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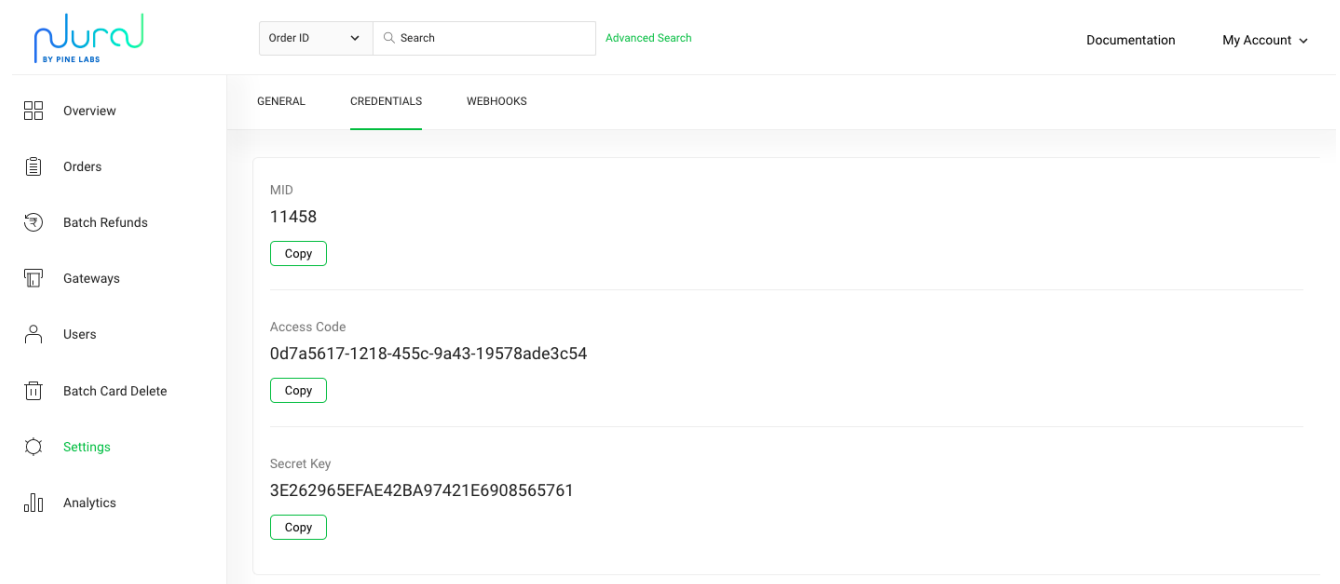
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## Overview

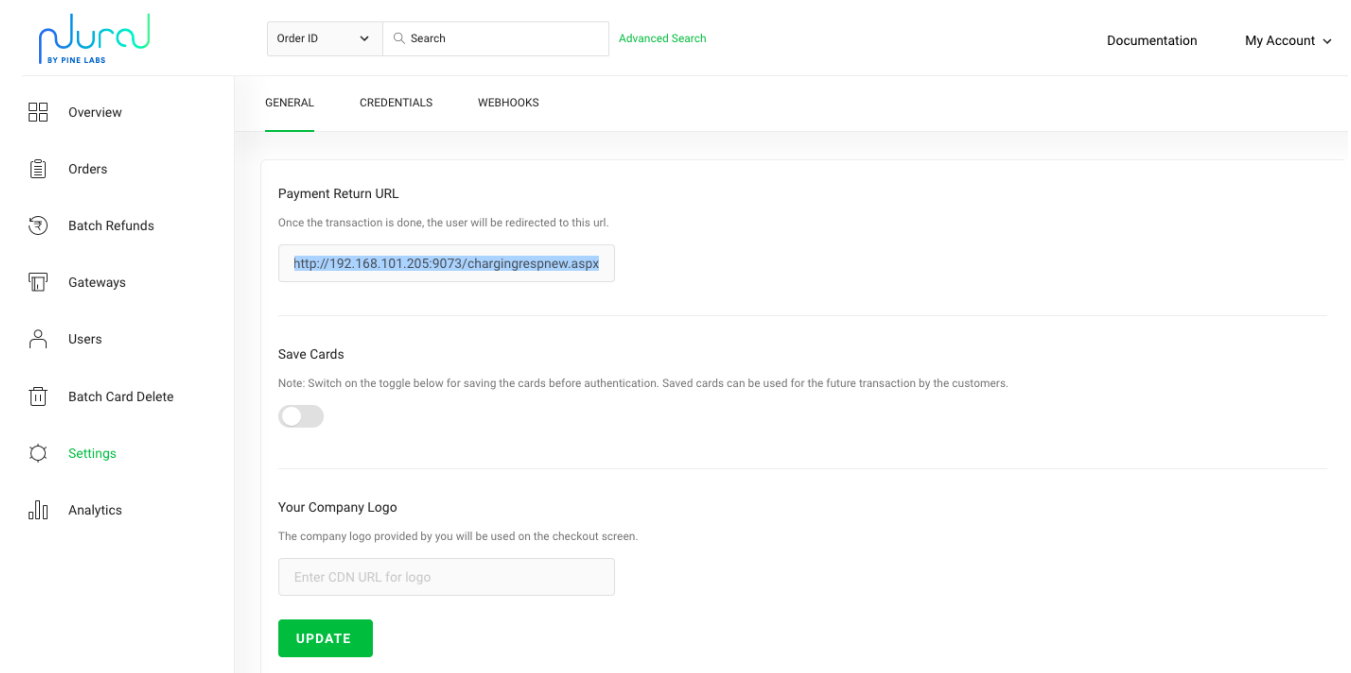
This document aims at describing the integration process details for doing transaction through Plural XT.

## Prerequisites

1. Sign up on Plural XT Dashboard in test environment
  - a. Click on the link:  
<https://paymentoptimizerdashboardtest.pinepg.in/dashboardsignup>
2. Take note of Merchant credentials: [Dashboard → Settings → Credentials]
  - i. MID
  - ii. Access Code
  - iii. Secret Key



3. Configure Payment Return URL (This is necessary step to get the payment response.): [Dashboard->Setting->General->Payment Return URL ]



#### 4. Configure PG

- a. You should get test credentials from the Payment gateways (such as RazorPay, PayU) which you intend to configure.

For Edge test PG:

MID :2415

Password : Access Code (4e919e33-e940-49a7-a2ba-ece896b9800a)

Secret Key : Secret Key (840917F43186472EB2261ABCDE5CA576).

Configuration PG: Dashboard->Gateways->Create Gateway->Select Gateway->Configure Key\_ID and Key\_Secret

- b. Configure Payment Modes in the PG

## Integration Modes

**Redirection** and **Seamless** modes are supported. Merchant redirects a customer to Plural XT by Pine Labs landing page. This is called re-direct mode. Capturing customer card details at merchant page is called seamless mode. In this case, merchant needs to be PCI DSS certified.

### Customer Journey in Redirect Mode

1. Merchant redirects customer to Plural XT's landing page along with merchant and other specific details.
2. Customer enters card details on this page.
3. Plural XT processes transactions by communicating with Acquirer in turn scheme

and then Issuer banks.

4. After transaction completion, Plural XT maps transaction with Merchant and order specific details and redirects customer to merchant page along with the response of the transaction.

#### Customer Journey in Seamless Mode

1. In this integration mode, merchant captures card details of the customer at his/her page and calls Pine Labs payment gateway API passing encrypted card details along with merchant and other specific fields.
2. Plural XT, Pine Labs' Payment Gateway, processes this transaction, maps transaction with merchant and order specific details and sends response back.

## Transaction Steps

1. **Create Order:** Order represents the shopping cart in the payment journey. Order plays a central part in the payment flow as the subsequent transactions e.g. payment, refund, get status are linked to it. For this, an order must be identified uniquely and you can create and assign a random and unique order\_id to the order. This order\_id can be used for the subsequently linked transactions to the order.
2. **Base payload creation**
  - a. Prepare request payload using all mandatory parameter and other parameters required by the merchant. [Check Sample Request](#)
  - b. Encode in Base-64 [Check Sample](#)
  - c. Hash generation using Base 64 payload and secret key to create X-verify
  - d. POST on the url: <host url> [Check sample CURL](#)
3. **Process Payment:** When order creation response received then merchant needs to call second consecutive server to server call which would process the payment to create unique transaction id. In this API call merchant need to pass Card/UPI/GPAY/Netbanking transaction related data.
4. **Order Inquiry:** Order Inquiry API enables the merchant to get the status of the order created by the merchant. For this, the merchant needs to supply the order ID of the order for which the status is sought.

