



Zaakpay Standing Instruction API V1.0

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1. 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.ext 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.

2. Get Merchant ID & Secret Key

Login to zaakpay.com, go to Developers--> Customize Your Integration. Here you can get your merchant identifier and secret key.

3. Checksum calculation before sending Request

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 **HMAC SHA-**

256 algorithm 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:

- Create a list of all parameters which you're passing to the API. Parameters used in checksum calculation are (in particular order):
 - merchantIdentifier
 - orderId
 - mode
 - currency
 - amount
 - merchantIpAddress
 - txnDate
- Create a concatenated string of all data values in your list, with single quotes around each item.
- Calculate the checksum using the HMAC SHA-256 algorithm using the concatenated string as data 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" only with the parameters mentioned below and the order of the parameters must remain intact when calculating "checksum".**

 - **merchantIdentifier** - b19e8f103bce406cbd
 - **orderId** - 223453
 - **mode** - 1
 - **currency** - INR
 - **amount** - 20000
 - **merchantIpAddress** - 10.45.46.127
 - **txnDate** - 2013-05-23

Now, we have to create a concatenated strip 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:
'b19e8f103bce406cbd'223453'1'INR'20000'10.45.46.127'2013-05-23'

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

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.

4. Standing Instruction API

4.1 Request Parameters:

The purpose of this API is to enable websites to do online payment transactions using Zaakpay.

Mobile Integration: For Zaakpay integration on mobile, parameter showMobile must be set to true. Everything else is same for desktop and mobile integration.

Parameter	Optional O, Mandatory	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
buyerEmail	M	valid email address of the buyer	pankaj@gmail.com
buyerFirstName	M	max 30 alphanumeric characters,no special characters or dashes. First Name on card.	Pankaj Kumar
buyerLastName	M	max 30 alphanumeric characters,no special characters or dashes. first name and last name cannot be same. Last Name on card.	Sharma
buyerAddress	M	100 alphanumeric Street address of the buyer. (Part of billing address)	#123, Hello Apartments, Rainbow Street, Defence Colony
buyerCity	M	30 alphabet, minimum 3 (Part of billing address)	Surat
buyerState	M	State of the buyer (Part of billing address)	Gujarat
buyerCountry	M	Country of the buyer	India

buyerPincode	M	Buyer's pin/zip code. 2 to 12 digits Can have Numbers,Spaces and Hyphens (-) only (Part of billing address)	110011
buyerPhoneNumber	M	buyer's landline or mobile phone number numeric only, no dashes, no spaces	eg. 01145771775 9971712962
txnType	M	1 digit only, numeric Zaakpay will show the tab on the payment page which corresponds to the txnType you provide	debit/credit cards=1,
zpPayOption	M	Which Zaakpay option have you used for this transaction. 1 digit only, numeric Default value is 1.	0=on_zaakpay 1=button_redirect 2=widget_redirect 3=api
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 100000000; 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
merchantIpAddress	M	buyer's IP address as recorded by your website. numeric and dots only	127.1.0.1
txnDate	M	Transaction date in yyyy-MM-dd format	1984-11-13
purpose	M	min and max numeric 1 digit You must specify the purpose of the transaction	0=Service, 1=Goods, 2=Auction, 3=Others

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
product1Description	0	free text alphanumeric 100 max	
product2Description	0	free text alphanumeric 100 max	
product3Description	0	free text alphanumeric 100 max	
product4Description	0	free text alphanumeric 100 max	
shipToAddress	0	You may specify this only when buyer's address is different from shipping address. 30 alphanumeric	Flat 1A, Sector7, Defence Colony

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shipToCity	0	shipping address city. 30 alphabet, minimum 3	Surat
shipToState	0	shipping address state	Gujarat
shipToCountry	0	shipping address country	India
shipToPincode	0	Shipping address pin/zip code. 2 to 12 digits Can have Numbers,Spaces and Hyphens (-) only	110011
shipToPhoneNumber	0	shipping address landline or mobile phone number numeric only, no dashes, no spaces	eg. 01145771775 9971712962
shipToFirstname	0	max 30 alphanumeric characters,no special characters or dashes	P K
shipToLastname	0	max 30 alphanumeric characters,no special characters or dashes	Kumaraswamy

