# Payment Gateway Integration Guide Merchant Hosted

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#### **Version Control Table**

| Date Updated | Version | Description of Changes                     | Author | Approved By |
|--------------|---------|--|--------|-------------|
| 10 Jan 2020  | 1.0     | Initial version                            | Smith  | Smith       |
| 19 Feb 2021  | 1.1     | Updated Net-banking and wallet<br>Payments | Smith  | Smith       |
| 6 April 2021 | 1.2     | Add UPI payment Type                       | Smith  | Smith       |

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# 1 ABOUT THIS GUIDE

# **Objectives and target audience**

This guide is designed to provide detailed information on how to integrate and use Payment Gateway where the merchant can accept card details at their own application. The guide covers the steps in the payment process and the information that needs to be passed from Merchant web servers to process payments via Payment Gateway.

Additional gateway integration options are also described.

# **Related documentation**

You should use this guide together with the additional Payment Gateway documents described below.

| Guide                 | Description                                   |
|-----------------------|---|
| API specification Doc | Details of all Status enquiry and refund APIs |
|                       |   |

# 2 INTRODUCTION

The Payment Gateway is a secured payment aggregator, where you redirect customers from your Website/Ecommerce/M-commerce platform to make a payment using Credit Card/Debit Card/UPI/Internet Banking other payment options. The gateway collects customer payment details in a secured manner using standard HTML forms and processes the payment transaction.

After the payment is complete, the customer is returned to merchant website and merchant application receives a real-time notification of the payment, which include details of the transaction.

### **PRE-REQUISITE**

It is expected that the users may go through the entire guide to understand the Integration Requirements though it is easy for people with technical understanding.

It is assumed that the Merchant website/application is **PCI-DSS** certified (Regulatory requirements form Banks and Card associations) as it is mandatory for capturing Customer's Credit/Debit card information on Merchant websites.

All Card/Net banking information is transferred seamlessly to Payment Gateway Page in a secured manner and transaction response is returned back to the Merchant real time, post processing of the transaction.

### Connecting to the Payment Gateway

Connecting to the Payment Gateway Payment Gateway requires adding Payment Gateway as a payment method on your website's checkout or payment page. When your customer selects the payment option, you should ensure that they are redirected to the Payment Gateway.

You can use a standard HTML form to collect and pass payment and customer details to Payment Gateway. An example of an HTML form is shown in *section Code Integration Example* 

A simplified illustration of the transaction flow is shown in *Figure 1* below.

#### Figure 1. Transaction flow from merchant to PG

- 1. When the customer is ready to pay for goods or services on your website, they enter the card details on your payment page.
- 2. The customer is redirected Payment Gateway PG for and the card details are validated.
- 3. Customer is redirect to the bank systems for additional bank authentication.
- 4. Payment Gateway receives the response of the transaction from bank.
- 5. User is redirected back to merchant website
- 6. Customer gets to know the status of the transaction

#### **Optional steps:**

- 7. Merchant gets SMS/email notification about the transaction status.
- 8. Customer gets SMS/email notification about the transaction status.

### Redirecting customers to the Payment Gateway (step 1)

When a customer is on the online checkout/payment page on your website, they first have to enter the card details or select other payment mode.

#### How to redirect the customer

- The HTML form should contain the required input fields listed in *Table-2* below.
- You should use a secure method of obtaining a session ID before redirecting customers to Payment Gateway.
- The payment request should be encrypted before posting to Payment Gateway servers.

#### Tips for improving the customer experience

- To maximize conversion, Payment Gateway recommends that you redirect customers to the Payment Gateway in the same browser.

# 3 Integration with Payment Gateway

# **Request Format**

Please review the table below for details of the required and optional parameters that need to be included in your form. An example of a simple HTML form is provided.

#### **Request URLs**

#### Integration: https://uat.AMIPay.co/pgui/jsp/hostedpaymentrequest Production: https://www.AMIPay.co/pgui/jsp/hostedpaymentrequest

|  | Table 2: | Payment | Gateway | parameters |
|--|----------|---------|---------|------------|
|--|----------|---------|---------|------------|

| Field name       | Description   | Requi<br>red | Type^ | Min | Max  | Example                                     |  |  |
|------------------|---|--------------|-------|-----|------|---|--|--|
| Merchant Details | Merchant Details  |              |       |     |      |   |  |  |
| PAY_ID           | Pay ID is a unique<br>merchant identifier<br>provided by Payment<br>Gateway         | YES          | NU    | 16  | 16   | 160234578452178                             |  |  |
| ORDER_ID         | Merchant reference<br>number  | YES          | AN    | 1   | 50   | ORDER1234                                   |  |  |
| RETURN_URL       | Url of merchant website<br>to get the response after<br>transaction is<br>processed | YES          | СН    | 5   | 1024 | http://www.merc<br>hant.com/pgResp<br>oonse |  |  |
| HASH             | Unique value<br>generated by SHA 256<br>hashing algorithm                           | YES          | AN    | 64  | 64   | 7995156CE4C40C<br>44C41BECA3B9CE<br>09B9    |  |  |
| Customer Details |   |              |       |     |      |   |  |  |
| CUST_NAME        | Customer name   | NO           | СН    | 1   | 150  | John Pal                                    |  |  |

