

# MobiKwik PaymentGatewayIntegrati onDocumentTransactU Flow(Server To Server)

# **Contents**

1.	Introduction	4
2.	Sign-Up	5
3.	Get Merchant ID andSecretKey	7
4.	StagingCredentials	10
5.	ChecksumCalculation	11
6.	Card Encryption	12
7.	TransactAPI:Server-to-Server	14
8.	Card ValidationAPI	21
9.	AddCardAPI	24
10.	FetchCardAPI	27
11.	CheckAPI	27
12.	UpdateAPI	32
13.	RemoveCardAPI	35
14.	Testing	37
15.	TestCardsforDifferentScenarios	38
16.	FewKeyCommonPointsforAllAPIs	41
17.	Bank-Codes	41
18.	MobiKwik Payment GatewayAPIResponses	42
19.	MobiKwik Payment Gateway PushNotification (v2.0)	49

# **List of Tables**

Table 1:Web-RedirectRequest	15
Table 2: Card-ValidationAPIrequest	21
Table 3: Card-ValidationAPIresponse	22
Table 4: Add-CardAPIrequest	24
Table 5: Add-CardAPIresponse	25
Table 6: Fetch-CardAPIrequest	27
Table 7: CheckAPIRequest	29
Table 8: CheckAPIResponse	30
Table 9: UpdateAPIRequest	32
Table 10: UpdateAPIResponse	34
Table 11: Remove CardAPIRequest	35
Table 12: RemoveCardAPI	35
Table 13:Bank-Codes	41
Table 14: Transact-APIResponses Codes	42
Table 15 : Some more Transact API Response Codes	43
Table 15: Transact-APIResponseCodes(Wallet)	45
Table 16: Check-APIResponse Codes	46
Table 17: Update-APIResponseCodes	47

## 1. Introduction

MobiKwikis an online payments platform that offers multiple payment methods to both an individual user and a business. So, whether you are an ecommerce giant, a small spunky start-up or an individual user simply wanting to make payments to businesses, we have products that cater to all your needs.

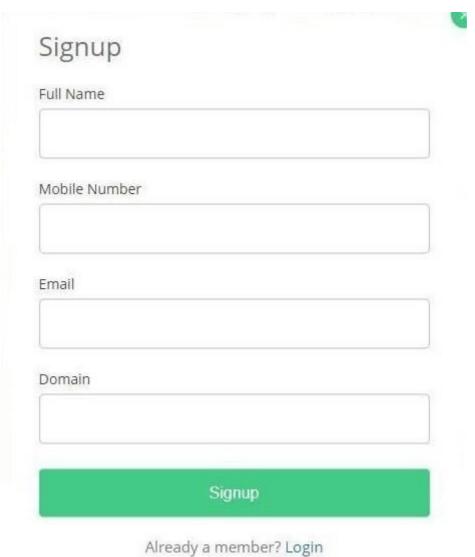
This document describes the steps for technical integration process between merchant website/app and MobiKwikPayment Gateway for enabling online transactions. This document is covered in two sections. Section 1 covers website integration and Section 2 covers the APIs provided to the merchants.

# 2. Sign-Up

Signup for a business account on MobiKwik Payment Gateway. After signing up and verifying your account follow the steps below:

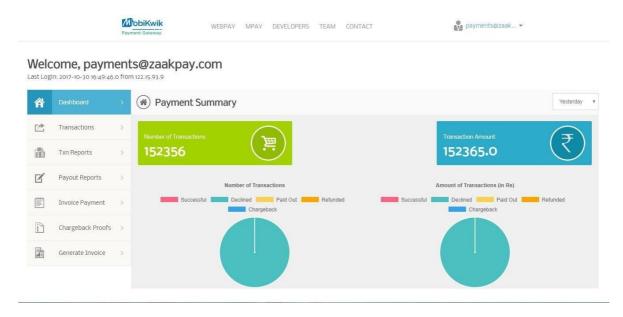
• Login to MobiKwik Payment Gatewayonhttps://pay.mobikwik.com





- Click the My Accounttab.
- Select the integration sub-menu item under the My Accounttab.
- Select the URLs & Keys tab from thenavigation.
- 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 MobiKwik Payment Gatewayfrom and the response URL for transact API is the path to the response ext file on yourserver.
- Select the Transaction limits sub-menu item under the My Account tab and set your appropriate transaction limits.

Figure2: Dashboard-Home

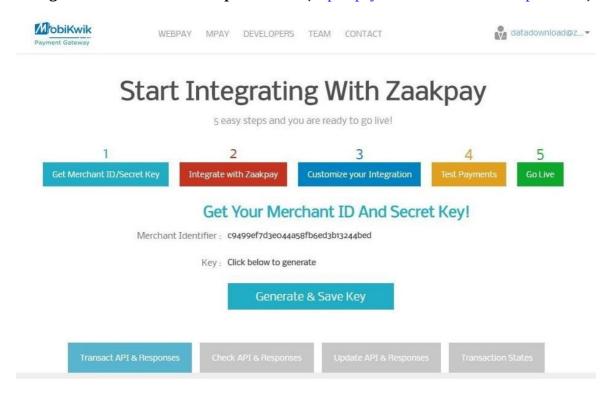


Generate your secret key and note it down along with your merchant identification number

# 3. Get Merchant ID and Secret Key

Login to your MobiKwik Payment Gatewayaccount with registered email id. Go to Integration section. You'll get your Merchant Identifier and Secret key in URLs and Keys section.

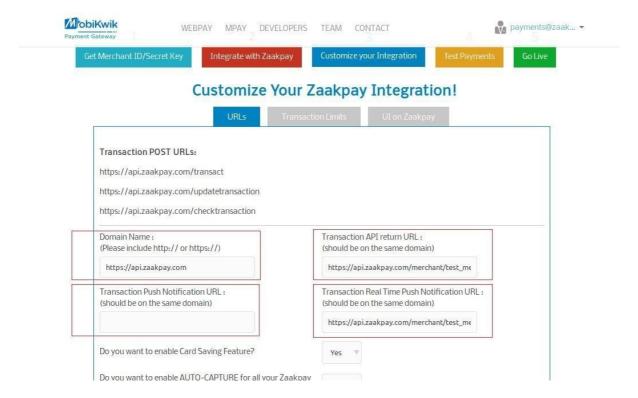
Figure3: Dashbaord-Developer Section (https://pay.mobikwik.com/developerSet.do)



If Secret key is blank, you can generate Key by pressing the button "Generate Key" and save. If you're using the integration kit, please replace the values of the secret key in the response.ext and posttozaakpay.ext files where ext=extension.

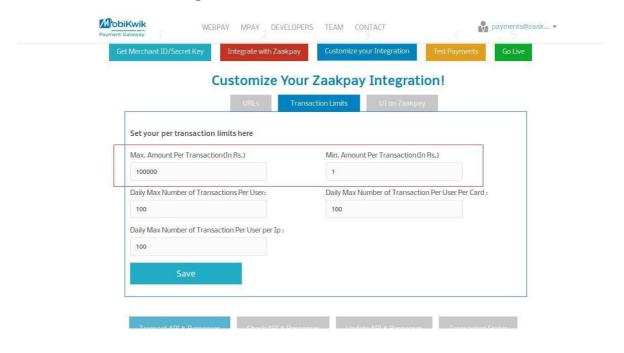
Next, you need to fill in the domain details in your MobiKwik Payment Gatewayaccount. For that, click on "Customize your Integration" and then, click on "URL's" as described in the screen below.

Figure4: Dashboard-URL Section



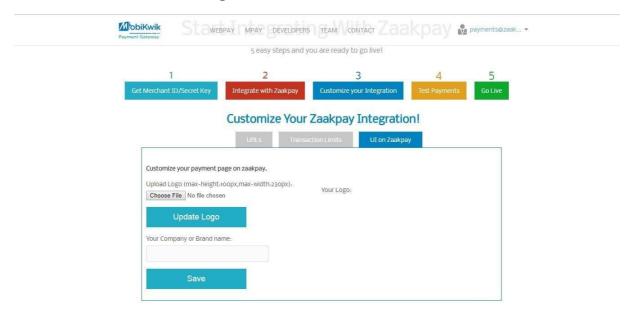
After this, proceed to the next tab, "Transaction Limits". Here you can update the transaction caps (upper and lower) as per your requirements.

**Figure5: Dashboard-Transaction Limits** 



Next you can complete the integration UI by uploading a brand image on the ext tab.

Figure6: Dashboard-UI Section



Click on "Save" once you are done with all these configurations.

This was the overall set of procedures required for MobiKwik Payment Gatewayintegration at our end. Next comes Merchant's side of integration, which is explained in the later sections.

# 4. **StagingCredentials**

- URL:https://zaakstaging.zaakpay.com/transactU?v=8
- Merchant Identifier:b19e8f103bce406cbd3476431b6b7973
- Secret key:0678056d96914a8583fb518caf42828a
- PublicKeyId:sAMtcgidueVcrZI
- Public

key:MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAikG2PaW+CqT3m26Dbtm7u na22MYEDd+xONYjwE69Qa/FNQO0R5eqUnfi4lneWX6rc1IB6iVhyNDYULOZBW7v UsFbDWNJFDTD+V1T+30VXYvo+m7ufZCgxJVLn8W+JnKn1JPaL0n78UV2cG9zPlXKzJcMIG rNSG9QWFd6XJjlriJ2CFEbzPf7a4y7DwNgGrRpqMkmJDHNLcaba+CtTqjgeGUWoVIIg7RaQk4r J5v21qyVK0pAUyfEXBDcLGWjsae0lsK+En7RFpV5NV6HxO78RnfT07RIdIBHxjWeM9WJ+xu GBKrODXmKRdWXSCAIiDYCp6F6fkgViE1XnCL6gQbnqQIDAQAB

## 5. ChecksumCalculation

For both integrity & data-authenticity verification before sending data to the API, you need to calculate a checksum of all the data that you send to Zaakpay. We use an HMACSHA- 256algorithm to calculate the checksum of ALL data that is posted to the API. We require data to be posted to our server in NVP (Name-Value Pairs) format.

