=xxxxxxxxxxxx&merchant_id=yyyyyyy&key=vvvvvvvvvvvvvv¶mXXX=argXXX

Where api_id, merchant_id and private key are provided to the integrator or developers by Zynle Technologies Limited.

5. Parameters

Name	Variable	Type	Value	Default Value	Mandatory
API Identity	api_id	vchar	as provided by zynle		Yes
Merchant Identity	merchant_id	integer	as provided by zynle		Yes
Transaction Key	key	vchar	as provided by zynle		Yes
Request Identity	request_id	vchar	unique from merchant		Yes
Transaction Amount	amount	double	as presented by merchant		Yes
Service/Product Name	product	text	as presented by merchant		No
Transaction Remark	comment	text	as presented by merchant		No
Reference Number	reference	vchar	unique from merchant		No
Debit/Credit Card Number	cardnumber	numeric	as presented by merchant		Yes
Card Expiry Month	expirymonth	big integer	as presented by merchant		Yes
Card Expiry Year	expiryyear	big integer	as presented by merchant		Yes
Securiy Code	cvv	integer	as presented by merchant		Yes
Card Type	cardtype	letter	visa/mastercard/amex/maestro/discover		Yes
Currency	currency	symbol	USD/ZMW	ZMW	Yes
Name of Card Holder	nameoncard	text	as presented by merchant		Yes
First Name of Shopper	firstname	letter	as presented by merchant		Yes
Last Name of Shopper	lastname	letter	as presented by merchant		Yes
Address of Shopper	address	vchar	as presented by merchant	Stand No. 23051	Yes
City/Town of Shopper	city	letter	as presented by merchant	Lusaka	Yes
Province/State of Shopper	state	letter	as presented by merchant	Lusaka	Yes
Email address of shopper	email	email	as presented by merchant	no-reply@zynlepay.com	Yes
Mobile Phone of Shopper	phone	text	as presented by merchant	260955000679	Yes
Country of Shopper	country	code	as presented by merchant	ZM	Yes

6. Responses

Code	Description
100	Successful transaction
101	The request is missing one or more required fields
102	One or more fields in the request contain invalid data.
104	Duplicate reference code
150	General system failure.
151	The request was received but there was a server timeout.
152	The request was received, but a service did not finish running in time.
200	The authorization request was approved by the
202	Expired card.
203	General decline of the card.
204	Insufficient funds in the account.
209	Stolen or lost card.
231	Invalid account number
207	Issuing bank unavailable.
208	Inactive card or card not authorized for card-not-present transactions.
209	CVN did not match.
210	The card has reached the credit limit.
232	The card type is not accepted by the payment processor.
236	Processor failure.

7. Method

a) runTranAuth

This method instructs ZynlePay to contact the issuing bank to find out about the balance of the account and reduce balance if the amount is enough to purchase product or service.

This instruct needs to be followed by **runTranCapture method** to move monies from card owners account to the merchant account.

runTranAuth will expire after some time-say 5 days, if it's not followed up with runTransCapture request.

b) runTranCapture

Running **runTranCapture** instructs ZynlePay to process settlement of funds set aside by **runTranAuth**.

c) runTranAuthCapture

If you want to run both runTranAuth and runTranCapture meaning if you want to have the transaction and authorised and capture for settlement, use **runTranAuthCapture** . This transaction is ideal for purchases

that do not need shipment instead service delivered on digitally e.g selling of songs, prepaid services, fees and subscriptions among others.

d) runTranVoid

This method is used to cancel runTranAuth transaction. Transaction that has been captured cannot be void or cancelled.

e) runTranCredit

runTranCredit on the captured transaction. Its takes money from merchant account into the card account.

6. Plugins And Module

ZynlePay also provides ecommerce and cart plugins for the different most used content management systems(CMS) for ecommerce websites.

Plugins provided are for CMS like drupal, wordpress, joomla, Magento, OpenCart and Zen Cart. ZynlePay has expertise to help developers and integrators to develop different ecommerce application.

7. SandBox Account

1. URL : <http://dev.zynlepay.com>
2. Username: **sandbox**
3. Password: **123456789**

8. Example

Transactions Request

8.1 Method: runTranAuthCapture

sample url:

http://api.zynlemoney.com:8060/zynlepaytest/zpay/api/runTranAuthCapture?api_id=zynlepay1&merchant_id=13&key=3eevcsweqeqcessesdsfsdrdfdsfdresfwr&request_id=313123343242342342&amount=1200.00&product=koo&comment=foo&reference&cardnumber=5200000000000023&expirymonth=08&expiryyear=2028&cvv=123&cardtype=visa¤cy=USD&nameoncard=foo&firstname=william&lastname=simukoko&address=test&city=lusaka&email=william@zynle.com&phone=260977547820&country=ZM

8.1.1 PHP Sample Code:

```
<?php
```

```
$request_id = time();
```

```
$secret = "0411a4e70eee656f88a2bbe98e2a91eb6f5268a9";
```

```
$generate_key = base64_encode(sha1($secret . $request_id));
```

```
$url="http://api.zynlemoney.com:8070/zynlepaytest/zpay/api/runTranAuth?api_id=sandbox1&merchant_id=13&key=".  
$generate_key."&request_id=".  
$request_id."&amount=12.45&product=koo&comment=foo&reference&cardnumber=4111111111111111&expirymonth  
=01&expiryyear=2043&cvv=123&cardtype=visa&currency=ZMW&nameoncard=william+jones&firstname=william&  
lastname=jones&address=test&city=lusaka&email=zynle@zynle.com&phone=00919035948076&country=zm";
```

```
$auth_credetials=base64_encode("zynle@zynle.com:12345678");
```

```
$curlHandle = curl_init($url);
```

```
curl_setopt($curlHandle, CURLOPT_HTTPHEADER, array("Content-type:application/xml"));
```

```
curl_setopt($curlHandle, CURLOPT_HEADER, 0);
```

```
curl_setopt($curlHandle, CURLOPT_TIMEOUT, 30);
```

```
curl_setopt($curlHandle, CURLOPT_RETURNTRANSFER, 1);
```

```
curl_setopt($curlHandle, CURLOPT_FOLLOWLOCATION, 1);
```

```
curl_setopt($curlHandle, CURLOPT_HTTPHEADER, array("Authorization:".$auth_credetials));
```

```
$returnCode = (int)curl_getinfo($curlHandle, CURLINFO_HTTP_CODE);
```

```
$execResult = curl_exec($curlHandle);
```

```
$execResult=json_decode($execResult);
```

```
print_r($execResult);
```

```
curl_close($curlHandle);
```

```
?>
```