#### Request Payload

```
{  
  "merchant_data":{  
    "merchant_id":11401,
```

```
"merchant_access_code":"e8d7344f-6aae-4a2e-b868-55a169c291de",

"merchant_return_url":"https://whirlpool.stores2.shoptimize.in/pluralxt/standard/response
/",
  "order_id":"testorder39"
},
"payment_info_data":{
  "amount":1431000,
  "currency_code":"INR",
  "preferred_gateway":"EDGE",
  "order_desc":"TEST ORDER!"
},
"customer_data":{
  "customer_id":"352391",
  "country_code":"91",
  "mobile_number":"9717263595",
  "email_id":"abc.pqr@xyz.com",
  "first_name":"abc",
  "last_name":"pqr",
  "customer_ref_no":"67589"
},
"billing_address_data":{
  "first_name":"harsh",
  "last_name":"kumar",
  "address1":"hon 15",
  "address2":"lal kurti",
  "address3":"jalandhar",
  "pincode":"144005",
  "city":"NOIDA",
  "state":"PUNJAB",
  "country":"INDIA"
},
"shipping_address_data":{
  "first_name":"harsh",
  "last_name":"kumar",
  "address1":"hon 15",
  "address2":"lal kurti",
  "address3":"jalandhar",
```

```
{
  "pincode":"144005",
  "city":"NOIDA",
  "state":"PUNJAB",
  "country":"INDIA"
},
"product_info_data":{
  "product_details":[
    {
      "product_code":"50020",
      "product_amount":1431000
    }
  ]
},
"additional_info_data":{
  "rfu1":"123"
}
}
```

### Base 64 Encoded Request Body

ewogICAgbWVYy2hhbnRfZGF0YSI6ewogICAglCAibWVYy2hhbnRfaWQiOjExNDAXLAog  
ICAglCAibWVYy2hhbnRfYWwNjZXNzX2NvZGUiOiJlOGQ3MzMzQ0ZiO2YWFiLFRhbmUtYjg2  
OC01NWExNjljMjkxZGUiLAogICAglCAibWVYy2hhbnRfcml6dXJuX3VybiCl6Imh0dHBzOi8v  
8vd2hpcmxwb29sLnN0b3Jlc2luc2hvchRpbWI6ZS5pbj9wbHVyYWx4dC9zdGFuZGFyZC  
9yZXNwb25zZS8iLAogICAglCAib3JkZXJfaWQiOiJ0ZXN0b3JkZXIzOSIKICAgfSwKICAgIn  
BheW1lbmRfaW5mb19kYXRhljp7CiAglCAglCjhbW91bnQiOjE0MzEwMDAsCiAglCAglCj  
jdXJyZW5jeV9jb2RlljoilSU5SlwKICAgICAglCnByZWZlcnJlZF9nYXRld2F5ljoilRURHRSIsCiA  
glCAglCjvcmlcl9kZXNjloilVEVTVCBPUKRfUUEiCiAglIH0sCiAglCjJdXN0b21lcl9kYXRhljp7  
CiAglCAglCjJdXN0b21lcl9pZCI6ljM1MjM5MSIsCiAglCAglCjJb3VudHJ5X2NvZGUiOiIl5MSI  
sCiAglCAglCjtb2JpbGVfbnVtYmVyljoilOTcxNzl2MzU5NSIsCiAglCAglCjlbWFpbF9pZCI6l  
mFiYy5wcXJAeHI6LmNvbSIsCiAglCAglCjmaXJzdF9uYW1ljoilYWJjliwKICAgICAglmxhc3  
RfbmFtZSI6lnBxcilsCiAglCAglCjJdXN0b21lcl9yZWZfbm8iOiIl2NzU4OSIKICAgfSwKICAgI  
mJpbGxpbnmdfYWVRkcmVzc19kYXRhljp7CiAglCAglCjmaXJzdF9uYW1ljoiaGFyc2giLAogl  
CAglCAibGFzdF9uYW1ljoia3VtYXliLAoglCAglCAiYWRkcmVzczEiOiJob24gMTUiLAoglC  
AglCAiYWRkcmVzczliOiJsYWwga3VydGkiLAoglCAglCAiYWRkcmVzczMiOiJqYWxhbmRoYXliLAoglCAglCAicGluY29kZSI6ljE0NDAwNSIsCiAglCAglCjJaXR5ljoilTk9JREElLAoglCA  
glCAic3RhduGUiOiJQUU5KQUliLAoglCAglCAiY291bnRyeSI6klOREIBlgogICB9LAoglCAic2hpcHBpbmdfYWVRkcmVzc19kYXRhljp7CiAglCAglCjmaXJzdF9uYW1ljoiaGFyc2giLAogl

CAglCAibGFzdF9uYWw1Ijoia3VtYXliLAogICAglCAiYWRkcmVzczEiOiJob24gMTUiLAogICAglCAiYWRkcmVzczIiOjJsYWwga3VydgkiLAogICAglCAiYWRkcmVzczMiOiJqYWxhbmRoYXliLAogICAglCAicGluY29kZSI6IjE0NDAAwNSIsCiAglCAglCjJaXR5IjoITk9JREEiLAogICAglCAic3RhdGUiOiJQVU5KQUliLAogICAglCAiY291bnRyeSI6IklORElBogogICB9LAogICAicHJvZHVjdF9pbmZvX2RhdGEiOnsKICAgICAglCnByb2R1Y3RfZGV0YWLscyl6WwogICAgICAgICB7CiAglCAglCAglCAglCjwcm9kdWN0X2NvZGUiOiI1MDAyMCIsCiAglCAglCAglCAglCjwcm9kdWN0X2Ftb3VudCI6MTQzMTAwMAogICAglCAglCB9CiAglCAglF0KICAgfSwKICAgImFkZGI0aW9uYWxfaW5mb19kYXRhIjpw7CiAglCAglCjYnUxIjoIMTlzlhogogICB9Cn0gCg==

### CURL for Create Order

Curl for the Create Order API call:

```
curl --location --request POST \
'https://paymentoptimizertest.pinepg.in/api/v2/order/create' \
--header 'x-verify:
05D71346573642DFE24A3628A90A1E180780255A7760B6199BA5CB5FC64E70AC' \
--header 'Content-Type: application/json' \
--data-raw
{"request": "eyJtZXJjaGFudF9kYXRhljp7Im1lcmNoYW50X2kljoxMTQwMSwibWVvyY2hhbnRfYWVNbjZnNzX2NvZGUioiJOIGQ3MzMzQ0ZiO2YWFiLFRhbmUtYjg2OC01NWExNjlmjkxZGUiLCJtZXJjaGFudF9yZXR1cm5fdXJsIjoiaHR0cHM6Ly93aGlybHBvb2wuc3RvcmlvMi5zaG9wdGltaXplLmLuL3BsdXJhbHh0L3N0YW5kYXJkL3Jlc3BvbniLylslm9yZGVyX2kljoidGVzdG9yZGVyMzkifSwicGF5bWVudF9pbmZvX2RhGEiOnsiYW1vdW50ljoxNDMxMDAwLCJjdXJyZW5jeV9jb2RlljoiSU5SliwicHJlZmVycmVkX2dhdGV3YXkiOiJFREdFlwiwb3JkZXJfZGVzYyYl6IlRFU1QgT1JERVlhIn0slmN1c3RvbWVvyX2RhGEiOnsiY3VzdG9tZXJfaWQiOilzNTlzOTElLCJjb3VudHJ5X2NvZGUioil5MSIsIm1vYmIsZV9udW1iZXliOil5NzE3MjYzNTk1liwiZW1haWxfafWQiOiJhYmMuchFyQHh5ei5jb20iLCJmaXJzdF9uYW1lloiYWJjliwibGFzdF9uYW1lloichHFyliwiY3VzdG9tZXJfcmlvVmX25vljoiNjc1ODkiLH0slmJpbGxpbnmdfYWRkcmlvZmVzcziOiJob24gMTUiLCJhZGRyZXNzMil6ImxhbCBrdXJ0aSlslmFkZHJlc3MzljoiamFsYW5kaGFyYiwicGlUy29kZSI6IjE0NDAwNSIsImNpdHkiOiJOT0lEQSIsInN0YXRlljoiUFVOSkFClwiY291bnRyeSI6IkORElBlnoSlmNoaXBwaW5nX2FkZHJlc3NfZGF0YSI6eyJmaXJzdF9uYW1lloiaGFyc2giLCJyZXN0X25hbWUiOiJrdW1hcilslmFkZHJlc3MxljoiaG9uIDE1liwiYWRkcmlvZmVzcziOiJsYWwga3VydgKiLCJhZGRyZXNzMyl6ImphbGFuZGhhcilslmBpbmNvZGUioilxNDQwMDUiLCJjaXR5IjoiTk9JREElLCJzdGF0ZSI6IlBVTkpBQilslmNvdW50cnkiOiJJTkRJQSJ9LCJwcm9kdWN0X2luZm9fZGF0YSI6eyJwcm9kdWN0X2RldGFpbHMiolt7InByb2R1Y3Rfy29kZSI6IjUwMDIwliwicHJvZHVjdF9hbW91bnQiOiE0MzEwMDBBXX0slmFkZGI0aW9u
```

