

# Payment Gateway

*API Integration Guide*

*Version 3.6.1*

Version	Date	Author	Note
3.5	24-11-2022	Huỳnh Hữu Lộc	
3.6	26-12-2022	Huỳnh Hữu Lộc	Add API Query Transaction Update API Pay - Support Pay & Create Token - Support Pay with Token
3.6.1	03-02-2023	Huỳnh Hữu Lộc	Add API Remove Token

# Contents

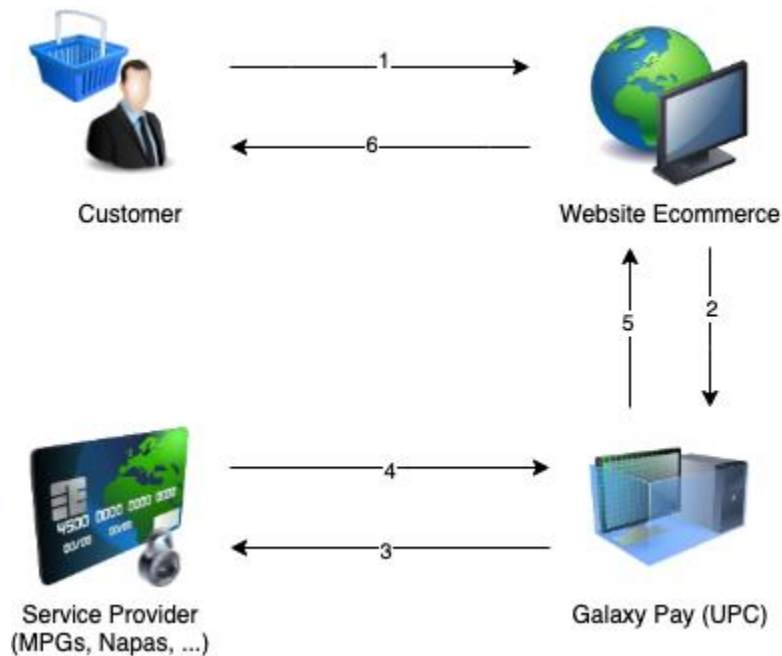
1	Overview .....	3
1.1	Integration Flow .....	3
1.2	Demo .....	4
1.3	Message Structure .....	4
1.4	Integration Information .....	4
1.5	Response Code Table .....	5
1.6	Signature Algorithm .....	6
1.7	Currencies Table .....	7
1.8	eWallet Table .....	8
1.9	Payment Hubs Table .....	8
1.10	QR Pay Table .....	8
1.11	International Card Scheme Table .....	8
1.12	Domestic Bank Table .....	9
1.13	Card Test Information .....	11
1.13.1	International (via MPGs) .....	11
1.13.2	International (via Cybersource) .....	11
1.13.3	Viet Nam Domestic (via Napas) .....	11
2	API Specification .....	12
2.1	Definition Table .....	12
2.2	Data Format .....	12
2.3	API Query .....	13
2.3.1	Request Message .....	13
2.3.2	Response Message .....	13
2.4	API Pay .....	15
2.4.1	Request Message .....	15
2.4.2	Response Message .....	21
2.5	API Pay with Option .....	22
2.5.1	Request Message .....	22
2.5.2	Response Message .....	23
2.6	Cancel Callback .....	24
2.6.1	Request Message .....	24
2.7	Result & IPN Callback .....	26

2.7.1	Request Message .....	26
2.7.2	Response Message (FOR IPN ONLY) .....	27
2.8	Remove Token.....	28
2.8.1	Request Message .....	28
2.8.2	Response Message.....	28

GALAXY PAY

## 1 Overview

### 1.1 Integration Flow



1. Customer makes a purchase on the E-commerce Website and makes an Online Payment for the Order
2. E-commerce website establishes a payment request to GALAXY PAY and redirects customers to GALAXY PAY Secure Page with endpoint URL.
3. GALAXY PAY processes Payment requests sent by e-commerce website. Customers proceed to enter the required information to make payment.
4. The customer enters information to verify the customer's account and authenticate the transaction.
5. Successful transaction at the Service Provider, GALAXY PAY proceed:
  - Redirect customers to e-commerce website (**Result URL**)
  - Notify the E-commerce website of the customer's payment results through the **IPN URL**. Merchant updates GALAXY PAY payment results sent at this URL.
6. Merchant displays transaction results to customers

## 1.2 Demo

Demo		Link
Live Demo		<a href="https://uat-merchant.galaxypay.vn">https://uat-merchant.galaxypay.vn</a>
Source Demo	.NET	<a href="https://github.com/galaxypayvn/sample-upc-dotnet">https://github.com/galaxypayvn/sample-upc-dotnet</a>

## 1.3 Message Structure

- Service: REST API
- HTTP Method: POST
- Content Type: application/json

The request structure:

#	Component	Param	Description
1	Request Header	APIKey	API Key for authentication request.
2		Signature	Request signature, created with <b>SHA256 &amp; Salt</b>
3		Accept	Accept encoding: <b>application/json</b>
4		Content-Type	Request content type: <b>application/json</b>
5	Request Body		JSON content

## 1.4 Integration Information

Name	Value	Note
Endpoint for API	<a href="https://uat-secure.galaxypay.vn">https://uat-secure.galaxypay.vn</a>	Use for UAT only
SHA 256 Salt	<b>GALAXY PAY</b> will provide detail when integration	Use for Signature
API Key	<b>GALAXY PAY</b> will provide detail when integration	Use for Authenticate

## 1.5 Response Code Table

Response Code	Description
<b>200</b>	<b>Success</b>
400	Bad Request (Due to missing Required Fields)
401	Unauthorized (Invalid Merchant Key)
408	Transaction Expired
409	Duplicate Transaction
499	Canceled by User
502	Bad Gateway (Can not connect to Service Provider)
503	Service Unavailable (Can not send request to Service Provider)
504	Request Timeout
505	Authentication Failure (3DS Flow)

## 1.6 Signature Algorithm

- Apply hash algorithm **SHA256** with **Salt**.

