PayZippy API Reference

Charging API

Refund API

Status Query API

Version 1.03

Oct 2013

Got questions for us? We're available at merchant.care@payzippy.com

Contents

Revision History

Version	Release Date	Description
1.0	3 July 2013	First Release
1.01	21 Aug 2013	1. New Refund Response Code added 2. Refund Statuses added 3. Added productinfo1-3 as optional Charging request params
1.02	25 Sep 2013	Added enum for PayZippy wallet payment method
1.03	25 Oct 2013	Added bank name param values for Net Banking and EMI Added new response params for PayZippy wallet

1 Introduction

Payment Options

PayZippy currently offers the following payment options:

1. Credit Cards (MasterCard, VISA, Amex)
2. Debit Cards (MasterCard, VISA, Maestro)
3. Net Banking (all major banks)

The following payment options are currently not supported, but in pipeline:

1. EMI options on Credit Cards
2. Diners Credit Cards

Currencies

PayZippy currently supports only Indian Rupee (INR) based payment transactions.

SDKs

PayZippy SDKs are available for Java and PHP. Further, we also offer plugins for popular shopping carts like Magento, OpenCart and WooCommerce (WordPress). Do reach out to us if you would like to use our SDKs.

APIs

PayZippy offers three REST based APIs:

1. **Charging API** - used for processing the payment
2. **Refund API** - used for refunding an existing successful payment
3. **Status Query API** - used for verifying the status of an existing payment/refund transaction

More details on the above three APIs will follow in the subsequent sections of this document.

Basic requirements before you start the integration

- Test Merchant Id (*merchant_id*) issued by PayZippy
- Secure Key and Key Id (*merchant_key_id*) for the APIs issued by PayZippy
- Knowledge of REST APIs

Please contact PayZippy at merchant.care@payzippy.com if you don't have any of the above.

2 Integration Overview

Integration with PayZippy

With PayZippy, you get end-to-end payments experience.

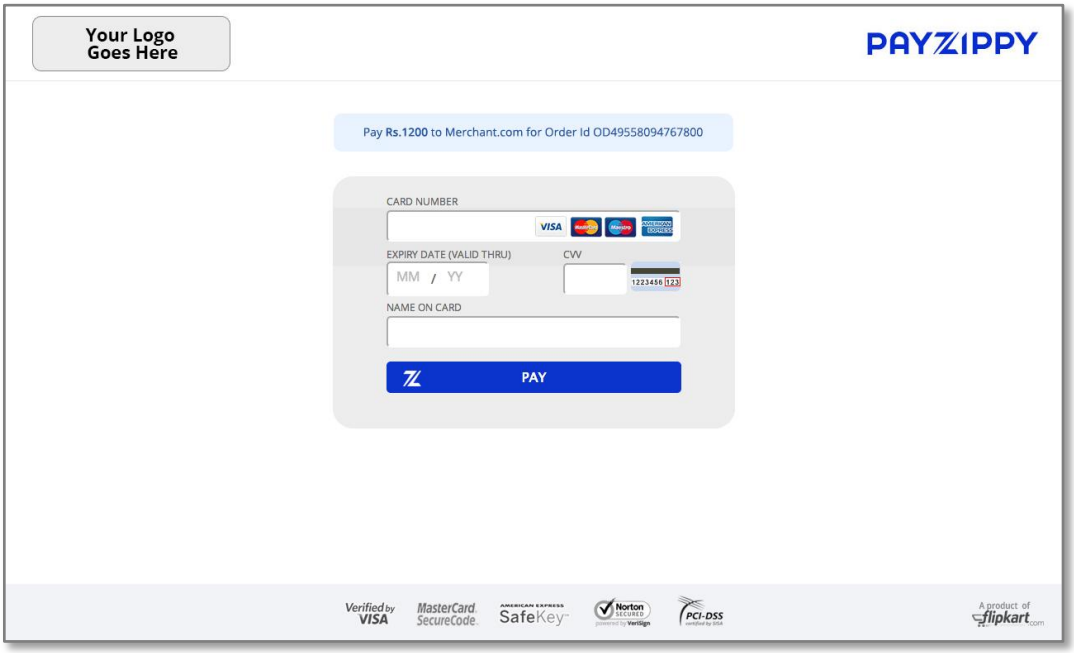
PayZippy not only processes the payments through its technology platform, but also manages acquiring bank relationships and settlement of funds with you on a daily basis. You are not required to directly sign up with the acquiring bank.

User Experience Options

PayZippy gives you the flexibility to choose between two distinct user experience options based on your requirement.

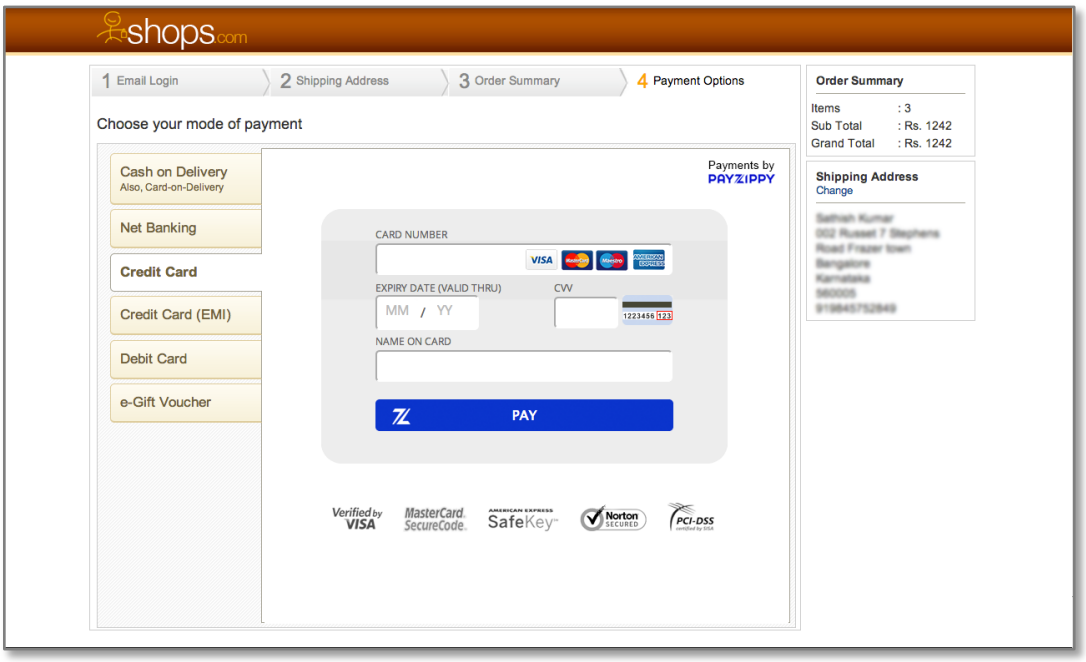
Redirect mode

User is redirected from your website to the PayZippy secure payment page for capturing card details.



iFrame mode

The PayZippy payment page is rendered within an iFrame on your website. The users do not leave your website, except for entering the 3DS password for which the user will be redirected to the issuing bank's secure page.