To calculate the checksum please follow the process below:

- Calculate the checksum using the HMAC SHA-256 algorithm using the string as data parameter and your generated secretkey.
- The resulting checksum calculated should be posted to the Zaakpay API along with other data. For example: Let's suppose we need to post the following data to the API. We calculate "checksum" only with the parameters mentioned below and the order of the parameters must remain intact when calculating "checksum".

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

- PHP HMACimplementation
- Python HMACimplementation
- Perl HMACimplementation
- RubyHMACimplementation
- CHMACimplementation
- Javaimplementation
- <u>JavaScriptHMACimplementation</u>
- .NET'sSystem.Security.Cryptography.HMAC

The links provided above are for referential purposes only.

# 6. CardEncryption

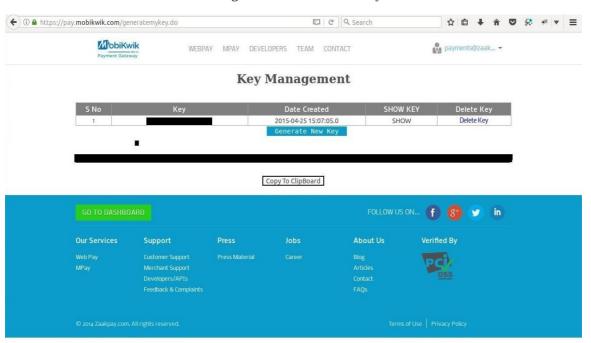
The public key (Present in your Zaakpay Profile) is stored, and used to encrypt the card details using RSA algorithm

• You can find the public key on thepath

:https://pay.mobikwik.com/generatemykey.d

0

Figure7: Dashboard-PG keys



• The sample java code explains the flow:

```
}
catch(Exception e){
     e . printStackTrace ( ) ;
}
return null ;
}
```

- The card number, cvv, and expiry need to be encrypted using the same format before sending to Zaakpay.
- RSA encryption is used with PKCS1 PaddingRSAES-PKCS1-v1\_5

# 7. TransactAPI:Server-to-Server

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 (Staging):http://zaakpaystaging.centralindia.cloudapp.azure.com:8080/transactU?v=8
- Request URL (Live): https://api.zaakpay.com/transactU?v=8

The flow of this integration is explained in the figure below:

Status of transaction

Authorization

Request: Card Data

Response: Bank URL

7

Sank server

Sank server

3D/Bank secure Page

Figure8: Integration Flow

# 7.1. Request Parameters

These Parameters are mentioned in the same order in which MobiKwik Payment Gateway calculates the checksum (Excluding checksum).

Table1: Web-Redirect Request

Parameter	Optional O, Mandatory M	Validation	Allowed Values
amount	М	Value in paisa. Min 100 paisa MaX 10000000. Amount limit saved under Transaction limit in your Zaakpay panel.	
merchantIdentifier	М	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	О	This must be the domain(or a sub-domain 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	eg. abc@xyz.com
address	М	100 alphanumeric Street address of the buyer. (Part of billing address)	B-34, Priyadarshni Society, Dumna Road
city	M	30 alphabet, minimum 3 (Part of billing address)	Jabalpur
state	M	State of the buyer (Part of billing address	MP
country	M	Country of the buyer	India
pincode	M	Buyer's pin/zip code. Can have Numbers, Spaces and Hyphens (-)only ( Part of billing address)	482001
productDescription	М	Text description of what you are selling. Atleast 1 product description is mandatory to show in the bill on payment page. free text alphanumeric 100 max	e.g. name of book, name of mobile etc. e.g. Rs 199 Godzilla Movie DVD

showMobile	0	false:We show the full-fledged version unconditionally. DETECT:We do detection of the user Agent of the browser from which the request is sent& route accordingly. true:We show the mobile page unconditionally. missing/not sent: Same as DETECT (i.e. We do detection at our end ).	Only allowed value is "true" if you want Zaakpay to represent mobile view.
paymentMode	М	Possible Values: debit,credit, UPI, UPIAPP(for intent flow) or net	
bankid	M (for Net Banking and UPI )	For Net Banking, ID of selected bank, as SBI or 9876543210@upi	
encrypted_pan	M (for Card Txn)	Encrypted Card Number	
nameoncard	M (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	0	Flag to save card. true if user wants to save his card at Zaakpay	
cardId	О	Id assigned by Zaakpay to a saved card	
encryptionKeyId	M (for Card Txn)	Id of Merchant's Public key as signed by Zaakpay	
merchantCardRefId	О	A unique id assigned by to a card saved at Zaakpaymerchant	
checksum	М	To be calculated on above parameters using HMAC SHA 256	

The card details need to be encrypted and sent across the https POST parameters. This encryption can be done by the help of RSA encryption.

Example: Since you are sending payment information to MobiKwik Payment Gateway, you need to prefill form parameters as hidden fields as a part of a form. Here is an example of what a form sending information toMobiKwik Payment Gatewaylooks like:

data={

"merchantIdentifier": "b19e8f103bce406cbd3476431b6b7973",

```
"encryptionKeyId": "sAMtcgidueVcrZI",
        "showMobile":"true",
        "mode":"0",
"returnUrl": "http://zaakpaystaging.centralindia.cloudapp.azure.com:9090/merchant/test_merchant
_output.jsp",
"orderDetail":
       {
         "orderId": "1509683630172",
         "amount":"1000",
         "currency":"INR",
         "productDescription": "Ebay shopping",
         "email":"dgfff@gmail.com",
         "phone": "9891322967"
       },
"billingAddress":
       {
         "address": "758, Udyog Vihar",
         "city":"Gurgaon",
         "state":"Haryana",
         "country":"India",
         "pincode":"122012"
       },
"shippingAddress":
       {
         "address": "758 Udyog Vihar",
         "city":"Gurgaon",
         "state":"Haryana",
         "country":"India",
         "pincode":"122012"
       },
"paymentInstrument":
```

```
{
    "paymentMode":"card",
    "card":
    {
        "encrypted_pan":"removed",
        "nameoncard":"Deepti Sinha",
        "encryptedcvv":"removed","encrypted_expiry_
        month":"removed","encrypted_expiry_year":"re
        moved", "saveCard":"true"
    }
}
```

&checksum=9d6fac81b8001d6c1af120e192883eb918f4aa5f7afe83ca28ef565cb29a23d4

#### 7.2. Transact UPIAPI

URL(beta): https://beta1.zaakpay.com/transactU?v=4 URL(prod): https://api.zaakpay.com/transactU?v=4

For checksum calculation refer to above checksum logic

• Hit this API to initiatecollectrequest

## Request:

```
data={"merchantIdentifier":"b19e8f103bce406cbd3476431b6b7973","encryptionKeyId":"zXqMJON0AJo7aFG ","showMobile":"true","mode":"0","returnUrl":"http://localhost:3000/api/v2/mobikwik_pay/confirm","orderDet ail":{"orderId ":57231404,"amount":100,"currency":"INR","productDescription":"Mobikwik Money","email":abc@test.com","phone":"7202XXXXXX"},"timeout":"3","paymentInstrument":{"paymentMode":"upi","netbanking":{"bankid":"<customerVPA>"}}}&checksum=0a69cd247401e16eabf04a9c4d891b659a8693de8bb5d a1fb267132e3717c212 Response:{"orderDetail":{"orderId":"57231404", "amount":"100", "currency":"INR", "productDescription": "Mobikwik Money", "email": "abc", "phone": "7202"}, "responseCode": "208", "responseDescription": "Transaction in Processing state.", "doRedirect": "true", "paymentInstrument":{"paymentMode": "upi", "netbanking":{"bankid":"<customer VPA>"}}, "bankPostData":{"upiTxnRefNo":"5119467657", "timeout": "3", "token": "1557149157315X7XBk"}}
```

After receiving the callback from bank, we will send notification on merchant's registered url

#### Sample callback response :

```
txnData={"merchantIdentifier":"b19e8f103bce406cbd3476431b6b7973","txns": [{"amount":"12332","bank":null,"ba nkid":null,"doRedirect":"false","orderId":"1554968957568", "responseDescription":"The transactionws
```

 $completed successfully.", "paymentMode": "upi", "cardScheme": null, "cardId": null, "txnDate": "2019-04-1813:07:00.07", "cardToken": null, "responseCode": "100" \}] \\ \& checksum = 53df59df76d72ec58428b1e7a4aeb2378dc34082bb4fa24ca4de4d02381da739$ 

## 7.3 ResponseParameters

# 7.3.1 If redirect required forcard

```
In this case, 2FA is enabled for the card, so browser redirect is required to bank's 2FA page
{
"merchantIdentifier": "b19e8f103bce406cbd3476431b6b7973", "ord
erDetail":
{ "orderId": "1509368113998
"txnId":"2017-10-30 18:25:23.0",
"amount":"1000",
"productDescription":"Ebay shopping"
},
"responseCode":"228",
"responseDescription": "Transaction has been captured.",
"paymentInstrument":
"paymentMode":"card",
"card":
{"cardToken":"4012 XXXX XXXX
1112", "cardId": "25157d8564f730461489ea3102c393fd3bf13cfed94966f44815714d57170f4c~273", the second control of the control o
"cardScheme":"Visa",
"bank": "EXTRAS TEST - VISA",
"cardHashId": "CH373",
"paymentMethod":"401200"
}
},
```

```
"version":"5",

"txnStatus":"Success",

"userAccountDebited":true,

"paymentMode":"Debit Card"

}
```

#### 7.3.2 Redirect required for netbanking

For netbanking, browser redirect is always required

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>
```

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

#### 7.3.3 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

```
{
"orderDetail":
{"orderId":"1510231316508",
"amount":"1000",
"currency":"INR",
"productDescription":"Ebay shopping",
```

```
"email":"dgfff@gmail.com",
"phone": "9891322967"
},
"responseCode":"100",
"responseDescription": "The transaction was completed successfully."
,"doRedirect":"false",
"paymentInstrument":
{"paymentMode":"Debit Card",
"card":
{
"cardToken":"4012 XXXX XXXX 1881",
"cardScheme":"Visa","first4":
"4012",
"last4":"1881",
"bank":"",
"cardHashId":"CH101",
"paymentMethod":"401288"
}
},
"paymentMode":"Debit Card"
}
```

## **#UPI IntentResponse**

You will get a postUrl field in response which will be used to open Intent in Android application.

It will look likefollowing:

```
"postUrl": "upi://pay?
pa=abc@hdfcbank&pn=xyz&tr=ZP58a194be1c721&am=1.00&cu=INR&mode=04&purpose=10&orgid=-&sign=-"
Below piece of Android code will open all the intent options and user can choose any of the options to do the payments. You can use this postUrl to openintent.
```

### Use below code to open Mobikwik appdirectly:

```
Uri uri= Uri.parse(postUrl);
Intent i=new Intent(Intent.ACTION_VIEW,uri);
i.setPackage("com.mobikwik_new");
startActivityForResult(i,1);
```

#### Use below code to let the Android OS show all the possible payment app options:

```
Uri uri= Uri.parse(postUrl);
Intent i=new Intent(Intent.ACTION_VIEW,uri);
startActivityForResult(i,1);
```

Once the user has done the payment, you will get callback in the below function.

@Override

protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {

// You can write all your code in this callback function like starting a timer or a progress bar. You are supposed to hit zaakpay check Api to get the status of the transaction.

}

If you are using out UPI or UPI Intent flow then you have to use our check Api to find the status of the transaction which is further explained in the document.

#### 7.4 Final Response afterRedirection:

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 ofIndia"SBI'

# 1. CardValidationAPI

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:

- Card's CVV and Expiry provided by user iscorrect
- Card is still active orblocked.
- User's card/account has sufficientfunds.
- Request Type:GET
- Request URL(Staging): http://zaakpaystaging.centralindia.cloudapp.azure.com:8080/validateCard
- Request URL(Live): <a href="https://api.zaakpay.com/validateCard">https://api.zaakpay.com/validateCard</a>

# **Request Parameters**

**Table2: Card-Validation API request** 

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	eg. abc@xyz.com
mode	M	1 digit only, numeric	1 = Domain check, 0=Domain Check Skip
encrypted_pan	M (for Card Txn)	Encrypted Card Number	
nameoncard	M (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	0	Id assigned by Zaakpay to a saved Card	
encryptionKeyId	M	Id of Merchant's Public key as signed by Zaakpay	
merchantCardRefId	О	A unique id assigned by merchant to a card saved at Zaakpay	
checksum	M	To be calculated on above parameters using HMAC SHA 256	

# **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 ": " bce8e4e1e66520cb0bc2bf3a0e760412d53273a844
bf0931f2b3136a2ee0ada 3~1",
" merchantCardRefId ": "cardRef123"
}
}& checksum = dfsafdsfdsf345dfhywrt7trhue 567sdf
```

# ResponseParameters:

**Table3: Card-Validation API response** 

Parameter	Optional O, Mandatory M	Validation	Allowed Values
responseCode	M	numeric max 3 digits 123	
responseDescription	M	alphanumeric max 30 description of the response	
cardId	O	Unique token of card if user had chosen to save card	
cardScheme	О		Visa,Mastercard etc.
cardToken	О	Masked card number	4012XXXX XXXX1881
bank	M	Name of bank for card or netbanking	Eg. State Bank of India
bankid	O	bankid in case of net banking	SBI
email	M	Email id of card holder	
checksum	M	To be calculated on above parameters using HMAC SHA 256	

## **Response format**

```
{
"email": "abc@gmail.com",
"responseCode":"100",
"responseDescription": "Card is valid",
"card":{
"cardToken": "4012 XXXXXXXX1881",
"cardScheme ": "Visa",
"bank ": "State Bank ofIndia",
"cardId ": "bce8e4e1e66520cb0bc2bf3a0e760412d53273a844bf0931f2b3136a2ee0 ada3~1",
"merchantCardRefId ": "cardRef123"
}
}
```

# 2. AddCardAPI

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:

- Encrypt carddata
- Create JSON using encrypted carddata
- Calculate checksum on entire JSONstring
- URL Encode the JSON
- Post checksum and encoded JSON to Zaakpay
- Request Type:POST
- $\bullet \ Request \ URL (Staging): \underline{http://zaakpaystaging.centralindia.cloudapp.azure.com: 8080/addCardU$
- Request URL(Live): https://api.zaakpay.com/addCardU

## **Request Parameters**

**Table4: Add-Card API request** 

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	eg. abc@xyz.com
address	О	100 alphanumeric Street address of the buyer. (Part of billing address)	B-34, Priyadarshni Society, Dumna Road
city	0	30 alphabet, minimum 3 (Part of billing address)	Jabalpur
state	0	State of the buyer (Part of billing address	MP
country	0	Country of the buyer	India
pincode	О	Buyer's pin/zip code. Canhave Numbers, Spaces and Hyphens (-)only ( Part of billingaddress)	482001
mode	M	1 digit only, numeric	1 = Domain check, 0=Domain Check Skip
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	M (for Card Txn)	Id of Merchant's Public key as signed by Zaakpay	
merchantCardRefId	0	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 ",
  " encrypted_expiry_month ": " sadasda ",
  " encrypted_expiry_year ": "sdasfff",
  " encrypted_expiry_year ": "sdasfff",
  " merchantCardRefId ": "cardRef123"
  },
  " billingAddress":
  {
  " address ": "758, udyogvihar ",
  " city ": "Gurgaon",
  "state ": " Haryana ",
  " country ": " India ",
  " pincode":"120012"
  }
}
```

# **Response Parameters**

Table5: Add-Card API response

Parameter	Optional O, Mandatory M	Validation	Allowed Values
responseCode	M	numeric max 3 digits 123	
responseDescription	M	alphanumeric max 30 description of the response	
cardId	0	Unique token of card if user had chosen to save card	
cardScheme	0		Visa,Mastercard etc.
cardToken	0	Masked card number	4012 XXXX XXXX 1881
bank	M	Name of bank for card or netbanking	Eg. State Bank of India
bankid	0	bankid in case of net banking	SBI
email	M	Email id of card holder	
nameoncard	0	Card holder name	
first4	0	First 4 digits of card number	
last4	0	Last 4 digits of card number	
checksum	M	To be calculated on above parameters using HMAC SHA 256	

# **Response Format**

<sup>{
&</sup>quot; email ": " chirag@zaakpay . com ",
" responseCode":"100",

```
" responseDescription ": " Card saved successfully .",
"card":
{
    "nameoncard ": " chirag jain ",
    "first 4":"4012",
    "last 4":"1881",
    " cardId ": " bce8e4e1e66520cb0bc2bf3a0e760412d53273a844bf09 31f2b3136a2ee0 ada3~1",
    " cardScheme ": " Visa ",
    " cardToken ": "4012 XXXXXXXXX1881"
}
}
```

After receiving response, please calculate checksum on JSON and verify if it it same as received in "check-sum" parameter.

# 3. FetchCardAPI

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

- RequestType:GET
- $\bullet \ Request \ URL (Staging): \underline{http://zaakpaystaging.centralindia.cloudapp.azure.com: 8080/fetch Card Urline (Staging): 8080/fetch Card Urline (Sta$
- Request URL(Live): <a href="https://api.zaakpay.com/fetchCardU">https://api.zaakpay.com/fetchCardU</a>

## **Request Parameters**

**Table6: Fetch-Card API request** 

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	eg. abc@xyz.com
mode	M	1 digit only, numeric	1 = Domain check, 0=Domain Check Skip
merchantCardRefId		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 Format**

```
" email ": " chirag@zaakpay . com ",
" responseCode":"100",
" responseDescription ": " Card Saved Successfully .",
" cards":[
" nameoncard ": " chirag jain ",
" first4":"4012",
" last 4": "1881",
"cardId":"bce8e4e1e66520cb0bc2bf3a0e760412d53273a844bf0931f2b3136a2ee0ada 3~1",
" cardScheme ": " Visa ",
" cardToken ": "4012 XXXXXXXX1881",
" merchantCardRefId ": "cardRef123"
},
" nameoncard ": " chirag jain ",
" first4": "5610",
" last 4": "8250",
" cardid": "dbd45ca21bedf7a7fb4156533e779e8aee5e7a89c46ba203c85c89f91bd21dd9~12",
" cardScheme ": " Maestro ",
"cardToken": "5610 XXXXXXXX8250",
" merchantCardRefId ": "cardRef123"
}
}
}
```

## 4. CheckAPI

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

- Request Type:POST
- Request URL (Staging):http://zaakpaystaging.centralindia.cloudapp.azure.com:8080/checkTxn?v=5
- Request URL (Live):https://api.zaakpay.com/checkTxn?v=5

## 1. Request Parameters

**Table7: Check API Request** 

Parameter	Optional O, Mandatory M	Validation	Allowed Values
merchantIdentifier	M	alphanumeric	

orderId	М	Transaction id for which you want to check the status	Your unique transaction identifier
mode	M	1 digit only, numeric	0
checksum M		Checksum calculated on all above request parameters	

The parameters must be posted to the Check Transaction API using HTTP(POST). Apart from the listed parameters, a checksum is also expected. Refer below section for clarification on checksum generation.

## **Checksum(request) calculation for Check API:**

Create a list of data parameter which you're passing to the API. Parameters used in checksum calculation are (in no particular order):

- merchantIdentifier
- mode
- orderId

The data parameter is taken for checksum calculation, sorrounded with single quotes.

Calculate the checksum using the HMAC SHA-256 algorithm using the data parameter and your generated secret key.

The resulting checksum calculated should be posted to the Zaakpay API along with other data. For example: Let's suppose we need to post the following data to the API.We calculate "checksum" with the parameters mentioned below:

- merchantIdentifier-b19e8f103bce406cbd
- mode -0
- orderId -ZPK12345

## **Request Format**

Now, we have to create a concatenated string of all the values, in the order in which they'll be sent to the API, with single quotes around each item. The string therefore will be:

' { "merchantIdentifier": "b19e8f103bce406cbd", "mode": "0", "orderDetail": { "orderId": "ZPK12345" } } '

Now you can calculate the checksum based on this concatenated string and the secret key generated in your account under the URLs & Keys tab.