**Signature = SHA256(SignData + Salt)**

**Example:**

Salt	GO@2021
JSON Data	<pre>{   "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",   "requestDateTime": 20220426083322,   "requestData": {     "apiOperation": "PAY",     "orderID": "2a43e4b9-c5df-49e6-8b18-42af9bcd150e",     "orderNumber": 205249008064,     "orderAmount": 100000,     "orderCurrency": "VND",     "orderDateTime": 20220426083322,     "orderDescription": "DEMO TRANSACTION",     "paymentMethod": "DOMESTIC",     "sourceType": "970400",     "language": "vi"   } }</pre>
Sign Data (JSON String)	<pre>{"requestID":"14653fa1-2f69-4f4f-9d4b-240e1bebbdf3","requestDateTime":20220426083322,"requestData":{"apiOperation":"PAY","orderID":"2a43e4b9-c5df-49e6-8b18-42af9bcd150e","orderNumber":205249008064,"orderAmount":100000,"orderCurrency":"VND","orderDateTime":20220426083322,"orderDescription":"DEMO TRANSACTION","paymentMethod":"DOMESTIC","sourceType":"970400","language":"vi"}}</pre>
Signature	b4b7cb5596680bb343f399922fc32e63fd69191c573e83c0383fd734531eab03



## 1.7 Currencies Table

Currency	Code
Vietnam Dong	VND
US Dollar	USD
Thai Baht	THB
Japanese Yen	JPY
India Rupee	INR
Taiwan Dollar	TWD
Ringit Malaysia	MYR
Singapore Dolar	SGD
South Korean Won	KRW
Riel Cambodia	KHR
Kyat Myanmar	MMK
Indonesia Rupiah	IDR
Dollar Hongkong	HKD
Ren Min Bi	CNY
Australian dollar	AUD

## 1.8 eWallet Table

eWallet	Code
MoMo eWallet	MOMO
GPay eWallet	GPAY
Zalo Pay eWallet	ZALOPAY

## 1.9 Payment Hubs Table

Hub	Code
2C2P Hub	2C2P
POLi Hub	POLI

## 1.10 QR Pay Table

Provider	Code
QRPAY	QRPAY

## 1.11 International Card Scheme Table

Card Scheme	Code
Visa	VISA
Master	MASTER
JCB	JCB
American Express	AMEX

## 1.12 Domestic Bank Table

<b>Viet Nam Local Banks</b>	<b>Code</b>
Ngân hàng TMCP Sài Gòn Công Thương	SAIGONBANK
Ngân hàng TMCP Sài Gòn Thương Tín	SACOMBANK
Ngân hàng Nông nghiệp và Phát triển Nông thôn Việt Nam	AGRIBANK
Ngân hàng TMCP Đông Á	DONGABANK
Ngân hàng TMCP Kỹ Thương	TECHCOMBANK
Ngân hàng Thương mại TNHH MTV Dầu Khí Toàn Cầu	GPBANK
Ngân hàng TMCP Bắc Á	BACABANK
Ngân hàng TMCP Đại Chúng Việt Nam	PVCOMBANK
Ngân hàng TNHH MTV Đại Dương	OCEANBANK
Ngân hàng TMCP Công Thương Việt Nam	VIETINBANK
Ngân hàng TMCP Á Châu	ACB
Ngân hàng Đầu tư và Phát triển Việt Nam	BIDV
Ngân hàng TMCP Quốc Dân	NCB
Ngân hàng liên doanh Việt Nga	VRB
Ngân hàng TMCP Quân Đội	MB
Ngân hàng TMCP Tiên Phong	TPBANK
Ngân hàng TNHH MTV Shinhan Việt Nam	SHINHANBANK
Ngân hàng TMCP An Bình	ABBANK
Ngân hàng TMCP Hàng Hải Việt Nam	MSB
Ngân hàng TMCP Việt Á	VIETABANK
Ngân hàng TMCP Nam Á	NAMABANK
Ngân hàng TMCP Sài Gòn	SCB

Ngân hàng TMCP Xăng dầu Petrolimex	PGBANK
Ngân hàng TMCP Xuất Nhập khẩu Việt Nam	EXIMBANK
Ngân hàng TMCP Việt Nam Thịnh Vượng	VPBANK
Ngân hàng TMCP Việt Nam Thương Tín	VIETBANK
Ngân hàng TNHH Indovina	IVB
Ngân hàng TMCP Ngoại thương Việt Nam	VIETCOMBANK
Ngân hàng TMCP Phát Triển Thành Phố Hồ Chí Minh	HDBANK
Ngân hàng TMCP Bảo Việt	BAOVIETBANK
Ngân hàng TNHH MTV Public Việt Nam	PUBLICBANK
Ngân hàng TMCP Đông Nam Á	SEABANK
Ngân hàng TMCP Quốc Tế Việt Nam	VIB
Ngân hàng TNHH MTV Hong Leong Việt Nam	HONGLEONGBANK
Ngân hàng TMCP Sài Gòn - Hà Nội	SHB
Ngân hàng TMCP Phương Đông	OCB
Ngân hàng TMCP Bưu Điện Liên Việt	LIENVIETPOSTBANK
Ngân hàng TMCP Kiên Long	KIENLONGBANK
Ngân hàng TMCP Bản Việt	VIETCAPITALBANK
Ngân Hàng Hana	KEBHANA
Ngân hàng Woori Bank Việt Nam	WOORIBANK
Ngân hàng UOB Việt Nam	UOB
Công ty Tài chính cổ phần Tín Việt	VIETCREDIT
Công ty Tài chính TNHH MTV Mirae Asset (Việt Nam)	MAFC