| CUST_FIRST_NA<br>ME           | Customer first name               | NO  | СН | 2 | 150 | John          |
|-------------------------------|-----------------------------------|-----|----|---|-----|---------------|
| CUST_LAST_NA<br>ME            | Customer last name                | NO  | СН | 2 | 150 | Pal           |
| CUST_STREET_A<br>DDRESS1      | Customer address                  | NO  | СН | 2 | 250 | House no-101  |
| CUST_CITY                     | Customer city                     | NO  | СН | 2 | 50  | Ghaziabad     |
| CUST_STATE                    | Customer state                    | NO  | СН | 2 | 100 | Haryana       |
| CUST_COUNTRY                  | Customer country                  | NO  | СН | 2 | 100 | India         |
| CUST_ZIP                      | Customer zip                      | NO  | AN | 6 | 9   | TWQ 123       |
| CUST_PHONE*                   | Customer phone                    | YES | NU | 8 | 15  | 074xxxxx65    |
| CUST_ID                       | Unique ID assigned to<br>customer | NO  | СН | 5 | 250 | CUST109328    |
| CUST_EMAIL*                   | Customer email                    | YES | СН | 6 | 120 | john@test.com |
| CUST_SHIP_LAS<br>T_NAME       | Customer Shipping last<br>name    | NO  | СН | 2 | 150 | Pal           |
| CUST_SHIP_FIRS<br>T_NAME      | Customer shipping first name      | NO  | СН | 2 | 150 | John          |
| CUST_SHIP_NA<br>ME            | Customer shipping name            | NO  | СН | 2 | 150 | John Pal      |
| CUST_SHIP_STR<br>EET_ADDRESS1 | Customer shipping<br>address      | NO  | СН | 2 | 250 | House no-101  |
| CUST_SHIP_STR<br>EET_ADDRESS2 | Customer shipping<br>address      | NO  | СН | 2 | 250 | Block A       |
| CUST_SHIP_CIT<br>Y            | Customer shipping city            | NO  | СН | 2 | 50  | Gurgaon       |
| CUST_SHIP_STA<br>TE           | Customer shipping state           | NO  | СН | 2 | 100 | Haryana       |
| CUST_SHIP_CO                  | Customer shipping                 | NO  | СН | 2 | 100 | India         |

| UNTRY                | country                                |            |    |    |      |                                |
|----------------------|--|------------|----|----|------|--------------------------------|
| CUST_SHIP_ZIP        | Customer shipping zip                  | NO         | AN | 6  | 9    | 1xxxx1                         |
| CUST_SHIP_PH<br>ONE  | Customer shipping phone                | NO         | NU | 8  | 15   | 074xxxxx65                     |
|                      |  |            |    |    |      |                                |
| Payment Details      |  |            |    |    |      |                                |
| AMOUNT**             | Total Sale Amount                      | YES        | NU | 3  | 12   | 100                            |
|                      |  |            |    |    |      |                                |
| CURRENCY_COD<br>E    | 3-digit code of the<br>currency        | YES        | NU | 3  | 3    | 826 (ISO 4217<br>numeric code) |
| CARD_NUMBER          | Card number of customer                | YES^       | NU | 15 | 19   | 40120010371411<br>12           |
| CARD_EXP_DT          | Expiry month and year of card          | YES^       | NU | 6  | 6    | 122023 (With<br>format MMYYYY) |
| CVV                  | Security code on card                  | YES^       | NU | 3  | 4    | 354                            |
| CARD_HOLDER_<br>NAME | Name of card holder as written on card | YES^       | A  | 1  | 100  | KV Rao                         |
| PAYMENT_TYPE         | Type of payment method                 | YES        | А  | 2  | 10   | CARD,NB,WL                     |
| MOP_TYPE             | Net banking or wallet code             | YES^       | AN | 2  | 10   | 1024                           |
| PAYER_ADDRES<br>S    | VPA of end user                        | YES**<br>* | СН | 5  | 255  | johnsnow@ybl                   |
| Item Level Details   |  |            |    |    |      |                                |
| PRODUCT_DESC         | Description of product                 | NO         | СН | 1  | 1024 | хуг                            |

Abbreviation NU - Numeric, CH – Character, AN – Alphanumeric, A: Alphabetic

\*\*Refer Amount format for Amount

\*\*\* Only mandatory in case of UPI payments

\*Email and phone number is mandatory for all requests

^: All card fields are mandatory together in case of card-based transactions and MOP\_TYPE required only in case of net banking or wallet transactions.

### Amount format

The amount of the transaction expressed in the smallest currency unit. The amount must not contain any decimal points, thousands of separators or currency symbols. This value cannot be negative or zero.

For example, INR 12.50 is expressed as 1250. INR 1 is expressed as 100.

**Note**: Transactions in currency IDR (Indonesian Rupiah) will use an exponent of 0 (zero). This means an amount expressed as 1250 will be treated as IDR Rp1, 250 and not IDR Rp12.50 (with exponent 2) unlike other currencies. Payment Gateway Response Format

When the payment process is complete Payment Gateway sends the details of the transaction to the Response url. This is done with a standard HTTP POST request. The Payment Gateway server continues to post the status until a response of HTTP OK (200) is received from your server or the number of posts exceeds 10.

### **Response parameters**

After completion of the transaction the customer is redirected back to the merchant at the return URL provided. In case the merchant does not receive the transaction repose a status enquiry request can be initiated.

#### Table 3 shows the parameters sent to merchant response url:

| Table 3: I | Response | parameters |
|------------|----------|------------|
|------------|----------|------------|

| Field name | Description   | Example value |  |
|------------|---------------|---------------|--|
| CUST_NAME  | Customer name | John Pal      |  |