Please note that the iFrame mode works best only on web and may not work properly if accessed from a mobile device.

3 PayZippy API Overview

Salient features of PayZippy APIs

- REST based URLs
- Consistent JSON Response (applicable only for Refund and Status Query API)
- Hash-based validation (MD5, SHA 256) using shared secret key for a Merchant Id
- Versioning to ensure backward compatibility

Authentication of API calls

All transactions contain a Hash based on secret pre-shared key and certain request parameters. Hash is calculated based on the following techniques:

- MD5
- SHA256

Hash Generation Explained

Assumptions:
Test Merchant Id = “test_merchant”
Key Id = “payment”

For http response (Charging API)

The sample below indicates how a Hash is generated for a test merchant:

```
merchant_id=test_merchant
merchant_key_id=payment
hash_method=SHA256
hash=ignore_this
merchant_transaction_id=MT123
transaction_amount=100
currency=INR
transaction_type=SALE
buyer_phone_no=9999999999
buyer_email_address=email@email.com
ui_mode=IFRAME
payment_method=CREDIT
```

Now, ignore Hash as a parameter and sort all the request parameters by their key (not value).

```
buyer_email_address=email@email.com
buyer_phone_no=9999999999
currency=INR
hash_method=SHA256
merchant_id=test_merchant
merchant_key_id=payment
merchant_transaction_id=MT123
payment_method=CREDIT
transaction_amount=100
transaction_type=SALE
ui_mode=IFRAME
```

Now, concatenate all values of the sorted keys of parameters with pipe - ‘|’ character.

```
String str =
email@email.com|9999999999|INR|SHA256|test_merchant|payment|MT123
|CREDIT|100|SALE|IFRAME|
```

Now, add the shared Secret key for given merchant_id and merchant_key_id.

For merchant_id=”test_merchant” and merchant_key_id =”payment”, this value is ***asdflkafuq347riuvgyrgfbwqbvq***.

The string generated is

```
str =
email@email.com|9999999999|INR|SHA256|test_merchant|payment|MT123
|CREDIT|100|SALE|IFRAME|asdflkafuq347riuvgyrgfbwqbvq

hash = SHA256(str);
```

This generates the Hash
15084c1d2a731c6f804e00e1f8b15d3c3267eb7ed9684a01fa394d7881b0e849

Now, use this Hash and pass it along to the API. Your call is authenticated and PayZippy passes the results of the API back to you.

For JSON response (Refund and Query API)

Consider the following response by a refund API:

```
{
      data: {
            pg_trackid: "PZT13071516071954996",
            pg_id: "test_pg",
            refund_amount: 10,
            pg_mid: "test",
            terminal_id: "tid",
            merchant_transaction_id: "OT660368164069",
            refund_response_code: "SUCCESS",
            refund_status: "SUCCESS",
            payzippy_transaction_id: "PZT13071516084825453",
            bank_transaction_id: "REF16A7F83",
            bank_arn: null,
            transaction_time: "2013-07-15 16:08:48",
            refund_currency: "INR",
            refund_response_message: "The transaction is successful",
      },
      error_code: null,
      hash:
"788ca48a0bffea0b12535e709001f80732a3cef7bb16b59fecf47361154626f8",
      error_message: null,
      status_code: 200,
      merchant_id: "test_merchant",
      merchant_key_id: "payment",
      hash_method: "SHA256",
      status_message: "OK"
}
```

Here, to generate Hash to validate the Refund Response. The challenge is that JSON is 2 level deep. Sort all the top level keys of the JSON in alphabetical order.

This gives the following:

```
data
error_code
error_message
hash_method
merchant_id
merchant_key_id
status_code
status_message
```

Here, we have ignored hash as one of the keys - similar to what we did during Request.

Again, sort all keys within data.

This gives the following:

```
bank_arn
bank_transaction_id
merchant_transaction_id
payzippy_transaction_id
pg_id
pg_mid
pg_trackid
refund_amount
refund_currency
refund_response_code
refund_response_message
refund_status
terminal_id
transaction_time
```

So we calculate the hash as follows:

```
value(data) =
value(bank_arn)|value(bank_transaction_id)|value(merchant_transac
tion_id)|value(payzippy_transaction_id)|value(pg_id)|value(pg_mid
)|value(pg_trackid)|value(refund_amount)|value(refund_currency)|v
alue(refund_response_code)|value(refund_response_message)|value(r
efund_status)|value(terminal_id)|value(transaction_time)

response_value=
value(data)|value(error_code)|value(error_message)|value(hash_met
hod)|value(merchant_id)|value(merchant_key_id)|value(status_code)
|value(status_message)|secret_key_specified
response_value=value(bank_arn)|value(bank_transaction_id)|value(m
erchant_transaction_id)|value(payzippy_transaction_id)|value(pg_i
d)|value(pg_mid)|value(pg_trackid)|value(refund_amount)|value(ref
und_currency)|value(refund_response_code)|value(refund_response_m
essage)|value(refund_status)|value(terminal_id)|value(transaction
_time)|value(error_code)|value(error_message)|value(hash_method)|
value(merchant_id)|value(merchant_key_id)|value(status_code)|valu
e(status_message)|secret_key_specified

Actual response_value=
null|REF16A7F83|OT660368164069|PZT13071516084825453|test_pg|test|
PZT13071516071954996|10|INR|SUCCESS|The transaction is
successful|SUCCESS|tid|2013-07-15
16:08:48|12|13|14|15|16|null|null|SHA256|test_merchant|payment|20
0|OK|<secret_key>

Hash Value = SHA256(response_value) or MD5(response_value)
```

In case of Query API, the change is with the data as it's a JSON Array.

```
value(data) = value(data[0])|value(data[1])|value(data[2])

where

value(data[i])=value(bank_arn)|value(bank_transaction_id)|value(e
mi_months)|value(fraud_action)|value(fraud_details)|value(is_inte
rnational)|value(merchant_transaction_id)|value(payment_method)|v
alue(payzippy_transaction_id)|value(pg_authcode)|value(pg_id)|val
ue(pg_mid)|value(pg_trackid)|value(terminal_id)|value(transaction
_amount)|value(transaction_currency)|value(transaction_response_c
ode)|value(transaction_response_message)|value(transaction_status
)|value(transaction_time)|value(transaction_type)|value(udf1)|val
ue(udf2)|value(udf3)|value(udf4)|value(udf5)
```

Important Note: For security reasons the LIVE Key Id (*merchant_key_id*) will be changed every 6 months. Every 6 months, you will receive a new Key Id from PayZippy. It is recommended that you replace your old Key Id with the new Key Id when generating the Hash.