### 1.13 Card Test Information

#### 1.13.1 International (via MPGs)

Card Number	Expiry Date	CVV	3DS Secure
5506920809243667	01 / 39	100	Y
4012000033330026	01 / 39	100	N

#### 1.13.2 International (via Cybersource)

Card Number	Expiry Date	CVV	3DS Secure
4456530000001096	12 / 30	111	Y
4456530000000064	12 / 30	111	N

#### 1.13.3 Viet Nam Domestic (via Napas)

Card Number	Card Holder Name	Issue Date / Expiry Date	OTP (Permanent)
9704000000000018	Nguyen Van A	03/07	otp

## 2 API Specification

### 2.1 Definition Table

Definition	Remark
Mandatory (M)	Required when call API
Optional (O)	DOT NOT Required when call API
Condition (C)	Base on Condition of another field when call API, that field can be Required or Optional

### 2.2 Data Format

Definition	Remark
Alpha	String data, including capital letters (A-Z), usually (a-z)
Numeric	Numeric data, consisting only of numeric characters (0-9)
Alphanumeric	Numeric data, including uppercase, lowercase, and numeric characters
JSON Object	JSON object data
JSON Array	JSON array data

## 2.3 API Query

Use to query a transaction status.

Endpoint URL: <https://uat-secure.galaxypay.vn/api/v1/transaction/query>

### 2.3.1 Request Message

Header					
Level	Field Name	Data Type	Length	Required	Description
1	apiKey	Alphanumeric		M	Request authenticate
1	signature	Alphanumeric		M	Request signature
Body					
Level	Field Name	Data Type	Length	Required	Description
1	requestID	Alphanumeric	50	M	Unique ID for each transaction request Recommend: <b>GUID</b>
1	requestDateTime	Numeric	14	M	<b>yyyyMMddHHmmss</b>
1	requestData	JSON Object			
2	requestData.transactionID	Alphanumeric	50	M	Transaction ID at GALAXY PAY
Example					
<pre>{   "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",   "requestDateTime": 20220426083322,   "requestData": {     "transactionID": "2212265363226226066183459"   } }</pre>					

### 2.3.2 Response Message

Body					
Level	Field Name	Data Type	Length	Required	Description
1	requestID	Alphanumeric	50	M	Original Request ID
1	responseDateTime	Numeric	14	M	<b>yyyyMMddHHmmss</b>
1	responseCode	Numeric	3	M	See <b>Response Code Table</b> for detail
1	responseMessage	Alphanumeric	250	M	Response message
1	responseData	JSON Object		M	Response data
2	responseData.transactionID	Alphanumeric	38	M	Transaction ID at GALAXY PAY
2	responseData.transactionDateTime	Numeric	14	M	<b>yyyyMMddHHmmss</b>

2	responseData.transactionStatus	Alphanumeric	3	M	Transaction Status
2	responseData.transactionDescription	Alphanumeric	250	M	Transaction Description
2	responseData.orderID	Alphanumeric	50	M	Transaction ID at Merchant
2	responseData.orderNumber	Alphanumeric	20	O	Order Number or Bill Number
2	responseData.orderAmount	Numeric	16	M	Order Amount
2	responseData.orderCurrency	Alpha	3	M	Order Currency
2	responseData.orderDateTime	Numeric	14	M	Order Date Time
2	responseData.orderDescription	Alphanumeric	250	M	Order Description

#### Example

```
{
  "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",
  "responseDateTime": "20220506113517",
  "responseCode": "200",
  "responseMessage": "Success",
  "responseData": {
    "transactionID": "2212265363226226066183459",
    "transactionDateTime": "20220405202000",
    "transactionStatus": "200",
    "transactionDescription": "Giao dịch thành công.",
    "orderID": "888289",
    "orderNumber": "82262889",
    "orderAmount": "109000",
    "orderDescription": "Secure Page Demo",
    "orderCurrency": "VND",
    "orderDateTime": "20220405202000"
  }
}
```



## 2.4 API Pay

Use to create a simple payment request to GALAXY PAY.