| ТХМТҮРЕ            | Type of transaction processed   | SALE/AUTH                            |
|--------------------|---|--------------------------------------|
| AMOUNT             | Total Sale Amount   | 100                                  |
| CURRENCY_CODE *    | CURRENCY_CODE * 3-digit code of the currency  |                                      |
| ORDER_ID           | Merchant reference number   | ESN78452                             |
| PAY_ID             | Pay ID is given by Payment Gateway  | 160234578452178                      |
| TXN_ID             | Transaction Id generated by<br>Payment Gateway to identify the<br>current step  | 150611417421130                      |
| PAYMENT_TYPE       | Type of payment mode used by customer   | CC/DC/NB/WL                          |
| MOP_TYPE           | Method of payment   | VI/MC/PPWL/1005                      |
| CARD_MASK          | Masked card number for card txns  | 401200*****1234                      |
| PG_REF_NUM         | Id generated by Payment Gateway.<br>Use for further communication with<br>Payment Gateway, for tracking the<br>full order | 150611417421129                      |
| RESPONSE_CODE *    | Code for transaction status   | 000                                  |
| RESPONSE_MESSAGE * | Response message for transaction status   | SUCCESS                              |
| HASH*              | Unique value generated by SHA<br>256 hashing algorithm  | 7995156CE4C40C44C41BECA3<br>B9CE09B9 |
| ECI                | Bank issued ECI flag  | 5                                    |
| AUTH_CODE          | Authorization code  | 123456                               |
| RRN                | Bank reference number   | 789456132                            |
| AVR                | Address verification flag   | Y/N                                  |
| ACQ_ID             | Bank reference number   | KJDNI4UT873                          |
| STATUS             | Transaction status  | Approved/Captured/Declined           |

| CUST_EMAIL          | Echo back field  | john@gmail.com                           |
|---------------------|--|--|
| CUST_ID             | Echo back field  |  |
| CUST_PHONE          | Echo back field  |  |
| PG_TXN_MESSAGE      | Detailed message for transaction                               |  |
| RETURN_URL          | Merchant return URL in request                                 | www.merchantsite.com/paym<br>entresponse |
| RESPONSE_DATE       | Date of response   | 12102019                                 |
| RESPONSE_TIME       | Time of response   | 10:35:10                                 |
| PRODUCT_DESC        | Description of product   | хуz                                      |
| CARD_ISSUER_BANK    | Card issuing bank  | SBI                                      |
| CARD_ISSUER_COUNTRY | Issuing country of the customer card                           | India                                    |
| TOTAL_AMOUNT        | Total amount debited to customer<br>in case of surcharge model | 10134                                    |
| IS_MERCHANT_HOSTED  | Hosted transaction flag  | Y  |

- \* Refer Table 2 for Currency Code
- \* Refer Table 4 & Table 5 for Response Code
- \* Refer Table 4 & Table 5 for Response Message
- \* Refer Generate secure hash

### Validating the response

The merchant application must validate the transaction response in the status response. This can be done as follows:

- 1. First the request is decrypted, and parameter map is prepared
- 2. Match the response hash that is present in the response against the merchant application calculated hash value using the response params. In case the merchant hash does not match that transaction must not be considered a successful transaction. For successful transaction RESPONSE\_CODE is 000 and STATUS is "Captured" or "Approved".
- 3. Call the status API and verify the same result as received in real time response.

The merchant technical team can implement the ignore case snippet in their system to avoid disconnect.

Once you have validated the transaction data you can process the transaction, for example, by dispatching the goods ordered.

**Please Note:** The above implementations are a mandate for all the merchants and in case of any discrepancy at the merchant's end the merchant will be liable for any losses. To confirm the same Payment Gateway team shall review the merchant system before go-live.

# 4 Generating a secure hash

### SHA-256 signature

The merchant code creates the Secure Hash value on the Transaction Request data. The Payment Server creates another Secure Hash value and sends it back to the merchant in the Transaction Response.

The Secure Hash is a hexadecimal encoded SHA-256 HMAC of a concatenation of VPC and User Defined parameters. The concatenation of parameters takes the form of a set of name-value pairs, like the parameter string for an HTTP GET call.

### Method of generating hash

To generate a hash you need to make a request string of all the required parameters

For example, if you want to pass the following name value pairs in your request

{CVV=123, CUST\_PHONE=9811679358, CARD\_EXP\_DT=122020, CURRENCY\_CODE=356, CARD\_NUMBER=4012001037141112, CARD\_HOLDER\_NAME=SMITH, PAYMENT\_TYPE=CARD, RETURN\_URL=https://merchant.com/response/paymentResponse, PAY\_ID=1008791016132600, ORDER\_ID=CASH1588932933238, AMOUNT=1000, CUST\_EMAIL=Smith@Payment Gateway.com}

Then you need to sort all the parameters in ascending order and add "Tiled" (~) symbol as separator to prepare the request String.

#### The Output will be as follows

{AMOUNT=1000~CARD\_EXP\_DT=122020~CARD\_HOLDER\_NAME=SMITH~CARD\_NUMBER=4012001037 141112~CURRENCY\_CODE=356~CUST\_EMAIL=Smith@Payment Gateway.com~CUST\_PHONE=9811679358~CVV=123~ORDER\_ID=CASH1588932933238~PAYMENT\_TYPE =CARD~PAY\_ID=1008791016132600~RETURN\_URL= https://merchant.com/response/paymentResponse }

Next step is to append the Secret Key at the end of the parameter string given by Payment Gateway to you. After adding you will get the following output

{AMOUNT=1000~CARD\_EXP\_DT=122020~CARD\_HOLDER\_NAME=SMITH~CARD\_NUMBER=4012001037 141112~CURRENCY\_CODE=356~CUST\_EMAIL=Smith@Payment Gateway.com~CUST\_PHONE=9811679358~CVV=123~ORDER\_ID=CASH1588932933238~PAYMENT\_TYPE =CARD~PAY\_ID=1008791016132600~RETURN\_URL= https://merchant.com/response/paymentResponse5572307a4cf1427e}

After completing the above-mentioned process, you will have to call SHA 256 algorithm and pass the parameter string to the same and the SHA will return you the desired result as below (Contact merchant support team to get SHA256 library for your platform)

Hash value= {6797f1842deb4f3ebaead53e1bafd5a535d322b9fa3893f201fdb03933eeae09}

Now you must convert the generated value to the Upper Case, and you will get the final result as hash value

```
Hash value = 6797F1842DEB4F3EBAEAD53E1BAFD5A535D322B9FA3893F201FDB03933EEAE09
```

The purpose of the **SHA2signature** field is to ensure the integrity of the data posted back to your server. You should always compare the **SHA2signature** field's value posted by Payment Gateway 's servers with the one you calculated.

