Zaak ePayment Services Private Limited

API Document

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Table Of Content

Sign Up

Sign up for a business account on Zaakpay. After signing up & verifying your account follow the steps below:

- Login to Zaakpay.
- Click the My Account tab.
- Select the integration sub-menu item under the My Account tab.
- Select the URLs & Keys tab from the navigation.
- Fill in details like the domain you'll be posting from and your return URL. **Here the domain is the domain where you'll be posting data to Zaakpay from and the response URL for transact API is the path to the response handler file on your server.**
- Select the Transaction limits sub-menu item under the My Account tab and set your appropriate transaction limits.
- Generate your secret key and note it down along with your merchant identification number.

Checksum calculation before sending

For both integrity & data-authenticity verification before sending data to the API, you need to calculate a checksum on the data that you send to Zaakpay. We use an **HMAC SHA-256** algorithm to calculate the checksum of entire JSON data that is posted to the API. **The secret key generated in your account under the URLs & Keys tab will be the key passed to hash function for checksum calculation.**

For more on HMAC implementations for various platforms please take a look at the following links:

- PHP HMAC implementation
- Python HMAC implementation
- Perl HMAC implementation
- Ruby HMAC implementation
- C HMAC implementation
- Java implementation
- JavaScript HMAC implementation
- Lightweight JavaScript implementation (SHA-256 & HMAC SHA-256)
- .NET's System.Security.Cryptography.HMAC

The links provided above are for referential purposes only. **The final checksum should be converted into HEXADECIMAL character set.**

1. Get Up Enabled Payment Options API

This api will return the payment methods available to merchant (based on merchant id) and cards saved by a user.

Request Type: GET
Request URL: https://api.zaakpay.com/getPaymentMethods

Request Params:

```
data={
   "merchantIdentifier": "zaakpaymid",
      "email":"abc@gmail.com",
      "mode":"0"
}
&checksum=dfsafdsfdsf89345nvetvw4985vnery
```

Response Params:


```
{
   "email": "chirag@zaakpay.com",
   "responseCode": "100",
   "responseDescription": "Cards have been fetched successfully.",
   "enabledNetbanking": {
      "SBI": "State Bank of India",
      "AXIS": "Axis Bank",
      "KMB": "Kotak Mahindra Bank"
   },
   "enabledCards": [
      "Visa",
      "Master",
      "Maestro",
      "Diners",
      "Discover"
   ],
   "cards": [
      {
         "nameoncard": "chirag jain",
         "first4": "4012",
         "last4": "1881",
         "cardId": "bce8e4e1e66520cb0bc2bf3a0e760412d53273a844bf0931f2b3136a2ee0ada3~1",
         "cardScheme": "Visa",
         "cardToken": "4012 XXXX XXXX 1881",
                  "merchantCardRefId": "cardRef123"
      },
      {
         "nameoncard": "chirag jain",
         "first4": "5610",
         "last4": "8250",
         "cardId": "dbd45ca21bedf7a7fb4156533e779e8aee5e7a89c46ba203c85c89f91bd21dd9~12",
         "cardScheme": "Maestro",
         "cardToken": "5610 XXXX XXXX 8250",
                  "merchantCardRefId": "cardRef123"
      }
   ]
}
```

2. Transact API

Using this api, merchant's server POSTs card/bank data to Zaakpay's server. Zaakpay's server responds back with bank's url.

Request Type: POST
Request URL: https://api.zaakpay.com/transactU?v=4

Request Params:

Parameter	Optional(O) Mandatory (M)	Validation	Allowed Values
merchantIdentifier	M	alphanumeric	Zaakpay's unique identifier for your website
orderId	M	max 20 alphanumeric, must be unique per website, we do not accept duplicate	Your unique transaction identifier
returnUrl	O	this must be the domain (or a subdomain of it) you saved under My Account>Integration	Url where you want Zaakpay to post the response
email	M	valid email address of the buyer	pankaj@gmail.com
address	O	100 alphanumeric Street address of the buyer. (Part of billing address)	#123, Hello Apartments, Rainbow Street, Defence Colony
city	O	30 alphabet, minimum 3 (Part of billing address)	Surat
state	O	State of the buyer (Part of billing address)	Gujarat
country	O	Country of the buyer	India
pincode	O	Buyer's pin/zip code. 2 to 12 digits Can have Numbers,Spaces and Hyphens (-) only (Part of billing address)	110011
phone	M	buyer's landline or mobile phone number, numeric only, no dashes, no spaces	eg. 01145771775 9971712962
mode	M	1 digit only, numeric	Single digit numeric value, 0 or 1 Domain / referral checks will be skipped if mode is set to 0. Ideal when making API requests from developer / staging environments
currency	M	values defined by Zaakpay	INR is the only accepted value

amount	M	amount in paisa. min 100, max 10000000; The amount limit per transaction you saved under My Account>Integration is applied.	example Re 1 is 100 paisa, Rs 777.50 is 77750 paisa
productDescription	M	Text description of what you are selling. At least 1 product description is mandatory to show in the bill on payment page. free text alphanumeric 100 max	eg. name of book, name of mobile etc. eg. Rs 199 Godzilla Movie DVD
showMobile	O	**false**: We show the full-fledged version unconditionally. **DETECT**: We do detection of the userAgent of the browser from which the request is sent & route accordingly. **true**: We show the mobile page unconditionally. missing / not sent : Same as DETECT (ie We do detection at our end).	
paymentMode	M	Possible Values: debit,credit or net banking	
bankid	M (for Net Banking)	For Net Banking, ID of selected bank, as SBI	
encrypted_pan	M (for Card txn)	Encrypted Card Number	
nameoncard	O (for Card txn)	Card Holder Name	
encryptedcvv	M (for Card txn)	Encrypted CVV of card	
encrypted_expiry_month	M (for Card txn)	Encrypted Expiry Month of card	
encrypted_expiry_year	M (for Card txn)	Encrypted Expiry year of card	
saveCard	O	Flag to save card. true if user wants to save his card at Zaakpay	true/false
cardId	O	Id assigned by Zaakpay to a saved card	
encryptionKeyId	O	Id of Merchant’s Public key assigned by Zaakpay	
merchantCardRefId	O	A unique id assigned by merchant to a card saved at Zaakpay	