Endpoint URL: <https://uat-secure.galaxypay.vn/api/v1/transaction/pay>

### 2.4.1 Request Message

Header					
Level	Field Name	Data Type	Length	Required	Description
1	apiKey	Alphanumeric		M	Request authenticate
1	signature	Alphanumeric		M	Request signature
Body					
Level	Field Name	Data Type	Length	Required	Description
1	requestID	Alphanumeric	50	M	Unique ID for each transaction request Recommend: <b>GUID</b>
1	requestDateTime	Numeric	14	M	<b>yyyyMMddHHmmss</b>
1	requestData	JSON Object			
2	requestData.apiOperation	Alpha	20	M	Set default value: <b>PAY   PAY_WITH_CREATE_TOKEN</b>
2	requestData.orderID	Alphanumeric	50	M	Transaction ID at Merchant
2	requestData.orderNumber	Alphanumeric	20	O	Order Number or Bill Number
2	requestData.orderAmount	Numeric	16	M	Transaction Amount
2	requestData.orderCurrency	Alpha	3	M	Send the code in <b>Currencies Table</b>
2	requestData.orderDateTime	Numeric	14	M	<b>yyyyMMddHHmmss</b>
2	requestData.orderDescription	Alphanumeric	250	M	Transaction Description
2	requestData.paymentMethod	Alpha	20	M	<b>DOMESTIC   INTERNATIONAL   WALLET   HUB   QRPAY</b>  DOMESTIC: VietNam Local Card INTERNATIONAL: International Card WALLET: MoMo ewallet, Zalo Pay ewallet... HUB: Payment hub... QRPAY: QR Payment
2	requestData.sourceType	Alphanumeric	20	O	Can leave it blank or set the value corresponding to the payment method.  When <b>paymentMethod = DOMESTIC</b> Send the code in <b>Domestic Bank Table</b> ... When <b>paymentMethod = INTERNATIONAL</b> Send the code in <b>International Card Scheme Table</b> ... When <b>paymentMethod = WALLET</b> Send the code in <b>eWallet Table</b> ... When <b>paymentMethod = HUB</b> Send the code in <b>Payment Hubs Table</b>
2	requestData.language	Alpha	2	M	<b>vi or en</b>  vi: Vietnamese

					en: English
2	requestData.successURL	Alphanumeric	500	O	Callback URL when Payment is success
2	requestData.failureURL	Alphanumeric	500	O	Callback URL when Payment is failure
2	requestData.cancelURL	Alphanumeric	500	O	Callback URL when Customer cancel
2	requestData.ipnURL	Alphanumeric	500	O	IPN URL
2	requestData.sourceOfFund	Alpha	50	O	Accept value: <b>CARD</b> or <b>TOKEN</b>
2	requestData.cardNumber	Numeric	19	C	<b>Only required when sourceOfFund = CARD</b>
2	requestData.cardHolderName	Alphanumeric	19	C	<b>Only required when sourceOfFund = CARD</b>
2	requestData.cardExpireDate	Alphanumeric	5	C	<b>Only required when sourceOfFund = CARD</b> <b>Format: MM/YY</b>
2	requestData.cardVerificationValue	Numeric	3	C	<b>Only required when sourceOfFund = CARD</b>
2	requestData.token	Alphanumeric	50	C	<b>Only required when sourceOfFund = TOKEN</b>
2	requestData.extraData	JSON Object		O	Extra data
3	requestData.extraData.customer	JSON Object		O	Customer information
4	requestData.extraData.customer.firstName	Alphanumeric	50	O	Customer first name
4	requestData.extraData.customer.lastName	Alphanumeric	50	O	Customer last name
4	requestData.extraData.customer.identityNumber	Numeric	50	O	Customer national ID
4	requestData.extraData.customer.email	Alphanumeric	50	O	Customer email
4	requestData.extraData.customer.phoneNumber	Numeric	50	O	Customer phone number
4	requestData.extraData.customer.phoneType	Alpha	1	O	Customer phone type <b>F</b> : Fixed-line or <b>M</b> : Mobile
4	requestData.extraData.customer.gender	Alpha	1	O	Customer gender <b>M</b> : Male, <b>F</b> : Female
4	requestData.extraData.customer.dateOfBirth	Numeric	8	O	Customer birth day <b>yyyyMMdd</b>
4	requestData.extraData.customer.title	Alphanumeric	50	O	Customer title
3	requestData.extraData.device	JSON Object		O	Device information
4	requestData.extraData.device.browser	Alphanumeric	50	O	Browser information
4	requestData.extraData.device.fingerprint	Alphanumeric	100	O	Unique identifier for the device
4	requestData.extraData.device.hostName	Alphanumeric	50	O	The name of merchant server
4	requestData.extraData.device.ipAddress	Alphanumeric	50	O	The ip address of merchant server
4	requestData.extraData.device.deviceID	Alphanumeric	50	O	Mobile device identifier
4	requestData.extraData.device.deviceModel	Alphanumeric	50	O	Mobile device model
3	requestData.extraData.application	JSON Object		O	Application information
4	requestData.extraData.application.applicationID	Alphanumeric	50	O	Application Identifier