To calculate the **SHA2sig**, you need to take the values of the fields listed above exactly as they were posted back to you, concatenate them and perform a **SHA2** calculation on this string.

### Secret key

The secret key is very essential element in generating hash. You have to append the secret key with all the other required parameters to generate hash through SHA2 algorithm. You can find your secret key in your merchant panel in following steps:

- 1. Login to your merchant account
- 2. Click on My Account Tab
- 3. Click on My Profile
- 4. You can find secret key value under Integration Tab

| My Personal Details | My Contact Details | My Bank Details | My Business Details           | Integration | Logo Upload |
|---------------------|--------------------|-----------------|-------------------------------|-------------|-------------|
|                     |                    |                 |                               |             |             |
|                     | Pay Id:            | 1611            | 1281700401000                 |             |             |
|                     | Salt:              | 37ce            | eabc80c384b03                 |             |             |
|                     | Request url:       | http:           | //localhost:8080/crm/jsp/payn | nentrequest |             |

# 5 Encrypting the request

# Encryption Key

The encryption key will be sent over email to the registered email id when the merchant is proceeding to live mode.

### **Encryption mechanism**

After the plain text request is prepared the hash is also appended to the request string

{

AMOUNT=1000~CARD\_EXP\_DT=122020~CARD\_HOLDER\_NAME=SMITH~CARD\_NUMBER=40120010371 41112~CURRENCY\_CODE=356~CUST\_EMAIL=Smith@Payment Gateway.com~CUST\_PHONE=9811679358~CVV=123~ORDER\_ID=CASH1588932933238~PAYMENT\_TYPE =CARD~PAY\_ID=1008791016132600~RETURN\_URL= https://merchant.com/response/paymentResponse~HASH=6797F1842DEB4F3EBAEAD53E1BAFD5A535

D322B9FA3893F201FDB03933EEAE09

}

After the hash is appended the request string is encrypted using AES algorithm with "/CBC/PKCS5PADDING" and then posted over to the Payment Gateway PG with parameter name ENCDATA

ENCDATA="PAECEyI8JEO8kXxG8CSDGnNKn0mBem9KKOpaycxrQ5keKH/Bxob5qtNTqquAyrC2fVwTuUY yryMeC6alcicYU62CDyyLIrzlvjc7BRwurRTyv066p1IEv4+PAUV4WQOMxTAXdJ4hY9kDpU9TjvvTqYpld0FN CrgCudWzWwXiMfOOSt5cjXhBwwoDM7j1gR9cgDqwd8I+WrDaf1u6dOSkKgIwgYaTGxYgNEmL9Kmprc1f j8ePd6TOHBW2nYUMpjGFuhvjSQjF1mQw7sF4YiNgL8OCQ9Um+OniFsoWbuw6eyPr2ZMhFORyeTBdyS+ 865BD662SBIFRDKSrvZLuQo7neY6dg9J1FM7O9h45xcHwguZf+oUVaw79nr2ZNMmVE3gao5cuMmj19KV Dm3Xd5031HKVSXtInRJh18x9BNh6G+litkvCFx7HpU22YSEL9NsQNKMktocWHDw7HLYthJ7EDTXKq/0jA9 1Rpw/oVw5pECcj9mM1kKVolKncp5VYyJKEO"

Note: Please do not append the salt key with the request String before encryption.

# 6 Sending request and Getting Response

### 6.1 Request

After the hashing and encryption is done the encrypted request is posted to Payment Gateway PG securely and user is redirected to bank for authentication by Payment Gateway

```
<form action= "https://uat.AMIPay.co/pgui/jsp/hostedpaymentrequest" method=post>
<input type="hidden" name="PAY_ID" value="1008791016132600"/>
<input type="hidden" name="ENCDATA"
value="PAECEy18JE08kXxG8CSDGnNKn0mBem9KKOpaycxrQ5keKH/Bxob5qtNTqquAyrC2fVw</pre>
```

TuUYyryMeC6aIcicYU62CDyyLIrzlvjc7BrwurRTyv066p1Iev4+PAUV4WQOMxTAXdJ4hY9kDp U9TjvvTqYpld0FNCrgCudWzWwXiMf0OSt5cjXhBwwoDM7j1gR9cgDqwd8I+WrDaf1u6dOSkKgI wgYaTGxYgNEmL9Kmprc1fj8ePd6TOHBW2nYUMpjGFuhvjSQjF1mQw7sF4YiNgL8OCQ9Um+OniF soWbuw6eyPr2ZMhFORyeTBdyS+865BD662SB1FRDKSrvZLuQo7neY6dg9J1FM7O9h45xcHwguZ f+oUVaw79nr2ZNMmVE3gao5cuMmj19KVDm3Xd5031HKVSXt1nRJh18x9BNh6G+litkvCFx7HpU 22YSEL9NsQNKMktocWHDw7HLYthJ7EDTXKq/0jA91Rpw/oVw5pECcj9mM1kKVolKncp5VYyJKE O"/> <input type="submit" value="Click to Pay"/> </form>

### 6.2 Response

The response is redirected to the merchant in the same format with ENCDATA and PAY\_ID as the parameters. ENCDATA is decrypted using the same encryption key and Hash is validated.