2.1 Request Format:


```
data={
   "merchantIdentifier": "zaakpaymid",
   "encryptionKeyId": "123",
   "showMobile": "true",
      "mode": "0",
      "returnUrl": "http://merchant.com/zaakpayResponse",
   "orderDetail": {
      "orderId": "1224",
      "amount": "10000",
      "currency": "INR",
      "productDescription": "Cab Hire",
      "email": "abc@gmail.com",
      "phone": "9999999999"
   },
   "billingAddress": {
      "address": "758,udyogvihar",
      "city": "Gurgaon",
      "state": "Haryana",
      "country": "India",
      "pincode": "120012"
   },
   "shippingAddress": {
      "address": "758,udyogvihar",
      "city": "Gurgaon",
      "state": "Haryana",
      "country": "India",
      "pincode": "120012"
   },
   "paymentInstrument": {
      "paymentMode": "card",
      "card": {
         "encrypted_pan": "ggfhfbsdjbf",
         "nameoncard": "cardholdername",
         "encryptedcvv": "sdafdsf",
         "encrypted_expiry_month": "sadasda",
         "encrypted_expiry_year": "sdasfff",
         "saveCard": "true",
         "cardId": "bce8e4e1e66520cb0bc2bf3a0e760412d53273a844bf0931f2b3136a2ee0ada3~1"
      },
      "netbanking": {
         "bankid": "SBI",
         "bankName": "State Bank of India"
      }
   }
      }&checksum=dfsafdsfdsf345dfhwe6fg
```

Parameter	Optional(O), Mandatory(M)	Validation	Allowed Values
orderId	M	max 20 alphanumeric, must be unique per website, we do not accept duplicate	Your unique transaction identifier
responseCode	M	numeric max 3 digits 123	Refer to responses
responseDescription	M	alphanumeric max 30 description of the response	Refer to responses
checksum	O	Checksum calculated by Zaakpay on all response parameters. In case of JSON response, it will in response header	
amount	M	Txn amount in paisa, Integer	
doRedirect	M	Always false, as this is final transaction response	Sample value: false
paymentMode	M	Payment mode (txns was done via card or net banking)	Sample Value: card, netbanking
cardId	O	Unique token of card if user had chosen to save card	
cardScheme	O		Visa,Mastercard etc
cardToken	O	Masked card number	4012 XXXX XXXX 1881
bank	M	Name of bank for card or netbanking	State Bank of India
bankid	O	bankid in case of net banking	SBI
postUrl	O	If doRedirect is true, this is the URL where browser redirect should be done	
bankPostData	O	If doRedirect is true, this is the dictionary (or map) having parameters (key value pair) to be posted to postUrl.	

Response Parameters:

Response Format:

2.2 Response (if redirect required for card): In this case, 2FA is enabled for the card, so browser redirect is required to bank's 2FA page.


```
{
   "checksum": "dfsafdsfdsf",
   "data":{
   "orderDetail": {
      "orderid": "1224",
      "amount": "10000"
   },
   "responseCode": "208",
   "responseDescription": "Transaction in Processing state",
   "doRedirect": "true",
   "paymentInstrument": {
      "paymentMode": "card",
      "card": {
         "cardId": "dddsbdjsabdj",
         "cardToken": "4012 XXXX XXXX 1881",
         "cardScheme": "Visa",
         "bank": "State Bank of India"
      }
   },
   "postUrl": "http://bankpage.com",
   "bankPostData": {
      "PaReq": "ddfsf",
      "MD": "3434",
      "TermUrl": "https://api.zaakpay.com/hdfctermurl",
      "PID": "74324"
   }
}
```


2.3 Response (redirect required for net banking): For netbanking, browser redirect is always required.


```
{
   "checksum": "dfsafdsfdsf",
   "data":{
   "orderDetail": {
      "orderid": "1224",
      "amount": "10000"
   },
   "responseCode": "208",
   "responseDescription": "Transaction in Processing state",
   "doRedirect": "true",
   "paymentInstrument": {
      "paymentMode": "netbanking",
      "netbanking": {
         "bankid": "SBI",
         "bankName": "State Bank of India"
      }
   },
   "postUrl": "https://sbi.com/txn",
   "bankPostData": {
      "MD": "3434",
      "PID": "74324",
      "ES": "132ge1yg332"
   }
}
```

The key-value pairs contained in bankPostData are the parameters to be POSTed to bank url mentioned in postUrl parameter. It will be a browser based form POST. For example:

```
<html>
<body onload="document.forms[0].submit()">
      <form action="https://sbi.com/txn" method="POST">
            <input name="MD" value="3434" />
            <input name="PID" value="74324" />
            <input name="ES" value="132ge1yg332" />
      </form>
</body>
</html>
```

After this form is posted, **user will be taken to bank's page** for 2FA/netbanking authentication. After completion of transaction, user will be redirected back to Zaakpay from bank's website with transaction status. After that **Zaakpay will redirect back to merchant's returnUrl with final transaction response** in format mentioned in section 2.5