4	requestData.extraData.application.applicationChannel	Alpha	50	O	Application channel <b>Mobile, Web, POS</b>
3	requestData.extraData.airline	JSON Object		O	Airline information
4	requestData.extraData.airline.recordLocator	Alphanumeric	50	O	Passenger name record (PNR)
4	requestData.extraData.airline.journeyType	Numeric	1	O	Oneway: 1, Roundtrip: 2
4	requestData.extraData.airline.departureAirPort	Alphanumeric	50	O	Departure air port
4	requestData.extraData.airline.departureDateTime	Numeric	14	O	Departure date time <b>yyyyMMddHHmmss</b>
4	requestData.extraData.airline.arrivalAirPort	Alphanumeric	50	O	Arrival air port
4	requestData.extraData.airline.arrivalDateTime	Numeric	14	O	Arrival date time
4	requestData.extraData.airline.services	JSON Array		O	Airline services information
5	requestData.extraData.airline.services.serviceCode	Alphanumeric	50	O	Service code
5	requestData.extraData.airline.services.quantity	Numeric	10	O	Service quantity
5	requestData.extraData.airline.services.amount	Numeric	16	O	Service amount
5	requestData.extraData.airline.services.tax	Numeric	6	O	Service tax
5	requestData.extraData.airline.services.fee	Numeric	6	O	Service fee
5	requestData.extraData.airline.services.currency	Alpha	3	O	Service amount currency <b>VND or USD</b>
4	requestData.extraData.airline.flights	JSON Array		O	Airline flights information
5	requestData.extraData.airline.flights.airlineCode	Alphanumeric	50	O	Airline code
5	requestData.extraData.airline.flights.carrierCode	Alphanumeric	50	O	Carrier code
5	requestData.extraData.airline.flights.flightNumber	Numeric	50	O	Flight number
5	requestData.extraData.airline.flights.travelClass	Alphanumeric	50	O	Class of service
5	requestData.extraData.airline.flights.departureAirPort	Alphanumeric	50	O	Departure air port
5	requestData.extraData.airline.flights.departureDate	Numeric	50	O	Departure date <b>yyyyMMdd</b>
5	requestData.extraData.airline.flights.departureTime	Numeric	50	O	Departure time <b>HHmmss</b>
5	requestData.extraData.airline.flights.departureTax	Numeric	50	O	Departure tax
5	requestData.extraData.airline.flights.arrivalAirPort	Alphanumeric	50	O	Arrival air port
5	requestData.extraData.airline.flights.arrivalDate	Numeric	50	O	Arrival air port
5	requestData.extraData.airline.flights.arrivalTime	Numeric	50	O	Arrival date <b>yyyyMMdd</b>
5	requestData.extraData.airline.flights.fees	Numeric	50	O	Total fees
5	requestData.extraData.airline.flights.taxes	Numeric	50	O	Total taxes
5	requestData.extraData.airline.flights.fares	Numeric	50	O	Total fares

5	requestData.extraData.airline.flights.fareBasicCode	Alphanumeric	50	O	Code defining rules forming the basic of fare.
5	requestData.extraData.airline.flights.originCountry	Alpha	2	O	Country code of the country of origin for the flight.
4	requestData.extraData.airline.passengers	JSON Array		O	Airline passengers information
5	requestData.extraData.airline.passengers.passengerID	Alphanumeric	50	O	Passenger ID or Passport
5	requestData.extraData.airline.passengers.passengerType	Alphanumeric	50	O	Adult: ADT, Children: CHD, Infant: INF
5	requestData.extraData.airline.passengers.firstName	Alphanumeric	50	O	Passenger first name
5	requestData.extraData.airline.passengers.lastName	Alphanumeric	50	O	Passenger last name
5	requestData.extraData.airline.passengers.title	Alphanumeric	50	O	Passenger title
5	requestData.extraData.airline.passengers.gender	Alpha	1	O	Passenger gender
5	requestData.extraData.airline.passengers.dateOfBirth	Numeric	14	O	Passenger birth day yyyyMMddHHmmss
5	requestData.extraData.airline.passengers.identityNumber	Alphanumeric	50	O	Passenger national ID
5	requestData.extraData.airline.passengers.nameInPNR	Alphanumeric	50	O	Name in PNR
5	requestData.extraData.airline.passengers.memberTicket	Alphanumeric	50	O	Member ticket ID
3	requestData.extraData.billing	JSON Object		O	Billing address information
4	requestData.extraData.billing.country	Alpha	2	O	Billing country
4	requestData.extraData.billing.state	Alphanumeric	50	O	Billing state/provine
4	requestData.extraData.billing.city	Alphanumeric	50	O	Billing city
4	requestData.extraData.billing.postalCode	Alphanumeric	50	O	Billing postal code
4	requestData.extraData.billing.streetNumber	Alphanumeric	50	O	Billing street number
4	requestData.extraData.billing.address01	Alphanumeric	50	O	Billing address line 1
4	requestData.extraData.billing.address02	Alphanumeric	50	O	Billing address line 2
3	requestData.extraData.shipping	JSON Object		O	Shipping address information
4	requestData.extraData.shipping.country	Alpha	2	O	Shipping country
4	requestData.extraData.shipping.state	Alphanumeric	50	O	Shipping state/provine
4	requestData.extraData.shipping.city	Alphanumeric	50	O	Shipping city
4	requestData.extraData.shipping.postalCode	Alphanumeric	50	O	Shipping postal code
4	requestData.extraData.shipping.streetNumber	Alphanumeric	50	O	Shipping street number
4	requestData.extraData.shipping.address01	Alphanumeric	50	O	Shipping address line 1
4	requestData.extraData.shipping.address02	Alphanumeric	50	O	Shipping address line 2
Example					
<pre>{   "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",</pre>					

```

"requestDateTime": 20220426083322,
"requestData": {
  "apiOperation": "PAY",
  "orderID": "2a43e4b9-c5df-49e6-8b18-42af9bcd150e",
  "orderNumber": 205249008064,
  "orderAmount": 100000,
  "orderCurrency": "VND",
  "orderDateTime": 20220426083322,
  "orderDescription": "DEMO TRANSACTION",
  "paymentMethod": "DOMESTIC",
  "sourceType": "",
  "language": "vi",
  "extraData": {
    "customer": {
      "firstName": "Luca",
      "lastName": "Joshua",
      "identityNumber": "6587729673",
      "email": "William@outlook.com",
      "phoneNumber": "0598961097",
      "phoneType": "15oBj0MfIo",
      "gender": "M",
      "dateOfBirth": "19990716",
      "title": "Mr"
    },
    "device": {
      "browser": "QJc2njSA0f",
      "fingerprint": "hA05iBWrRE",
      "hostName": "tKlUfI0PSy",
      "ipAddress": "XGInpbefIV",
      "deviceId": "NzoBA2ys2y",
      "deviceModel": "yB0pcSWt1C"
    },
    "application": {
      "applicationID": "KbPCc8eSXH",
      "applicationChannel": "Mobile"
    },
    "airline": {
      "recordLocator": "taiytAvAbH",
      "journeyType": 630351972,
      "departureAirport": "0GwfbYtgKQ",
      "departureDateTime": "26/04/2022 09:33:28",
      "arrivalAirport": "Z7oMrnXLyV",
      "arrivalDateTime": "26/04/2022 07:49:17",
      "services": [{
        "serviceCode": "CNm3xWF0BN",
        "quantity": 2080236449,
        "amount": 90000,
        "tax": 0,
        "fee": 20000,
        "totalAmount": 90000,
        "currency": "USD"
      }],
      "flights": [{
        "airlineCode": "iwxOOR6FdH",
        "carrierCode": "uOzkYneyc4",
        "flightNumber": 2094437388,
        "travelClass": "F7nh7Sq3h0",
        "departureAirport": "kaUCOr4fIu",
        "departureDate": "nTTKO14KMw",
        "departureTime": "26/04/2022 05:18:41",
        "departureTax": "PPKh18CuOL",
        "arrivalAirport": "9ngCTN12RX",
        "arrivalDate": "J7dPrCJhG4",
        "arrivalTime": "26/04/2022 01:50:58",
        "fees": 10000,
        "taxes": 0,
        "fares": 80000,
        "fareBasisCode": "1oJaV16qdp",
        "originCountry": "ctdWpuaNUY"
      }],
      "passengers": [{
        "passengerID": "PY46jn97Ti",
        "passengerType": "5VnNkPVs7k",
        "firstName": "James",
        "lastName": "Theodore",
        "title": "Mr",
        "gender": "F",
        "dateOfBirth": "20220425",
        "identityNumber": "bRcd3XuUx1",
        "nameInPNR": "UXHn1FZzTz",
        "memberTicket": "M5SnryZ27k"
      }],
      "billing": {