For example: Encrypted Data Received

ENCDATA: "N2N0ktvZ07xVU1YgMdIRpiGChgc3u9sZhCra9twHXiLZveG2y9pAub/ijAnELRc4mJjFqcJtmCWa V3wDTTwAqEVE54mSUHoMGySSd/CaDudHu4ciBlhIRigGyr7Vqev692bN412msQMatZBmfE2F28onz9h2L2 gsnF1+rNBcsct+sxK9lhoOmq/TltadYUrYRnu3sxkzzjy/ByeHDivy7lbzL26p3q8oW6YVRhtmmDUsfLcLYyr5t9K LGSMb34958r8jinqQqIpxQqqw5wc6iCNJ0geIOgFFp6miYzCTC9WyafAxSyEZA3VREaWYi83/1ZfF+NoIG5JZg 3d9Fpu9DwsXINvAWp296Avp65Ero+Rn0XhDZG8Uey6NXIgo+fWqLegxaxjKs7dkM1eEnppNeep1KupPlxYX 9EaKQoqwPMq0kcZMW/2c06/goFx6rmDGguLoxDvs7QljouYhPK+7+EdLts9GbzAYzzI8p1kTP0L8RhDjC+be 3jjHG10EF1j0jUmbpE67dGdGFG68W2c71iaFAjVyy8pOs6bgoiKi9dg1i6PmukaYZE0fahSWhiqjHPx4uh6XM R7d1+Mkkc84QW6fT1RSFrzpAixoV4Nj9XOPBarr26jLIgnswE21/amufH3bd/4+TxS1ykI0XqpqVJEO+L7aR2gc Wc1GekrbhtiH06x56b7rueunIg2iJ0R6NIVoRVoauLZaOpsJTL9tpuHkUlAuucIHeHwmh4FzOAfUghohnDpkgF xfKg7LeyyG2q+gcOKKOAfjQMctbjExmb6idxCW9Nqdv65NnPf+9cQYYZTvk5Fbyg5DvZtoalxlQaglkq4mcMy zfQdSJrIBN958vTE419ZZ3kxJPhUELAwb4dl89u8mGPmGgXgrtyvL"

#### **Decrypted Data**

#### RESPONSE\_DATE\_TIME=2020-05-08

17:20:38~RESPONSE\_CODE=000~AUTH\_CODE=000000~IS\_MERCHANT\_HOSTED=Y~CUST\_PHONE=9811679359~M OP\_TYPE=VI~CARD\_MASK=401200\*\*\*\*\*\*1112~CURRENCY\_CODE=356~RRN=012910001740~PG\_TXN\_MESSAGE= CAPTURED~STATUS=Captured~PG\_REF\_NUM=1521500508172020~AMOUNT=1000~RESPONSE\_MESSAGE=SUCCES S~CUST\_EMAIL=Smith@Payment

Gateway.com~CARD\_ISSUER\_COUNTRY=IN~TXN\_ID=1531500508172037~CARD\_ISSUER\_BANK=HDFC~ACQ\_ID=20 2012980689610~TXNTYPE=SALE~SURCHARGE\_FLAG=N~HASH=5A28AF06235A29899C208B65012735DB658070F3 A9EBC6161ABB8CBAE0EB91D7~PAYMENT\_TYPE=CC~RETURN\_URL=https://merchant/response/paymentResponse ~PAY\_ID=1008791016132600~ORDER\_ID=CASH1588938618275~AVR=Y~TOTAL\_AMOUNT=1000 The hash value is extracted, and Hash is calculated in the same way as request HASH but using the response params.

After a successful HASH validation, the merchant system has to call the Status check API (Please refer the API documentation for the same).

# 7 GATEWAY OPTIONS AND RESPONSE

# Response Code for Valid Transaction

| Response Code | Response message   |
|---------------|--|
| 000           | Success  |
| 001           | Acquirer Error   |
| 002           | Denied   |
| 003           | Timeout  |
| 004           | Declined   |
| 005           | Authentication not available                                 |
| 006           | Transaction processing                                       |
| 007           | Rejected by acquirer   |
| 008           | Duplicate  |
| 009           | Response signature did not match                             |
| 010           | Cancelled by user  |
| 011           | Authorization success but error processing recurring payment |
| 012           | Denied due to fraud detection                                |
| 013           | Total refund amount greater than sale amount                 |
| 014           | Refund Amount should be less than today's Captured Amount    |

#### Table 4: Response Codes for Valid Transactions

| 015 | Transaction not found   |  |
|-----|---|--|
| 016 | In case of Full Refund, Refund Amount shall be equal to the Sale Amount |  |
| 017 | In case if token is not generated from GPay server                      |  |
| 018 | Duplicate order Id  |  |
| 019 | Duplicate refund order Id   |  |
| 020 | Declined due to insufficient balance                                    |  |
| 021 | Invalid at acquirer   |  |
| 022 | Failed at acquirer  |  |
| 023 | The cardholder is enrolled in Payer Authentication                      |  |
| 024 | Card is not enrolled  |  |
| 025 | Unable to fetch surcharge details                                       |  |
| 026 | Pending   |  |
| 027 | Duplicate submission on same order ID                                   |  |
| 028 | No payment options configured for the merchant                          |  |
| 029 | Transaction rejected by payment gateway                                 |  |
| 030 | Authentication Failed   |  |
| 032 | Pending   |  |
| 033 | No Transaction Available  |  |
| 034 | Sum of Product prices and Total Amount Should be Equal                  |  |

# Response Code for Invalid Transaction

### Table 5: Response Codes for Invalid/Error Transactions

| Response Code | Response Message |
|---------------|------------------|
|               |                  |
|               |                  |

| 300 | Invalid Request       |
|-----|-----------------------|
| 900 | Internal system error |
| 999 | Unknown Error         |