2.4 Response (if redirect not required and txn is complete): For cards not enabled for 2FA, transaction can be completed without browser redirect. For those cards, this will be the final transaction response.

```
{
   "checksum": "dfsafdsfdsf",
   "data": {
   "orderDetail": {
      "orderid": "1224",
      "amount": "10000"
   },
   "responseCode": "100",
   "responseDescription": "Transaction Completed Successfully",
   "doRedirect": "false",
   "paymentInstrument": {
      "paymentMode": "card",
      "card": {
         "cardId": "dddsbdjsabdj",
         "cardToken": "4012 XXXX XXXX 1881",
         "cardScheme": "Visa",
         "bank": "State Bank of India"
      }
   }
}
```

2.5 Final Response after Redirection:
After receiving JSON response in server to server call to Transact API, if "doRedirect" is true, merchant needs to POST all bank parameters mentioned in "bankPostData" to url mentioned in "postUrl". This will take user to bank's 2FA or netbanking page. After completion of transaction, Zaakpay will redirect back to merchant's returnUrl with below parameters:

Checksum will be calculated on all parameters in the same order in which they are posted. Prepare checksum string by concatenating all param value and surrounding them with single quote '

Sample Checksum String for Card txns:

'Orderid123"100"Transaction Completed Successfully"10000"false"card"dhe273rtfghdsadbsafb"Visa"4012 XXXX XXXX 1881"State Bank of India'

Sample Checksum String for Netbanking txns:

'Orderid123"100"Transaction Completed Successfully"10000"false"netbanking"State Bank of India"SBI'

3. Card Validation API

This api will check with the bank if card is valid and return card status to merchant.This api just checks if a card exists with given card number.
This api **does not check** if:
A. Card's CVV and Expiry provided by user is correct.
B. Card is still active or blocked.
C. User's card/account has sufficient funds.

Request Type: GET
Request URL: https://api.zaakpay.com/validateCard

Request Params:

Parameter	Optional (O) Mandatory (M)	Validation	Allowed Values
merchantIdentifier	M	alphanumeric	Zaakpay's unique identifier for your website
email	M	valid email address of the buyer	pankaj@gmail.com
mode	M	1 digit only, numeric	Single digit numeric value, 0 or 1 Domain / referral checks will be skipped if mode is set to 0. Ideal when making API requests from developer / staging environments
encrypted_pan	M (for Card txn)	Encrypted Card Number	
nameoncard	O (for Card txn)	Card Holder Name	
encryptedcvv	M (for Card txn)	Encrypted CVV of card	
encrypted_expiry_month	M (for Card txn)	Encrypted Expiry Month of card	
encrypted_expiry_year	M (for Card txn)	Encrypted Expiry year of card	
cardId	O	Id assigned by Zaakpay to a saved card	
encryptionKeyId	O	Id of Merchant's Public key assigned by Zaakpay	
merchantCardRefId	O	A unique id assigned by merchant to a card saved at Zaakpay	

Request Format:

```
data={
   "merchantIdentifier": "zaakpaymid",
      "email":"abc@gmail.com",
      "mode":"0",
    "card": {
         "encrypted_pan": "ggfhfbsdjbf",
         "nameoncard": "cardholdername",
         "encryptedcvv": "sdafdsf",
         "encrypted_expiry_month": "sadasda",
         "encrypted_expiry_year": "sdasfff",
         "cardId": "bce8e4e1e66520cb0bc2bf3a0e760412d53273a844bf0931f2b3136a2ee0ada3~1",
"merchantCardRefId": "cardRef123"
            }
}&checksum=dfsafdsfdsf345dfhywrt7trhue567sdf
```

Response Parameters:

Parameters	Mandatory (M), Optional(O)	Validation	Allowed values
responseCode	M	numeric max 3 digits 123	Refer to responses
responseDescription	M	alphanumeric max 30 description of the response	Refer to responses
cardId	O	Unique token of card if user had chosen to save card	
cardScheme	O		Visa,Mastercard etc
cardToken	O	Masked card number	4012 XXXX XXXX 1881
bank	M	Name of bank for card or netbanking	State Bank of India
bankid	O	bankid in case of net banking	SBI
email	M	Email id of card holder	

Response Format:

```
{
   "email": "abc@gmail.com",
   "responseCode": "100",
   "responseDescription": "Card is valid",
   "card": {
      "cardToken": "4012 XXXX XXXX 1881",
      "cardScheme": "Visa",
      "bank": "State Bank of India",
      "cardId": "bce8e4e1e66520cb0bc2bf3a0e760412d53273a844bf0931f2b3136a2ee0ada3~1"
           "merchantCardRefId": "cardRef123"
   }
}
```

4. Add Card API

This api will first check if card is valid and then save a card against a merchant and a valid email id. Card can also be mapped against a merchantCardRefId which is a unique card ref id assigned by the merchant to a card.

These steps must be followed while making a request to add card api:

1. Encrypt card data
2. Create JSON using encrypted card data
3. Calculate checksum on entire JSON string
4. URL Encode the JSON
5. Post checksum and encoded JSON to Zaakpay

Request Type: POST
Request URL: https://api.zaakpay.com/addCardU

Request Params:

Parameter	Optional (O) Mandatory (M)	Validation	Allowed Values
merchantIdentifier	M	alphanumeric	Zaakpay's unique identifier for your website
email	M	valid email address of the buyer	pankaj@gmail.com
address	O	100 alphanumeric Street address of the buyer. (Part of billing address)	#123, Hello Apartments, Rainbow Street, Defence Colony
city	O	30 alphabet, minimum 3 (Part of billing address)	Surat
state	O	State of the buyer (Part of billing address)	Gujarat
country	O	Country of the buyer	India
pincode	O	Buyer's pin/zip code. 2 to 12 digits Can have Numbers,Spaces and Hyphens (-) only (Part of billing address)	110011
mode	M	1 digit only, numeric	Single digit numeric value, 0 or 1 Domain / referral checks will be skipped if mode is set to 0. Ideal when making API requests from developer / staging environments
encrypted_pan	M (for Card txn)	Encrypted Card Number	
nameoncard	O (for Card txn)	Card Holder Name	
encryptedcvv	M (for Card txn)	Encrypted CVV of card	
encrypted_expiry_month	M (for Card txn)	Encrypted Expiry Month of card	
encrypted_expiry_year	M (for Card txn)	Encrypted Expiry year of card	
encryptionKeyId	O	Id of Merchant’s Public key assigned by Zaakpay	
merchantCardRefId	O	A unique id assigned by merchant to a card saved at Zaakpay	