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).	
debitorcredit	M	Possible Values: debit, credit,	
encrypted_pan	O	Encrypted Card Number	
card	O	Card type: VISA,MasterCard	
nameoncard	M	Card Holder Name	
encryptedcvv	M	Encrypted CVV of card	
encrypted_expiry_month	O	Encrypted Expiry Month of card	
encrypted_expiry_year	O	Encrypted Expiry year of card	
cardId	O	Card id of saved card fetched from Zaakpay	
saveCard	O	true if card should be saved at Zaakpay	true/false
merchantCardRefId	O	Unique ref id assigned to a card by merchant Max length: 50	

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The parameters must be POSTed to the Zaakpay Standing Instruction API using HTTPS server to server call. Please refer to sample code provided in **ZaakpySI.java** file for sending request to Zaakpay.

4.2 Response Parameters:

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
amount	M	Txn amount in paisa, Integer	
paymentMethod	M	Payment Method ID for Card and Net Banking transactions. ID mapping will be provided in an excel. For Card txns, paymentMethod ID starts with C and with N for Net Banking. It is alphanumeric value with max length 6. First letter is C or N, followed by 5 digits max	Sample Value:N1001,C4300
cardhashid	M	Unique id for each card no used in transaction. For net banking txns, value will be "NA".	Sample value: CH101.
checksum	M	Checksum calculated by Zaakpay on all above response parameters	

paymentMethod: This parameters helps in determining the mode of payment. **This parameter returns a unique id which is mapped to different cards/banks.** For example, if the value of this parameter is N1001, payment was made using HDCF Net Banking. If the value is C4300, payment was made using Axis VISA Debit Card.

cardhashid: This is a one to one mapping with a card number. **It is a unique value generated per card and will remain same for all transactions made using same card.** This can help a merchant to extract information like how many transactions and of how much worth were made using a card. Merchants can also set up some fraud checks and limits per card using this parameter.

checksum: Similar to request checksum, response checksum must be calculated on all response parameters by merchant and matched with the checksum sent by Zaakpay in response.

5. Zaakpay API Responses

8.1 Transaction API Responses

Response	Response Description
100	The transaction was completed successfully.
101	Merchant not found. Please check your merchantIdentifier field.
102	Customer cancelled transaction.
103	Fraud Detected.
104	Customer Not Found.
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.
135	BuyerFirstName field missing or blank.
136	BuyerFirstName received with request was not Valid.
137	BuyerLastName field missing or blank.
138	BuyerLastName received with request was not Valid.
139	BuyerAddress field missing or blank.
140	BuyerAddress received with request was not Valid.
141	BuyerCity field missing or blank.
142	BuyerCity received with request was not Valid.
143	BuyerState field missing or blank.

144	BuyerState received with request was not Valid.
145	BuyerCountry field missing or blank.
146	BuyerCountry received with request was not Valid.
147	BuyerPincode field missing or blank.
148	BuyerPinCode received with request was not Valid.
149	BuyerPhoneNumber field missing or blank.
150	BuyerPhoneNumber received with request was not Valid.
151	TxnType field missing or blank.
152	TxnType received with request was not Valid.
153	ZpPayOption field missing or blank.
154	ZpPayOption 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.
161	BuyerIpAddressfield missing or blank.
162	BuyerIpAddress received with request was not Valid.
163	Purposefield missing or blank.
164	Purpose received with request was not Valid.
165	ProductDescription field missing or blank.
166	ProductDescription received with request was not Valid.
167	Product1Description received with request was not Valid.
168	Product2Description received with request was not Valid.
169	Product3Description received with request was not Valid.
170	Product4Description 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.
176	ShipToPhoneNumber received with request was not Valid.
177	ShipToFirstname received with request was not Valid.
178	ShipToLastname received with request was not Valid.
179	Date is blank.
179	Date received with request was not valid.
180	checksum received with request is not equal to what we

181	Merchant Data Complete.
182	Merchant Data Not Complete in Our Database.
183	Unfortunately, the transaction has failed.

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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
501	debitorcredit is blank
502	bankid is blank
503	encrypted_pan is blank
504	card is blank
505	nameoncard is blank
506	encryptedcvv is blank
507	encrypted_expiry_month is blank
508	encrypted_expiry_year is blank