

DTC Payment OpenAPI Documentation

Digital Treasures Center @ 2022

Update History

Date	Author	Comment
11 May 2022	Andy	
19 Aug 2022	Andy	Add Payment Notification
06 Sep 2022	Andy	Add Get Merchant QR API
28 Sep 2022	Andy	Update enum parameter type
14 Feb 2025	Frank	Add payment page param
24 Jun 2025	Gerry	1. Add static qr API 2. Add 3.5 API param
31 Oct 2025	Jensen	Update billingInfo to Mandatory for Get Payment Page
13 Nov 2025	Jensen	Get Payment Page: add saleAmount, serviceFeeAmount, gstAmount, tipAmount params
03 Dec 2025	Kang Wei	Add senderAddress request param into /api/v1/generate-merchant-qr
15 Dec 2025	Kang Wei	Add disclaimer in Quick Start section
19 Dec 2025	Zhi Yan	Update Brand enum (add WECHAT, CIMB, WORLDPAY, GOOGLE_PAY, SAMSUNG_PAY, BINANCE_PAY, BASE, SOLANA, ARBITRUM, DTCPAY; remove POLYGON)
24 Dec 2025	Zhi Yan	Add PARTIAL_PAYMENT and CANCELLED transaction states
12 May 2026	Jensen	Add Binance Pay brand to PaymentBrand enum
12 May 2026	Kang Wei	Sync update history
12 May 2026	Kang Wei	Reorder update history chronologically

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Chapter 1. Introduction

1.1. Overview

The DTC Payment API, a JSON restful web service API, for third-party to integrate DTC Payment solutions with their own business website or services.

This specification defines a set of interfaces and standard of security standards.

NOTE

The time-related values are based on the Singapore Time (SGT) Timezone by default.

1.2. Specification Titles

- **Name:** This column specifies the name of JSON field in request or response.
- **Max Length:** This column specifies the content and maximum length of value of JSON field.
 - **a** - Alpha
 - **n** - Numeric
 - **s** - Special printable character
- **Type:** This column specifies the type of JSON field.
 - **String** - the value is in string type;
 - **Nested JSON** - the value is a JSON object.
- **Required:** This column specifies the requirement of JSON field
 - **M** - Mandatory. DTC system will validate the value of this field in request
 - **C** - Conditional. In some conditions, this field is Mandatory. The condition will be specified in the description.
 - **O** - Optional. This field is optional, which will not affect the result of the transaction.
- **Description:** This column describes the usage, conditions or values contained of this JSON field.

1.3. Security Standards

The OpenAPI provides different level of security standards.

HTTPS: First level of security which is compulsory for all connections to DTC Payment OpenAPI. TLS 1.2.

Whitelist: IP whitelist is optional, you can set it up in the API Key Management Page.

Signature: For security checking.

Chapter 2. Quick Start

2.1. Disclaimer

Use of these APIs is subject to dtcpay's review and approval. dtcpay reserves the right, at its sole discretion, to approve, restrict, suspend, or revoke access at any time.

2.2. Before Integration

- SignKey: Assigned by DTC. The terminal of each merchant corresponds to a unique signkey

2.3. HTTP Headers

1. Append merchantId,terminalId,timestamp and signature to HTTP headers

- D-MERCHANT-ID: Assigned by DTC
- D-TERMINAL-ID: Assigned by DTC
- D-TIMESTAMP: SGT based Epoch Time(Millisecond), for example 1636363076779, CurrentTimestamp in 2 mins. refer to <https://currentmillis.com/>.
- D-SIGNATURE: BASE64(HMAC_SHA512(Request Method + D-TIMESTAMP + Request Url + urlParameter/requestBody(post only), SignKey)).

① The SignKey from Before Integration.

Chapter 3. API

3.1. Sign In

Request

```
[GET] /api/v1/sign-in
```

Response Parameters

ID	Name	Max length	Type	Required	Description
1	merchantId	a..20	Long	M	The merchant ID generated by DTC system for merchant. generated unique transaction-id, which is used heavily for identifying the resulted transaction in DTC system.
2	merchantInfo		MerchantInfo	M	The merchant's information
3	terminalId	a..20	Long	M	The terminal ID generated by DTC system for merchant. Multiple terminal routes can be added to a terminal ID.
4	brand		int	M	The payment mode or card type that customer used for the transaction. Please refer to Enum List - Brand.
5	module		int	M	Please refer to Enum List - Module.
6	processingCurrency	a..7	Currency	M	Currency of the payer transaction
7	acqRouteId	a..20	Long	M	The acqRoute ID generated by DTC system for merchant

Response Sample (formatted)

```
{
  "header": {
    "code": 200
  },
  "terminalId": 2011100008,
  "merchantId": 8520110007,
  "merchantInfo": {
    "name": "Wise & New Life Pte Ltd. (Test)",
    "country": "SGP",
    "city": "Singapore",
    "state": "Central Singapore",
    "postalCode": "018936",
    "address": "7 Straits View, Marina One East Tower"
  },
  "channels": [
```

```

    {
      "brand":201,
      "processingCurrency":"USDC",
      "module":1002,
      "acqRouteId":67
    },
    {
      "brand":201,
      "processingCurrency":"USDT",
      "module":1002,
      "acqRouteId":60
    },
    {
      "brand":200,
      "processingCurrency":"USDT",
      "module":1003,
      "acqRouteId":17
    },
    {
      "brand":200,
      "processingCurrency":"USDT",
      "module":1002,
      "acqRouteId":13
    },
    {
      "brand":2,
      "processingCurrency":"SGD",
      "module":4,
      "acqRouteId":6
    },
    {
      "brand":2,
      "processingCurrency":"SGD",
      "module":2,
      "acqRouteId":8
    },
    {
      "brand":7,
      "processingCurrency":"CNY",
      "module":1,
      "acqRouteId":1
    },
    {
      "brand":1,
      "processingCurrency":"SGD",
      "module":2,
      "acqRouteId":7
    }
  ]
}