Request Format:


```
data={
"merchantIdentifier": "zaakpaymid",
"email": "abc@gmail.com",
"mode": "0",

"card": {
   "encrypted_pan": "ggfhfbsdjbf",
   "nameoncard": "cardholdername",
   "encryptedcvv": "sdafdsf",
   "encrypted_expiry_month": "sadasda",
   "encrypted_expiry_year": "sdasfff",
        "merchantCardRefId": "cardRef123"
},
"billingAddress": {
   "address": "758,udyogvihar",
   "city": "Gurgaon",
   "state": "Haryana",
   "country": "India",
   "pincode": "120012"
}
}&checksum=dfsafdsfdsfbhgfjbfvgdbgbhfvvgvvcjkui
```


Response Parameters:

Parameters	Mandatory(M), Optional(O)	Validation	Allowed Values
responseCode	M	numeric max 3 digits 123	Refer to responses
responseDescription	M	alphanumeric max 30 description of the response	Refer to responses
cardId	O	Unique token of card if user had chosen to save card	
cardScheme	O		Visa,Mastercard etc
cardToken	O	Masked card number	4012 XXXX XXXX 1881
bank	M	Name of bank for card or netbanking	State Bank of India
bankid	O	bankid in case of net banking	SBI
email	M	Email id of card holder	
nameoncard	O	Card holder name	
first4	O	First 4 digits of card number	
last4	O	Last 4 digits of card number	

Response Format:


```
{
   "email": "chirag@zaakpay.com",
   "responseCode": "100",
   "responseDescription": "Card saved successfully.",
   "card": {
      "nameoncard": "chirag jain",
      "first4": "4012",
      "last4": "1881",
      "cardId": "bce8e4e1e66520cb0bc2bf3a0e760412d53273a844bf0931f2b3136a2ee0ada3~1",
      "cardScheme": "Visa",
      "cardToken": "4012 XXXX XXXX 1881"
   }
}
```


After receiving response, please calculate checksum on JSON and verify if it it same as received in “checksum” parameter.

4. Fetch Card API

This api will fetch all cards saved by a user at Zaakpay.

Request Type: GET
Request URL: https://api.zaakpay.com/fetchCardU

Request Params:

Parameter	Optional (O) Mandatory (M)	Validation	Allowed Values
merchantIdentifier	M	alphanumeric	Zaakpay's unique identifier for your website
email	M	valid email address of the buyer	pankaj@gmail.com
mode	M	1 digit only, numeric	Single digit numeric value, 0 or 1 Domain / referral checks will be skipped if mode is set to 0. Ideal when making API requests from developer / staging environments
merchantCardRefId	O	A unique id assigned by merchant to a card saved at Zaakpay	

Request Format:

```
   data={
   "merchantIdentifier": "zaakpaymid",
   "email": "abc@gmail.com",
   "mode": "0",
   "merchantCardRefId": "cardRef123"
} &checksum=dfsafdsfdsf
```

Response Parameters:

Parameters	Mandatory(M), Optional(O)	Validation	Allowed Values
responseCode	M	numeric max 3 digits 123	Refer to responses
responseDescription	M	alphanumeric max 30 description of the response	Refer to responses
cardId	O	Unique token of card if user had chosen to save card	
cardScheme	O		Visa,Mastercard etc
cardToken	O	Masked card number	4012 XXXX XXXX 1881
bank	M	Name of bank for card or netbanking	State Bank of India
bankid	O	bankid in case of net banking	SBI
email	M	Email id of card holder	
nameoncard	O	Card holder name	
first4	O	First 4 digits of card number	
last4	O	Last 4 digits of card number	
merchantCardRefId	O	Unique id assigned by Merchant to a saved card	

Response Format:


```
{
  "email": "chirag@zaakpay.com",
  "responseCode": "100",
  "responseDescription": "Card Saved Successfully.",
   "cards": [
     {
        "nameoncard": "chirag jain",
        "first4": "4012",
        "last4": "1881",
        "cardId": "bce8e4e1e66520cb0bc2bf3a0e760412d53273a844bf0931f2b3136a2ee0ada3~1",
        "cardScheme": "Visa",
        "cardToken": "4012 XXXX XXXX 1881",
             "merchantCardRefId": "cardRef123"
     },
     {
        "nameoncard": "chirag jain",
        "first4": "5610",
        "last4": "8250",
```

```
        "cardId": "dbd45ca21bedf7a7fb4156533e779e8aee5e7a89c46ba203c85c89f91bd21dd9~12",
        "cardScheme": "Maestro",
        "cardToken": "5610 XXXX XXXX 8250",
                "merchantCardRefId": "cardRef123"
    }
  ]
}
```


6. Check API

The purpose of this API is to enable websites to check the latest status of their transaction at any time.