```

```
    "country": "vn",
    "state": "",
    "city": "Hồ Chí Minh",
    "postalCode": "70000",
    "streetNumber": "673",
    "address01": "Đường Nguyễn Hữu Thọ",
    "address02": ""
  },
  "shipping": {
    "country": "vn",
    "state": "",
    "city": "Hồ Chí Minh",
    "postalCode": "70000",
    "streetNumber": "673",
    "address01": "Đường Nguyễn Hữu Thọ",
    "address02": ""
  }
}
```

## 2.4.2 Response Message

Header					
Level	Field Name	Data Type	Length	Required	Description
1	signature	Alphanumeric		M	Response signature
Body					
Level	Field Name	Data Type	Length	Required	Description
1	requestID	Alphanumeric	50	M	Original Request ID
1	responseDateTime	Numeric	14	M	yyyyMMddHHmmss
1	responseCode	Numeric	3	M	See <a href="#">Response Code Table</a> for detail
1	responseMessage	Alphanumeric	250	M	Response message
1	responseData	JSON Object		M	Response data
2	responseData.transactionID	Alphanumeric		M	GALAXY PAY transaction ID
2	responseData.endpoint	Alphanumeric		M	Secure page URL (Use for Redirect)
Example					
<pre>{   "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",   "responseDateTime": "20220506092917",   "responseCode": "00",   "responseMessage": "Success",   "responseData": {     "transactionID": "2212055304051619700136225",     "endpoint": "https://uat-payment.galaxypay.vn/pay/2212055304051619700136225"   } }</pre>					

## 2.5 API Pay with Option

Use to create a payment request to GALAXY PAY with payment options. Customers can select payment methods on GALAXY PAY.

URL: <https://uat-secure.galaxypay.vn/api/v1/transaction/payWithOption>

### 2.5.1 Request Message

Header					
Level	Field Name	Data Type	Length	Required	Description
1	apiKey	Alphanumeric		M	Request authenticate
1	signature	Alphanumeric		M	Request signature
Body					
Level	Field Name	Data Type	Length	Required	Description
1	requestID	Alphanumeric	50	M	Unique ID for each transaction request Recommend: <b>GUID</b>
1	requestDateTime	Numeric	14	M	<b>yyyyMMddHHmmss</b>
1	requestData	JSON Object			
2	requestData.apiOperation	Alpha	20	M	Set default value: <b>PAY</b>
2	requestData.orderID	Alphanumeric	50	M	Transaction ID at Merchant
2	requestData.orderNumber	Alphanumeric	20	O	Order Number or Bill Number
2	requestData.orderAmount	Numeric	16	M	Transaction Amount
2	requestData.orderCurrency	Alpha	3	M	Send the code in <b>Currencies Table</b>
2	requestData.orderDateTime	Numeric	14	M	<b>yyyyMMddHHmmss</b>
2	requestData.orderDescription	Alphanumeric	250	M	Transaction Description
2	requestData.language	Alpha	2	M	<b>vi or en</b> vi: Vietnamese en: English
2	requestData.successURL	Alphanumeric	500	O	Callback URL when Payment is success
2	requestData.failureURL	Alphanumeric	500	O	Callback URL when Payment is failure
2	requestData.cancelURL	Alphanumeric	500	O	Callback URL when Customer cancel
2	requestData.ipnURL	Alphanumeric	500	O	IPN URL
2	requestData.extraData	JSON Object		O	Extra data. Same as API Pay
Example					



```
{
  "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",
  "requestDateTime": 20220426083322,
  "requestData": {
    "apiOperation": "PAY",
    "orderID": "2a43e4b9-c5df-49e6-8b18-42af9bcd150e",
    "orderNumber": 205249008064,
    "orderAmount": 100000,
    "orderCurrency": "VND",
    "orderDateTime": 20220426083322,
    "orderDescription": "DEMO TRANSACTION",
    "language": "vi",
    "extraData": {
    }
  }
}
```

