

Tokenization Payment Processing API

CONTENTS

| | | |
|-------|--|----|
| 1 | Overview | 3 |
| 1.1 | Related Documentation..... | 3 |
| 2 | Implementation Details | 3 |
| 2.1 | Accept Payment..... | 3 |
| 2.1.1 | Request..... | 3 |
| 2.1.2 | Response..... | 7 |
| 2.2 | Process Payment through Card Token | 8 |
| 2.2.1 | Request..... | 8 |
| 2.2.2 | Response..... | 10 |
| 2.3 | Browser Redirect Response..... | 10 |
| 2.3.1 | Form Post Response Payload..... | 10 |
| 3 | Master codes | 12 |
| 3.1.1 | Payment Modes..... | 12 |
| 3.1.2 | Transaction Status..... | 12 |

| | | |
|-------|---------------------|----|
| 3.1.3 | Issuer..... | 13 |
| 3.1.4 | Schemes..... | 14 |
| 3.1.5 | Card Type | 14 |
| 3.1.6 | Response Codes..... | 14 |

1 Overview

This document explains how to integrate the Pine Labs edge tokenization API in seamless mode.

1.1 Related Documentation

This guide should be used together with the additional documents as described below.

| Document | Description |
|-------------------------|---|
| <i>HashGeneration</i> | Describes about hash generation algorithm |
| <i>ResponseCodeList</i> | Listing of transaction response codes |

2 Implementation Details

Below APIs need to be integrated.

2.1 Accept Payment

The merchant needs to initiate this API with an unique merchant transaction reference number, amount and other parameters.

2.1.1 Request

2.1.1.1 Content Type & URL's

| | |
|--------------|------------------|
| Content Type | application/json |
|--------------|------------------|

| | |
|------------|---|
| UAT | https://uat.pinepg.in/api/v2/accept/payment |
| Production | https://pinepg.in/api/v2/accept/payment |

2.1.1.2 Request Headers

HEADERS:

| Header name | Header value |
|--------------|---|
| Content-Type | application/json |
| X-VERIFY | SHA256of (Base64 request encoded payload) |

2.1.1.3 Body Param

| Parameter Name | Type | Description | Mandatory(M)/Optional |
|----------------|--------|---|-----------------------|
| merchant_data | Object | It contains merchant data | M |
| payment_data | Object | It contains payment related data | M |
| txn_data | Object | It contains transaction related data | M |
| customer_data | Object | It contains information about customer data. Merchants who are on aggregator model must pass this data | O |
| udf_data | Object | It contains user defined fields. Merchant can pass it transaction specific data in these fields | O |

merchant_data

| Parameter Name | Type | Description | Mandatory(M)/Optional/Conditional |
|------------------------|--------|---|-----------------------------------|
| merchant_id | int | Merchant id provided by pine labs | M |
| merchant_access_code | string | Merchant access code provided by pine labs | M |
| unique_merchant_txn_id | string | Unique transaction id maintained by merchant for each transaction | M |

| | | | |
|---------------------|--------|--|---|
| merchant_return_url | string | Merchant return url on which browser response will be sent. Mandatory in the case of EMI, Cards, Netbanking | C |
|---------------------|--------|--|---|

payment_data

| Parameter Name | Type | Description | Mandatory(M)/Optional |
|-----------------|------|-----------------------------|-----------------------|
| amount_in_paisa | long | Transaction amount in paise | M |

txn_data

| Parameter Name | Type | Description | Mandatory(M)/Optional |
|------------------|---------|--|-----------------------|
| navigation_mode | int | Navigation mode 7 for Seamless | M |
| payment_mode | String | It will contain csv of valid payment mode ids. In case of seamless mode only single payment mode to be specified. | M |
| transaction_type | Integer | 1 for 'Purchase' | M |
| time_stamp | Long | Unix timestamp | O |