# Payment method codes

The table below details the payment method supported with Payment Gateway

Table 6: Supported Payment Methods

| Payment Method       | Value |
|----------------------|-------|
| Credit/Debit Cards   |       |
| Credit/Prepaid Cards | СС    |
| Debit Card           | DC    |
| Net Banking          | NB    |
| Wallets              | WL    |
| UPI                  | UP    |

| MOP (Method of payment) | Value |
|-------------------------|-------|
| Credit/Debit Cards      |       |
| MasterCard              | MC    |
| Visa                    | VI    |
| Maestro                 | MS    |
| American Express        | АХ    |
| Diners                  | DN    |
| Rupay                   | RU    |
| Wallet                  |       |
| Mobikwik                | MWL   |
| PayTm                   | PPL   |

| Amazon Pay  | APWL   |
|---|--|
| PhonePe   | PPWL   |
| Ola Money   | OLAWL  |
| Airtel Wallet   | AWL  |
| Freecharge  | FCWL   |
| ITZ Cash  | ICWL   |
| Jio Money   | JMWL   |
| M Pesa Wallet   | MPWL   |
| Oxygen Wallet   | OXWL   |
| SBI Buddy   | SBWL   |
| Zip Cash  | ZCWL   |
|   |  |
| UPI   |  |
| UPI   | UP   |
|   |  |
| Net Banking Options   |  |
| Andhra Bank   | 1091   |
| Allahabad Bank  | 1117   |
| Axis Bank   | 1005   |
|   | 1005   |
| Axis Bank Corporate   | 1099   |
| Axis Bank Corporate<br>Bank of Bahrain And Kuwait   |  |
|   | 1099   |
| Bank of Bahrain And Kuwait  | 1099<br>1043   |
| Bank of Bahrain And Kuwait<br>Bank of Baroda Corporate  | 1099         1043         1092                           |
| Bank of Bahrain And Kuwait<br>Bank of Baroda Corporate<br>Bank of Baroda Retail Accounts                  | 1099         1043         1092         1093              |
| Bank of Bahrain And Kuwait<br>Bank of Baroda Corporate<br>Bank of Baroda Retail Accounts<br>Bank of India | 1099         1043         1092         1093         1009 |

| Central Bank of India                | 1063 |
|--------------------------------------|------|
| Citi Bank                            | 1010 |
| City Union Bank                      | 1060 |
| Corporation Bank                     | 1034 |
| COSMOS Bank                          | 1104 |
| DCB Bank                             | 1148 |
| Deutsche Bank                        | 1026 |
| Dhanlaxmi Bank                       | 1127 |
| Development Credit Bank              | 1040 |
| Equitas Bank                         | 1131 |
| Federal Bank                         | 1027 |
| HDFC Bank                            | 1004 |
| HSBC Bank                            | 1102 |
| ICICI Bank                           | 1013 |
| ICICI Bank Corporate                 | 1100 |
| IDFC FIRST Bank Limited              | 1111 |
| Indian Bank                          | 1069 |
| Indian Overseas Bank                 | 1049 |
| Indusind Bank                        | 1054 |
| Industrial Development Bank of India | 1003 |
| IngVysya Bank                        | 1062 |
| Jammu And Kashmir Bank               | 1041 |
| Janata Sahakari Bank Pune            | 1116 |
| Karnatka Bank Ltd                    | 1032 |

| KarurVysya Bank                | 1048 |
|--------------------------------|------|
| Kotak Bank                     | 1012 |
| Lakshmi Vilas Bank NetBanking  | 1095 |
| Oriental Bank of Commerce      | 1042 |
| Punjab and Sindh Bank          | 1108 |
| Punjab National Bank           | 1107 |
| Punjab National Bank Corporate | 1101 |
| Ratnakar Bank (RBL Bank)       | 1053 |
| SaraSwat Bank                  | 1106 |
| South Indian Bank              | 1045 |
| Standard Chartered Bank        | 1097 |
| State Bank of India            | 1030 |
| Syndicate Bank                 | 1098 |
| Tamilnad Mercantile Bank       | 1065 |
| UCO Bank                       | 1103 |
| Union Bank of India            | 1038 |
| United Bank of India           | 1046 |
| Vijaya Bank                    | 1044 |
| Yes Bank                       | 1001 |
|                                |      |

**Note**: The list of payment modes to be activated in live may vary depending upon approval from respective banks.

# Supported Currency and Currency Code

Table 7: Supported Currency with Codes

| Payment Method |              |      |
|----------------|--------------|------|
|                |              |      |
| Name           | Abbreviation | Code |

| Indian Rupee | INR | 356 |
|--------------|-----|-----|
| Pound        | GBP | 826 |
| Dollar       | USD | 840 |
| Euro         | EUR | 978 |

### Sample Request's

### Card:

"ENCDATA":"PAY\_ID=1000201119142553~ORDER\_ID=LP1584004319534~CARD\_NUMBER=4012 001037141112~CARD\_EXP\_DT=122020~CVV=123~CARD\_HOLDER\_NAME=Rahul~TXNTYPE=SALE ~PAYMENT\_TYPE=CARD~RETURN\_URL=https://uat.Payment

Gateway.com/pgui/jsp/response.jsp~CURRENCY\_CODE=356~AMOUNT=100~CUST\_EMAIL=smith @Payment

Gateway.com~HASH=47367C6D8A6F9D958B0B511B39531BDD583A53AEC75D8F555B3F1D3033 E0B33C~CUST\_PHONE=8377991897~CUST\_NAME=Rahul"

### UPI:

"ENCDATA":"PAY\_ID=1007810114153437~ORDER\_ID=ORDDER0001~PAYER\_ADDRESS=99999999 99@ybl~PAYER\_NAME=Rahul~TXNTYPE=SALE~PAYMENT\_TYPE=UP~RETURN\_URL=https://uat.Pa yment

Gateway.com/pgui/jsp/response.jsp~CURRENCY\_CODE=356~AMOUNT=100~CUST\_EMAIL=smith @Payment

Gateway.com~HASH=F6729A601AC58993F924927489621B74A81F4E58C8C055022A084C568498 2FEB~CUST PHONE=99999999999