API Request URLs

PayZippy URLs for Staging and Production are the same. The transactions are routed either to the staging platform or the production platform based on the MID and secret key being used.

PayZippy API	URL
Charging API	https://www.payzippy.com/payment/api/charging/v1
Refund API	https://www.payzippy.com/payment/api/refund/v1
Status Query API	https://www.payzippy.com/payment/api/query/v1

4 API Details

Charging API

You can use this API to initiate a payment request to PayZippy.

1. When a request is sent to this API, PayZippy renders a secure payment page where your customers can enter and submit their credit/debit card details. Based on the ui_mode parameter sent by you in the API request, PayZippy will render either the iFrame option or the Redirect option (refer “User Experience Options” above for more details).
2. PayZippy processes these details and redirects the user to the card issuing bank’s 3D secure page.
3. PayZippy receives the payment status from the bank and posts the status to your callback URL

It is recommended that you specify your callback URL (callback_url) in the API request that you send to us. Alternatively, you can also configure your callback URL with PayZippy and it will be picked up by default by us if the callback_url parameter in your API request doesn’t have any value.

Request URL

https://www.payzippy.com/payment/api/charging/v1

Request Sample

```
GET/POST

https://www.payzippy.com/payment/api/charging/v1?merchant_id=test_merchant&
merchant_transaction_id=MT123&merchant_key_id=payment&buyer_email_address=e
mail@email.com&transaction_type=SALE&transaction_amount=100&payment_method=
CREDIT&currency=INR&ui_mode=REDIRECT&hash_method=SHA256&hash=0cf7d69155ae0d
02519b2a5afc80913977f70a301356b37f9891c116a99ab86b&callback_url=http%3A%2F%
2Fyour_calback_url
```

Response Sample

```
http://your_callback_url?transaction_response_code=SUCCESS&merchant_key_id=
payment&transaction_time=2013-07-
09+12%3A44%3A51&bank_name=NULL&terminal_id=&transaction_type=SALE&transacti
on_response_message=The+transaction+is+successful&version=api_version&udf2=
&udf1=&payzippy_transaction_id=PZT13070912445185271&hash_method=SHA256&udf5
=&merchant_transaction_id=MT123&fraud_action=reject&transaction_amount=100&
udf4=&is_international=true&bank_transaction_id=T130709124610NKJ3B&udf3=&me
rchant_id=test_merchant&transaction_currency=INR&hash=3ecbb8d8afc15cbbc0b2a
684f04152927c652c12212481d77d9ea2aed9c18a80&pg_trackid=PZT13070912445185271
&pg_id=test_pg&pg_mid=test&transaction_status=SUCCESS&fraud_details=%5B%2C+
Suspected+txn+by+extended+international+check%5D&pg_authcode=Q2F2VX&payment
_method=CREDIT
```

Request Parameters

The below table contains the list of **mandatory** parameters that you need to send to our Charging API for initiating a payment request.

Parameter Name	Parameter Type	Parameter Constraints	Comments/Description
merchant_id	String	Required Max length:32	This is the Merchant Id that will be issued to you by PayZippy
buyer_email_address	String	Required Max length:100	Your customer's Email address
merchant_transaction_id	String	Required Max length:100	Your unique transaction Id
transaction_type	String	Required Default value: SALE	Send the value as "SALE" for all your transactions.

transaction_amount	Integer	Required	This is your order amount in paise. E.g. If order amount is Rs.500.99, the value to be passed should be 50099.
payment_method	String	Required Should have one of the following values: CREDIT DEBIT EMI NET PAYZIPPY	Required (for iFrame mode) Optional (for Redirect mode) CREDIT = Credit Card DEBIT = Debit Card EMI = Credit Card EMI NET = Net Banking PAYZIPPY = PayZippy Wallet
bank_name	String	Required (only if payment_method is EMI or NET)	Required in case of Net Banking or EMI transactions. Refer Appendix for complete list of Bank name values
emi_months	Integer	Required (only in case of EMI) Should have one of the following values: • 3 • 6 • 9 • 12	This is the EMI tenure (in months), required only for EMI transactions.
currency	String	Required Default value: INR	For transactions in Indian Rupees, send the value as “INR”.
ui_mode	String	Required Should have one of the following values: • REDIRECT • IFRAME	Use this to specify the user experience mode. REDIRECT = User is redirected from your website to PayZippy page IFRAME = PayZippy page opens in iFrame on your website
hash_method	String	Required Should have one of the following values: • MD5 • SHA256	This is the Hash method that you use while sending API request to PayZippy. Refer hash generation section of this document for more details.
hash	String	Required Max length:64	This is used for API Authentication. Refer hash generation section of this document for more details on how to generate the hash.

merchant_key_id	String	Required Max length:20	This is your secure API key id that will be issued to you by PayZippy.

For advanced integration, the following **optional** parameters are supported in our Charging API request:

buyer_phone_no	String	Optional Max length: 50	Your customer's phone number
buyer_unique_id	String	Optional * Max length: 100	Your customer's account id (in case you generate a unique account id for your customers)
shipping_address	String	Optional * Max length:100	Your customer's address
shipping_city	String	Optional * Max length:50	Your customer's city
shipping_state	String	Optional * Max length:50	Your customer's state
shipping_zip	String	Optional * Max length:50	Your customer's zip code
shipping_country	String	Optional * Max length:50	Your customer's country
source	String	Optional Max length:20	If you are accepting payments across multiple websites/apps, you can use this parameter to identify the source of your transaction. For mobile payments, send the value as "Mobile" for this parameter.
callback_url	String	Optional Max length:256	This is your callback URL where you want PayZippy to send the final API response. In case you don't send any value, then this will default to the callback URL that you have setup with PayZippy.