6.1 Request Parameters:

Parameters	Mandatory(M), Optional(O)	Validation	Allowed Values
merchantIdentifier	M	alphanumeric	Zaakpay's unique identifier for your website
orderId	M	max 20 alphanumeric, must be unique per website, we do not accept duplicate	Your unique transaction identifier
mode	M	1 digit only, numeric	0=test 1=production

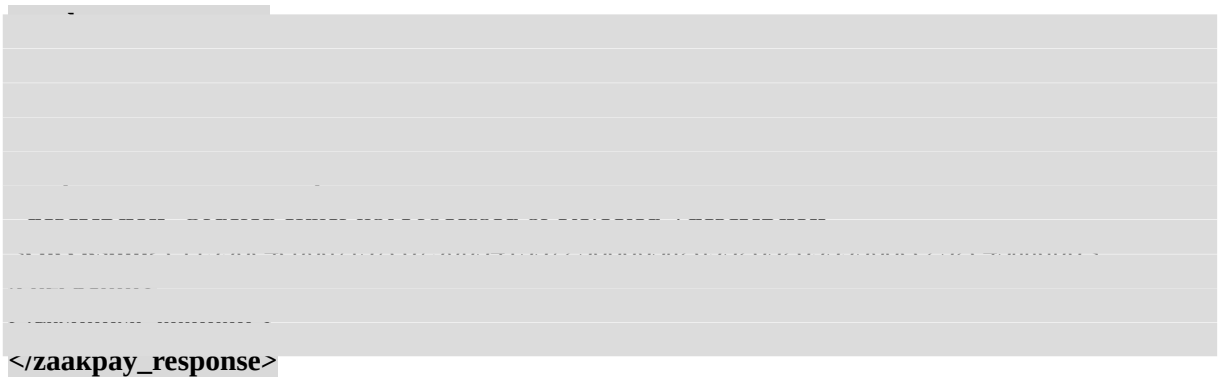
The parameters may be posted to the Update Transaction API using HTTP (POST).

Example:

6.2 Response Parameters:

The response will be in the XML format.

Example:



Parameters	Mandatory(M), Optional(O)	Validation	Allowed Values
merchantid	M	alphanumeric	Zaakpay's unique identifier for your website
orderid	M	max 20 alphanumeric, must be unique per website, we do not accept duplicate	Your unique transaction identifier
responsecode	M	numeric max 3 digits 123	Refer to responses
description	M	alphanumeric max 30 description of the response	Refer to responses

7. Update API

The purpose of this API is to enable websites to settle, cancel or refund transactions.

Only below updates are possible:

Authorized --> Cancel (After Cancel, Amount will be returned in user's bank account)
Authorized --> Capture (Only when a transaction is Captured, amount is paid to merchant)
PayoutCompleted --> Full Refund
PayoutCompleted --> Partial Refund (After Full/Partial Refund, amount will be deducted from merchant's payout and returned in user's bank account)

To know the current status of transaction at Zaakpay, please use Check API.

7.1 Request Parameters:

Parameter	Optional (O),Mandatory (M)	Validation	Allowed Values
merchantIdentifier	M	alphanumeric	Zaakpay's unique identifier for your website
orderId	M	max 20 alphanumeric, must be unique per website, we do not accept duplicate	Your unique transaction identifier
mode	M	1 digit only, numeric	0=test 1=production
updateDesired	M	numeric max 1 digit, values predefined by Zaakpay	**7**="Captured", **8**="Cancelled", **14**="Full Refund",**22**="Partial Refund"
updateReason	M	description of the reason for update. min 5, max 50 alphanumeric characters. no special characters or dashes	Examples: you want to cancel a transaction, your user wants a refund, you want to settle a transaction
amount	O	Numeric, no decimals (in paisa)	Needed in case of partial refunds only

The parameters may be posted to the Update Transaction API using HTTP(POST).
Apart from the listed parameters, a checksum is also expected. Refer the transact API docs for clarification related to checksum generation.

Example:

```
<
<
<
<

<
<
</
```

7.2 Response Parameters:

The response will be in the XML format.

Example:

```
<
<
<
<
<
<
<
/c
</
</
```

Parameters	Mandatory(M), Optional(O)	Validation	Allowed Values
merchantid	M	alphanumeric	Zaakpay's unique identifier for your website
orderid	M	max 20 alphanumeric, must be unique per website, we do not accept duplicate	Your unique transaction identifier
responsecode	M	numeric max 3 digits 123	Refer to responses
description	M	alphanumeric max 30 description of the response	Refer to responses

8. Remove Card API

This api will remove card saved by a user at Zaakpay.

Request Type: POST

Request URL: https://api.zaakpay.com/removeCardU

8.1 Request Paramater

Parameter	Optional (O) Mandatory (M)	Validation	Allowed Values
merchantIdentifier	M	alphanumeric	Zaakpay's unique identifier for your website
buyerEmail	M	valid email address of the buyer	pankaj@gmail.com
mode	M	1 digit only, numeric	Single digit numeric value, 0 or 1 Domain / referral checks will be skipped if mode is set to 0. Ideal when making API requests from developer / staging environments
cardId	M	Id of the card to be removed	

Request Format:

```
data={
"merchantIdentifier": "zaakpaymid",
"buyerEmail": "abc@gmail.com",
"mode": "0",
"cardId": "cardId"
} &checksum=dfsafdsfdsf
```

8.2 Response Parameter

Parameters	Mandatory(M), Optional(O)	Validation	Allowed Values
responseCode	M	numeric max 3 digits 123	Refer to responses
responseDescription	M	alphanumeric max 30 description of the response	Refer to responses
cardId	O	Unique token of card if user had chosen to save card	

cardType	O		Visa,Mastercard etc
formattedCardNum	O	Masked card number	4012 XXXX XXXX 1881
first4	O	First 4 digits of card number	
last4	O	Last 4 digits of card number	
buyerEmail	M	Email id of card holder	
cardHolderName	O	Card holder name	

Response Format:


```
{
   "buyerEmail": "chirag@zaakpay.com",
   "responseCode": "100",
   "responseDescription": "This card has been removed Successfully.",
    "cards": [
      {
         "cardHolderName": "chirag jain",
         "first4": "4012",
         "last4": "1881",
         "cardId": "bce8e4e1e66520cb0bc2bf3a0e760412d53273a844bf0931f2b3136a2ee0ada3~1",
         "cardType": "Visa",
         "formattedCardNum": "4012 XXXX XXXX 1881"
      }
   ]
}
```


8. Testing

Set the parameter mode=0 and try a few transactions using Zaakpay!
If everything works as it should, after a payment is completed you should be directed back to your website along with POST data about the result & other parameters of the transaction. This part is handled by the response.ext file, which displays all the received information and also verifies the checksum to verify the integrity of the information received.The parameters received with a response from the Zaakpay transact API can be seen on this page.You should take the response.ext as a starting point and accordingly display the end result to your customers and other things.

