

## 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	<a href="https://uat.pinepg.in/api/v2/accept/payment">https://uat.pinepg.in/api/v2/accept/payment</a>
Production	<a href="https://pinepg.in/api/v2/accept/payment">https://pinepg.in/api/v2/accept/payment</a>

### 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
udf_field_5	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  
cGF5bWVudF9tb2RlljogIjQiLAogICAgIn-  
RyYW5zZWNOaW9uX3R5cGUuOiAiMSIsCiAgICAgIdGltZV9zdGFtcCI6IDE1NzU0ODAwMDAwMAogICAgH0kfQo="  
  
}
```

### 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%2fZCjCveYWNymE7ULAIOO7FCbz4%3d "**

### 2.2.1 Request

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

UAT	<a href="https://uat.pinepg.in/api/v2/process/payment/card/tokenize?token=BJ5Dj5o5dh6jZaWCTAv%2fnwJj0h%2f3Eiq2HgY14%2fMOP7k%3d">https://uat.pinepg.in/api/v2/process/payment/card/tokenize?token=BJ5Dj5o5dh6jZaWCTAv%2fnwJj0h%2f3Eiq2HgY14%2fMOP7k%3d</a>
Production	<a href="https://pinepg.in/api/v2/process/payment/card/tokenize?token=BJ5Dj5o5dh6jZaWCTAv%2fnwJj0h%2f3Eiq2HgY14%2fMOP7k%3d">https://pinepg.in/api/v2/process/payment/card/tokenize?token=BJ5Dj5o5dh6jZaWCTAv%2fnwJj0h%2f3Eiq2HgY14%2fMOP7k%3d</a>

#### 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
<b>Key</b>	<b>Value</b>	<b>Details</b>

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