billing_name	String	Optional * Max length:255	Your customer's name
billing_address	String	Optional * Max length: 100	Your customer's billing address
billing_city	String	Optional * Max length:50	Your customer's billing city
billing_state	String	Optional * Max length:50	Your customer's billing state
billing_zip	String	Optional * Max length:50	Your customer's billing zip code
billing_country	String	Optional * Max length:50	Your customer's billing country
is_user_logged_in	boolean	Optional *	If your customer has signed in to your website for this transaction then send value as "true". If your customer has done a guest checkout then send value as "false".
item_total	String	Optional * Max length:100	This is a comma separated list of the sale value of all the items in the order. Example if the order had two items of value 500 and 1000, send the value as "500,1000".
item_vertical	String	Optional * Max length:100	This is a comma separated list of the categories of all the items in the order. Example if the order had two books send the value as "Book,Book".
timegmt	String	Optional Max length:13	If you want to retry a payment request, keeping the merchant_transaction_id same, then you can send the duplicate request by sending a unique value for this parameter. Format: Number of milliseconds since epoch Example: 1372958256063

product_info1	String	Optional Max length:100	This can be used for sending the product name. Example: Apple iPhone 4
product_info2	String	Optional Max length:100	This can be used for sending the product model number/details. Example: Black, 8 GB
product_info3	String	Optional Max length:100	This can be used for sending any other product details
udf1	String	Optional Max length:100	This is a user-defined field that you can use to send any additional information about the transaction. The udf will be visible to you on the PayZippy Console and available to you for reporting & analytics on PayZippy.
udf2	String	Optional Max length:100	This is a user-defined field that you can use to send any additional information about the transaction. The udf will be visible to you on the PayZippy Console and available to you for reporting & analytics on PayZippy.
udf3	String	Optional Max length:100	This is a user-defined field that you can use to send any additional information about the transaction. The udf will be visible to you on the PayZippy Console and available to you for reporting & analytics on PayZippy.
udf4	String	Optional Max length:100	This is a user-defined field that you can use to send any additional information about the transaction. The udf will be visible to you on the PayZippy Console and available to you for reporting & analytics on PayZippy.
udf5	String	Optional Max length:100	This is a user-defined field that you can use to send any additional information about the transaction. The udf will be visible to you on the PayZippy Console and available to you for reporting & analytics on PayZippy.

* While these parameters are optional, it is recommend that you use them because their value is consumed by PayZippy's risk engine for fraud detection.

Response Parameters

In PayZippy response you will receive all the parameters you sent in your request, in addition to transaction status and response codes. The response also contains the parameter 'hash' generated using the same hashing algorithm as mentioned earlier.

The below table contains the list of parameters that you will receive as response from our Charging API.

Parameter Name	**Parameter Type**	**Comments/Description**
merchant_id	String Max length:32	This has the same value that was sent by you in the API Request.
merchant_key_id	String Max length:20	This has the same value that was sent by you in the API Request.
merchant_transaction_id	String Max length:100	This has the same value that was sent by you in the API Request.
payzippy_transaction_id	String Max length:20	This is the unique id generated by PayZippy for this transaction.
transaction_status	String Max length:30	This is the status of the payment. This will have the following values: • SUCCESS • FAILED • PENDING Refer "Transaction Statuses" section for more details on these.
transaction_response_code	String Max length:30	This is the response code for the transaction status. If the transaction is failed, this code represents the failure reason. Refer "Charging Response Codes" section for the complete list of response codes.
transaction_response_message	String	This is human readable text message associated with the transaction_response_code.
payment_method	String	This has the same value that was sent by you

	Max length:20	in the API Request. If the value in API Request is empty then this represents the payment method selected by your customer on PayZippy's secure payment page.
payment_instrument	String Should have one of the following values: CREDIT DEBIT EMI NET	This is the payment instrument used by your customer while making the payment. CREDIT = Credit Card DEBIT = Debit Card EMI = Credit Card EMI NET = Net Banking
bank_name	String Max length:100	This has the same value that was sent by you in the API Request. If the value in API Request is empty then this represents the bank name (in case of EMI or Net banking) selected by your customer on PayZippy's secure payment page.
emi_months	Integer Max length:4	This has the same value that was sent by you in the API Request. If the value in API Request is empty then this represents the EMI tenure (in case of EMI) selected by your customer on PayZippy's secure payment page.
transaction_amount	Integer Max length:20	This has the same value that was sent by you in the API Request.
transaction_currency	String Max length:20	This has the same value that was sent by you in the API Request.
transaction_time	String Max length:18	This is the timestamp at which PayZippy received your API request. Format: yyyy-mm-ddhh:mm:ss Example: 2013-05-0618:11:59
fraud_action	String Max length:20 This will have one these four values: • Accept • Reject • Review • No Action	This is the action recommended by PayZippy's risk engine. Accept = Fraud not suspected Reject = Very strong fraud suspicion, reject the order Review = Fraud suspected, review the customer details before processing the order No Action = PayZippy was unable to review this transaction
fraud_details	String	If a fraud is suspected by PayZippy (fraud_action is Reject or Review), this

		parameter will list the reasons for suspecting the transaction as fraudulent.
is_international	Boolean	If customer uses an international card then this will have value as “true”.
version	String Max length:10	This is the version of the Charging API used.
udf1	String Max length:100	This has the same value that you send in the API request.
udf2	String Max length:100	This has the same value that you send in the API request.
udf3	String Max length:100	This has the same value that you send in the API request.
udf4	String Max length:100	This has the same value that you send in the API request.
udf5	String Max length:100	This has the same value that you send in the API request.
hash_method	String Max length:20	This is the hash method used by merchant for the API request.
hash	String Max length:64	This will be used for API Authentication.

Response Code	Response Message
SUCCESS	The transaction is successful
Failure Response Codes	
_3DS_AUTH_FAILED	3D Secure password entered by customer is incorrect
_3DS_AUTH_UNSUPPORTED	The card issuing bank is not enabled for 3D Secure authentication
ACQUIRER_TECHNICAL_ERROR	There was a technical error at the bank's end
ADDRESS_VERIFICATION_FAILED	The card billing address is incorrect
BANK_RESPONSE_DELAYED	There was a delay in receiving the bank's response
BANK_UNAVAILABLE	The bank for processing this payment request is currently unavailable
BIN_BLOCKED_BY_ACQUIRER	The card number series is blocked by the bank
CANCELLED_BY_USER	Transaction has been cancelled by user
CARD_EXPIRED	The card is either inactive or expired
CARD_EXPIRY_DATE_INVALID	The card expiry date entered by user is not valid
CARD_NOT_ENROLLED	The card is not enrolled for 3D Secure authentication
CARD_NUMBER_INVALID	The card number is incorrect
COUNTRY_NOT_SUPPORTED	Cards issued in the given country are currently not supported by PayZippy for the merchant
CVV_INCORRECT	The CVV number is incorrect
CVV_MISSING	The CVV number is missing
DECLINED_BY_ACQUIRER	Transaction has been declined by bank
DECLINED_BY_ISSUER	Transaction has been declined by the card issuing bank