For Example:
In case of a successful responseCode & successful checksum verification you can display a success page to the customer and show his order has been placed successfully. You can also keep a copy of the transaction details in your database by updating it for each response received here.

Possible Values for "cardScheme" field:

Visa
Mastercard
Maestro
Amex
Diners
Discover

Test Cards for Different Scenarios:

4012888888881881 success without 2FA
5177194127672001 failure without 2FA
4012001037141112 success after 2FA
4012001037461114 Failure after 2FA

Few Key Common Points for All APIs:

A. Common format of API Requests:

All Zaakpay APIs has same request format. We require data to be posted to our server in NVP (Name-Value Pairs) format. Request has 2 parameters:
1. **data:** It is a JSON value which has separate structure for each API. It has some parameters common in all APIs like merchantIdentifier,email etc and other API specific parameters like orderid, amount, card/netbanking details etc.
2. **checksum**: It is hash (HMAC SHA-256) value of entire JSON string (value of parameter "data")

Both of these parameters must be sent to Zaakpay in all API requests as GET/POST.

B. Common format of API Responses:

Except the response sent via browser redirect after 2FA is done, all APIs have same response format. **Response will be a JSON** which will have different structure based on API. Also, **response will contain a custom header "zaakchecksum" added by Zaakpay.** This header contains the checksum (HMAC SHA-256) which is calculated on the entire JSON value sent in response.

C. Preparing API Request at Client(Merchant) side:

Let's say the request JSON is below:

```
{
      "merchantIdentifier": "zaakpaymid",
      "email":"abc@gmail.com",
      "mode":"0",
      "card": {
         "encrypted_pan": "ggfhfbsdjbf",
         "nameoncard": "cardholdername",
         "encryptedcvv": "sdafdsf",
         "encrypted_expiry_month": "sadasda",
         "encrypted_expiry_year": "sdasfff",
         "cardId": "bce8e4e1e66520cb0bc2bf3a0e760412d53273a844bf0931f2b3136a2ee0ada3~1",
                  "merchantCardRefId": "cardRef123"
      }
}
```

These steps must be followed:

1. **Calculate hash on entire JSON** (value of parameter **"**data**")** using HMAC SHA 256. This hash value will be the value of request parameter "checksum".
2. **URL Encode entire JSON.** This encoded value will be value of request parameter **"**data**".**

Now, the request submitted to Zaakpay will look like this:

data=%7B%27%2C%27+%22merchantIdentifier%22%3A+%22zaakpaymid%22%2C%27%2C%27+%22email%22%3A%22abc%40gmail.com%22%2C%27%2C%27+%22mode%22%3A%220%22%2C

%27%2C%27+%22card%22%3A+%7B%27%2C%27+%22encrypted_pan%22%3A+%22ggfhfbsdjbf
%22%2C%27%2C%27+%22nameoncard%22%3A+%22cardholdername%22%2C%27%2C%27+
%22encryptedcvv%22%3A+%22sdafdsf%22%2C%27%2C%27+%22encrypted_expiry_month
%22%3A+%22sadasda%22%2C%27%2C%27+%22encrypted_expiry_year%22%3A+%22sdasfff
%22%2C%27%2C%27+%22cardId%22%3A+
%22bce8e4e1e66520cb0bc2bf3a0e760412d53273a844bf0931f2b3136a2ee0ada3%7E1%22%2C
%27%2C%27%22merchantCardRefId%22%3A+%22cardRef123%22%27%2C%27+%7D%27%2C
%27%7D**&checksum=**5XJDJWERH2GR34TRCX2

D. Verifying Response Checksum:

Zaakpay sends response checksum value in HTTP Response Header "**zaakchecksum**". Merchant must ensure that checksum value sent by Zaakpay in this header matches the checksum value calculated by merchant. **If it does not match, consider the transaction as failed even if responseCode is 100.**

The entire response JSON value will be the string on which checksum will be calculated. Below is a sample JSON response of Transact API. This entire value will be used for checksum calculation.


```
{
   "orderDetail": {
          "orderid": "1224",
         "amount": "10000"
   },
   "responseCode": "100",
   "responseDescription": "Transaction Completed Successfully",
   "doRedirect": "false",
   "paymentInstrument": {
      "paymentMode": "card",
      "card": {
         "cardId": "dddsbdjsabdj",
         "cardToken": "4012 XXXX XXXX 1881",
         "cardScheme": "Visa",
         "bank": "State Bank of India"
      }
   }
}
```


note: Encryption type used is RSA.