YWxfaW5mb19kYXRhljp7InJmdTEiOilxMjMifX0="}'

## API References

### Create Order

#### Create Order Request

API URL- <##API host URL##>/api/v2/order/create

Content Type- application/json

#### Request Parameters

Parameters Name	Property Name	Description
merchant_data		
	merchant_id* (int)	Merchant unique identification id provided by Plural XT
	merchant_access_code* (string)	Merchant unique access code provided by Plural XT (Length = 50 Characters)
	order_id* (string)	Unique Order id of transaction maintained at Merchant end (Length = 200 Characters)
	merchant_return_url* (string)	Length=500 Characters
payment_info_data		
	amount* (long)	Total Payment amount in paise
	currency_code* (string)	INR
	order_desc (string)	Merchant's order description
customer_data		Either Customer Id To be sent
		or if Customer Id is not created at Plural XT's end then rest all Customer Details need to be sent for implementing Saved Card Functionality



	customer_id (int)	Customer Id (Received during Create Customer API), to be sent if card is to be saved for Customer
	customer_ref_no (string)	Unique Reference Number of Customer at Merchant's end. (Length = 100 Characters)
	mobile_number (string)	Mobile Number of Customer (Length = 20 Characters)
	email_id (string)	Email Id of Customer (Length = 100 Characters)
	first_name (string)	First Name of Customer (Length = 200 Characters)
	last_name (string)	Last Name of Customer (Length = 200 Characters)
	country_code (string)	Country Code (Length = 10 Characters)
billing_address_data		
	first_name (string)	Length=50 Characters
	last_name (string)	Length=50 Characters
	address1 (string)	Length=200 Characters
	address2 (string)	Length=200 Characters
	address3 (string)	Length=200 Characters
	pincode (string)	Length=50 Characters
	city (string)	Length=50 Characters
	state (string)	Length=50 Characters
	country (string)	Length=50 Characters
shipping_address_data		
	first_name (string)	Length=50 Characters
	last_name (string)	Length=50 Characters
	address1 (string)	Length=200 Characters
	address2 (string)	Length=200 Characters
	address3 (string)	Length=200 Characters
	pincode (string)	Length=50 Characters

	city (string)	Length=50 Characters
	state (string)	Length=50 Characters
	country (string)	Length=50 Characters
	()	
additional_info_data		
	rfu1 (string)	Length=200 Characters
	Rfu2 (string)	Length=200 Characters
	Rfu3 (string)	Length=200 Characters
	Rfu4 (string)	Length=200 Characters
	Rfu5 (string)	Length=200 Characters
	Rfu6 (string)	Length=200 Characters
	Rfu7 (string)	Length=200 Characters
	Rfu8 (string)	Length=200 Characters
	Rfu9 (string)	Length=200 Characters
	rfu10 (string)	Length=200 Characters
	rfu11 (string)	Length=200 Characters
	rfu12 (string)	Length=200 Characters
	rfu13 (string)	Length=200 Characters
	rfu14 (string)	Length=200 Characters
	rfu15 (string)	Length=200 Characters
	rfu16 (string)	Length=200 Characters
	rfu17 (string)	Length=200 Characters
	rfu18 (string)	Length=200 Characters
	rfu19 (string)	Length=200 Characters
	rfu20 (string)	Length=200 Characters
product_info_data		
	product_details[] (Array of Product Details which)	Need to send for Implementing Brand EMI
product_details	()	
	product_code (string)	Product code present at merchant end
	product_amount	Product amount in paise (Length = .)

	(long)	
--	--------	--

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

### Create Order Response

Parameters Name	Data Type	Value	Description
response_code	int	1- Success Transaction -1- Failure Transaction	Plural XT would provide all response codes list.
response_message	string		Description the exact reason of transaction failure
plural_order_id	long		Order Id generated by Rapid Pay
token	string		Unique token for process payment transaction. Token expire after predefined time span. The same token needs to pass in next server to server API call to process transaction

### Example of response:

#### Success Response

```
{
  "token": "NK6MRzHCd5dFosGHL2gEGQ%3d%3d",
  "plural_order_id": "301"
  "response_code": 1,
  "response_message": "SUCCESS"
}
```

#### Failure Response

```
{
  "response_code": -1,
  "response_message": "DUPLICATE TXN ID",
}
```

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

## Process payment API call

When order creation response received then merchant need to call second consecutive server to server call which would process the payment to create unique transaction id. In this API call merchant need to pass Card/UPI/GPAY/Netbanking transaction related data.

### Process payment request

API URL- <##API host URL##>/

api/v2/process/payment?token=eWat4peytZfFi5h586HKpA%3d%3d"

Content Type- application/json

Request Parameters:

Parameters Name	Property Name	Description
txn_data		

	payment_mode* (String)	1-CC/DC 3 - Netabnking 4 - EMI 10- UPI 14 – Debit EMI 11- Wallet  "CREDIT_DEBIT" For CC/DC payment mode, "NETBANKING" For Netbanking payment mode, "EMI" For EMI payment mode, "UPI" For UPI payment mode, "WALLET" For Wallet payment mode, "DEBIT_EMI" For Debit EMI payment mode, "ALL" For All payment mode enabled on Merchant
	navigation_mode* (String)	2 - Redirect 7 – Seamless  REDIRECT SEAMLESS
card_data		If Payment Mode is CC/DC, then either Card Data or Saved Card Id should be sent
	card_number* (string)	Length=19 Characters
	cvv* (string)	Length=6 Characters
	card_holder_name* (string)	Length=150 Characters
	card_expiry_year* (string)	Length=2 Characters
	card_expiry_month* (string)	Length=4 Characters
	saved_card_id (long)	Saved Card id received while saving card through saved card API
netbanking_data		To be sent if netbanking Transaction
		Payment Code for Bank, through which netbanking transaction is to be done
upi_data		To be sent if UPI Transaction

		Mobile number registered for UPI
	upi_option* (string)	UPI Option like Gpay/UPI etc
wallet_data		To be sent if Wallet Transaction
	wallet_code* (String)	Wallet Code
	mobile_number (string)	Mobile Number

### Process Payment Request Payload

```
{
  "card_data": {
    "card_number": "4012001037141112",
    "cvv": "123",
    "card_holder_name": "harsh",
    "card_expiry_year": "2020",
    "card_expiry_month": "12",
    "is_card_to_be_saved": false
  },
  "txn_data": {
    "payment_mode": "CREDIT_DEBIT",
    "navigation_mode": "SEAMLESS"
  }
}
```

### Process Payment API- Wallet Payment Mode's Payload

```
{
  "wallet_data": {
    "wallet_code": "PAYZAPP",
    "mobile_number": "9050157978"//Mandatory Conditionally - Depends Wallet by
    Wallet for PayzApp it's mandatory field
  },
  "txn_data": {
    "payment_mode": "WALLET",

```

```

    "navigation_mode": "SEAMLESS"
  }
}

```

### Second Example for Wallet

```

{
  "wallet_data": {
    "wallet_code": "PAYTM"
  },
  "txn_data": {
    "payment_mode": "WALLET",
    "navigation_mode": "SEAMLESS"
  }
}

```

### Process Payment API- UPI Payment Mode's Payload

```

{
  "upi_data": {
    "vpa": "payu@hdfcbank",
    "upi_option": "UPI"
  },
  "txn_data": {
    "payment_mode": "UPI",
    "navigation_mode": "SEAMLESS"
  }
}

```

### Process Payment Response

Parameters Name	Data Type	Value	Description
response_code	int	1- Success Transaction -1- Failure Transaction	Plural XT would provide all response codes list.
response_message	string		Description the exact reason of transaction failure

redirect_url	string		URL on which Merchant needs to redirect to complete transaction
--------------	--------	--	---

### Process Payment Response Payload

```
{
  "redirect_url":"http://localhost:51462/pinepg/v2/process/payment?token=9KK5R9b3ZKFP
  304GcKWgFagM7utHs3tzgignoZWEu%2bQ%3d",
  "response_code":1,
  "response_message":"SUCCESS"
}
```

### Redirect Navigation Mode

In case of Redirect Navigation Mode, User needs to browse below URL top open Plural XT Payment Page :

<##API host URL##>  
 pinepg/v2/process/payment/redirect?ordertoken=GZ3eDyFK4FxRrydmQOIm%2fHSE1Ev  
 NBHapKWL2m0yiT8c%3d&paymentmodecsv=paymentModes

paymentModes	String	Comma Separated Payment Modes which you want on landing Page
--------------	--------	--

Step 3. Merchant need to redirect to API URL shared in Process Payment API. API would call to host to process transaction, and Merchant Will Receive Following Browser Redirect Response