DECLINED_BY_PAYZIPPY	Transaction has been declined by PayZippy risk management system
DECLINED_BY_RISK	Transaction amount exceeds the risk limits defined by the bank for this card
DUPLICATE_TXN_REQUEST	Merchant has sent a duplicate transaction id
INSUFFICIENT_FUNDS	There is insufficient balance in the customer's account
INVALID_PARAM_FORMAT	Invalid format received for param(s) - <comma separated list of param & value pairs>
INVALID_PARAM_VALUE	Invalid value received for param(s) - <comma separated list of param & value pairs>
INVALID_USER_INPUT	Invalid input received from user for <comma separated list of params>
ISSUER_TECHNICAL_ERROR	There was a technical error at the card issuing bank
MANDATORY_PARAM_MISSING	Mandatory param(s) is/are missing - <comma separated list of missing params>
MERCHANT_AUTH_FAILED	PayZippy was unable to authenticate the request due to hash mismatch
MID_NOT_ACTIVE	The MID is not active. Please contact merchant.care@payzippy.com
MID_NOT_FOUND	The MID sent in payment request is incorrect
NETBANKING_LIMIT_EXCEEDED	Transaction amount exceeds the daily net banking limit for this account
NETBANKING_NOT_ENABLED	Net banking facility is currently not enabled for this account
PAYZIPPY_TECHNICAL_ERROR	There was a technical error at PayZippy's end
USER_REFRESH_COUNT_EXCEEDED	The user refreshed the payment page too many times
USER_SESSION_TIMED_OUT	Transaction was not processed due to prolonged user inactivity

Refund API

The Refund API gives you the convenience of automating your customer refunds. Alternatively, you always have the option to refund a payment transaction manually using the Merchant Console.

Request URL

https://www.payzippy.com/payment/api/refund/v1

Request Sample

```
POST
https://www.payzippy.com/payment/api/refund/v1?merchant_id=test_merchant&me
rchant_transaction_id=MT123&refund_amount=10&merchant_key_id=payment&hash_m
ethod=SHA256&hash=8b620de459ef0f857ab9b737a897dd0ccfa70bc0ad0d65f412d23fa2e
5a66061
```

Response Sample

Unlike our Charging API, the Refund API Response uses a JSON format.

```
{
   data:
   {
           refund_currency: "INR",
           merchant_transaction_id: "MT123",
           refund_amount: 10,
           transaction_time: "2013-07-09 12:50:48",
           udf1: "",
           udf2: "",
           udf3: "",
           udf4: "",
           udf5: "",
           bank_transaction_id: "REF1A1BDFA",
           pg_id: "test_pg",
           pg_mid: "test",
           pg_trackid: "PZT13070912445185271",
           terminal_id: "",
           refund_status: "SUCCESS",
           refund_response_code: "SUCCESS",
           payzippy_transaction_id: "PZT13070912504832268",
           bank_arn: null,
           refund_response_message: "The transaction is successful"
    },
    error_code: null,
    hash:
"6221792a87d3567f6e90c971f179019a9165063d1d05fbe1bbcd2f69c33b3141",
    merchant_id: "test_merchant",
    status_code: 200,
    status_message: "OK",
    error_message: null,
    merchant_key_id: "payment",
    hash_method: "SHA256"
}
```


Request Parameters

The below table contains the list of parameters that you need to send to our Refund API.

Parameter Name	Parameter Type	Parameter Constraints	Comments/Description
merchant_id	String	Required Max length:32	This is the Merchant Id that will be issued to you by PayZippy
merchant_transaction_id	String	Required/Optional Max length:100	This is your transaction id for which you want to initiate a refund This parameter is optional if the below payzippy_sale_transaction_id parameter is not empty.
payzippy_sale_transaction_id	String	Required/Optional	This is the PayZippy transaction id of

		Max length:20	your sale transaction for which you want to initiate a refund This parameter is optional if the above merchant_transaction_id parameter is not empty.
refund_amount	Integer	Required Max length:20	This is the refund amount in paise. This can be less than the transaction amount in case you wish to initiate a partial refund.
hash_method	String	Required Should have one of the following values: • MD5 • SHA256 Max length:20	This is the Hash method that you use while sending API request to PayZippy. Refer hash generation section of this document for more details.
hash	String	Required Max length:64	This is used for API Authentication. Refer hash generation section of this document for more details on how to generate the hash.
merchant_key_id	String	Required Max length:20	This is your secure API key id that will be issued to you by PayZippy.
refund_reason	String	Optional Max length:512	You can specify a custom reason for initiating the refund for your future reference. The reason will be visible to you on the PayZippy Console.
refunded_by	String	Optional Max length:100	If you are using your own in-house consoles for initiating refunds via this API, then you can use this parameter to specify the user who initiated the refund request.
udf1	String	Optional Max length:100	This is a user-defined field that you can use to send any additional information about this refund.
udf2	String	Optional Max length:100	This is a user-defined field that you can use to send any additional information about this refund.
udf3	String	Optional Max length: 100	This is a user-defined field that you can use to send any additional information about this refund.
udf4	String	Optional Max length: 100	This is a user-defined field that you can use to send any additional information about this refund.

udf5	String	Optional Max length: 100	This is a user-defined field that you can use to send any additional information about this refund.
timegmt	String	Optional Max length:13	If you want to retry a payment request, keeping the merchant_transaction_id same, then you can send the duplicate request by sending a unique value for this parameter. Format: Number of milliseconds since epoch Example: 1372958256063

Response Parameters

The below table contains the list of parameters that you will receive as response from our Refund API.

Please note the parameters related to refund request are part of **data** sub-JSON while other parameters are part of http response JSON.

Parameter Name	**Parameter Type**	**Comments/ Description**
status_code	Integer Max length:3	This is the validation status of your Refund API Request. This should have one the following values: • 200 • 400 • 500 200 = Validation success 400 = Validation failed 500 = PayZippy technical error
status_message	String Max length:30	This is the validation status of your Refund API Request, mapped to the above status_code. This should have one the following values: • OK • BAD_REQUEST • INTERNAL_SERVER_ERROR OK = Validation success BAD_REQUEST = Validation failed INTERNAL_SERVER_ERROR = PayZippy technical error
hash_method	String	This is the hash method used by merchant for the API