List of Possible Response Codes and Descriptions :

All response codes that are returned by different APIs are listed here:

9. Zaakpay API Responses

9.1 Transaction API Responses

109	One or more fields entered for this transactions has validation error please retry this payment.	
133	Email in OrderDetail field missing or blank.	
140	Address in BillingAddress received with request was not valid.	
142	City in BillingAddress received with request was not valid.	
144	State in BillingAddress received with request was not valid.	
148	PinCode in BillingAddress received with request was not valid.	
150	PhoneNumber in OrderDetail received with request was not valid.	
159	Amount field missing or blank.	
160	Transaction amount validation has failed.	
171	Address in ShippingAddress received with request was not valid.	
176	ShipToPhoneNumber received with request was not valid.	
180	Checksum received with request is not equal to what we calculated.	
200	Transaction Already Refunded	
204	Transaction Id is not valid.	
227	Acquiring Bank returned an error	
405	Transaction failed as the total amount allowed for this card per month has been reached.	
406	Transaction failed as the total amount allowed for this card per day has been reached.	
407	Invalid Card Details	
408	Transaction failed as the total no. of transactions allowed for this card per day has been reached.	
409	Transaction failed as the total no. of transactions allowed for this email per day has been reached.	
418	amex card not enabled for merchant Transaction has failed	
419	card not enabled for merchant Transaction has failed	
510	Invalid bankid	
629	Unknown Error!! Transaction has failed --------- edit this existing text	
726	User Authentication Failed. Please try again.	
742	Credit Card Not Allowed	
744	Another Attempt with same OrderId is in process.	
745	Card expired	
801	Incorrect Expiry Date or CVV Value Please retry with correct values or another Card.	
802	Your bank is experiencing heavy traffic at the moment please Retry this payment with another Card.	
804	Your Card is Expired Please enter the correct expiry date or Retry this payment with another Card.	
806	Your Bank has declined this transaction due to insufficient funds please Retry this payment with another Card.	
807	Your card is not allowed for this type of transaction please Retry this payment with another card.	
809	Unfortunately some processing error occurred at the bank and the transaction	

	failed.Please try again.	
812	Invalid PIN entered Please retry with a valid PIN or any other payment mode.	
813	International Card not allowed please Retry this payment with another Card.	
814	You have exceeded today's transaction limit on this card Please retry with another card.	
815	You have exceeded the trial limit for PIN please Retry this payment with another Card.	
818	You have entered incorrect card details. Please enter the correct card details and try again.	
857	The card which is being used for this transaction is reported to be stolen. Kindly retry payment with another card.	
1011	Card Expired	
1012	Invalid VPA! Please enter a valid Vpa	

Some More Transact-API Responses Codes

Response Code	Response Description
100	The transaction was completed successfully.
102	Customer cancelled transaction.
103	Fraud Detected.
105	Transaction details not matched.
106	IpAddress BlackListed.
107	Transaction Amount not in specified amount range.
108	Validation Successful.
109	Validation Failed.
110	MerchantIdentifier field missing or blank.
111	MerchantIdentifier Not Valid.
126	Date received with request was not valid.
127	ReturnUrl does not match the registered domain.
128	Order Id Already Processed with this Merchant.
129	OrderId field missing or blank.
130	OrderId received with request was not Valid.
131	ReturnUrl field missing or blank.
132	ReturnUrl received with request was not Valid
133	BuyerEmail field missing or blank.
134	BuyerEmail received with request was not Valid.
140	BuyerAddress received with request was not Valid.
142	BuyerCity received with request was not Valid.
144	BuyerState received with request was not Valid.
146	BuyerCountry received with request was not Valid.
148	BuyerPinCode received with request was not Valid.
150	BuyerPhoneNumber received with request was not Valid.
155	Mode field missing or blank
156	Mode received with request was not Valid.
157	Currency field missing or blank.
158	Currency received with request was not Valid.
159	Amount field missing or blank.
160	Amount received with request was not Valid.
165	ProductDescription field missing or blank.
166	ProductDescription received with request was not Valid.
171	ShipToAddress received with request was not Valid.
172	ShipToCity received with request was not Valid.
173	ShipToState received with request was not Valid.

174	ShipToCountry received with request was not Valid.
175	ShipToPincode received with request was not Valid.
180	Checksum received with request is not equal to what we calculated.
182	Merchant data not complete in our database
183	Unfortunately, the transaction has failed
400	The transaction was declined by the issuing bank
401	The transaction was rejected by the acquiring bank
402	This test transaction has been successfully completed.
403	Transaction failed because this card has been blocked by Zaakpay
404	Transaction failed due to security checks
407	Invalid Card Details
410	Invalid Key Details
502	Bankid is blank
503	Encrypted_pan is blank
509	Payment mode is blank
510	Invalid bankid

The below response code series starting from ‘6’ e.g. ‘6XX’ are sent from MobiKwik wallet via Zaakpay to merchant site.

Response code	Response Description
601	Transaction completed successfully
602	Merchant secret key doesn’t exist
603	User blocked
604	Merchant blocked
605	Merchant doesn’t exist
606	Merchant not registered on MobiKwik
607	Wallet Topup failed
608	Wallet debit failed
609	Wallet credit failed
610	User canceled transaction at login page
611	User cancelled transaction at Wallet Top Up page
612	User cancelled transaction at Wallet Debit page
613	Order Id already processed with this merchant
614	Length of parameter orderid must be between 8 to 30 characters
615	Parameter orderid must be alphanumeric only
616	Parameter email is invalid
618	Parameter cell is invalid. It must be numeric, have 10 digits and start with 7,8,9
619	Parameter merchantname is invalid. It must be alphanumeric and its length must be between 1 to 30 characters
620	Parameter redirecturl is invalid
621	User Authentication failed
622	Monthly Wallet Top up limit crossed
623	Monthly transaction limit for this user crossed
624	Maximum amount per transaction limit for this merchant crossed
625	Merchant is not allowed to perform transactions on himself
626	Checksum Mismatch
627	Unexpected Error
628	Orderid is Blank or Null
629	Unknown Error