```
Example:

data ={
  " merchantIdentifier ":"",
  "mode":"0",
  " orderDetail":
  {
  " orderId":""
  }
  }
  & checksum = gdhfjhfdgsrdfgdtfdgf
```

# 2. ResponseParameters

The response will be in the JSON format in body. Checksum will come in header.

**Table8: Check API Response** 

Parameters	Description		
merchantid	MobiKwik Payment Gateway's unique identifier for your website		
orderid	Your unique transaction identifier		
responsecode	Numeric, max 3 digits example 100 for success		
description	Alphanumeric max 30 description of the response		
paymentmethod	Payment Method ID for Card and Net Banking transactions. For Card txns,payment Method ID starts with C and N for Net Banking. It is alphanumeric value with max length 6. First letter is C or N, followed by 5 digits max.		
cardhashid	Unique id for each card number used in transaction. For Netbankingtxns,valuewill be "NA".		
amount	Txn amount in paisa, Integer		
paymentmode	mode of payment		
txnid	MobiKwik Payment Gatewaytxn ID		
timestamp	Timestamp of txn		
status	Status of txni.e Success or Failure		
productdescription	As received with the request		
product1description	As received with the request		
product2description	As received with the request		
product3description	As received withthe request		
product4description	As received with the request		
checksum	Checksum calculated by MobiKwik Payment Gatewayon all above response parameters		

# **Sample Response:**

{

```
"merchantIdentifier": "b19e8f103bce406cbd3476431b6b7973",
"order Detail": \{"order Id": "1509368113998", "txnId": "2017-10-30"\} \\
18:25:23.0", "amount": "1000", "productDescription": "Ebay shopping"},
"responseCode":"228",
"responseDescription": "Transaction has been captured.",
"paymentInstrument":
{"paymentMode":"card",
"card":{
"cardToken":"4012 XXXX XXXX
1112", "cardId": "25157d8564f730461489ea3102c393fd3bf13cfed94966f44815714d57170f4c~273", the second control of the control o
"cardScheme":"Visa",
"bank": "EXTRAS TEST -VISA",
"cardHashId": "CH373",
"paymentMethod":"401200"
},
"version":"5",
"txnStatus": "Success",
"userAccountDebited":true,
"paymentMode":"Debit Card"
```

## CheckAPItxnStatus

Parameters	Description
0	Success
1	Failure
2	ending
3	Refund
4	Partial Refund
5	Chargeback Reverted
6	Chargeback
7	Partial Chargeback Reverted
8	Partial Chargeback

# 5. UpdateAPI

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

• Request Type :POST

• Request URL(Staging):http://zaakpaystaging.centralindia.cloudapp.azure.com:8080/updateTxn

• Request URL(Live): <a href="https://api.zaakpay.com/updateTxn">https://api.zaakpay.com/updateTxn</a>

# 1. Request Parameters

**Table9: Update API Request** 

Parameter	Optional O, Mandatory M	Validation	Allowed Values
merchantIdentifier	М	alphanumeric	MobiKwik Payment Gatewayunique merchant identifier for your website
orderId	M	Max 20 alphanumeric, must beunique per website, we do not acceptduplicate	Your unique transaction identifier
Mode	M	1 digit only, numeric	0
updateDesired	М	Numeric max1digit, values predefined by MobiKwik Payment Gateway	7="Captured", 8="Canceled", 14="Refunded", 22="Partial Refund". Note:If yourequest a state update to "Refunded"we will issue the full amount refund to the user.
updateReason	M	Description of the reason for update.min5, max 30 alphanumericcharacters. no special charactersor dashes	Examples: you want to cancela transaction, your user wantsa refund, you want to settleatransaction
Amount	O(during Full- Refund), M(for Partial- Refund)	Amount in paisa. Amount whichneeds to be refunded in case of partialrefunds. In case of full refundthis can be omitted.	example Re1 is 100 paisa, Rs 777.50 is 77750 paisa. Pass this parameter if merchant wants partial refund.
Checksum	M	Checksum calculated on all aboverequest parameters	

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

Create a list of "data" parameter which you're passing to the API.Parameters used in checksum calcula-tion are(in no particular order):

- merchantIdentifier
- updateDesired
- updateReason
- orderId

• mode

Create a concatenated string of data values in your list, with single quotes around each item. Calculate the checksum using the HMAC SHA-256 algorithm using the string as data and your generated secret key.

The resulting checksum calculated should be posted to the Zaakpay API along with other data.

#### Note: Only below kinds of updates are possible using Update API:

- Authorized toCancel
- Authorized to Capture
- Capture to Refund before PayoutInitiated
- Capture to Partial Refund before PayoutInitiated
- Payout Initiated to RefundInitiated
- Payout Initiated to Partial RefundInitiated
- Payout Completed to RefundInitiated
- Payout Completed to Partial RefundInitiated

## **Request Format**

Now, we have to create a concatenated string of all the values, in the order in which they'll be sent to the API, with single quotes around each item.

The string therefore will be:

```
"merchantIdentifier":"b19e8f103bce406cbd","updateReason":"Test
Reason","mode":"0","updateDesired":"7", "orderDetail":{ "orderId":"ZPK12345","amount":"100"} } }

data ={
    " merchantIdentifier ":"b19e8f103bce406 cbd",
    " updateReason ":" TestReason",
    " mode ":"0",
    " updateDesired ":"7",
    " orderDetail ":
    {"orderId":"ZPK12345",
    " amount ":"100"
    }
}
& checksum = ehtrgdtrthfgdthxrdfghf
```

## 2. ResponseParameters

The response will be in the Json format.

Table 10: Update API Response

Parameters	Description
Merchantid	MobiKwik Payment Gateway's unique identifier for your website
Ordered	Your unique transaction identifier

Responsecode	Numeric, max 3 digits example 100 for success		
Description	Alphanumeric max 30 description of the response		
	Checksum calculated by MobiKwik Payment Gateway on all above		
Checksum	response parameters		

# **Example:**

```
data = {
" merchantIdentifier ":"b19e8f103bce406 cbd3476431b6b7973",
"orderDetail":{
" orderId ":"1472456383207"
},
" responseCode":"224",
responseDescription ":"Txn can not be updated ."
}
& checksum = dfsafdsfdsfbhgfjbfvgdbgbhfvvgvvcjkui
```

# 6. RemoveCardAPI

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

- Request Type:POST
- Request URL (Staging):http://zaakpaystaging.centralindia.cloudapp.azure.com:8080/removeCardU
- Request URL (Live):https://api.zaakpay.com/removeCardU

# **Request Parameters**

Table11: Remove Card API Request

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	eg. abc@xyz.com
mode	M	1 digit only, numeric	1 = Domain check, 0=Domain Check Skip
cardId	M	Unique token of card if user had chosen to save card	
checksum	M	To be calculated on above parameters using HMAC SHA 256	

# **Sample Request:**

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

# **Response Parameters**

Table12: Remove Card API

Parameter	Optional O, Mandatory M	Validation	Allowed Values
responseCode	M	numeric max 3 digits 123	
responseDescription	M	alphanumeric max 30 description of the response	
cardId	0	Unique token of card if user had chosen to save card	
cardScheme	0		Visa,Mastercard etc
cardToken	0	Masked card number	4012 XXXX XXXX 1881
first4	О	First 4 digits of card number	
last4	0	Last 4 digits of card number	
email	M	Email id of card holder	
nameoncard	0	Card Holder Name	
checksum	M	To be calculated on above parameters using HMAC SHA 256	

# **Sample Response**

```
{
"email": "chirag@zaakpay.com",
"responseCode":"100",
"responseDescription": "This card has been removed Successfully.",
"cards":[
{
"nameoncard": "chirag jain",
"first4":"4012",
"last 4": "1881",
"cardId": "bce8e4e1e66520cb0bc2bf3a0e760412d53273a844
bf0931f2b3136a2ee0ada 3~1",
"cardScheme": "Visa",
"cardToken": "4012 XXXXXXXXX1881"
}
]
]
```

# 7. 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 web-site 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. 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 trans-action details in your database by updating it for each response received here. Possible Values for "cardScheme" field:

- Visa
- Mastercard
- Maestro
- Amex
- Diners
- Discover

## 8. Test Cards ForDifferentScenarios

- 5453010000064154 success without2FA
- 5177194127672001 failure without2FA
- 4012001037141112success after 2FA
- 4012001037461114Failureafter2FA

# **9.** Few Key Common Points for AllAPIs

- 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 2parameters:
- data: It is a JSON value which has separate structure for each API. It has some parameters com-mon in all APIs like merchantIdentifier,email etc and other API specific parameters like orderid, amount, card/netbanking detailsetc.

- checksum: is hash (HMAC SHA256) value of entire JSON string (value of parameter "data") (Both of these parameters must be sent to Zaakpay in all API requests asGET/POST.)
- 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 SHA256) which is calculated on the entire JSON value sent inresponse.
- Preparing API Request at Client(Merchant) side:

```
Let's say the request JSON isbelow:

{
"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 ": "bce8e4e1e66520cb0bc2bf3a0e760412d53273
a844bf0931f2b3136a2ee0ada3~1",
"merchantCardRefId ": "cardRef123"
}
}
```

These steps must be followed:

- Calculate hash on entire JSON (value of parameter "data") using HMAC SHA 256. This hash value will be the value of request parameter "checksum".
- URL Encode entire JSON. This encoded value will be value of request parameter "data".
- Now, the request submitted to Zaakpay will look likethis:

```
data =%7B%27%2C%27+%22 merchantIdentifier %22%3A+%22 zaakpaymid %22%2C%27%2C%27+%22 email %22%3A%22abc%40 gmail . com%22%2C%27%2C%27+%22 mode %22%3A%220%22%2C%27%2C%27+% 22 card %22%3A+%7B%27%2C%27+%22 encrypted_pan %22%3A+%22 ggfhfbsdjbf %22%2C%27%2C%27+%22 nameoncard %22%3A+%22 cardholdername %22%2C%27%2C%27+%22 encryptedcvv %22%3A+%2 2 sdafdsf %22%2C%27%2C%27+%22 encrypted_expiry_month %22%3 A+%22 sadasda %22%2C%27%2C%27+%22 encrypted_expiry_year %2 2%3A+%22 sdasfff %22%2C%27%2C%27+%22 encrypted_expiry_year %2 2%3A+%22 sdasfff %22%2C%27%2C%27+%22 cardId %22%3A+%22bce 8 e4e1e66520cb 0bc2bf3a0e760412d53273a844bf0931f2b3136a2ee0 ada3%7E1%22%2C%27%2C%27%2C
```

#### • Verifying ResponseChecksum:

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 cal-culated 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 XXXXXXXXX1881",
" cardScheme ": "Visa",
" bank ": " State Bank ofIndia"
}
}
}
```

### 10. Bank-Codes

This category contains the codes for net-banking as well as the wallet services that we currently offer. Below is a combined list of both.