	Max length:20	request.
hash	String Max length:64	This will be used for API Authentication.
merchant_key_id	String Max length:20	This has the same value that was sent by you in the API Request.
merchant_id	String Max length:32	This has the same value that was sent by you in the API Request.
error_code	String Max length:30	If the status_code is 400 then the error_code signifies the error code for validation failure Example: “invalid_param_format”
error_message	String Max length:100	If the status_code is 400 then the error_message signifies the error message for validation failure Example: “Invalid format received for param – refund_amount=100.12”
data.merchant_transaction_id	String Max length:100	This has the same value that was sent by you in the API Request.
data.payzippy_transaction_id	String Max length:20	This has the same value that was sent by you in the API Request.
data.refund_amount	Integer Max length:20	This has the same value that was sent by you in the API Request.
data.refund_status	String Max length:50	This is the status of the refund transaction. This should have the following values: • SUCCESS • FAILED • PENDING • INITIATED
data.refund_response_code	String Max length:100	This is the response code for the refund transaction. If the transaction is failed, this code represents the failure reason. Refer “Refund Response Codes” section for more details on these.
data.refund_response_message	String	This is human readable text message associated with the refund_response_code.
data.bank_arn	String Max	This is the refund reference id (ARN) received by PayZippy from the acquiring bank. This value will be null for most of the transactions. The ARN is typically

	length:512	received by PayZippy from acquiring banks a couple of days after the transaction.
data.transaction_time	String Max length:18	This is the timestamp at which PayZippy received your API request. Format: yyyy-mm-ddhh:mm:ss Example: 2013-05-06 18:11:59
data.pg_trackid	String Max length:20	This is the transaction id sent by PayZippy to the acquiring bank. Applicable only for “Tech-only” merchants.
data.pg_mid	String Max length:32	This is the MID issued to the merchant by his acquiring bank. Applicable only for “Tech-only” merchants.
data.pg_id	String Max length:32	This is the logical name of the acquiring bank used by PayZippy to process the transaction. Applicable only for “Tech-only” merchants.
data.terminal_id	String Max length:6	This is the same terminal_id that is sent by the merchant in the API request. Applicable only for “Tech-only” merchants.
data.bank_transaction_id	String Max length:50	This is the transaction id received by PayZippy from the acquiring bank for this transaction. Applicable only for “Tech-only” merchants.
data.currency	String Max length:20	This has the same value that was sent by you in the Charging API Request.
data.udf1	String Max length:100	This has the same value that you send in the API request.
data.udf2	String Max length:100	This has the same value that you send in the API request.
data.udf3	String	This has the same value that you send in the API request.

	Max length:100	
data.udf4	String Max length:100	This has the same value that you send in the API request.
data.udf5	String Max length:100	This has the same value that you send in the API request.

Refund API Response Codes

Refer to following table for various response codes and their meaning, which you can receive in field ‘data.refund_response_code’ of refund response API.

Response Code	Response Message	Additional Comments
SUCCESS	Your refund request has been successfully acknowledged by the bank	
DUPLICATE_REFUND_REQUEST	Refund for this transaction has already been initiated	
EXCESS_REFUND_AMOUNT	The refund amount exceeds the maximum refundable amount allowed for this transaction	If Refund amount is more than the sale amount.
INSUFFICIENT_BALANCE	Merchant doesn't have sufficient outstanding balance in nodal account to pay for the refund. Merchant needs to transfer funds to PayZippy to enable refunds.	
MULTIPLE_REFUNDS_UNSUPORTED	Multiple refunds are not supported for this transaction	If multiple partial refunds are not supported for the merchant or payment method.
PARTIAL_REFUNDS_UNSUPPORTED	Partial refunds are not supported for this transaction. Merchant should initiate the refund for full transaction amount	If partial refunds are not supported for the merchant or payment method.
PAYZIPPY_TECHNICAL_ERROR	Refund could not be processed due to a technical error at PayZippy's end	

ACQUIRER_TECHNICAL_ERROR	Refund could not be processed due to a technical error at the bank's end	
REFUND_NOT_SUPPORTED	Refunds are not supported for this transaction	If the Refund config for the merchant is missing at PayZippy's end
REFUND_REQUEST_ACCEPTED	Your refund request has been successfully accepted by us	
REFUND_REQUEST_SENT	Your refund request has been successfully sent to the bank	
REFUND_WINDOW_EXPIRED	Refund on this transaction cannot be initiated beyond X days from sale transaction date	If the max time frame specified by acquiring bank for refund has expired.
REFUNDED	Refund amount has been credited into your customer's card/bank account	
SALE_TRANSACTION_UNSUCCESSFUL	Refund cannot be processed because the sale transaction is unsuccessful	
SIMILAR_PREVIOUS_PARTIAL_REFUND_DETECTED	We have detected previous partial refund of the same amount a short while back. Please try again after sometime.	This is a check to prevent erroneous duplicate partial refunds by your refund/customer support team.
TXNID_NOT_FOUND	No matching sale transaction found for the given sale transaction Id	

Transaction Status Query API

If for some reason you didn't receive a response from PayZippy for a Sale or Refund transaction (maybe the user abandoned the transaction midway or there was a network/timeout issue when PayZippy sent the response to your callback URL), you can use the Transaction Status Query API to confirm the final status of your transaction.

Alternately, you also have the option to receive an email/sms from PayZippy for such cases as and when the status of the transaction is confirmed as "SUCCESS". You can specify the recipient email/mobile for this through the 'Txn Status Change Notification' setting on your PayZippy Console. We request you to take action on receipt of these sms/emails and communicate with your customers accordingly.

Request URL

https://www.payzippy.com/payment/api/query/v1

Request Sample

```
https://www.payzippy.com/payment/api/query/v1?merchant_id=test_flipkart&pay
zippy_transaction_id=&merchant_transaction_id=MT123&transaction_type=SALE&m
erchant_key_id=payment&hash_method=SHA256&hash=07e866d1b321208fa47b80622da2
1b9b03327c7b27768208f717ad8bd8c4590d
```

Response Sample

Unlike the Charging API Response, the Query API Response uses a JSON format.

```
{
    data:
    {
      fraud_action: "reject",
      merchant_transaction_id: "MT123",
      transaction_time: "2013-07-09 12:44:51",
      udf1: "",
      udf2: "",
      udf3: "",
      udf4: "",
      udf5: "",
      payment_method: "CREDIT",
      bank_transaction_id: "T130709124610NKJ3B",
      emi_months: 0,
      transaction_type: "SALE",
      pg_id: "test_pg",
      pg_mid: "test",
      pg_trackid: "PZT13070912445185271",
      pg_authcode: "Q2F2VX",
      terminal_id: "",
      is_international: true,
      payzippy_transaction_id: "PZT13070912445185271",
      transaction_status: "SUCCESS",
      transaction_response_code: "SUCCESS",
      transaction_amount: 100,
      fraud_details: "[, Suspected txn by extended international check]",
      transaction_currency: "INR",
      transaction_response_message: "The transaction is successful",
      bank_arn: null
     },
     error_code: null,
     hash:
"4a61fcef252629a4734a450947d0cbfc8e9e7294e78f363fcfe33665d0f2a595",
     merchant_id: "test_merchant",
     status_code: 200,
     status_message: "OK",
     error_message: null,
     merchant_key_id: "payment",
     hash_method: "SHA256"
}
```