9.2 Update API Responses

Response Code	Response Description
184	Update Desired blank.
185	Update Desired not Valid
186	Update Reason blank.
187	Update Reason Not Valid.
189	Checksum was blank.
190	orderId either not Processed or Rejected.
201	Transaction cannot be refunded.
203	Transaction status could not be updated try again.
229	Transaction cannot be captured.
230	Transaction Refund Initiated
242	Transaction captured successfully.
243	Transaction canceled successfully.
245	Transaction Partial Refund Initiated

9.3 Check API Responses

Response code	Response Description
103	Fraud Detected
110	MerchantIdentifier field missing or blank
111	MerchantIdentifier not valid
129	OrderId field missing or blank
155	Mode field missing or blank
156	Mode received with request was not valid
180	Checksum received with request is not equal to what we calculated.
182	Merchant Data not complete in our database.
89	Checksum was blank.
190	OrderId either not processed or Rejected.
191	Merchant Identifier or Order Id was not valid.
205	We could not find this transaction in our database.
206	Transaction in Scheduled state.
207	Transaction in Initiated state.
208	Transaction in Processing state.
209	Transaction has been authorized.
210	Transaction has been put on hold.
211	Transaction is incomplete.
212	Transaction has been settled.
213	Transaction has been canceled.
223	Data Validation success.
228	Transaction has been captured.
230	Transaction Refund Initiated
231	Transaction Refund Completed
232	Transaction Payout Initiated
233	Transaction Payout Completed
234	Transaction Payout Error.
236	Transaction Refund Paid Out
237	Transaction Chargeback has been initiated
238	Transaction Chargeback is being processed
239	Transaction Chargeback has been accepted
240	Transaction Chargeback has been reverted
241	Transaction Chargeback revert is now complete

9.4 Add Card Responses

Response code	Response Description
100	Card saved successfully.
103	Fraud Detected
110	MerchantIdentifier field missing or blank.
111	MerchantIdentifier not valid
133	BuyerEmail field missing or blank.
134	BuyerEmail received with request was not valid
155	Mode field missing or blank
156	Mode received with request was not valid
180	Checksum received with request is not equal to what we calculated
182	Merchant Data not complete in our database
407	Invalid Card Details
410	Invalid Key Details
503	encrypted card number is blank
718	Unfortunately, card could not be saved
719	Unfortunately, Something wrong happened
720	This card already exists

9.5 Fetch Card Responses

Response Code	Response Description
100	Cards have been fetched successfully.
103	Fraud Detected
110	MerchantIdentifier field missing or blank
111	MerchantIdentifier not valid
133	BuyerEmail field missing or blank
134	BuyerEmail received with request was not valid
155	Mode field missing or blank
156	Mode received with request was not valid.
180	Checksum received with request is not equal to what we calculated
182	Merchant Data not complete in our database
189	Checksum was blank
719	Unfortunately, Something wrong happened

9.6 Validate card Responses

Response Code	**Response Description**
103	Fraud Detected
110	MerchantIdentifier field missing or blank
111	MerchantIdentifier not valid
133	BuyerEmail field missing or blank
134	BuyerEmail received with request was not valid
155	Mode field missing or blank
156	Mode received with request was not valid
180	Checksum received with request is not equal to what we calculated
182	Merchant Data not complete in our database
407	Invalid Card Details
410	Invalid Key Details
713	Card could not be Authorized
719	Unfortunately, Something wrong happened

10. Zaakpay Push Notification (v2.0)

What is Push Notification: For the transactions that get updated in bank recon next day, Zaakpay will send a push notification to a URL provided by merchant for this purpose. Zaakpay will make a POST request to this URL with 2 parameters:

1. **txnData**: Transaction data in JSON format for the transactions that have been updated in bank recon. This JSON also has 3 fields:

a) **txns:** All txns marked as successful.
b) **refunds:** All txns auto-refunded if auto-refund is enabled by merchant.
c) merchantIdentifier: Zaakpay merchant identifier.

2. **checksum**: **checksum calculated on the entire JSON** value of parameter txnData using secret key of the merchant.

Sample data posted by Zaakpay on merchant's push notification URL is below:

txnData={"txns":[{"amount":8500,"orderid":"ORDER1234","txnDate":"2014-10-20 10:29:12.0"},{"amount":42500,"orderid":"ORDER7896","txnDate":"2014-10-20 10:35:53.0"},{"amount":2000,"orderid":"ORDER5678","txnDate":"2014-10-20 22:41:06.0"}],"merchantIdentifier":"ZaakpayMerchantIdentifier","refunds": [{ "amount": 10000, "orderid": "ORDER9873", "txnDate": "2015-01-14 13:06:34.0" }, {"amount":50000,"orderid":"ORDER46789","txnDate":"2015-01-14 15:36:45.0" }]}&checksum=5hgs40 6ae90eee18e4eb0af154hj877ed4337b4s4rf732e26bd1492919573456

Here amount is in paisa and txnDate is the timestamp when transaction was done on Zaakpay. Part highlighted in blue is the JSON containing all transactions that need to be marked as successful at merchant's end. Checksum has been calculated on entire string highlighted in blue.

Response:
In the response of above call, merchant should return "SUCCESS" to Zaakpay in response. If Zaakpay does not receive this response, Zaakpay will retry above request with same data one more time.

Number of transactions in one call: Currently there can be maximum 10 transactions in one POST request. When there are more than 10 transactions which have been updated in bank recon, there will be multiple POST requests. for Example, if there are total 36 transactions that have been updated on a day,Zaakpay will make 3 POST requests to merchant's push notification url. First 2 requests will have 10 transactions each in JSON and the 3rd request will have 6 transactions.

Sample code: Sample java code to parse the json response sent by Zaakpay and to calculate checksum on json has been provided in file PushNotificationServlet.java