### 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 Plural XT 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.
order_id	String	Unique Order id of transaction maintained at Merchant end
plural_order_id	Long	Order Id generated at Plural XT end.
order_status	String	Status of Order
amount_in_paisa	Long	It is the amount for which payment transaction is being done.
acquirer_name	String	Acquirer Bank
payment_mode	String	Payment mode chosen at landing page.
dia_secret	String	Hash of response parameters. Please refer to HashGeneration document. Plural XT 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
merchant_return_url	String	Merchant return url
captured_amount_in_paisa	long	Captured amount for a transaction
refund_amount_in_paisa	long	Refund amount for a transaction
issuer_name	String	Issuing bank name .
payment_status	String	Status of Payment
payment_completion_date_time	Date time	Payment completion datetime
payment_response_code	int	Represent the response of the API request and response code is returned based on the transaction result.
payment_response_message	String	Payment response message
payment_id	long	Payment id generated at Plural XT end
rrn	String	Bank RRN number
product_code	String	
masked_card_number	String	
mobile_no	String	
udf_field_1	String	
udf_field_2	String	
udf_field_3	String	
udf_field_4	String	
card_holder_name	String	
salted_card_hash	String	
auth_code	String	

All the APIs require Authentication,hence we need to send merchant id and access code shared during Onboarding in Authorisation Header Field

## Refund

End Point

POST : api/pg/payments/:payment\_id/refund  
(payment\_id, which is to be refunded)

### Request Parameters

Field Name	Description	Type	Mandatory
amount	Amount to be refunded	long	Y
unique_request_id	Unique Txn Id generated at Merchant's end for Transaction	Varchar(100)	Y

Request Body :

```
{
  "payment_info_data": {
    "amount": 200,
    "unique_request_id": "15091832"
  }
}
```

}

### Response Parameters

Parameters Name	Field Name	Data Type	Value	Description
response_code		int	1- Success Transaction -1- Failure Transaction	Plural XT would provide all response codes list.
response_message		string		Description the exact reason of transaction failure
merchant_data				
	merchant_id	int		Merchant's Id
	order_id	string		Unique Order id of transaction maintained at Merchant end
order_data				
	plural_order_id	long		Order Id generated at Plural XT's end .
	amount	string		Order Amount in paisa.
	refund_amount	string		Amount Refunded Corresponding to Order in Paisa
	currency_code	string	INR	Currency Code
	order_desc	string		Order Description
	order_status	string		Status of Order
payment_info_data				
	amount_in_paisa	long		It is the amount in paisa for which payment transaction is

				being done.
	captured_amount_in_paisa	long		It is the amount in paisa for which has been sent to bank
	acquirer_name	string		Acquirer Bank
	payment_mode	string		Payment mode passed
	payment_status	String		Payment Status
	payment_completion_date_time	Date time		The date-time of the transaction completion at Plural XT payment gateway server.
	payment_response_code	int		Represent the response of the API request and response code is returned based on the transaction result.
	payment_response_message	String		Payment response
	payment_id	long		Payment id, for which we are doing refund
	refund_amount_in_paisa	Long		Amount Refunded in Paisa
	rrn	String		RRN
	unique_request_id	string		In response you can find the merchant unique transaction Id which you have sent as one of the parameter.
	refund_id	long		Unique refund id generated at Plural XT.

### Sample Response

```
{
```

```
"merchant_data": {
  "merchant_id": 3413,
  "order_id": "150920201318"
},
"order_data": {
  "plural_order_id": 30863,
  "amount": 200,
  "currency_code": "INR",
  "order_desc": "TEST ORDER!",
  "order_status": "REFUNDED",
  "refund_amount": 200
},
"payment_info_data": {
  "payment_status": "REFUNDED",
  "payment_completion_date_time": "15/09/2020 01:21:20 PM",
  "amount_in_paisa": "200",
  "payment_response_code": "1",
  "payment_response_message": "SUCCESS",
  "acquirer_name": "HDFC",
  "payment_id": "371815",
  "captured_amount_in_paisa": "0",
  "refund_amount_in_paisa": "200",
  "payment_mode": "CREDIT_DEBIT",
  "rrn": "428779754742",
  "unique_request_id": "15091320",
  "refund_id": "371816"
},
"response_code": 1,
"response_message": "SUCCESS"
}
```

Response, will also have x-verify in header, which is SHA256(Base64(Response))

## Inquiry

### Fetching status of a specific order

End Point

GET : api/pg/orders/:orderid

### Response Parameters

Parameters Name	Field Name	Data Type	Value	Description
response_code		int	1- Success Transaction -1- Failure Transaction	Plural XT would provide all response codes list.
response_message		string		Description the exact reason of transaction failure
merchant_data				
	merchant_id	int		Merchant's Id
	order_id	string		Unique Order id of transaction maintained at Merchant end
order_data				
	plural_order_id	long		Order Id generated at Plural XT end.
	amount	string		Order Amount in paisa.
	refund_amount	string		Amount Refunded Corresponding to Order in Paisa
	currency_code	string	INR	Currency Code
	order_desc	string		Order Description
	order_statuses	string		Status of Order

### Sample Response

```
{
```

```

"merchant_data": {
  "merchant_id": 3413,
  "order_id": "150920201318"
},
"order_data": {
  "plural_order_id": 30863,
  "amount": 200,
  "currency_code": "INR",
  "order_desc": "TEST ORDER!",
  "order_status": "REFUNDED",
  "refund_amount": 200
},
"response_code": 1,
"response_message": "SUCCESS"
}

```

Response, will also have x-verify in header, which is SHA256(Base64(Response))

### Fetching status of all payments for specific order

GET : api/pg/orders/:id/payments

### Response Parameters

Parameters Name	Field Name	Data Type	Value	Description
response_code		int	1- Success Transaction -1- Failure Transaction	Plural XT would provide all response codes list.
response_message		string		Description the exact reason of transaction failure
merchant_data				
	merchant_id	int		Merchant's Id
	order_id	string		Unique Order id of transaction maintained at



				Merchant end
order_data				
	plural_order_id	long		Order Id generated at Plural XT end .
	amount	string		Order Amount in paisa.
	refund_amount	string		Amount Refunded Corresponding to Order in Paisa
	currency_code	string	INR	Currency Code
	order_desc	string		Order Description
	order_status	string		Status of Order
payment_info_data				
	amount_in_paisa	long		It is the amount in paisa for which payment transaction is being done.
	captured_amount_in_paisa	long		It is the amount in paisa for which has been sent to bank
	acquirer_name	string		Acquirer Bank
	payment_mode	String		Payment mode of Transaction
	payment_status	String		Payment Status
	payment_completion_date_time	Date time		The date-time of the transaction completion at Plural XT payment gateway server.
	payment_response_code	int		Represent the response of the API request and response code is returned based on the transaction result.
	payment_response_message	String		Payment response

	message			
	payment_id	long		Payment id generated at Plural XT
	refund_amount_in_paisa	Long		Amount Refunded in Paisa
	rrn	String		RRN
	merchant_return_url	String		Return URL Of Merchant
	product_code	String		Product Code
	masked_card_number	String		Masked Card Number
	mobile_no	String		Mobile Number
	udf_field_1	String		User Defined Field
	udf_field_2	String		User Defined Field
	udf_field_3	String		User Defined Field
	udf_field_4	String		User Defined Field
	card_holder_name	String		Card Holder Name
	salted_card_hash	String		Card Hash
	auth_code	String		Auth Code

### Sample Response

```
{
  "merchant_data": {
    "merchant_id": 3413,
    "order_id": "150920201318"
  },
  "order_data": {
    "plural_order_id": 30863,
    "amount": 200,
```

```

    "currency_code": "INR",
    "order_desc": "TEST ORDER!",
    "order_status": "REFUNDED",
    "refund_amount": 200
  },
  "payment_info_data": [
    {
      "payment_status": "REFUNDED",
      "payment_completion_date_time": "15/09/2020 01:20:28 PM",
      "amount_in_paisa": "200",
      "payment_response_code": "1",
      "payment_response_message": "SUCCESS",
      "acquirer_name": "HDFC",
      "payment_id": "371815",
      "merchant_return_url": "http://localhost:53132/ChargingRespnew.aspx",
      "product_code": "TEST",
      "captured_amount_in_paisa": "200",
      "refund_amount_in_paisa": "200",
      "payment_mode": "CREDIT_DEBIT",
      "masked_card_number": "401200*****1112",
      "mobile_no": "9582492891",
      "udf_field_1": "123",
      "udf_field_2": "",
      "udf_field_3": "",
      "udf_field_4": "",
      "card_holder_name": "alfishan",
      "salted_card_hash":
"CE88E1CF9247936231DB21D02498C6470625892F7FE4A6FAC2FE8F6A03D3E4AE",
      "rrn": "425847096720",
      "auth_code": "999999"
    }
  ],
  "response_code": 1,
  "response_message": "SUCCESS"
}