Request Parameters

Parameter Name	Parameter Type	Parameter Constraints	Comments/Description
merchant_id	String	Required Max length:32	This is the Merchant Id that you used for the Sale/Refund transaction for which you wish to query the status.

merchant_key_id	String	Required Max length:20	This is your secure API key id that will be issued to you by PayZippy.
merchant_transaction_id	String	Required/Optional Max length:100	This is the transaction id for which you wish to query the transaction status. This parameter is optional if the below payzippy_transaction_id parameter is not empty.
hash_method	String	Required Should have one of the following values: • MD5 • SHA256 Max length:20	This is the Hash method that you use while sending API request to PayZippy. Refer hash generation section of this document for more details.
hash	String	Required Max length:64	This is used for API Authentication. Refer hash generation section of this document for more details on how to generate the hash.
payzippy_transaction_id	String	Required/Optional Max length:20	This is the payzippy transaction id for which you wish to query the transaction status. This parameter is optional if the above merchant_transaction_id parameter is not empty.
transaction_type	String	Optional Max length:20 Default value: SALE	If you wish to query the status of the Refund transaction then you should send the value as “REFUND”. Should have one of the following values: • SALE • REFUND

Response Parameters

Parameter Name	**Parameter Type**	**Comments/ Description**
status_code	Integer Max length:3	This is the validation status of your Refund API Request. This should have one the following values:

		• 200 • 400 • 500 200 = Validation success 400 = Validation failed 500 = PayZippy technical error
status_message	String Max length:30	This is the validation status of your Refund API Request, mapped to the above status_code. This should have one the following values: • OK • BAD_REQUEST • INTERNAL_SERVER_ERROR OK = Validation success BAD_REQUEST = Validation failed INTERNAL_SERVER_ERROR = PayZippy technical error
hash_method	String Max length:20	This is the hash method used by merchant for the API request.
hash	String Max length:64	This will be used for API Authentication.
merchant_key_id	String Max length:20	This has the same value that was sent by you in the API Request.
merchant_id	String Max length:32	This has the same value that was sent by you in the API Request.
error_code	String Max length:30	If the status_code is 400 then the error_code signifies the error code for validation failure Example: “invalid_param_format”
error_message	String Max length:100	If the status_code is 400 then the error_message signifies the error message for validation failure Example: “Invalid format received for param – hash_method=ertet”
data.merchant_transaction_id	String Max length:100	This is the your transaction id of the transaction for which you queried the status
data.payzippy_transaction_id	String Max length:20	This is the PayZippy transaction id of the transaction for which you queried the status

data.bank_arn	String Max length:512	If transaction_type is REFUND and if we have the ARN for the refund transaction, then the same will be sent in this parameter
data.transaction_amount	Integer Max length:20	This is the transaction amount in case of SALE and refund amount in case of a REFUND
data.transaction_currency	String Max length:20	This has the same value that was sent by you in the Charging API Request.
data.transaction_time	String Max length:18	This is the timestamp at which PayZippy received your Charging/Refund API request. Format: yyyy-mm-ddhh:mm:ss Example: 2013-05-06 18:11:59
data.payment_method	String Max length:20	This has the same value that was sent by you in the Charging API Request. If the value in Charging API Request is empty then this represents the payment method selected by your customer on PayZippy's secure payment page at the time of SALE.
data.payment_instrument	String Should have one of the following values: CREDIT DEBIT EMI NET	This is the payment instrument used by your customer while making the payment. CREDIT = Credit Card DEBIT = Debit Card EMI = Credit Card EMI NET = Net Banking
data.bank_name	String	This has the same value that was sent by you in the Charging API Request. If the value in Charging API Request is empty then this represents the bank name (in case of Net Banking and EMI) selected by your customer on PayZippy's secure payment page at the time of SALE.
data.emi_months	Integer Max length:4	This has the same value that was sent by you in the Charging API Request. If the value in Charging API Request is empty then this represents the EMI tenure (in case of EMI) selected by your customer on PayZippy's secure payment page at the time of SALE.
data.transaction_type	String	This will be either SALE or REFUND depending on the transaction whose status you wish to query

	Max length:20	
data.transaction_status	String Max length:30	This is the status of the payment. Refer “Transaction Statuses” section for more details on the complete list of statuses.
data.transaction_response_code	String Max length:20	This is the response code for the transaction status. If the transaction is failed, this code represents the failure reason. Refer “Charging Response Codes” and “Refund Response Codes” section for the complete list of response codes.
data.transaction_response_message	String	This is human readable text message associated with the transaction_response_code.
data.fraud_action	String Max length:20 This will have one these four values: • Accept • Reject • Review • No Action	This is the action recommended by PayZippy’s risk engine. Accept = Fraud not suspected Reject = Very strong fraud suspicion, reject the order Review = Fraud suspected, review the customer details before processing the order No Action = PayZippy was unable to review this transaction
data.fraud_details	String	If a fraud is suspected by PayZIppy (fraud_action is Reject or Review), this parameter will list the reasons for suspecting the transaction as fraudulent.

5 Integrating with PayZippy Sandbox

You can try and test all PayZippy API integrations using the PayZippy Sandbox. The Sandbox can be accessed from your staging as well as local development environments. You will require a Test MID issued by PayZippy for using the Sandbox.

Please reach out to us at merchant.care@payzippy.com in case you haven't yet received your Test MID.

The great thing about PayZippy's Sandbox is that once you have successfully tested your integration on PayZippy's Sandbox you can go-live without any additional code change. Even the URL for accessing PayZippy's Sandbox and Live environments is the same.