### Net-Banking:

"ENCDATA":"PAY\_ID=5743010201122514~ORDER\_ID=LP1584004319544~TXNTYPE=SALE~PAYM ENT\_TYPE=NB~RETURN\_URL=https://uat.Payment

Gateway.com/pgui/jsp/response.jsp~CURRENCY\_CODE=356~AMOUNT=1000~CUST\_EMAIL=smit h@Payment

Gateway.com~HASH=B954BF56FC716936F891CA034A476031CF03C0A5C32877D2642AABEDE13 AF613~CUST\_PHONE=8377991897~CUST\_NAME=Rahul~MOP\_TYPE=1094"

### Wallets:

"ENCDATA":"PAY\_ID=5743010201122514~ORDER\_ID=LP1584004319534~TXNTYPE=SALE~PAYM ENT\_TYPE=WL~RETURN\_URL=https://uat.Payment

Gateway.com/pgui/jsp/response.jsp~CURRENCY\_CODE=356~AMOUNT=1000~CUST\_EMAIL=smit h@Payment

Gateway.com~HASH=291F2BE843AF2A833677B107D433DFE653AE66489BF2B3BC220326DE0DE 24305~CUST\_PHONE=8377991897~CUST\_NAME=Rahul~MOP\_TYPE=APWL"

# 8 APPENDICES

# ISO 4217 currencies

Table 7: ISO 4217 Currencies accepted by Payment Gateway

| EUR | Euro               | TWD        | Taiwan Dollar      |
|-----|--------------------|------------|--------------------|
| USD | U.S. Dollar        | ТНВ        | Thailand Baht      |
| GBP | British Pound      | СZК        | Czech Koruna       |
| HKD | Hong Kong Dollar   | HUF        | Hungarian Forint   |
| SGD | Singapore Dollar   | <b>SKK</b> | Slovakian Koruna   |
| JPY | Japanese Yen       | EEK        | Estonian Kroon     |
| CAD | Canadian Dollar    | BGN        | Bulgarian Leva     |
| AUD | Australian Dollar  | PLN        | Polish Zloty       |
| CHF | Swiss Franc        | ISK        | Iceland Krona      |
| DKK | Danish Krone       | INR        | Indian Rupee       |
| SEK | Swedish Krona      | KRW        | South-Korean Won   |
| NOK | Norwegian Krone    | ZAR        | South-African Rand |
| ILS | Israeli Shekel     | RON        | Romanian Leu New   |
| MYR | Malaysian Ringgit  | HRK        | Croatian Kuna      |
| NZD | New Zealand Dollar | LTL        | Lithuanian Litas   |
| TRY | New Turkish Lira   | JOD        | Jordanian Dinar    |

| AED | Utd. Arab Emir. Dirham | OMR | Omani Rial     |
|-----|------------------------|-----|----------------|
| MAD | Moroccan Dirham        | RSD | Serbian dinar  |
| QAR | Qatari Rial            | TND | Tunisian Dinar |
| SAR | Saudi Riyal            |     |                |
|     |                        |     |                |
|     |                        |     |                |

# ISO country codes (3-digit)

Payment Gateway does not accept customers from the following countries: Afghanistan, Cuba, Myanmar, Nigeria, North Korea, Sudan, Syria, Somalia, and Yemen.

The detailed List of all other Countries from where the Payment is accepted, are shared below.

| Aland Islands       | ALA | Christmas Island                  | CXR | Guernsey                             | GGY |
|---------------------|-----|-----------------------------------|-----|--------------------------------------|-----|
| Albania             | ALB | Cocos (Keeling)<br>Islands        | ССК | Guinea                               | HTI |
| Algeria             | DZA | Congo, the<br>Democratic Republic | COD | Guinea-Bissau                        | HMD |
| American Samoa      | ASM | Cook Islands                      | СОК | Guyana                               | VAT |
| Andorra             | AND | Costa Rica                        | CRI | Haiti                                | GIN |
| Angola              | AGO | Colombia                          | COL | Heard Island and<br>McDonald Islands | GNB |
| Anguilla            | AIA | Comoros                           | СОМ | Holy See (Vatican City<br>State)     | GUY |
| Antarctica          | ATA | Congo, Republic of                | COG | Honduras                             | HND |
| Antigua and Barbuda | ATG | Cot'e d'Ivoire                    | CIV | Hong Kong                            | HKG |
| Argentina           | ARG | Croatia                           | HRV | Hungary                              | HUN |
| Armenia             | ARM | Cyprus                            | CYP | Iceland                              | ISL |
| Aruba               | ABW | Czech Republic                    | CZE | India                                | IND |
| Australia           | AUS | Denmark                           | DNK | Indonesia                            | IDN |
| Austria             | AUT | Djibouti                          | DJI | Iran, Islamic Republic of            | IRN |
| Azerbaijan          | AZE | Dominica                          | DMA | Iraq                                 | IRQ |
| Bahamas             | BHS | Dominican Republic                | DOM | Ireland                              | IRL |
| Bahrain             | BHR | Ecuador                           | ECU | Isle of Man                          | IMN |
| Bangladesh          | BGD | Egypt                             | EGY | Israel                               | ISR |
| Barbados            | BRB | El Salvador                       | SLV | Italy                                | ITA |
| Belarus             | BLR | Equatorial Guinea                 | GNQ | Jamaica                              | JAM |
| Belgium             | BEL | Eritrea                           | ERI | Japan                                | JPN |
| Belize              | BLZ | Estonia                           | EST | Jersey                               | JEY |
| Benin               | BEN | Ethiopia                          | ETH | Jordan                               | JOR |