## 2.5.2 Response Message

Header					
Level	Field Name	Data Type	Length	Required	Description
1	signature	Alphanumeric		M	Response signature
Body					
Level	Field Name	Data Type	Length	Required	Description
1	requestID	Alphanumeric	50	M	Original Request ID
1	responseDateTime	Numeric	14	M	yyyyMMddHHmmss
1	responseCode	Numeric	3	M	See <a href="#">Response Code Table</a> for detail
1	responseMessage	Alphanumeric	250	M	Response message
1	responseData	JSON Object		M	Response data
2	responseData.transactionID	Alphanumeric		M	GALAXY PAY transaction ID
2	responseData.endpoint	Alphanumeric		M	Secure page URL (Use for Redirect)
Example					
<pre>{   "requestID": "260b8362e5194b0da4b7eb6c54c87225",   "responseDateTime": "20220912174055",   "responseCode": "200",   "responseMessage": "Success",   "responseData": {     "transactionID": "2212055304051619700136225",     "endpoint": "https://uat-payment.galaxypay.vn/payWithOption/2212055304051619700136225"   } }</pre>					

## 2.6 Cancel Callback

- Use for Merchant to redirect customer to cancel payment page.
- Support http method **POST** or **GET**

### 2.6.1 Request Message

Body					
Level	Field Name	Data Type	Length	Required	Description
1	data	Alphanumeric		M	Base-64 string
1	signature	Alphanumeric		M	Response Signature
Data (Decode Base-64 String)					
Level	Field Name	Data Type	Length	Required	Description
1	requestID	Alphanumeric	50	M	Original Request ID
1	responseDateTime	Numeric	14	M	yyyyMMddHHmmss
1	responseCode	Numeric	3	M	See <b>Response Code Table</b> for detail
1	responseMessage	Alphanumeric	250	M	Response message
1	responseData	JSON Object		M	Response data
2	responseData.transactionID	Alphanumeric	38	M	Transaction ID at GALAXY PAY
2	responseData.transactionDateTime	Numeric	14	M	yyyyMMddHHmmss
2	responseData.orderID	Alphanumeric	50	M	Transaction ID at Merchant
2	responseData.orderNumber	Alphanumeric	20	O	Order Number or Bill Number
2	responseData.orderAmount	Numeric	16	M	Order Amount
2	responseData.orderCurrency	Alpha	3	M	Order Currency
2	responseData.orderDateTime	Numeric	14	M	Order Date Time
2	responseData.orderDescription	Alphanumeric	250	M	Order Description
2	responseData.language	Alpha	2	M	vi or en vi: Vietnamese en: English
Example					
<pre>{   "data":   "eyJyZXF1ZXN0SUQiOiIxNDY1M2ZhMS0yZjY5LTRmNGYtOWQ0Yi0yNDBlMWJlYmJkZjMiLCJyZXNwb25zZURhdGVUaW1lIjoimjAyMjA1MDYxMTM1MTciLCJyZXNwb25zZUNvZGUiOiI0OTkiLCJyZXNwb25zZU1lc3NhZ2UiOiJDYW5jZWxlZCBieSB1c2VyIiwicmVzcG9uc2VEYXRhIjp7InRyYW5zYWN0aW9uSUQiOiIyMjA1MDY5OWU2NWQ5YTcxZDU0OGU2YjY3MzIzYWVmMWE0OTRhYyIsInRyYW5zYWN0aW9uRGF0ZVRpbWUiOiIyMDIyMDUwNjExMzUxNyIsIm9yZGVySUQiOiI4ODgyODkiLCJvcmlk51bWJlciI6IjgyMjYyODg5Iiw</pre>					

```
ib3JkZXJBbW91bnQiOiIxMDkwMDAiLCJvcmlkRlcn2NyaXB0aW9uIjoU2VjdXJlIFBhZ2UgRGVtbyIsIm9yZGVyQ3VycmVuY3ki
OiJWtKQiLCJvcmlkRhdGVUaW11IjoUjMjYmJkMDUyMDIwMDAiLCJsYW5ndWFnZSI6InZpIn19",
  "signature": "be8d2d815d694037d7ec2d9f7ac645d7a6168b692af6b786c1d59da72cd93a5e"
}
```

Decode Base-64 string

```
{
  "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",
  "responseDateTime": "20220506113517",
  "responseCode": "499",
  "responseMessage": "Canceled by user",
  "responseData": {
    "transactionID": "22050699e65d9a71d548e6b67323aef1a494ac",
    "transactionDateTime": "20220506113517",
    "orderID": "888289",
    "orderNumber": "82262889",
    "orderAmount": "109000",
    "orderDescription": "Secure Page Demo",
    "orderCurrency": "VND",
    "orderDateTime": "20220405202000",
    "language": "vi"
  }
}
```

## 2.7 Result & IPN Callback

- Result URL: Use for Merchant to show result for Customer. Support http method **POST** or **GET**
- IPN URL: Use for Merchant to receive payment result and process business workflow.