```

Response, will also have x-verify in header, which is SHA256(Base64(Response))

## Fetching status of all refunds for specific payment id

GET : api/payments/:paymentid/refunds

### Response Parameters:

Parameters Name	Field Name	Data Type	Value	Description
response_code		int	1- Success Transaction -1- Failure Transaction	Plural XT would provide all response codes list.
response_message		string		Description the exact reason of transaction failure
merchant_data				
	merchant_id	int		Merchant's Id
	order_id	string		Unique Order id of transaction maintained at Merchant end
order_data				
	plural_order_id	long		Order Id generated at Plural XT's end .
	amount	string		Order Amount in paisa.
	refund_amount	string		Amount Refunded Corresponding to Order in Paisa
	currency_code	string	(356 for INR)	Currency Code
	order_desc	string		Order Description
	order_status	string		Status of Order
payment_info_data				
	amount_in_paisa	long		It is the amount in paisa for which

				payment transaction is being done.
	captured_amount_in_paisa	long		It is the amount in paisa for which has been sent to bank
	acquirer_name	string		Acquirer Bank
	payment_mode	String		Payment mode of Transaction
	payment_status	String		Payment Status
	payment_completion_date_time	Date time		The date-time of the transaction completion at Plural XT payment gateway server.
	payment_response_code	int		Represent the response of the API request and response code is returned based on the transaction result.
	payment_response_message	String		Payment response
	payment_id	long		Payment id, for which we are doing refund
	refund_amount_in_paisa	Long		Amount Refunded in Paisa
	rrn	String		RRN
	unique_request_id	string		In response you can find the merchant unique transaction Id which you have sent as one of the parameter.
	refund_id	long		Unique refund id generated by Plural XT

## Sample Response

```
{
  "merchant_data": {
    "merchant_id": 3413,
    "order_id": "150920201318"
  },
  "order_data": {
    "plural_order_id": 30863,
    "amount": 200,
    "currency_code": "INR",
    "order_desc": "TEST ORDER!",
    "order_status": "REFUNDED",
    "refund_amount": 200
  },
  "payment_info_data": [
    {
      "payment_status": "REFUNDED",
      "payment_completion_date_time": "15/09/2020 01:21:20 PM",
      "amount_in_paisa": "200",
      "payment_response_code": "1",
      "payment_response_message": "SUCCESS",
      "acquirer_name": "HDFC",
      "payment_id": "371815",
      "captured_amount_in_paisa": "0",
      "refund_amount_in_paisa": "200",
      "payment_mode": "CREDIT_DEBIT",
      "rrn": "428779754742",
      "unique_request_id": "15091320",
      "refund_id": "371816"
    }
  ],
  "response_code": 1,
  "response_message": "SUCCESS"
}
```

Response, will also have x-verify in header, which is SHA256(Base64(Response))

### Fetching status of specific refund id

GET : `api/pg/payments/:payment_id/refunds/:merchant_refund_id`

#### Request Parameters

Parameters Name	Field Name	Data Type	Value	Description
merchant_refund_id		string		Unique Request Id sent by merchant while doing refund

#### Response Parameters:

Parameters Name	Field Name	Data Type	Value	Description
response_code		int	1- Success Transaction -1- Failure Transaction	Plural XT would provide all response codes list.
response_message		string		Description the exact reason of transaction failure
merchant_data				
	merchant_id	int		Merchant's Id
	order_id	string		Unique Order id of transaction maintained at Merchant end
payment_info_data				
	amount_in_paisa	long		It is the amount in paisa for which payment transaction is being done.

	captured_amount_in_paisa	long		It is the amount in paisa for which has been sent to bank
	acquirer_name	string		Acquirer Bank
	payment_mode	String		Payment mode of Transaction
	payment_status	String		Payment Status
	payment_completion_date_time	Date time		The date-time of the transaction completion at Plural XT payment gateway server.
	payment_response_code	int		Represent the response of the API request and response code is returned based on the transaction result.
	payment_response_message	String		Payment response
	payment_id	long		Payment id, for which we are doing refund
	refund_amount_in_paisa	Long		Amount Refunded in Paisa
	rrn	String		RRN
	unique_request_id	string		In response you can find the merchant unique transaction Id which you have sent as one of the parameter.
	refund_id	long		Unique refund id generated by Plural XT

## Sample Response

```
{
```



```

"merchant_data": {
  "merchant_id": 3413,
  "order_id": "150920201318"
},
"payment_info_data": {
  "payment_status": "QUERY_COMPLETED",
  "payment_completion_date_time": "15/09/2020 01:21:20 PM",
  "amount_in_paisa": "200",
  "payment_response_code": "1",
  "payment_response_message": "SUCCESS",
  "acquirer_name": "HDFC",
  "payment_id": "371815",
  "captured_amount_in_paisa": "0",
  "refund_amount_in_paisa": "200",
  "payment_mode": "CREDIT_DEBIT",
  "rrn": "428779754742",
  "unique_request_id": "15091320",
  "refund_id": "371816"
},
"response_code": 1,
"response_message": "SUCCESS"
}

```

Response, will also have x-verify in header, which is SHA256(Base64(Response))

## Customer API

### Create Customer

End Point

POST : create/customer

Request Parameters

Field Name	Description	Type	Mandatory
customer_ref_no	Unique reference number of Customer at Merchant's end	Varchar(100)	Y
mobile_number	Mobile Number of Customer	Varchar(20)	Y

email_id	Email Id of Customer	Varchar(100)	Y
first_name	First Name of Customer	Varchar(200)	Y
last_name	Last Name of Customer	Varchar(200)	Y
country_code	Country Code	Varchar(10)	Y

Request Body :

```
{
  "country_code": "91",
  "mobile_number": "9779585525",
  "email_id": "test@juspay.in",
  "first_name": "name",
  "last_name": "lname",
  "customer_ref_no": "12306"
}
```

Response Parameters:

Parameters Name	Data Type	Value	Description
response_code	int	1- Success Transaction -1- Failure Transaction	Plural XT would provide all response codes list.
response_message	string		Description the exact reason of transaction failure
customer_id	int		Customer Id generated at Plural XT's end
customer_ref_no	string		Unique reference number of Customer at Merchant's end
merchant_id	int		Merchant Id
first_name	string		First Name of Customer

last_name	string		Last Name of Customer
mobile_number	string		Mobile Number of Customer
email_id	string		Email Id of Customer
country_code	string		Country Code Corresponding to Mobil e Number

### Sample Response

```
{
  "customer_id": 16,
  "customer_ref_no": "12306",
  "merchant_id": 3413,
  "first_name": "name",
  "last_name": "lname",
  "mobile_number": "9779585525",
  "email_id": "test@juspay.in",
  "country_code": "91",
  "response_code": 1,
  "response_message": "SUCCESS"
}
```

### Get Customer

#### End Point

GET : customer/{customerId}

#### Response Parameters:

Parameters Name	Data Type	Value	Description
-----------------	-----------	-------	-------------

response_code	int	1- Success Transaction -1- Failure Transaction	Plural XT would provide all response codes list.
response_message	string		Description the exact reason of transaction failure
customer_id	int		Customer Id generated at Plural XT's end
customer_ref_no	string		Unique reference number of Customer at Merchant's end
merchant_id	int		Merchant Id
first_name	string		First Name of Customer
last_name	string		Last Name of Customer
mobile_number	string		Mobile Number of Customer
email_id	string		Email Id of Customer
country_code	string		Country Code Corresponding to Mobile Number

Sample Response:

```
{
  "customer_id": 16,
  "customer_ref_no": "12306",
  "merchant_id": 3413,
  "first_name": "name",
  "last_name": "lname",
  "mobile_number": "9779585525",
  "email_id": "test@juspay.in",
  "country_code": "91",
  "response_code": 1,
  "response_message": "SUCCESS"
}
```

## Update Customer

End Point

POST : update/customer/{CustomerId}

Request Parameters:

Field Name	Description	Type	Mandatory
mobile_number	Mobile Number of Customer	Varchar(20)	N
email_id	Email Id of Customer	Varchar(100)	N
first_name	First Name of Customer	Varchar(200)	N
last_name	Last Name of Customer	Varchar(200)	N
country_code	Country Code	Varchar(10)	N

Sample Request:

```
{
  "country_code":"91",
  "mobile_number":"9779585524",
  "email_id":"test@juspay.in",
  "first_name":"name",
  "last_name":"lname_updated"
}
```

Response Parameters:

Parameters Name	Data Type	Value	Description
-----------------	-----------	-------	-------------

response_code	int	1- Success Transaction -1- Failure Transaction	Plural XT would provide all response codes list.
response_message	string		Description the exact reason of transaction failure
customer_id	int		Customer Id generated at Plural XT's end
customer_ref_no	string		Unique reference number of Customer at Merchant's end
merchant_id	int		Merchant Id
first_name	string		First Name of Customer
last_name	string		Last Name of Customer
mobile_number	string		Mobile Number of Customer
email_id	string		Email Id of Customer
country_code	string		Country Code Corresponding to Mobile Number