Just replace the following 3 Test credentials with LIVE credentials:

1. MID (*merchant_id*)
2. Secure key (used to determine *hash*)
3. Secure key id (*merchant_key_id*)

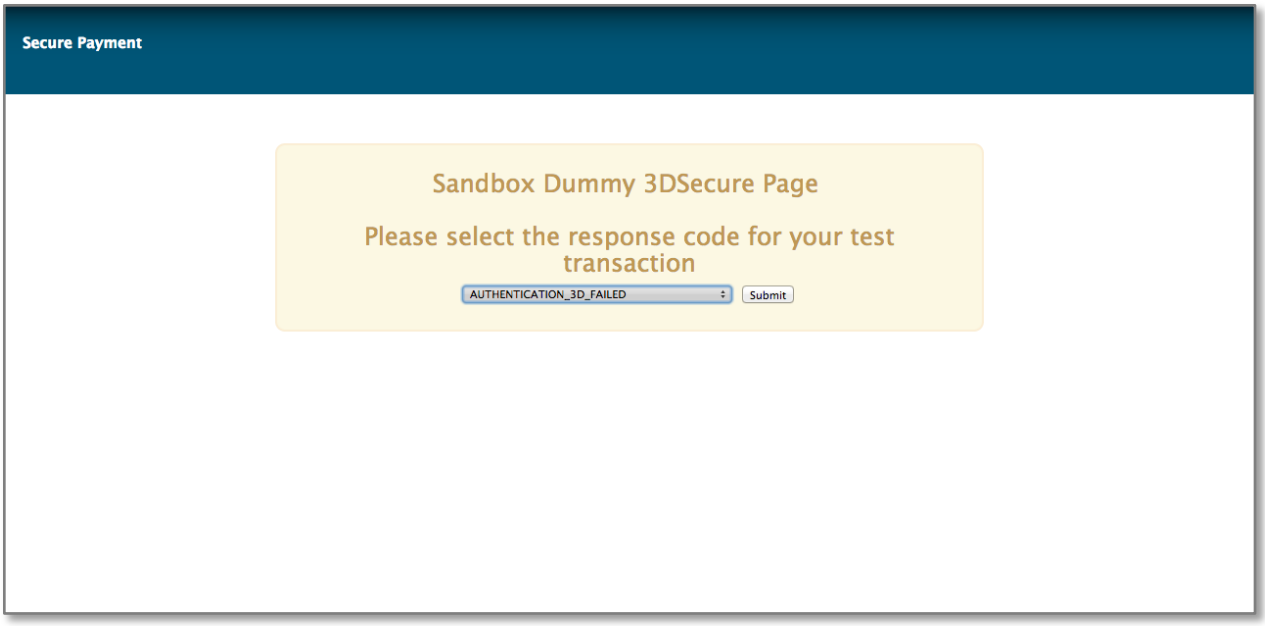
This ensures that you have the confidence of going LIVE with a thoroughly tested end-to-end experience.

Steps to integrate with PayZippy

1. POST a sample payment request to the PayZippy Charging API with all the mandatory parameters mentioned in the Charging API section above.

2. You will be redirected to the PayZippy's secure payment page. Enter your credit/debit card details and click on Pay. If you enter a non-Indian credit/debit card then you will be required to enter your card billing address as well.

3. Once you submit the card details, you will be redirected to our dummy Sandbox 3DSecure page. On this page you will get the option to choose the PayZippy response for which you would like to test the integration.



4. After you have selected and submitted the response, you will see an intermediate page displaying the transaction status. You will then be automatically redirected to your callback URL. PayZippy will post the transaction response containing the payment status and other transaction details to your callback URL.

PayZippy Sale Transaction Statuses

Status	Description
Success	The payment is successful
Failure	The payment failed. You should refer PayZippy Response Message to identify the failure reason.
Pending	The payment request was sent to bank but a confirmed response was not received. There is a low probability of the payment being successful.
Initiated	The payment request was not sent to bank. There is zero probability of the payment being successful. You should refer Transaction Funnel Step to identify the point at which the transaction was aborted.

PayZippy Refund Transaction Statuses

Status	Description
SUCCESS	The refund is successful
FAILURE	The refund failed. You should refer PayZippy Response Message to identify the failure reason.
REFUND_REQUEST_ACCEPTED	Refund request has been accepted and will be sent to the acquiring bank for processing within 24 hours
REFUND_REQUEST_SENT	Refund request has been sent to the acquiring bank and the bank's acknowledgement is awaited
REFUNDED	Refund amount received in customer's bank account

Transaction Funnel Steps

A transaction passes through multiple steps from the point you send a payment request to PayZippy to the point PayZippy returns a response. These multiple steps have been classified into the funnel steps given below. The funnel step helps you identify the final point at which a transaction was abandoned or concluded.

Transaction Funnel Step	Transaction Status	Interpretation
PAYMENT_REQUEST_RECEIVED	Initiated / Failed	PayZippy received the payment request from merchant
PAYMENT_REQUEST_VERIFIED	Initiated	PayZippy successfully verified the payment request
PAYZIPPY_FORM_RENDERED	Initiated	PayZippy payment form was rendered in customer's browser
CARD_DETAILS_ENTERED	Initiated	Customer attempted to enter the card number on the PayZippy payment form
PAYMENT_DETAILS_SUBMITTED	Initiated / Failed	Customer has successfully submitted the payment details in PayZippy payment form
PG_ASSIGNED	Initiated	PayZippy has successfully assigned the payment request to a bank
PG_REQUEST_SENT	Pending	PayZippy has successfully sent the payment request to the assigned bank
_3DS_AUTHENTICATION	Pending	Customer was redirected to the 3D Secure authentication page of the issuing bank
PG_RESPONSE_RECEIVED	Pending	PayZippy received a response from the bank
PG_RESPONSE_PROCESSED	Success / Failed	PayZippy updated the payment status
TRANSACTION_COMPLETED	Success / Failed	PayZippy sent the payment response to merchant

Transaction Status Update Feature

There can be rare scenarios where the acquiring bank may have not sent the payment response to PayZippy even after the user enters the 3D secure password on the bank's page. In such scenarios, PayZippy may not return any confirmed payment status to you. For all such transactions, PayZippy later verifies the payment status with the acquiring bank to confirm whether the payment is successful or not.

If the bank confirms that the payment is successful, PayZippy will update the payment status at its end and notify you of the updated status by SMS/Email. You can configure the email address and mobile number on which you would like to receive these notifications, by visiting the "Account Settings" section on your PayZippy Console.

6 Mobile Payments

The above API integration holds good for mobile-based transactions as well.

When a payment request is sent to PayZippy, it intelligently identifies the device type and accordingly renders a mobile device-optimized payment page. You also get the option to override the PayZippy device detection logic to always render the mobile-optimized page by passing the value “Mobile” in the “Source” parameter of the Charging API.

7 Appendix

Valid values for **bank_name** param (used for Net Banking and EMI)

Bank	Bank_name param value
Axis Bank	AXIS
Citibank	CITIBANK
HDFC Bank	HDFC
ICICI Bank	ICICI
IndusInd Bank	INDUSIND
Kotak Mahindra Bank	KOTAK
State Bank of Bikaner	SBBIKANER
State Bank of Hyderabad	SBHYDERABAD
State Bank of India	SBI
State Bank of Mysore	SBMYSORE
State Bank of Patiala	SBPATIALA
State Bank of Travancore	SBTRAVANCORE
Yes Bank	YESBANK