Table13: Bank-Codes

Bank Code	Bank Name
HDF	HDFC Bank
ALB	Allahabad Bank
ADB	Andhra Bank

BBK Bank of Bahrain and Kuwait BBC Bank of Baroda - Corporate Banking BBR Bank of Baroda - Retail Banking BOI Bank of Maharashtra CNB Canara Bank CSB Catholic Syrian Bank CBB City Union Bank CRP Corporation Bank DEN Dena Bank DEN Development Credit Bank DLB Development Credit Bank INB Indian Bank INB Indian Bank INB Indian Overseas Bank ING ING Vysya Bank JKB Jammu and Kashmir Bank KBL Karnataka Bank Ltd KVB KarurVysya Bank LVC Laxmi Vilas Bank - Corporate Net Banking LVC Laxmi Vilas Bank - Retail Banking DCC Oriental Bank COPN Punjab National Bank SVC Shamrao Vittal Bank SBI State Bank Of Hordian State Bank SBI State Bank Of Hordian Bank SBI State Bank Of Travancore - merged to SBI SSBI State Bank Of Indian Derreged to SBI SSBI State Bank of Travancore - merged to SBI SSBI State Bank of Travancore - merged to SBI SSBI State Bank of Poma Canara Copperate of SBI SSBI State Bank of Travancore - merged to SBI SSBI State Bank of Travancore - merged to SBI SSBI State Bank of Travancore - merged to SBI SSBI State Bank of Poma Canara Ca	<del></del>	
BBR Bank of Baroda - Retail Banking BOI Bank of India BOM Bank of Maharashtra CNB Canara Bank CSB Catholic Syrian Bank CBI Central Bank of India CUB City Union Bank CRP Corporation Bank DEN Dena Bank DEN Deutsche Bank DCB Development Credit Bank DLB Development Credit Bank DLB Dhanlakshmi Bank FBK Federal Bank INB Indian Bank INB Indian Bank INB Indian Bank INS Indian Bank ING ING Vysya Bank KBL Karnataka Bank Ltd KVB KarurVysya Bank LVC Laxmi Vilas Bank - Corporate Net Banking LVR Laxmi Vilas Bank - Corporate Banking OBC Oriental Bank Oriental Bank CPN Punjab National Bank - Corporate Banking NB PNB Punjab National Bank - Sorporate Banking RBL Ratnakar Bank SSC Shamrao Vittal Co-operative Bank SBL State Bank Of Bikaner and Jaipur – merged to SBI SBI State Bank of Patiala – merged to SBI SBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Travancore – merged to SBI SSBI State Bank of Travancore – merged to SBI SSBI State Bank of Travancore – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Travancore – merged to SBI SSBI State Bank of Travancore – merged to SBI SSBI State Bank of Travancore – merged to SBI SSBI State Bank of Travancore – merged to SBI SSBI State Bank of Travancore – merged to SBI SSBI State Bank of Travancore – merged to SBI SSBI State Bank of India VJB Vijaya Bank	3K	Bank of Bahrain and Kuwait
BOI Bank of India BOM Bank of Maharashtra CNB Canara Bank CSB Catholic Syrian Bank CBI Central Bank of India CUB City Union Bank CRP Corporation Bank DEN Dena Bank DEN Dena Bank DEN Development Credit Bank DLB Dhanlakshmi Bank FBK Federal Bank IDB IDBI Bank INB Indian Bank IOB Indian Overseas Bank IDS IndusInd Bank ING ING Vysya Bank IKB Jammu and Kashmir Bank KBL Karnataka Bank Ltd KVB KarurVysya Bank IC2 Kotak Bank LVC Laxmi Vilas Bank - Corporate Net Banking LVR Laxmi Vilas Bank - Retail Net Banking OBC Oriental Bank of Commerce PSB Punjab and Sind Bank SVC ShamraoVithal Co-operative Bank SBI Ratnakar Bank SBI State Bank of Pdialan - merged to SBI SBI State Bank of Pdiala - merged to SBI SBI State Bank of Patiala - merged to SBI SBI State Bank of Patiala - merged to SBI SSI State Bank of Travancore - merged to SBI SSI State Bank of Travancore - merged to SBI SSI State Bank of Travancore - merged to SBI SSI State Bank of Patiala - merged to SBI SSI State Bank of Travancore - merged to SBI SSI State Bank of Patiala - merged to SBI SSI State Bank of Travancore - merged to SBI SSI State Bank of Patiala - merged to SBI SSI State Bank of Patiala - merged to SBI SSI State Bank of Travancore - merged to SBI SSI State Bank of Patiala - merged to SBI SSI State Bank of Travancore - merged to SBI SSI State Bank of Patiala - merged to SBI SSI State Bank of India VJB Vijaya Bank	3C	Bank of Baroda - Corporate Banking
BOM Bank of Maharashtra CNB Canara Bank CSB Catholic Syrian Bank CBI Central Bank of India CUB City Union Bank CRP Corporation Bank DEN Dena Bank DEN Dena Bank DEBK Deutsche Bank DLB Dhanlakshmi Bank FEK Federal Bank IDB IDBI Bank INB Indian Bank IOB Indian Overseas Bank INS IndusInd Bank ING ING Vysya Bank JKB Jammu and Kashmir Bank KBL Karnataka Bank Ltd KVB Karur'ysya Bank I62 Kotak Bank LVC Laxmi Vilas Bank - Corporate Net Banking LVR Laxmi Vilas Bank - Retail Net Banking OBC Oriental Bank of Commerce PSB Punjab National Bank - Retail Banking RBL Ratnakar Bank SVC Shamrao Vitthal Co-operative Bank SBI State Bank of Bikaner and Jaipur – merged to SBI SBI State Bank of Hydrabad – merged to SBI SBI State Bank of Patiala – merged to SBI SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SSBI State Bank of Travancore – merged to SBI SSBI State Bank of Travancore – merged to SBI SSBI State Bank of Travancore – merged to SBI SSBI State Bank of Travancore – merged to SBI SSBI State Bank of Travancore – merged to SBI SSBI State Bank of Travancore – merged to SBI SMD Tamilnad Mercandile Bank Ltd. UCO UCO Bank Union Bank of India VJB Vijaya Bank	3R	Bank of Baroda - Retail Banking
CNB Canara Bank CSB Catholic Syrian Bank CBI Central Bank of India CUB City Union Bank CRP Corporation Bank DEN Dena Bank DEN Dena Bank DEN Denes Bank DEBK Deutsche Bank DCB Development Credit Bank DLB Dhanlakshmi Bank FBK Federal Bank IDB IDBI Bank INB Indian Overseas Bank IOB Indian Overseas Bank INS Indian Overseas Bank ING ING Vysya Bank JKB Jammu and Kashmir Bank KBL Karnataka Bank Ltd KVB KarurVysya Bank 162 Kotak Bank LVC Laxmi Vilas Bank - Corporate Net Banking DBC Oriental Bank of Commerce PSB Punjab and Sind Bank CPN Punjab National Bank - Retail Banking PNB Punjab National Bank - Retail Banking RBL Ratnakar Bank SVC Shamrao Vitthal Co-operative Bank SBI State Bank of Hyderabad – merged to SBI SBI State Bank of Hyderabad – merged to SBI SBI State Bank of Travancore – merged to SBI SBI State Bank of Travancore – merged to SBI SBI State Bank of Travancore – merged to SBI STAD Syndicate Bank Tamilhad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank India Vijaya Bank Vijaya Bank Ltd. UCO UCO Bank UBI Union Bank of India	)I	Bank of India
CSB Catholic Syrian Bank CBI Central Bank of India CUB City Union Bank CRP Corporation Bank DEN Dena Bank DEN Deutsche Bank DCB Development Credit Bank DLB Dhanlakshmi Bank FEK Federal Bank IDB IDBI Bank INB Indian Bank INB Indian Bank INB Indian Bank INS Indian Mank INS Indian Mank INS Indian Mank ING ING Vysya Bank ING ING Vysya Bank JKB Jammu and Kashmir Bank KBL Karurtysya Bank Ic2 Kotak Bank LVC Laxmi Vilas Bank - Corporate Net Banking LVC Laxmi Vilas Bank - Retail Net Banking OBC Oriental Bank of Commerce PSB Punjab and Sind Bank CPN Punjab National Bank - Retail Banking RBL Ratnakar Bank SVC Shamrao Vitthal Co-operative Bank SBI State Bank of Hyderabad - merged to SBI SBI State Bank of Hyderabad - merged to SBI SSI State Bank of Patiala - merged to SBI SSI State Bank of Travancore - merged to SBI SSI State Bank of Patiala - merged to SBI STATE BANK OLOR UDIO HORION OLOR UDIO BANK UNION BANK Ltd.	)M	Bank of Maharashtra
CBI Central Bank of India CUB City Union Bank CRP Corporation Bank DEN Dena Bank DBK Deutsche Bank DCB Development Credit Bank DLB Dhanlakshmi Bank FBK Federal Bank IDB IDBI Bank INB Indian Bank IOB Indian Overseas Bank IIDS IndusInd Bank ING ING Vysya Bank JKB Jammu and Kashmir Bank KBL Karnataka Bank Ltd KVB KarurVysya Bank IC2 Kotak Bank LVC Laxmi Vilas Bank - Corporate Net Banking LVR Laxmi Vilas Bank - Retail Net Banking CPN Punjab National Bank - Corporate Banking PNB Punjab National Bank - Retail Banking RBL Ratnakar Bank SVC Shamrao Vitthal Co-operative Bank SBI State Bank of Hyderabad - merged to SBI SBI State Bank of Patiala - merged to SBI SBI State Bank of Patiala - merged to SBI SSPD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	NB	Canara Bank