Sample Response:

```
{
  "customer_id": 10,
  "merchant_id": 3413,
  "first_name": "name",
  "last_name": "lname_updated",
  "mobile_number": "9779585524",
  "email_id": "test@juspay.in",
  "country_code": "91",
  "response_code": 1,
  "response_message": "SUCCESS"
}
```

## Saved Card API

### Insert Save Card

End Point

POST : api/customer/card/save

Request Parameters:

ParameterName	Field Name	Description	Type	Mandatory
customer_data				
	customer_id	Customer Id generated at Plural XT's end	int	Y
card_data				
	card_number	Card number	varchar(500)	Y
	expiry_year	Card Expiry Year	Varchar(4)	y
	expiry_month	Card Expiry Month	varchar(2)	Y
	card_holder_name	Card holder Name	Varchar(100)	y

Sample Request Body :

```
{
  "customer_data": {
    "customer_id": 16
  },
  "card_data": {
    "card_number": "5346800030022920",
    "expiry_year": "2020",
    "expiry_month": "10",
    "card_holder_name": "Ettika"
  }
}
```

## Response Parameters:

Parameters Name	Data Type	Value	Description
response_code	int	1- Success Transaction -1- Failure Transaction	Plural XT would provide all response codes list.
response_message	string		Description the exact reason of transaction failure
expiry_year	string		Card Expiry Year
expiry_month	string		Card Expiry Month
card_holder_name	string		Card Holder Name
saved_card_id	long		Saved Card Id generated at Plural XT's end.
association_type	string		Association Type of Card
issuer_id	int		Card Issuer Id
masked_card_number	string		Masked Card Number
issuer_name	String		Card Issuing Bank
card_type_id	Int	1- CREDIT CARD 2- DEBIT CARD	Card Type

## Sample Response :

```
{
  "expiry_year": "2020",
  "expiry_month": "10",
  "card_holder_name": "Ettika",
```



```

"saved_card_id": 3,
"assosiation_type": "MASTERCARD",
"issuer_id": 3,
"masked_card_number": "534680*****2920",
"card_holder_mobile_no": null,
"issuer_name": "HDFC",
"card_type_id": 1,
"response_code": 1,
"response_message": "SUCCESS"
}

```

### Get Save Card Details For Customer

End Point

POST : api/customer/card/fetch

ParameterName	Field Name	Description	Type	Mandatory
customer_data				
	customer_id	Customer Id generated at Plural XT's end	int	Y

Sample Request Body :

```

{
  "customer_data": {
    "customer_id": 10
  }
}

```

Response Parameters:

Parameters Name	Data Type	Value	Description
-----------------	-----------	-------	-------------

response_code	int	1- Success Transaction -1- Failure Transaction	Plural XT would provide all response codes list.
response_message	string		Description the exact reason of transaction failure
card_details	Array of Cards, Saved for Customer		
	expiry_year	string	Card Expiry Year
	expiry_month	string	Card Expiry Month
	card_holder_name	string	Card Holder Name
	saved_card_id	long	Saved Card Id
	association_type	string	Association Type of Card
	issuer_id	int	Card Issuer Id
	masked_card_number	string	Masked Card Number
	response_code	int	Response Code
	response_message	string	Description Of Response Code
issuer_name	String		Card Issuing Bank
card_type_id	Int	1- CREDIT CARD 2- DEBIT CARD	Card Type

### Sample Response

```
{
  "card_details": [
    {
      "expiry_year": "2020",
```

```
"expiry_month": "11",
"card_holder_name": "test",
"saved_card_id": 1,
"association_type": "MASTERCARD",
"issuer_id": 3,
"masked_card_number": "401200*****1112",
"card_holder_mobile_no": "",
"issuer_name": "HDFC",
"card_type_id": 1,
"response_code": 0,
"response_message": null
},
{
  "expiry_year": "2020",
  "expiry_month": "11",
  "card_holder_name": "test",
  "saved_card_id": 3,
  "association_type": "MASTERCARD",
  "issuer_id": 3,
  "masked_card_number": "534680*****2920",
  "card_holder_mobile_no": "",
  "issuer_name": "HDFC",
  "card_type_id": 1,
  "response_code": 0,
  "response_message": null
}
],
"response_code": 1,
"response_message": "SUCCESS"
}
```

### Delete Save Card Details

End Point

POST : api/customer/card/delete

Request Parameters:

ParameterName	Field Name	Description	Type	Mandatory
customer_data				
	customer_id	Customer Id generated at Plural XT's end	int	Y
card_data				
	saved_card_id	Saved Card Id received during Saving Card Data	long	Y

Sample Request Body :

```
{
  "customer_data": {
    "customer_id": 1
  },
  "card_data": {
    "saved_card_id": 3
  }
}
```

Response Parameters:

Parameters Name	Data Type	Value	Description
response_code	int	1- Success Transaction -1- Failure Transaction	Plural XT would provide all response codes list.
response_message	string		Description the exact reason of transaction failure

Sample Response:

```
{
```

```
"response_code": 1,
"response_message": "SUCCESS"
}
```

## EMI/ Debit EMI Transaction Flow

### Step 1. Call EMI Calculator API, to fetch emi schemes

POST API URL- <##API host URL##>/api/V2/emi/calculator

Content Type- application/json

Request Parameters:

Parameter Name	Type	Description	Mandatory(M)/Optional
merchant_data	object	It contains information about merchant.	M
payment_data	object	It contains information about payment data.	M
product_details	Array of objects	It contains information about products present in cart	M

merchant\_data object

Parameter Name	Type	Description	Mandatory(M)/Optional
merchant_id	int	Merchant id provided by Plural XT	M
merchant_access_code	string	Merchant access code provided by Plural XT	M

### payment\_data object

Parameter Name	Type	Description	Mandatory(M)/Optional
amount_in_paisa	long	Total sum of products amount present in cart.	M

### product\_details object

Parameter Name	Type	Description	Mandatory(M)/Optional
product_code	string	Product code present at merchant end	M
product_amount	long	Product amount in paise .	M

### Sample Request

```
{
  "merchant_data": {
    "merchant_id": 3413,
    "merchant_access_code": "1c295f88-4477-4cd3-b5ac-e76148545a3e"
  },
  "payment_data": {
    "amount_in_paisa": 1000000
  },
  "product_details": [
    {
      "product_code": "40",
      "product_amount": 1000000
    }
  ]
}
```

## Sample Response Parameters

Parameter Name	Type	Description
issuer	Array of objects	It contains information about issuing bank EMI details.
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

### issuer array

Parameter Name	Type	Description
list_emi_tenure	Array of objects	It contains information about tenures for each issuer
issuer_name	String	Bank Name
is_debit_emi_issuer	Bool	Denotes whether an issuer is debit or credit

### list\_emi\_tenure array

Parameter Name	Type	Description
offer_scheme	Object	It contains information about offer applicable on each product
tenure_id	Int	Tenure Id specified at Plural XT end
tenure_in_month	String	Tenure name specified at

		Plural XT end
monthly_installment	Long	Emi amount in paise
bank_interest_rate	Long	Interest rate for which bank emi is calculated. Its value is percentage multiplied by 10000
interest_pay_to_bank	Long	Interest pay to bank in paise
total_offered_discount_cashback_amount	Long	Total sum of discount applicable on cart. It is in paise.
loan_amount	Long	Amount in paise on which loan will be booked
auth_amount	Long	Bank authorization amount in paise

#### offer\_scheme

Parameter Name	Type	Description
product_details	Array of objects	It contains information about product.
emi_scheme	Object	It contains information about bank EMI scheme.

#### product\_details

Parameter Name	Type	Description
product_code	String	Product code
product_amount	Long	Product amount in paise
subvention_cashback_discount	Long	Subvention discount cashback amount in paise. Only applicable when subvention is present.
product_discount	Long	Product discount amount in paise. Only applicable if product discount is present
subvention_cashback_discount_percentage	Long	Subvention discount cashback percentage. Its



		value is percentage multiplied by 10000.
product_discount_percentage	Long	Product discount cashback percentage. Its value is percentage multiplied by 10000.
subvention_type	Int	It tells offer type. 1-No cost EMI 2-Low cost EMI 3-Standard EMI
additional_cashback	String	Additional cashback text
bank_interest_rate	Long	Amount in paise
bank_interest_rate_percentage	Long	Percentage multiplied by 10000
schemes	Array of objects	It contains list of program applicable on product.