customer_data

| Parameter Name | Type | Description | Mandatory(M)/Optional |
|----------------|--------|--|-----------------------|
| email_id | string | Customer email id | O |
| first_name | string | Customer first name | O |
| last_name | string | Customer last name | O |
| customer_id | string | Customer id maintained at merchant end | O |
| mobile_no | string | 10 digit mobile number | O |
| billing_data | Object | Customer billing address details | O |
| shipping_data | Object | Customer Shipping address details | O |

udf_data

| Parameter Name | Type | Description | Mandatory(M)/Optional |
|----------------|--------|---------------------|-----------------------|
| udf_field_1 | string | User defined Fields | O |
| udf_field_2 | string | User defined Fields | O |
| udf_field_3 | string | User defined Fields | O |
| udf_field_4 | string | User defined Fields | O |

billing_data

| Parameter Name | Type | Description | Mandatory(M)/Optional |
|----------------|--------|--------------|-----------------------|
| address1 | string | Address 1 | O |
| address2 | string | Address 2 | O |
| address3 | string | Address 3 | O |
| pincode | string | Pin code | O |
| city | string | City name | O |
| state | string | State name | O |
| country | string | Country name | O |

shipping_data

| Parameter Name | Type | Description | Mandatory(M)/Optional |
|----------------|--------|---|-----------------------|
| first_name | String | First name entered in shipping address | O |
| last_name | String | Last name entered in shipping address | O |
| mobile_no | string | Mobile number entered in shipping address | O |
| address1 | string | Address 1 | O |
| address2 | string | Address 2 | O |
| address3 | string | Address 3 | O |
| pincode | string | Pin code | O |
| city | string | City name | O |
| state | string | State name | O |
| country | string | Country name | O |

2.1.1.4 Sample Request

Json Payload

```
{
  "merchant_data": {
    "merchant_id": 3473,
    "merchant_access_code": "57e39383-b053-4db9-a708-26d8971886e7",
    "unique_merchant_txn_id": "testorder786",
    "merchant_return_url": "http://localhost:53132/ChargingResp.aspx"
  },
  "payment_data": {
    "amount_in_paisa": 1100000
  },
  "txn_data": {
    "navigation_mode": "7",
    "payment_mode": "4",
    "transaction_type": "1",
    "time_stamp": 157588000000
  }
}
```

BASE 64 encoded request

```
{
```

```
"request":  
"ewogICJtZXJjaGFudF9kYXRhljogewogICAgIm1lcmNoYW50X2kljogMzQ3MywKICAgICJtZXJjaGFudF9hY2Nlc3Nf  
Y29kZSI6ICI1N2UzOTM4My1iMDUzLTRkYjktYTcwOC0yNmQ0OTcxODg2ZTciLAogICAgInVuaXF1ZV9tZXJjaGFudF9  
OeG5faWQiOiAidGVzdG9yZGVyNzg2liwKICAgICJtZXJjaGFudF9yZXR1cm5fdXJsIjogImh0dHA6Ly9sb2NhbgHvc3Q6  
NTMxMzlvQ2hhcmdpbmdSZXNWLMFzcHgicAgfSwKICAicGF5bWVudF9kYXRhljogewogICAgImFtb3VudF9pbl9w  
YWlzlYSi6IDExMDAwMDAKICB9LAogICAgICJ0eG5fZGF0YSI6IHsKICAgICJuYXZpZ2F0aW9uX21vZGUuOiAiNiNylsCiAgICAg  
GF5bWVudF9tb2RlljogIjQiLAogICAgIn-  
RyYW5zYWN0aW9uX3R5cGUuOiAiMSIsCiAgICAgIdGltZV9zdGFtcCI6IDE1NzU0ODAwMDAwMAogIH0KfQo="  
  
}
```

2.1.2 Response

Response to the accept payment response to be passed back to the merchant. Below are the details

2.1.2.1 Params

| Parameter Name | Type | Description |
|------------------|--------|---|
| response_code | int | It notifies the result of api processing. Value 1 denotes success. |
| response_message | string | It denotes the message corresponding to above code |
| token | string | It is the token created for a transaction. You need to pass it in the subsequent calls. |