CUB City Union Bank CRP Corporation Bank DEN Dena Bank DBK Deutsche Bank DCB Development Credit Bank DLB Dhanlakshmi Bank FBK Federal Bank IDB IDBI Bank INB Indian Bank INB Indian Bank ING ING Vysya Bank IKB Jammu and Kashmir Bank KBL Karnataka Bank Ltd KVB KarurVysya Bank LVC Laxmi Vilas Bank - Retail Net Banking OBC Oriental Bank of Commerce PSB Punjab And Sind Bank CPN Punjab National Bank - Retail Banking RBL Ratnakar Bank SVC Shamrao Vitthal Co-operative Bank SBI State Bank of Hyderabad – merged to SBI SBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI	SB .	Catholic Syrian Bank
CRP Corporation Bank DEN Dena Bank DEN Dena Bank DCB Development Credit Bank DCB Development Credit Bank DLB Dhanlakshmi Bank FBK Federal Bank IDB IDBI Bank INB Indian Bank IOB Indian Overseas Bank IIOS IndusInd Bank ING ING Vysya Bank JKB Jammu and Kashmir Bank KBL Karnataka Bank Ltd KVB KarurVysya Bank I62 Kotak Bank LVC Laxmi Vilas Bank - Corporate Net Banking LVR Laxmi Vilas Bank - Retail Net Banking OBC Oriental Bank of Commerce PSB Punjab and Sind Bank CPN Punjab National Bank - Retail Banking RBL Ratnakar Bank SVC ShamraoVitthal Co-operative Bank SIB South Indian Bank SBI State Bank of Bikaner and Jaipur – merged to SBI SBI State Bank of Mysore SBI State Bank of Patiala – merged to SBI SBI State Bank of Patiala – merged to SBI SBI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SSI State Bank of Patiala – merged to SBI SYD Syndicate Bank UCO UCO Bank UBI Union Bank of India	BI	Central Bank of India
DEN Dena Bank DBK Deutsche Bank DCB Development Credit Bank DLB Dhanlakshmi Bank FBK Federal Bank IIDB IIDBI Bank IINB IIndian Bank IOB Indian Overseas Bank IIOB IING Vysya Bank IING ING Vysya Bank IKB Jammu and Kashmir Bank KBL Karnataka Bank Ltd KVB KarurVysya Bank ICC Laxmi Vilas Bank - Corporate Net Banking LVR Laxmi Vilas Bank - Retail Net Banking OBC Oriental Bank of Commerce PSB Punjab and Sind Bank CPN Punjab National Bank - Corporate Banking RBL Ratnakar Bank SVC ShamraoVitthal Co-operative Bank SSVC ShamraoVitthal Co-operative Bank SBI State Bank of Hyderabad – merged to SBI SBI State Bank of Mysore SBI State Bank of Mysore SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SSI State Bank of Travancore – merged to SBI SSTORE SYD Syndicate Bank UDI Union Bank of India VJB Vijaya Bank	JB	City Union Bank
DBK Deustsche Bank DCB Development Credit Bank DLB Dhanlakshmi Bank FBK Federal Bank IDB IDBI Bank INB Indian Bank INB Indian Bank ING ING Vysya Bank JKB Jammu and Kashmir Bank KBL Karnataka Bank Ltd KVB KarurVysya Bank LVC Laxmi Vilas Bank - Corporate Net Banking LVR Laxmi Vilas Bank - Retail Net Banking OBC Oriental Bank of Commerce PSB Punjab and Sind Bank CPN Punjab National Bank - Retail Banking RBL Ratnakar Bank SVC ShamraoVitthal Co-operative Bank SVC ShamraoVitthal Co-operative Bank SBI State Bank of Bikaner and Jaipur – merged to SBI SBI State Bank of Hyderabad – merged to SBI SBI State Bank of Mysore SBI State Bank of Patiala – merged to SBI SSBI State Bank of Patiala – merged to SBI SSBI State Bank of Travancore – merged to SBI SYD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	₹P	Corporation Bank
DCB Development Credit Bank DLB Dhanlakshmi Bank FBK Federal Bank IDB IDBI Bank INB Indian Bank IOB Indian Overseas Bank IOB IndusInd Bank ING ING Vysya Bank ING JAME JAME JAME JAME JAME JAME JAME JAME	EN	Dena Bank
DLB Dhanlakshmi Bank FBK Federal Bank IDB IDBI Bank INB Indian Bank IOB Indian Overseas Bank IDS IndusInd Bank ING ING Vysya Bank ING ING Vysya Bank JKB Jammu and Kashmir Bank KBL Karnataka Bank Ltd KVB KarurVysya Bank I62 Kotak Bank LVC Laxmi Vilas Bank - Corporate Net Banking LVR Laxmi Vilas Bank - Retail Net Banking OBC Oriental Bank of Commerce PSB Punjab and Sind Bank CPN Punjab National Bank - Corporate Banking PNB Punjab National Bank - Retail Banking RBL Ratnakar Bank SVC ShamraoVitthal Co-operative Bank SIB South Indian Bank SBI State Bank of Hyderabad – merged to SBI SBI State Bank of Hyderabad – merged to SBI SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SSPD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	3K	Deutsche Bank
FBK Federal Bank IDB IDBI Bank INB Indian Bank IOB Indian Overseas Bank IDS IndusInd Bank ING ING Vysya Bank JKB Jammu and Kashmir Bank KBL Karnataka Bank Ltd KVB KarurVysya Bank IC2 Kotak Bank LVC Laxmi Vilas Bank - Corporate Net Banking LVR Laxmi Vilas Bank - Retail Net Banking OBC Oriental Bank of Commerce PSB Punjab and Sind Bank CPN Punjab National Bank - Corporate Banking RBL Ratnakar Bank SVC ShamraoVitthal Co-operative Bank SIB South Indian Bank SBI State Bank of Hyderabad – merged to SBI SBI State Bank of Patiala – merged to SBI SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SSI State Bank of Travancore – merged to SBI SYD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	CB	Development Credit Bank
IDB IDBI Bank INB Indian Bank IOB Indian Overseas Bank IDS IndusInd Bank ING ING Vysya Bank JKB Jammu and Kashmir Bank KBL Karnataka Bank Ltd KVB KarurVysya Bank I62 Kotak Bank LVC Laxmi Vilas Bank - Corporate Net Banking LVR Laxmi Vilas Bank - Retail Net Banking OBC Oriental Bank of Commerce PSB Punjab and Sind Bank CPN Punjab National Bank - Corporate Banking RBL Ratnakar Bank SVC ShamraoVitthal Co-operative Bank SIB South Indian Bank SBI State Bank of Hyderabad – merged to SBI SBI State Bank of Patiala – merged to SBI SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SYD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	LB	Dhanlakshmi Bank
INB Indian Bank IOB Indian Overseas Bank IDS IndusInd Bank ING ING Vysya Bank JKB Jammu and Kashmir Bank KBL Karnataka Bank Ltd KVB KarurVysya Bank I62 Kotak Bank LVC Laxmi Vilas Bank - Corporate Net Banking LVR Laxmi Vilas Bank - Retail Net Banking OBC Oriental Bank of Commerce PSB Punjab and Sind Bank CPN Punjab National Bank - Corporate Banking RBL Ratnakar Bank SVC ShamraoVitthal Co-operative Bank SVC ShamraoVitthal Co-operative Bank SBI State Bank of Bikaner and Jaipur – merged to SBI SBI State Bank of Mysore SBI State Bank of Patiala – merged to SBI SBI State Bank of Patiala – merged to SBI SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SYD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	K	Federal Bank
IOB Indian Overseas Bank IDS IndusInd Bank ING ING Vysya Bank JKB Jammu and Kashmir Bank KBL Karnataka Bank Ltd KVB KarurVysya Bank 162 Kotak Bank LVC Laxmi Vilas Bank - Corporate Net Banking LVR Laxmi Vilas Bank - Retail Net Banking OBC Oriental Bank of Commerce PSB Punjab and Sind Bank CPN Punjab National Bank - Corporate Banking PNB Punjab National Bank - Retail Banking RBL Ratnakar Bank SVC ShamraoVitthal Co-operative Bank SIB South Indian Bank SBI State Bank of Hyderabad – merged to SBI SBI State Bank of Mysore SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SSDI State Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	В	IDBI Bank
IDS IndusInd Bank ING ING Vysya Bank JKB Jammu and Kashmir Bank KBL Karnataka Bank Ltd KVB KarurVysya Bank 162 Kotak Bank LVC Laxmi Vilas Bank - Corporate Net Banking LVR Laxmi Vilas Bank - Retail Net Banking OBC Oriental Bank of Commerce PSB Punjab and Sind Bank CPN Punjab National Bank - Corporate Banking PNB Punjab National Bank - Retail Banking RBL Ratnakar Bank SVC ShamraoVitthal Co-operative Bank SIB South Indian Bank SBI State Bank of Bikaner and Jaipur – merged to SBI SBI State Bank of Mysore SBI State Bank of Patiala – merged to SBI SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SYD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	В	Indian Bank
ING ING Vysya Bank  JKB Jammu and Kashmir Bank  KBL Karnataka Bank Ltd  KVB KarurVysya Bank  162 Kotak Bank  LVC Laxmi Vilas Bank - Corporate Net Banking  LVR Laxmi Vilas Bank - Retail Net Banking  OBC Oriental Bank of Commerce  PSB Punjab and Sind Bank  CPN Punjab National Bank - Corporate Banking  PNB Punjab National Bank - Retail Banking  RBL Ratnakar Bank  SVC ShamraoVitthal Co-operative Bank  SIB South Indian Bank  SBI State Bank of Bikaner and Jaipur – merged to SBI  SBI State Bank of Mysore  SBI State Bank of Patiala – merged to SBI  SBI State Bank of Travancore – merged to SBI  SYD Syndicate Bank  TMB Tamilnad Mercantile Bank Ltd.  UCO UCO Bank  UBI Union Bank of India  VJB Vijaya Bank	В	Indian Overseas Bank