#### emi\_scheme

Parameter Name	Type	Description
scheme_id	Long	It tells scheme id applicable on product
program_type	Int	It tells scheme of which type. 105-Bank EMI 108-Product discount 112-Subvention discount
is_scheme_valid	Bool	Is scheme is valid

#### schemes

Parameter Name	Type	Description
scheme_id	Long	It tells scheme id applicable on product
program_type	Int	It tells scheme of which type. 105-Bank EMI 108-Product discount 112-Subvention discount

is_scheme_valid	Bool	Is scheme is valid
-----------------	------	--------------------

### Sample Response

```
{
  "issuer": [
    {
      "list_emi_tenure": [
        {
          "offer_scheme": {
            "product_details": [
              {
                "schemes": [
                  {
                    "scheme_id": 3470,
                    "program_type": 106,
                    "is_scheme_valid": true
                  }
                ],
                "product_code": "40",
                "product_amount": 1000000,
                "subvention_cashback_discount": 200000,
                "product_discount": 0,
                "subvention_cashback_discount_percentage": 100000,
                "product_discount_percentage": 0,
                "subvention_type": 2,
                "additional_cashback": "Hi there is additional casback of rs 100",
                "bank_interest_rate_percentage": 100000,
                "bank_interest_rate": 13369
              }
            ],
            "emi_scheme": null
          },
          "tenure_id": "3",
          "tenure_in_month": "3",
          "monthly_installment": 271123,
          "bank_interest_rate": 100000,
          "interest_pay_to_bank": 13369,
        }
      ]
    }
  ]
}
```

```

        "total_offered_discount_cashback_amount": 200000,
        "loan_amount": 800000,
        "auth_amount": 800000
    }
],
    "issuer_name": "SBI",
    "is_debit_emi_issuer": false
}
],
    "response_code": 1,
    "response_message": "SUCCESS"
}

```

## Step 2. Scheme Validation, to Validate Scheme

POST API URL- <##API host URL##>/api/v2/scheme/validation

Content Type- application/json

### Request Parameters

Parameter Name	Type	Description
merchant_data	Object	It contains information about merchant.
payment_data	Object	It contains information about payment
card_data	Object	It contains information about card data
emi_data	Object	It contains information about emi data

merchant\_data

Parameter Name	Type	Description	Mandatory(M)/Optional
merchant_id	int	Merchant id provided by Plural XT	M
merchant_access_code	string	Merchant access code provided by Plural XT	M

#### payment\_data

Parameter Name	Type	Description	Mandatory(M)/Optional
amount_in_paisa	long	Total sum of products amount present in cart.	M

#### card\_data

Parameter Name	Type	Description
card_number	String	Card number
card_expiry_year	String	Card expiry year having format YYYY
card_expiry_month	String	Card expiry month having format MM
card_holder_name	String	Card holder name

#### emi\_data

Parameter Name	Type	Description
offer_scheme	Object	It contains information about offer applicable on each product
tenure_id	Int	Tenure Id specified at Plural XT end
tenure_in_month	String	Tenure name specified at

		Plural XT end
monthly_installment	Long	Emi amount in paise
bank_interest_rate	Long	Interest rate for which bank emi is calculated. Its value is percentage multiplied by 10000
interest_pay_to_bank	Long	Interest pay to bank in paise
total_offered_discount_cashback_amount	Long	Total sum of discount applicable on cart. It is in paise.
loan_amount	Long	Amount in paise on which loan will be booked
auth_amount	Long	Bank authorization amount in paise.

#### offer\_scheme

Parameter Name	Type	Description
product_details	Array of objects	It contains information about product.
emi_scheme	Object	It contains information about bank EMI scheme.

#### product\_details

Parameter Name	Type	Description
product_code	String	Product code
product_amount	Long	Product amount in paise
subvention_cashback_discount	Long	Subvention discount cashback amount in paise. Only applicable when subvention is present.
product_discount	Long	Product discount amount in paise. Only applicable if product discount is present

subvention_cashback_discount_percentage	Long	Subvention discount cashback percentage. Its value is percentage multiplied by 10000.
product_discount_percentage	Long	Product discount cashback percentage. Its value is percentage multiplied by 10000.
subvention_type	Int	It tells offer type. 1-No cost EMI 2-Low cost EMI 3-Standard EMI
additional_cashback	String	Additional cashback text
bank_interest_rate	Long	Amount in paise
bank_interest_rate_percentage	Long	Percentage multiplied by 10000
schemes	Array of objects	It contains list of program applicable on product.

#### emi\_scheme

Parameter Name	Type	Description
scheme_id	Long	It tells scheme id applicable on product
program_type	Int	It tells scheme of which type. 105-Bank EMI 108-Product discount 112-Subvention discount
is_scheme_valid	Bool	Is scheme is valid

#### Schemes

Parameter Name	Type	Description
scheme_id	Long	It tells scheme id applicable on product
program_type	Int	It tells scheme of which type. 105-Bank EMI 108-Product discount 112-Subvention discount
is_scheme_valid	Bool	Is scheme is valid

Sample Request for All Credit cards , Axis and ICICI debit cards.

```
{
  "merchant_data": {
    "merchant_id": 3473,
    "merchant_access_code": "57e39383-b053-4db9-a708-26d8971886e7"
  },
  "payment_data": {
    "amount_in_paisa": 1100000
  },
  "card_data": {
    "card_number": "4012001037141112",
    "card_expiry_year": "2020",
    "card_expiry_month": "09",
    "card_holder_name": "harsh"
  },
  "emi_data": {
    "offer_scheme": {
      "product_details": {
        "schemes": [
          {
            "scheme_id": 1682,
            "program_type": 112,
            "is_scheme_valid": true
          }
        ],
        "product_code": "SM-G975FCWG",
        "product_amount": 550000,
        "subvention_cashback_discount": 11705,
        "product_discount": 0,
        "subvention_cashback_discount_percentage": 21500,
        "product_discount_percentage": 0,
        "subvention_type": 1
      },
        "schemes": [],
        "product_code": "40",
        "product_amount": 550000,
        "subvention_cashback_discount": 0,
        "product_discount": 0,
        "subvention_cashback_discount_percentage": 0,
        "product_discount_percentage": 0
      }
    },
    "emi_scheme": {
      "scheme_id": 1683,
      "program_type": 105,
      "is_scheme_valid": true
    },
    "tenure_id": "3",
    "tenure_in_month": "3",
    "monthly_installment": 370652,
    "bank_interest_rate": 130000,
    "interest_pay_to_bank": 23661,
    "total_offered_discount_cashback_amount": 11705,
    "loan_amount": 1088295,
    "auth_amount": 1088295
  }
}
```

#### Response Parameters:

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
offer_scheme	Object	It contains information about offer applicable on each product. This tag will come in response only in case of failure.

#### offer\_scheme

Parameter Name	Type	Description
product_details	Array of	It contains information about

	objects	product.
emi_scheme	Object	It contains information about bank EMI scheme.

#### product\_details

Parameter Name	Type	Description
product_code	String	Product code
product_amount	Long	Product amount in paise
subvention_cashback_discount	Long	Subvention discount cashback amount in paise. Only applicable when subvention is present.
product_discount	Long	Product discount amount in paise. Only applicable if product discount is present
subvention_cashback_discount_percentage	Long	Subvention discount cashback percentage. Its value is percentage multiplied by 10000.
product_discount_percentage	Long	Product discount cashback percentage. Its value is percentage multiplied by 10000.
subvention_type	Int	It tells offer type. 1-No cost EMI 2-Low cost EMI 3-Standard EMI
additional_cashback	String	Additional cashback text
bank_interest_rate	Long	Amount in paise
bank_interest_rate_percentage	Long	Percentage multiplied by 10000
schemes	Array of objects	It contains list of program applicable on product.