2.1.2.2 Sample Response

Seamless mode

```
{
  "token": "ubrrAgbVaJVrGz67y%2fZCjCveYWNymE7ULAIOO7FCbz4%3d",
  "response_code": 1,
  "response_message": "SUCCESS"
}
```

Failure response

```
{
  "response_code": -1,
  "response_message": "FAILURE",
}
```

2.2 Process Payment through Card Token

Merchants need to process the payment data against the transaction through this API for tokenised card (TPAN) credential only. Token received from the accept payment API response has to be sent across in the process payment API request

api/v2/process/payment/card/tokenize?token=ubrrAgbVaJVrGz67y%2fZCJCveYWNymE7ULAI007FCbz4%3d "

2.2.1 Request

| | |
|--------------|------------------|
| Content Type | application/json |
|--------------|------------------|

| | |
|------------|---|
| UAT | https://uat.pinepg.in/api/v2/process/payment/card/tokenize?token=BJ5Dj5o5dh6jZaWCTAv%2fnwJj0h%2f3Eiq2HgY14%2fMOP7k%3d |
| Production | https://pinepg.in/api/v2/process/payment/card/tokenize?token=BJ5Dj5o5dh6jZaWCTAv%2fnwJj0h%2f3Eiq2HgY14%2fMOP7k%3d |

2.2.1.1 Body Params

| Parameter Name | Type | Description | Mandatory/Optional/Conditional |
|--------------------|--------|----------------------------------|--------------------------------|
| tokenize_card_data | Object | It contains tokenized card data. | M (Visa, MasterCard, Diners) |
| card_meta_data | Object | It contains the card meta data | O |

For Rupay, please refer to Payment API specification (latest version) under section 2.2 - Process Payment. Reason: In case of Rupay, token provision and processing will be done with actual card details and not with Alt Token.

tokenize_card_data

| Parameter Name | Type | Description | Mandatory/Optional/Conditional |
|----------------|--------|--|--------------------------------|
| token | String | Card token received from token requestor | M |

| | | | |
|---------------------------|--------|---|--|
| expiration_month | String | Token expiry month having format MM | M |
| expiration_year | String | Token expiry year having format YYYY | M |
| cryptogram | String | Cryptogram (TAVV) received from token requestor | C (If token_transaction_type is ALT_TOKEN_TXN or NETWORK_TOKEN_TXN) |
| token_transaction_type | String | ALT_TOKEN_TXN: to recognize whether a transaction involves an ALT ID token or a Guest Checkout token. ISSUER_TOKEN_TXN: to recognize transactions involving an issuer token. NETWORK_TOKEN_TXN: to recognize transactions related to a network token. | O (If no specific value is provided, the transaction will default to being treated as a network token transaction) |
| cvv | String | Card CVV | M |
| par | String | Unique value generated by the network for the specific Token Requester | O (not required for now) |
| last4Digit | String | Last 4 digits of the card | M |
| token_request_merchant_id | String | *TSP token requester id | C (When token_transaction_type = ISSUER_TOKEN_TXN) or (When token_transaction_type = ALT_TOKEN_TXN and network = Diners) |
| token_referenceId | String | *TSP token reference id | C (When token_transaction_type = ISSUER_TOKEN_TXN) or (When token_transaction_type = ALT_TOKEN_TXN and network = Diners) |

card_meta_data

| Parameter Name | Type | Description | Mandatory/Optional/Conditional |
|----------------|--------|--|--------------------------------|
| issuer_name | String | Card issuing bank name ex: HDFC, AXIS, SBI | C |
| scheme_name | String | Network name ex : VISA, MASTER | C |

| | | | |
|-----------|--------|--------------------------------|---|
| card_type | String | Card type ex: CREDIT, DEBIT | C |
|-----------|--------|--------------------------------|---|