JKB Jammu and Kashmir Bank  KBL Karnataka Bank Ltd  KVB KarurVysya Bank  162 Kotak Bank  LVC Laxmi Vilas Bank - Corporate Net Banking  LVR Laxmi Vilas Bank - Retail Net Banking  OBC Oriental Bank of Commerce  PSB Punjab and Sind Bank  CPN Punjab National Bank - Corporate Banking  PNB Punjab National Bank - Retail Banking  RBL Ratnakar Bank  SVC ShamraoVitthal Co-operative Bank  SIB South Indian Bank  SBI State Bank of Bikaner and Jaipur – merged to SBI  SBI State Bank of Hyderabad – merged to SBI  SBI State Bank of Patiala – merged to SBI  SBI State Bank of Travancore – merged to SBI  SYD Syndicate Bank  TMB Tamilnad Mercantile Bank Ltd.  UCO UCO Bank  UBI Union Bank of India  Vijaya Bank	S	IndusInd Bank
KBL Karnataka Bank Ltd KVB KarurVysya Bank  162 Kotak Bank  LVC Laxmi Vilas Bank - Corporate Net Banking  LVR Laxmi Vilas Bank - Retail Net Banking  OBC Oriental Bank of Commerce  PSB Punjab and Sind Bank  CPN Punjab National Bank - Corporate Banking  PNB Punjab National Bank - Retail Banking  RBL Ratnakar Bank  SVC ShamraoVitthal Co-operative Bank  SIB South Indian Bank  SBI State Bank of Bikaner and Jaipur – merged to SBI  SBI State Bank of Hyderabad – merged to SBI  SBM State Bank of Patiala – merged to SBI  SBI State Bank of Travancore – merged to SBI  SYD Syndicate Bank  TMB Tamilnad Mercantile Bank Ltd.  UCO UCO Bank  UBI Union Bank of India  VJB Vijaya Bank	G	ING Vysya Bank
KVB KarurVysya Bank  162 Kotak Bank  LVC Laxmi Vilas Bank - Corporate Net Banking  LVR Laxmi Vilas Bank - Retail Net Banking  OBC Oriental Bank of Commerce  PSB Punjab and Sind Bank  CPN Punjab National Bank - Corporate Banking  PNB Punjab National Bank - Retail Banking  RBL Ratnakar Bank  SVC ShamraoVitthal Co-operative Bank  SIB South Indian Bank  SBI State Bank of Bikaner and Jaipur – merged to SBI  SBI State Bank of Hyderabad – merged to SBI  SBM State Bank of Patiala – merged to SBI  SBI State Bank of Travancore – merged to SBI  SYD Syndicate Bank  TMB Tamilnad Mercantile Bank Ltd.  UCO UCO Bank  UBI Union Bank of India  VJB Vijaya Bank	В	Jammu and Kashmir Bank
Kotak Bank	3L	Karnataka Bank Ltd
LVC Laxmi Vilas Bank - Corporate Net Banking LVR Laxmi Vilas Bank - Retail Net Banking OBC Oriental Bank of Commerce PSB Punjab and Sind Bank CPN Punjab National Bank - Corporate Banking PNB Punjab National Bank - Retail Banking RBL Ratnakar Bank SVC ShamraoVitthal Co-operative Bank SIB South Indian Bank SBI State Bank of Bikaner and Jaipur - merged to SBI SBI State Bank of Hyderabad - merged to SBI SBI State Bank of Patiala - merged to SBI SBI State Bank of Travancore - merged to SBI SYD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	/B	KarurVysya Bank
LVR Laxmi Vilas Bank - Retail Net Banking  OBC Oriental Bank of Commerce  PSB Punjab and Sind Bank  CPN Punjab National Bank - Corporate Banking  PNB Punjab National Bank - Retail Banking  RBL Ratnakar Bank  SVC ShamraoVitthal Co-operative Bank  SIB South Indian Bank  SBI State Bank of Bikaner and Jaipur – merged to SBI  SBI State Bank of Hyderabad – merged to SBI  SBI State Bank of Patiala – merged to SBI  SBI State Bank of Travancore – merged to SBI  SYD Syndicate Bank  TMB Tamilnad Mercantile Bank Ltd.  UCO UCO Bank  UBI Union Bank of India  VJB Vijaya Bank	2	Kotak Bank
OBC Oriental Bank of Commerce PSB Punjab and Sind Bank CPN Punjab National Bank - Corporate Banking PNB Punjab National Bank - Retail Banking RBL Ratnakar Bank SVC ShamraoVitthal Co-operative Bank SIB South Indian Bank SBI State Bank of Bikaner and Jaipur – merged to SBI SBI State Bank of Hyderabad – merged to SBI SBI State Bank of Mysore SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SYD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	<sup>7</sup> C	Laxmi Vilas Bank - Corporate Net Banking
PSB Punjab and Sind Bank CPN Punjab National Bank - Corporate Banking PNB Punjab National Bank - Retail Banking RBL Ratnakar Bank SVC ShamraoVitthal Co-operative Bank SIB South Indian Bank SBI State Bank of Bikaner and Jaipur – merged to SBI SBI State Bank of Hyderabad – merged to SBI SBM State Bank of Mysore SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SYD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	<sup>7</sup> R	Laxmi Vilas Bank - Retail Net Banking
CPN Punjab National Bank - Corporate Banking PNB Punjab National Bank - Retail Banking RBL Ratnakar Bank SVC ShamraoVitthal Co-operative Bank SIB South Indian Bank SBI State Bank of Bikaner and Jaipur – merged to SBI SBI State Bank of Hyderabad – merged to SBI SBI State Bank of Mysore SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SYD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	3C	Oriental Bank of Commerce
PNB Punjab National Bank - Retail Banking  RBL Ratnakar Bank  SVC ShamraoVitthal Co-operative Bank  SIB South Indian Bank  SBI State Bank of Bikaner and Jaipur – merged to SBI  SBI State Bank of Hyderabad – merged to SBI  SBM State Bank of Mysore  SBI State Bank of Patiala – merged to SBI  SBI State Bank of Travancore – merged to SBI  SYD Syndicate Bank  TMB Tamilnad Mercantile Bank Ltd.  UCO UCO Bank  UBI Union Bank of India  VJB Vijaya Bank	В	Punjab and Sind Bank
RBL Ratnakar Bank SVC ShamraoVitthal Co-operative Bank SIB South Indian Bank SBI State Bank of Bikaner and Jaipur – merged to SBI SBI State Bank of Hyderabad – merged to SBI SBM State Bank of Mysore SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SYD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	'n	Punjab National Bank - Corporate Banking
SVC ShamraoVitthal Co-operative Bank SIB South Indian Bank SBI State Bank of Bikaner and Jaipur – merged to SBI SBI State Bank of Hyderabad – merged to SBI SBM State Bank of Mysore SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SYD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	IB :	Punjab National Bank - Retail Banking
SIB South Indian Bank SBI State Bank of Bikaner and Jaipur – merged to SBI SBI State Bank of Hyderabad – merged to SBI SBM State Bank of Mysore SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SYD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	BL	Ratnakar Bank
SBI State Bank of Bikaner and Jaipur – merged to SBI SBI State Bank of Hyderabad – merged to SBI SBM State Bank of Mysore SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SYD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	'C	ShamraoVitthal Co-operative Bank
SBI State Bank of Hyderabad – merged to SBI SBM State Bank of Mysore SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SYD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	В	South Indian Bank
SBM State Bank of Mysore  SBI State Bank of Patiala – merged to SBI  SBI State Bank of Travancore – merged to SBI  SYD Syndicate Bank  TMB Tamilnad Mercantile Bank Ltd.  UCO UCO Bank  UBI Union Bank of India  VJB Vijaya Bank	SI .	State Bank of Bikaner and Jaipur – merged to SBI
SBI State Bank of Patiala – merged to SBI SBI State Bank of Travancore – merged to SBI SYD Syndicate Bank TMB Tamilnad Mercantile Bank Ltd. UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	SI .	State Bank of Hyderabad – merged to SBI
SBI State Bank of Travancore – merged to SBI SYD Syndicate Bank  TMB Tamilnad Mercantile Bank Ltd.  UCO UCO Bank  UBI Union Bank of India  VJB Vijaya Bank	5M	State Bank of Mysore
SYD Syndicate Bank  TMB Tamilnad Mercantile Bank Ltd.  UCO UCO Bank  UBI Union Bank of India  VJB Vijaya Bank	SI .	State Bank of Patiala – merged to SBI
TMB Tamilnad Mercantile Bank Ltd.  UCO UCO Bank  UBI Union Bank of India  VJB Vijaya Bank	SI .	State Bank of Travancore – merged to SBI
UCO UCO Bank UBI Union Bank of India VJB Vijaya Bank	'D	Syndicate Bank
UBI Union Bank of India  VJB Vijaya Bank	ИВ T	Tamilnad Mercantile Bank Ltd.
VJB Vijaya Bank	20	UCO Bank
	BI	Union Bank of India
VDV Voc Donk I td	В	Vijaya Bank
YBK Yes Bank Ltd	3K	Yes Bank Ltd
SBI State Bank of India	SI .	State Bank of India