#### emi\_scheme

Parameter Name	Type	Description
scheme_id	Long	It tells scheme id applicable



		on product
program_type	Int	It tells scheme of which type. 105-Bank EMI 108-Product discount 112-Subvention discount
is_scheme_valid	Bool	Is scheme is valid

## Schemes

Parameter Name	Type	Description
scheme_id	Long	It tells scheme id applicable on product
program_type	Int	It tells scheme of which type. 105-Bank EMI 108-Product discount 112-Subvention discount
is_scheme_valid	Bool	Is scheme is valid
reasons	Array of object	Description for failure of schemes

## Reasons

Parameter Name	Type	Description
reason_code	int	It denotes the reason code
reason_message	String	It denotes the reason message again the code

## Success response

```
{
  "response_code": 1,
  "response_message": "SUCCESS",
}
```

## Failure response

```
{ "offer_scheme": { "product_details": [ { "schemes": [ { "scheme_id": 8055,
"program_type": 112, "is_scheme_valid": true }, { "scheme_id": 8042, "program_type":
108, "is_scheme_valid": false, "reasons": [ { "reason_code": -298, "reason_message":
"OUTDATED_SCHEME_PRESENT" } ] }, "product_code": "SM-G950FZKDINS",
"product_amount": 550000, "subvention_cashback_discount": 9675, "product_discount":
100000, "subvention_cashback_discount_percentage": 21500,
"product_discount_percentage": 100000, "subvention_type": 1 }, { "schemes": [],
"product_code": "6504", "product_amount": 4500000, "subvention_cashback_discount":
0, "product_discount": 0, "subvention_cashback_discount_percentage": 0,
"product_discount_percentage": 0 } ], "emi_scheme": { "scheme_id": 8056,
"program_type": 105, "is_scheme_valid": true } }, "response_code": -289,
"response_message": "SCHEME VALIDATION FAILED" }
```

### Step 3. Create Order:

(Same as Order ID Generation, For other Payment Modes)

### Step 4. Process Payment

API URL- <##API host URL##>/

api/v2/process/payment?token=eWat4peytZfFi5h586HKpA%3d%3d"

Content Type- application/json

Request Parameters:

Parameters Name	Property Name	Description
txn_data		
	payment_mode* (Int String)	"DEBIT_EMI" For Debit EMI payment mode, "EMI" For EMI payment mode
	navigation_mode* (Int String)	2 - Redirect 7 - Seamless  REDIRECT SEAMLESS
card_data		If Saved Card id is not sent, then we will send card Data

	card_number* (string)	Length=19 Characters
	saved_card_id (long)	If transaction is to be done using Saved Card, then Saved Card id received while saving card through saved card API
	cvv* (string)	Length=6 Characters
	card_holder_name* (string)	Length=150 Characters
	card_expiry_year* (string)	Length=2 Characters
	card_expiry_month* (string)	Length=4 Characters
emi_data		Offer Scheme, which is to be availed Fetched using EMI Calculator API.
additional_data		
		Mobile Number registered with Bank (Length = 10 Characters)

### Sample Request

```
{
  "card_data": {
    "card_number": "401200103778404",
    "cvv": "123",
    "card_holder_name": "alfishan",
    "card_expiry_year": "2023",
    "card_expiry_month": "02",
    "is_card_to_be_saved": true
  },
  "txn_data": {
    "payment_mode": "DEBIT_EMI",
    "navigation_mode": "SEAMLESS"
  },
  "emi_data": {
```

```
"offer_scheme": {
  "product_details": [
    {
      "schemes": [
        {
          "scheme_id": 3478,
          "program_type": 106,
          "is_scheme_valid": true
        }
      ],
      "product_code": "40",
      "product_amount": 1000000,
      "subvention_cashback_discount": 100100,
      "product_discount": 0,
      "subvention_cashback_discount_percentage": 100000,
      "product_discount_percentage": 0,
      "subvention_type": 2,
      "bank_interest_rate_percentage": 100000,
      "bank_interest_rate": 15037
    }
  ],
  "emi_scheme": null
},
"tenure_id": "3",
"tenure_in_month": "3",
"monthly_installment": 304979,
"bank_interest_rate": 100000,
"interest_pay_to_bank": 15037,
"total_offered_discount_cashback_amount": 100100,
"loan_amount": 899900,
"auth_amount": 899900
}
}
```

Response Parameters:

Parameters Name	Data Type	Value	Description
response_code	int	1- Success Transaction -1- Failure Transaction	Plural XT would provide all response codes list.
response_message	string		Description the exact reason of transaction failure
redirect_url	string		URL on which Merchant needs to redirect to complete transaction
api_url	string	(In case of HDFC DC EMI)	API URL which Merchant needs to hit for Further Processing

Response: (For Credit EMI and DC EMI (AXIS, ICICI))

```
{
  "redirect_url":
  "http://localhost:51462/pinepg/v2/process/payment?token=gRVrq8oxFBARCJ9czSnDY9Y
  BgoVfxF4pTwRIC7XxPhc%3d",
  "response_code": 1,
  "response_message": "SUCCESS"
}
```

Click on Redirect URL, to complete transaction.

For HDFC DC EMI

Response:

```
{
  "api_url":
  "http://localhost:51462/api/v2/validate/otp?token=ZbLh08e6J%2f1WR8%2bGIYShPSPqm
  qIk3E7t1dJulGsyD88%3d",
}
```

```
"response_code": 1,
"response_message": "SUCCESS"
}
```

#### Step 5. Validate OTP

Post :

api/v2/validate/otp?token=4nmaQ9ekZCPJks%2b3Np3EiNIWzI5PWIW0uz2QGiGpvlk%3d

Request Parameters:

Field Name	Description	Type	Mandatory
otp	Otp received on Mobile Number	varchar	Y

Request:

```
{"otp":"123456"}
```

Response Parameters:

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
validate_otp_response	Object	It contains response received from Bank.
api_url	String	Url on which you need to make subsequent api calls

validate\_otp\_response

Parameter Name	Type	Description
customer_name	String	Customer name

interest_rate	Long	Interest rate
merchant_name	String	Merchant name at bank end
total_amount_in_paise	Long	Total amount in paise
emi_amount_in_paise	Long	Emi amount in paise
Address	String	Customer address at bank's end
tenure_in_months	int	Tenure
last6digitaccountnumber	String	Last 6 digit of account number

Sample Response:

```
{
  "api_url": "https://environment/api/v2/order/confirmation?token=LMIbhf7p8dFcu3K0%2fvntrY1URugF3sPS0bjPL71RDYE%3d",
  "validate_otp_response": {
    "customer_name": "Kamal Chowla",
    "interest_rate": 160000,
    "merchant_name": "PINELAB",
    "total_amount_in_paise": 1000000,
    "emi_amount_in_paise": 174530,
    "address": "INSURANCE REGULATORY AND DEVELOPMENT AUTXXXXXXXXXXXXXXXXDELHI110001",
    "tenure_in_months": "6",
    "last6digitaccountnumber": "077958"
  },
  "response_code": 1,
  "response_message": "SUCCESS"
}
```

Step 6. Order Confirmation

Post :

```
/api/v2/order/confirmation?token=4nmaQ9ekZCPJks%2b3Np3EiNIWzl5PWIW0uz2QGiGpvlk%3d
```

Response Parameters:

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
order_confirmation_response	Object	It contains transaction response

order\_confirmation\_response

Key	Value	Details
merchant_id	Integer	In response you can see the merchant id which you have sent as one of the parameter in Plural XT 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.
amount_in_paisa	Long	It is the amount for which payment transaction is being done.
acquirer_name	String	Acquirer Bank
payment_mode	String	Payment mode chosen at landing page.
merchant_return_url	String	Merchant return url
captured_amount_in_paisa	long	Captured amount for a transaction
refund_amount_in_paisa	long	Refund amount for a transaction
issuer_name	String	Issuing bank name .
order_id	String	Unique Order id of transaction maintained at Merchant end
plural_order_id	Long	Order Id generated at Plural XT end.
order_status	String	Status of Order
payment_status	String	Status of Payment
payment_completion_date_time	Date time	Payment completion datetime



payment_response_code	int	Represent the response of the API request and response code is returned based on the transaction result.
payment_response_message	String	Payment response message
payment_id	long	Payment id generated at Plural XT end
rrn	String	Bank RRN number
product_code	String	
masked_card_number	String	
mobile_no	String	
udf_field_1	String	
udf_field_2	String	
udf_field_3	String	
udf_field_4	String	
card_holder_name	String	
salted_card_hash	String	

Response :

```
{
  "order_confirmation_response": {
    "merchant_id": "3413",
    "merchant_access_code": "1c295f88-4477-4cd3-b5ac-e76148545a3e",
    "amount_in_paisa": "1000000",
    "acquirer_name": "Edge",
    "merchant_return_url": "http://localhost:53132/ChargingRespnew.aspx",
    "product_code": "TEST",
    "captured_amount_in_paisa": "899900",
    "refund_amount_in_paisa": "0",
    "masked_card_number": "401200*****8404",
    "mobile_no": "9582492891",
    "udf_field_1": "123",
    "udf_field_2": "",
    "udf_field_3": "",
    "udf_field_4": "",
    "card_holder_name": "alfishan",
    "salted_card_hash":
```

```
"6A1F78AFAFFA3C3F28E15A0F2D111DEED84856C03D3895E69DE68ABDC5F44FBE"
,
  "order_id": "150920201711",
  "payment_status": "CAPTURED",
  "payment_completion_date_time": "15/09/2020 05:14:10 PM",
  "payment_response_code": 1,
  "payment_response_message": "SUCCESS",
  "payment_id": "371837",
  "payment_mode": "DEBIT_EMI",
  "plural_order_id": "30871",
  "order_status": "CHARGED",
  "dia_secret":
"7FF03135015F7E64894447813997F36D1C69FFD4201AAE6F29BA5CFCBE6B9825",
  "dia_secret_type": "SHA256"
},
"response_code": 1,
"response_message": "SUCCESS"
}
```