2.2.1.2 Sample request

2.2.1.2.1 Tokenize Card Sample Request

Network Token

```
{
  "tokenize_card_data": {
    "token": "4895379990484220",
    "expiration_month": "11",
    "expiration_year": "2023",
    "cryptogram": "qE5juRwDzAUFBAkEHuWW9PiBkVv=",
    "token_transaction_type": "NETWORK_TOKEN_TXN",
    "cvv": "123",
    "par": "22sfsdfsd33ewr332",
    "card_meta_data": {
      "issuer_name": "HDFC",
      "scheme_name": "VISA",
      "card_type": "CREDIT"
    }
  }
}
```

GCT + VISA/MasterCard

```
{
  "tokenize_card_data": {
    "token": "4895379990484220",
    "expiration_month": "11",
    "expiration_year": "2023",
    "cryptogram": "qE5juRwDzAUFBAkEHuWW9PiBkVv=",
    "token_transaction_type": "ALT_TOKEN_TXN",
    "cvv": "123",
    "par": "22sfsdfsd33ewr332"
  }
}
```

GCT + Rupay

```
{
  "card_data": {
    "card_number": "4375511167337000",
    "card_expiry_year": "2030",
    "card_expiry_month": "08",
    "card_holder_name": "Indrani",
    "last4Digit": "1160",
    "cvv": "872"
  }
}
```

GCT + Diner

```
{
  "tokenize_card_data": {
    "token": "3615702051135384",
    "expiration_month": "02",
    "expiration_year": "2028",
    "last4Digit": "9785",
    "token_request_merchant_id": "PINELABMUINALTID001",
    "token_referenceId": "43e84d39-ce23-445e-9c93-6fd0ba0286cf",
    "token_transaction_type": "ALT_TOKEN_TXN",
    "cvv": "644",
    "cryptogram": "AgAAAGQkm6LsADcAAAA5gz4AAAA="
  }
}
```

Issuer Token + HDFC

```
{
  "tokenize_card_data": {
    "token": "3615702051135384",
    "expiration_month": "02",
    "expiration_year": "2028",
    "last4Digit": "9785",
    "token_request_merchant_id": "PINELABMUINALTID001",
    "token_referenceId": "43e84d39-ce23-445e-9c93-6fd0ba0286cf",
    "token_transaction_type": "ISSUER_TOKEN_TXN",
    "cvv": "644"
  }
}
```

2.2.2 Response

Response to the process payment API to be sent across. Below are the details.

2.2.2.1 Params

| Parameter Name | Type | Description |
|----------------|------|--|
| response_code | int | It notifies the result of api processing. Value 1 denotes success. |

| | | |
|------------------|--------|--|
| response_message | string | It denotes the message corresponding to above code |
| redirect_url | String | Customer should be redirected to below url. |

2.2.2.2 Sample Response

2.2.2.2.1 Successful response

```
{ "response_code": 1, "response_message": "SUCCESS", "redirect_url":  
"http://hostname:port/pinepg/v2/process/payment?token=848RFsu%2bRnNcSsaZdzEgkeosvCc2o5IKTV4uKJF%  
2fcjE%3d" }
```

Merchant application needs to redirect to url received in response.

2.2.2.2.2 Failure Response

```
{ "response_code": -1, "response_message": "FAILURE" }
```

2.3 Browser Redirect Response

2.3.1 Form Post Response Payload

| Key | Value | Details |
|------------------------|---------|--|
| merchant_id | Integer | In response you can see the merchant id which you have sent as one of the parameter in Pine Labs payment gateway API request parameters. |
| merchant_access_code | String | In response you can find the merchant access code which you have sent as one of the parameter. |
| unique_merchant_txn_id | String. | In response you can find the merchant unique |

| Key | Value | Details |
|-----|---------------|---|
| | Max length 99 | transaction Id which you have sent as one of the parameter. |