#### Table 8: List of Accepted Countries with Country Codes

| Bermuda                            | BMU | Falkland Islands<br>(Malvinas)   | FLK | Kazakhstan                          | KAZ |
|------------------------------------|-----|----------------------------------|-----|-------------------------------------|-----|
| Bhutan                             | BTN | Faroe Islands                    | FRO | Kenya                               | KEN |
| Bolivia                            | BOL | Fiji                             | FJI | Kiribati                            | KIR |
| Bosnia and                         | BIH | Finland                          | FIN | Korea, Republic of                  | KOR |
| Herzegovina                        |     |                                  |     |                                     |     |
| Botswana                           | BWA | France                           | FRA | Kuwait                              | KWT |
| Bouvet Island                      | BVT | French Guiana                    | GUF | Kyrgyzstan                          | KGZ |
| Brazil                             | BRA | French Polynesia                 | PYF | Lao People's<br>Democratic Republic | LAO |
| Brunei Darussalam                  | BRN | French Southern<br>Territories   | ATF | Latvia                              | LVA |
| Bulgaria                           | BGR | Gabon                            | GAB | Lebanon                             | LBN |
| Burkina Faso                       | BFA | Gambia                           | GMB | Lesotho                             | LSO |
| Burundi                            | BDI | Georgia                          | GEO | Liberia                             | LBR |
| Cambodia                           | KHM | Germany                          | DEU | Libyan Arab Jamahiriya              | LBY |
| Cameroon                           | CMR | Ghana                            | GHA | Liechtenstein                       | LIE |
| Canada                             | CAN | Gibraltar                        | GIB | Lithuania                           | LTU |
| Cape Verde                         | CPV | Greece                           | GRC | Luxembourg                          | LUX |
| Cayman Islands                     | CYM | Greenland                        | GRL | Масао                               | MAC |
| Central African<br>Republic        | CAF | Grenada                          | GRD | Macedonia                           | MKD |
| Chad                               | TCD | Guadeloupe                       | GLP | Madagascar                          | MDG |
| Chile                              | CHL | Guam                             | GUM | Malawi                              | MWI |
| China                              | CHN | Guatemala                        | GTM | Malaysia                            | MYS |
| Maldives                           | MDV | Peru                             | PER | Sweden                              | SWE |
| Mali                               | MLI | Philippines                      | PHL | Switzerland                         | CHE |
| Malta                              | MLT | Pitcairn                         | PCN | Taiwan, Province of<br>China        | TWN |
| Marshall Islands                   | MHL | Poland                           | POL | Tajikistan                          | TJK |
| Martinique                         | MTQ | Portugal                         | PRT | Tanzania, United<br>Republic of     | TZA |
| Mauritania                         | MRT | Puerto Rico                      | PRI | Thailand                            | THA |
| Mauritius                          | MUS | Qatar                            | QAT | Timor-Leste                         | TLS |
| Mayotte                            | MYT | R,union                          | REU | Тодо                                | TGO |
| Mexico                             | MEX | Romania                          | ROU | Tokelau                             | TKL |
| Micronesia, Federated<br>States of | FSM | Russian Federation               | RUS | Tonga                               | TON |
| Moldova                            | MDA | Rwanda                           | RWA | Trinidad and Tobago                 | TTO |
| Monaco                             | MCO | Saint Helena                     | SHN | Tunisia                             | TUN |
| Mongolia                           | MNG | Saint Kitts and Nevis            | KNA | Turkey                              | TUR |
| Montenegro                         | MNE | Saint Lucia                      | LCA | Turkmenistan                        | TKM |
| Montserrat                         | MSR | Saint Martin (French part)       | MAF | Turks and Caicos<br>Islands         | TCA |
| Morocco                            | MAR | Saint Pierre and<br>Miquelon     | SPM | Tuvalu                              | TUV |
| Mozambique                         | MOZ | Saint Vincent and the Grenadines | VCT | Uganda                              | UGA |
| Namibia                            | NAM | Samoa                            | WSM | Ukraine                             | UKR |
| Nepal                              | NPL | San Marino                       | SMR | United Arab Emirates                | ARE |
| Netherlands                        | NLD | Sao Tome and                     | STP | United Kingdom                      | GBR |

|                                    |     | Principe   |     |   |     |
|------------------------------------|-----|--|-----|---|-----|
| Netherlands Antilles               | ANT | Saudi Arabia                                       | SAU | United States                           | USA |
| New Caledonia                      | NCL | Senegal  | SEN | United States Minor<br>Outlying Islands | UMI |
| New Zealand                        | NZL | Serbia   | SRB | Uruguay                                 | URY |
| Nicaragua                          | NIC | Seychelles   | SYC | Uzbekistan                              | UZB |
| Niger                              | NER | Sierra Leone                                       | SLE | Vanuatu                                 | VUT |
| Niue                               | NIU | Singapore  | SGP | Venezuela                               | VEN |
| Norfolk Island                     | NFK | Slovakia   | SVK | Viet Nam                                | VNM |
| Northern Mariana<br>Islands        | MNP | Slovenia   | SVN | Virgin Islands, British                 | VGB |
| Norway                             | NOR | Solomon Islands                                    | SLB | Virgin Islands, U.S.                    | VIR |
| Oman                               | OMN | South Africa                                       | ZAF | Wallis and Futuna                       | WLF |
| Pakistan                           | PAK | South Georgia and<br>the South Sandwich<br>Islands | SGS | Western Sahara                          | ESH |
| Palau                              | PLW | Spain  | ESP | Zambia                                  | ZMB |
| Palestinian Territory,<br>Occupied | PSE | Sri Lanka  | LKA | Zimbabwe                                | ZWE |
| Panama                             | PAN | Suriname   | SUR |   |     |
| Papua New Guinea                   | PNG | Svalbard and<br>JanMayen                           | SJM |   |     |
| Paraguay                           | PRY | Swaziland  | SWZ |   |     |

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