ICICI	ICICI Bank
AXIS	Axis Bank
UNIZP	United Bank of India
MW	Mobikwik Wallet
EZE	Amex Eze Click
IDEBIT	ICICI ATM+Pin
HDFZP	HDFC Bank
MSPASS	Masterpass
icashw	ICASH CARD
PAYUWL	PayU Wallet
OXYW	Oxigen Wallet
payzpw	HdfcPayzapp Wallet
IDN	IDFC Bank

# 11. MobiKwik Payment Gateway APIResponses

### **18.1 Transact APIResponses**

Table14: Transact-API Responses Codes

Response Code	Response Description	Is Success
100	The transaction was completed successfully.	✓
101	Merchant not found. Please check your merchantIdentifier field.	Х
102	Customer cancelled transaction	Х
103	Fraud Detected.	Х
104	Customer Not Found.	Х
105	Transaction details not matched	Х

106	IpAddressBlackListed.	Х
107	Transaction Amount not in specified amount range.	Х
108	Validation Successful.	Х
109	Validation Failed	Х
110	MerchantIdentifier field missing or blank.	Х
111	MerchantIdentifier Not Valid.	Х
126	Date received with request was not valid.	Х
127	ReturnUrl does not match the registered domain	Х
128	Order Id Already Processed with this Merchant.	Х
129	OrderId field missing or blank.	Х
130	OrderId received with request was not Valid.	Х
131	ReturnUrl field missing or blank.	Х
132	ReturnUrl received with request was not Valid	Х
133	BuyerEmail field missing or blank.	Х
134	BuyerEmail received with request was not Valid.	Х
135	BuyerFirstName field missing or blank.	Х
136	BuyerFirstName received with request was not Valid.	Х
137	BuyerLastName field missing or blank	Х
138	BuyerLastName received with request was not Valid	Х
139	BuyerAddress field missing or blank.	Х
140	BuyerAddress received with request was not Valid.	Х
141	BuyerCity field missing or blank.	Х
142	BuyerCity received with request was not Valid.	Х
143	BuyerState field missing or blank	Х
144	BuyerState received with request was not Valid.	Х
145	BuyerCountry field missing or blank.	Х
146	BuyerCountry received with request was not Valid.	Х
147	BuyerPincode field missing or blank.	Х
148	BuyerPinCode received with request was not Valid.	Х
149	BuyerPhoneNumber field missing or blank	Х
150	BuyerPhoneNumber received with request was not Valid.	Х
151	TxnType field missing or blank.	Х
152	TxnType received with request was not Valid.	Х
153	ZpPayOption field missing or blank.	Х
154	ZpPayOption received with request was not Valid.	Х
155	Mode field missing or blank	Х
156	Mode received with request was not Valid.	Х
157	Currency field missing or blank.	Х
158	Currency received with request was not Valid.	Х
159	Amout field missing or blank.	Х
160	Amount received with request was not Valid.	Х
161	BuyerIpAddress field missing or blank	Х
162	BuyerIpAddress received with request was not Valid.	Х
163	Purpose field missing or blank.	Х
164	Purpose received with request was not Valid.	Х

165	ProductDescription field missing or blank.	Х
166	ProductDescription received with request was not Valid.	Х
167	Product1Description received with request was not Valid.	Х
168	Product2Description received with request was not Valid.	Х
169	Product3Description received with request was not Valid.	Х
170	Product4Description received with request was not Valid.	Х
171	ShipToAddress received with request was not Valid.	Х
172	ShipToCity received with request was not Valid.	Х
173	ShipToState received with request was not Valid.	Х
174	ShipToCountry received with request was not Valid.	Х
175	ShipToPincode received with request was not Valid.	Х
176	ShipToPhoneNumber received with request was not Valid.	Х
177	ShipToFirstname received with request was not Valid	Х
178	ShipToLastname received with request was not Valid.	Х
179	Date is blank.	Х
179	Date received with request was not valid.	Х
180	Checksum received with request is not equal to what we calculated	Х
181	Merchant Data Complete.	Х
182	Merchant data not completed in our database	Х
183	Unfortunately, the transaction has failed	Х
400	The transaction was declined by the issuing bank	Х
401	The transaction was rejected by the acquiring bank	Х
402	This test transaction has been successfully completed.	Х
	Transaction failed because this card has been blocked by MobiKwik	
403	Payment Gateway	Х
404	Transaction failed due to security checks	Х
501	Debitorcredit is blank	Х
502	Bankid is blank	Х
503	Encrypted pan is blank	Х
504	Card is blank	Х
505	Nameoncard is blank	Х
506	Encrypted cvv is blank	Х
507	Encrypted expiry month is blank	Х

**Table 15: Some More Transact-API Responses Codes** 

109	One or more fields entered for this transactions has validation error please retry	X
	this payment.	
133	Email in OrderDetail field missing or blank.	Х
140	Address in BillingAddress received with request was not valid.	
142	City in BillingAddress received with request was not valid.	Х
144	State in BillingAddress received with request was not valid.	Х
148	PinCode in BillingAddress received with request was not valid.	Х
150	PhoneNumber in OrderDetail received with request was not valid.	Х
159	Amount field missing or blank.	Х
160	Transaction amount validation has failed.	Х
171	Address in ShippingAddress received with request was not valid.	Х
176	ShipToPhoneNumber received with request was not valid.	X
180	Checksum received with request is not equal to what we calculated.	X
204	Transaction Id is not valid.	Х
227	Acquiring Bank returned an error	Х
405	Transaction failed as the total amount allowed for this card per month has been	Х
	reached.	
406	Transaction failed as the total amount allowed for this card per day has been	Х
	reached.	·
407	Invalid Card Details	Х
408	Transaction failed as the total no. of transactions allowed for this card per day	X
	has been reached.	·
409	Transaction failed as the total no. of transactions allowed for this email per day	Х
103		•
418	has been reached. amex card not enabled for merchant Transaction has failed	<b>v</b>
419	card not enabled for merchant Transaction has failed	X
510	Invalid bankid	X
629	Unknown Error!! Transaction has failed edit this existing text	X
726	User Authentication Failed. Please try again.	X
742	Credit Card Not Allowed	X
744	Another Attempt with same Orderld is in process.	X
745	Card expired	V
801	Incorrect Expiry Date or CVV Value Please retry with correct values or another	X
001	Card.	^
802	Your bank is experiencing heavy traffic at the moment please Retry this	Х
002		•
804	payment with another Card.  Your Card is Expired Please enter the correct expiry date or Retry this payment	Х
004		^
806	with another Card.  Your Bank has declined this transaction due to insufficient funds please Retry	v
000	· · ·	X
007	this payment with another Card.	
807	Your card is not allowed for this type of transaction please Retry this payment	X
000	with another card.	.,
809	Unfortunately some processing error occurred at the bank and the transaction	X
212	failed.Please try again.	
812	Invalid PIN entered Please retry with a valid PIN or any other payment mode.	Х
813	International Card not allowed please Retry this payment with another Card.	Х
814	You have exceeded today's transaction limit on this card Please retry with	X
	another card.	
815	You have exceeded the trial limit for PIN please Retry this payment with another	X
	Card.	

818	You have entered incorrect card details. Please enter the correct card details	X
	and try again.	
857	The card which is being used for this transaction is reported to be stolen. Kindly	X
	retry payment with another card.	
1011	Card Expired	X
1012	Invalid VPA! Please enter a valid Vpa	Х

The below response code series starting from '6' e.g. '6XX' are sent from MobiKwik wallet via MobiKwik Payment Gateway to merchant site.

Table16: Transact-API Response Codes(Wallet)

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

### 18.2 CheckAPIResponses

Table 17: Check-API Response Codes

Response Code	Response Description	Transaction Success	Valid for refund
103	Fraud Detected	Х	Х
110	MerchantIdentifier field missing or blank	Х	Х
111	MerchantIdentifier not valid	Х	Х
129	OrderId field missing or blank	Х	Х
155	Mode field missing or blank	Х	Х
156	Mode received with request was not valid	Х	Х
180	Checksum received with request is not equal to what we calculated	х	Х
182	Merchant Data not complete in our database	Х	Х
89	Checksum was blank.	Х	Х
190	OrderId either not processed or Rejected.	Х	Х
191	Merchant Identifier or Order Id was not valid	Х	Х
205	We could not find this transaction in our database	Х	Х
206	Transaction in Scheduled state.	Х	Х
207	Transaction in Initiated state.	Х	Х
208	Transaction in Processing state.	Х	Х
209	Transaction has been authorized.	Х	Х
210	Transaction has been put on hold.	Х	Х
211	Transaction is incomplete.	Х	Х
212	Transaction has been settled.	1	Х
213	Transaction has been canceled.	Х	Х
223	Data Validation success.	Х	Х
228	Transaction has been captured.	1	1
230	Transaction Refund Initiated	/	Х
231	Transaction Refund Completed	1	Х
232	Transaction Payout Initiated	/	1
233	Transaction Payout Completed	1	1
234	Transaction Payout Error.	Х	Х
236	Transaction Refund Paid Out	1	Х
237	Transaction Chargeback has been initiated	1	Х
238	Transaction Chargeback is being processed	1	Х
239	Transaction Chargeback has been accepted	1	Х
240	Transaction Chargeback has been reverted	1	Х
241	Transaction Chargeback revert is now complete	1	Х
245	Transaction Partial Refund Initiated	1	✓
246	Transaction Partial Chargeback has been initiated	1	✓
247	Transaction Partial Chargeback is being processed	1	✓
248	Transaction Partial Chargeback has been accepted	1	/
249	Transaction Partial Chargeback has been reverted	✓	/
251	Transaction Partial Refund Paid out	1	<b>√</b>
252	Transaction Partial Refund Completed	1	/
253	Transaction Refund Before Payout Paid out	1	/
254	Transaction Partial Refund Before Payout Paid Out	1	1
255	Transaction Partial Refund Before Payout Completed	1	/

256	Transaction Refund Before Payout Completed	1	Х
400	Your Bank has declined this transaction,	v	_
400	please Retry this payment with another Card.	^	^

## 18.3 Update APIResponses

Table 18: Update-API Response Codes

Response Code	Response Description	Update Success
184	Update Desired blank.	X
185	Update Desired not Valid	X
186	Update Reason blank.	X
187	Update Reason Not Valid.	X
189	Checksum was blank.	×
190	orderId either not Processed or Rejected	
201	Transaction cannot be refunded.	. 3
203	Transaction status could not be updated try again.	<b>X</b>
229	Transaction cannot be captured.	×
30	Transaction Refund Initiated	<b>/</b>
242	Transaction captured successfully.	<b>✓</b>
243	Transaction canceled successfully.	<b>✓</b>
245	Transaction Partial Refund Initiated	1

### 18.4 Add Card ResponseCodes

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

### 18.5 Fetch CardResponses

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

#### 18.6 Validate CardResponses

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

## 12. MobiKwik Payment Gateway PushNotification(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:

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

- txns: All txns marked assuccessful.
- refunds: All txns auto-refunded if auto-refund is enabled bymerchant.
- merchantIdentifier: Zaakpay merchantidentifier.
- 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:

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 mer-chant's end. Checksum has been calculated on entire string highlighted inblue.

#### **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