| | | |
|--------------------------|--------------|--|
| pine_pg_txn_status | Integer | Transaction status |
| txn_completion_date_time | DateTime | The date-time of the transaction completion at Pine Labs payment gateway server. |
| amount_in_paisa | Long | It is the amount for which payment transaction is being done. |
| txn_response_msg | String | Transaction response |
| acquirer_name | String | Acquirer Bank |
| pine_pg_transaction_id | Long | Unique transaction id generated by Pine Labs |
| payment_mode | Integer | Payment mode chosen at landing page. |
| dia_secret | String | Hash of response parameters. Please refer to HashGeneration document. Pine Labs payment gateway creates the hash of the response parameters and sends this information in response in tag dia_secret. Merchant should use this hash value returned in response to match with new secret generated at its side using other response Parameters. If these two secrets do not match then data is not authentic. |
| dia_secret_type | String | 'SHA256' or 'MD5' and will be the same which is passed in dia_secret_type parameter of request |
| Key | Value | Details |
| | | |

| | | |
|-----------------------------|---------|-----------------------------------|
| merchant_return_url | String | Merchant return url |
| emi_processing_fee | long | Processing fee amount in paisa. |
| captured_amount_in_paisa | long | Captured amount for a transaction |
| refund_amount_in_paisa | long | Refund amount for a transaction |
| parent_txn_status | Integer | Parent txn status |
| parent_txn_response_code | Integer | Parent txn response code |
| parent_txn_response_message | String | Parent txn response message |

3 Master codes

Below codes are to be passed in process payment request for seamless integration

3.1.1 Payment Modes

| PAYMENT_MODE_ID | PAYMENT_MODE_NAME |
|-----------------|-------------------|
| 1 | CREDIT/DEBIT CARD |

3.1.2 Transaction Status

| TXN_STATUS_ID | TXN_STATUS_NAME | DESCRIPTION |
|---------------|-----------------|--|
| -7 | Failure | Transaction has failed due to some reasons e.g. bank session time out, insufficient funds. Payer needs to re-initiate the transaction. |
| -6 | Rejected | Transaction has been rejected. |

| 1 | Initiated | Pine Labs payment gateway has not received response from Payment Provider/Bank. For all such transactions, We will retry the transaction, post which the transaction status will be |
|---------------|--------------------|---|
| TXN_STATUS_ID | TXN_STATUS_NAME | DESCRIPTION |
| | | updated to 'Captured', Failure 'Rejected'. |
| 4 | Captured | 'Captured' call is successful. Funds will be transferred to merchant account. |
| 6 | Refunded | Refund of the transaction is successful. |
| 7 | Query Complete | Query of the transaction is successful. |
| 9 | Partially Refunded | Transaction is partially refunded |
| 10 | Refund Initiated | When refund of aggregator transaction is initiated |

3.1.3 Issuer

The below list in an indicative list.

| ISSUER_NAME |
|-------------|
| ICICI |
| AXIS |
| HDFC |
| AMEX |
| HSBC |
| SBI |
| CITI |
| CORP |
| IDBI |

| |
|-------------------------|
| LVB |
| YES |
| FEDERAL |
| SBI Card |
| BOB Financial |
| UBI |
| Indusind Bank |
| KOTAK |
| STANDARD CHARTERED BANK |
| RBL Bank |
| J&K BANK |
| HDFC Bank Debit Card |
| ICICI Debit |
| Kotak Debit Card |
| Axis Debit |
| Federal Debit |

3.1.4 Schemes

| SCHEMES_NAME |
|--------------|
| VISA |
| MASTERCARD |
| RUPAY |

3.1.5 Card Type

| CARD_TYPE |
|-----------|
| DEBIT |
| CREDIT |

3.1.6 Response Codes

These response codes are related to Tokenization Process payment flow.

| RESPONS_CODE | RESPONSE_DESCRIPTION |
|--------------|-------------------------|
| -401 | Cryptogram is not valid |

| | |
|------|-------------------------------------|
| -402 | Card token is not valid |
| -403 | Card Expiry data is not valid |
| -404 | Card Tokenization data is not valid |