### 2.7.1 Request Message

Body					
Level	Field Name	Data Type	Length	Required	Description
1	data	Alphanumeric		M	Base-64 string
1	signature	Alphanumeric		M	Response Signature
Data (Decode Base-64 String)					
Level	Field Name	Data Type	Length	Required	Description
1	requestID	Alphanumeric	50	M	Original Request ID
1	responseDateTime	Numeric	14	M	yyyyMMddHHmmss
1	responseCode	Numeric	3	M	See <b>Response Code Table</b> for detail
1	responseMessage	Alphanumeric	250	M	Response message
1	responseData	JSON Object		M	Response data
2	responseData.transactionID	Alphanumeric	38	M	Transaction ID at GALAXY PAY
2	responseData.transactionDateTime	Numeric	14	M	yyyyMMddHHmmss
2	responseData.orderID	Alphanumeric	50	M	Transaction ID at Merchant
2	responseData.orderNumber	Alphanumeric	20	O	Order Number or Bill Number
2	responseData.orderAmount	Numeric	16	M	Order Amount
2	responseData.orderCurrency	Alpha	3	M	Order Currency
2	responseData.orderDateTime	Numeric	14	M	Order Date Time
2	responseData.orderDescription	Alphanumeric	250	M	Order Description
2	responseData.language	Alpha	2	M	vi or en vi: Vietnamese en: English
2	responseData.tokenization	JSON Object		O	Only Return on IPN callback when - Transaction is successful (ResponseCode = 200) - APIOperation = PAY_WITH_CREATE_TOKEN - PaymentMethod = DOMESTIC or INTERNATIONAL
3	responseData.tokenization.accountBrand	Alphanumeric	50	O	Card Brand Info
3	responseData.tokenization.accountSource	Alphanumeric	50	O	Card Issuer Info

3	responseData.tokenization.accountNumber	Alphanumeric	50	O	Card Masked Number
3	responseData.tokenization.accountName	Alphanumeric	50	O	Card Holder Name
3	responseData.tokenization.token	Alphanumeric	50	O	Card Token
3	responseData.tokenization.status	Alphanumeric	3	M	Token Creation Result
3	responseData.tokenization.message	Alphanumeric	250	M	Token Creation Message

#### Example

```
{
  "data":
    "eyJyZXFlZXN0SUQiOiIxNDY1M2ZhMS0yZjY5LFRmNGYtOWQ0Yi0yNDBlMWJlYmJkZjMiLCJyZXNwb25zZURhdGVUaW1lIjoimjAyMjA1MDYxMTM1MTciLCJyZXNwb25zZUNvZGU0IiYMDA1LCJyZXNwb25zZU1lc3NhZ2UiOiJUCmFuc2FjdGlvbiBpcyBzdWNjZXNzZnVsLiIsInJlc3Bvb3R0YSI6eyJ0cmFuc2FjdGlvbk1EIjoimjIwNTA2OT11NjVkeWV3MjQ1NDh1NmI2NzMyM2F1ZjFhNDk0YWMiLCJ0cmFuc2FjdGlvbkRhdGVUaW1lIjoimjAyMjA0MDUyMDIwMDA1LCJvcmlkLklEIjoimjODg4Mjg5Iiwib3JkZXJodW1iZXIiOiI4MjI2Mjg4OSIsIm9yZGVyQW1vdW50IjoimTA5MDAwIiwib3JkZXJlZ2UyOjI2aS9JfQ==",
  "signature": "4952cb18e6b136de4c15ecbae75ba1a758257684eb97a43f351e34bb12cede5f"
}
```

#### Decode Base-64 string

```
{
  "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",
  "responseDateTime": "20220506113517",
  "responseCode": "200",
  "responseMessage": "Transaction is successful.",
  "responseData": {
    "transactionID": "22050699e65d9a71d548e6b67323aef1a494ac",
    "transactionDateTime": "20220405202000",
    "orderID": "888289",
    "orderNumber": "82262889",
    "orderAmount": "109000",
    "orderDescription": "Secure Page Demo",
    "orderCurrency": "VND",
    "orderDateTime": "20220405202000",
    "language": "vi"
  }
}
```

## 2.7.2 Response Message (FOR IPN ONLY)

Body					
Level	Field Name	Data Type	Length	Required	Description
1	ipnStatus	Alphanumeric	50	M	Response Code for IPN Request.  Accepted value: <b>200:</b> Transaction Success <b>404:</b> Transaction Not Found <b>409:</b> Transaction Completed
1	ipnDescription	Alphanumeric	250	O	Response Description

## 2.8 Remove Token

- Use to remove the existing tokens.

### 2.8.1 Request Message

Header					
Level	Field Name	Data Type	Length	Required	Description
1	apiKey	Alphanumeric		M	Request authenticate
1	signature	Alphanumeric		M	Request signature
Body					
Level	Field Name	Data Type	Length	Required	Description
1	requestID	Alphanumeric	50	M	Unique ID for each transaction request Recommend: <b>GUID</b>
1	requestDateTime	Numeric	14	M	<b>yyyyMMddHHmmss</b>
1	requestData	JSON Object			
2	requestData.token	Alphanumeric	50	M	Card Token
Example					
<pre>{   "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",   "requestDateTime": 20220426083322,   "requestData": {     "token": "3235EAC34706B85A49D1993805798FB483B6"   } }</pre>					

### 2.8.2 Response Message

Body					
Level	Field Name	Data Type	Length	Required	Description
1	requestID	Alphanumeric	50	M	Original Request ID
1	responseDateTime	Numeric	14	M	<b>yyyyMMddHHmmss</b>
1	responseCode	Numeric	3	M	See <b>Response Code Table</b> for detail
1	responseMessage	Alphanumeric	250	M	Response message
Example					
<pre>{   "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",   "responseDateTime": "20220506113517",   "responseCode": "200",   "responseMessage": "Success", }</pre>					