```

3.2. Get Payment Page

Request

[POST] /api/v1/payment-page

Transaction Request Parameters

ID	Name	Max length	Type	Required	Description
1	totalAmount	a..63	BigDecimal	M	Total amount of payer transactions
2	saleAmount	a..63	BigDecimal	C	The original price of the goods or services
3	serviceFeeAmount	a..63	BigDecimal	C	Service Fee Amount (If provided, saleAmount must also be filled)
4	gstAmount	a..63	BigDecimal	C	The Goods and Services Tax amount (If provided, saleAmount must also be filled)
5	tipAmount	a..63	BigDecimal	C	The voluntary tip given by the customer (If provided, saleAmount must also be filled)
6	referenceNo	a..255	String	M	An unique string to locate a transaction
7	notificationUrl	a..255	String	C	Webhook URL for the transaction state update notifications, please refer to the section Payment Notification.
8	billingInfo		PersonalInfo	C	Billing Info
9	shippingInfo		PersonalInfo	C	Shipping Info
10	redirectUrl	a..255	String	M	Merchant's site URL where DTC is going to redirect Customer once a final result has been received from bank / acquirer

PersonalInfo Parameters

ID	Name	Type	Required
1	firstName	String	M
2	lastName	String	M
3	email	String	M
4	phone	String	C
5	country	String	M
6	state	String	C

ID	Name	Type	Required
7	city	String	C
8	postcode	String	M
9	address	String	M
10	address2	String	O

Request Body Sample (formatted)

```
{
  "transaction": {
    "totalAmount": "1.23",
    "referenceNo": "1821938217",
    "notificationUrl": "https://api.dev.dtcpayment.net",
    "billingInfo": {
      "firstName": "AAA",
      "lastName": "BBB",
      "email": "billing@xxx.yyy",
      "phone": "12345678",
      "country": "Singapore",
      "state": "Singapore",
      "city": "Singapore",
      "postcode": "123456",
      "address": "Billing Line 1",
      "address2": "Billing Line 2"
    },
    "shippingInfo": {
      "firstName": "CCC",
      "lastName": "DDD",
      "email": "shipping@xxx.yyy",
      "phone": "12345678",
      "country": "Singapore",
      "state": "Singapore",
      "city": "Singapore",
      "postcode": "654321",
      "address": "Shipping Line 1",
      "address2": "Shipping Line 2"
    }
  },
  "redirectUrl": "https://api.dev.dtcpayment.net",
}
```

Transaction Response Parameters

ID	Name	Max length	Type	Required	Description
1	success	true/false	BOOLEAN	M	

ID	Name	Max length	Type	Required	Description
2	page Url	a..255	BigDecimal	M	QR corresponding payment page URL.The payment page URL where merchant's system need to redirect to.
3	static	true/false	BOOLEAN	C	There are two forms of QR (true:Static QR , Can be used for multiple payments . false:Dynamic QR , A payment page is generated without creating one, and can only be used for one payment)
4	timeout		TIME	M	The timeout is in seconds

Response Sample (formatted)

```
{
  "header": {
    "success": true
  },
  "result": {
    "pageUrl": "https://api.dev.dtcpayment.net/api/v1/payment-page/F6yAivXiKdQ8x0KGosbkjhGhVyxCA6di",
    "static": false,
    "timeout": "1604756861"
  }
}
```

3.3. Generate Merchant QR

Request

[POST] /api/v1/generate-merchant-qr

Transaction Request Parameters

ID	Name	Max length	Type	Required	Description
1	totalAmount	a..63	BigDecimal	M	Total amount of payer transactions
2	referenceNo	a..255	String	M	An unique string to locate a transaction
3	notificationUrl	a..255	String	C	Webhook URL for the transaction state update notifications, please refer to the section Payment Notification.
4	billingInfo		PersonInfo	C	Billing Info

I D	Name	Max length	Type	Required	Description
5	shippingInfo		PersonalInfo	C	Shipping Info information
6	brand		int	M	Please refer to Enum List - Brand.
7	module		int	M	Please refer to Enum List - Brand.
8	processingCurrency	a..7	Currency	M	Currency of the payer transaction
9	senderAddress	a..255	String	O	If senderAddress is high-risk or fails validation, an error is returned; if it passes but the transaction isn't funded from that address, the transaction is marked as denied.

PersonalInfo Parameters

ID	Name	Type	Required
1	firstName	String	M
2	lastName	String	M
3	email	String	M
4	phone	String	C
5	country	String	M
6	state	String	C
7	city	String	C
8	postcode	String	M
9	address	String	M
10	address2	String	O

Request Body Sample (formatted)

```
{
  "transaction":{
    "brand":200,①
    "module":1002,②
    "processingCurrency":"USDT",③
    "totalAmount":"1",
    "referenceNo":"1821938217",
    "billingInfo":{
      "firstName":"AAA",
      "lastName":"BBB",
      "email":"billing@xxx.yyy",
      "phone":"12345678",
      "country":"Singapore",
      "state":"Singapore",
      "city":"Singapore",
      "postcode":"123456",

```

```

        "address": "Billing Line 1",
        "address2": "Billing Line 2"
    },
    "shippingInfo": {
        "firstName": "CCC",
        "lastName": "DDD",
        "email": "shipping@xxx.yyy",
        "phone": "12345678",
        "country": "Singapore",
        "state": "Singapore",
        "city": "Singapore",
        "postcode": "654321",
        "address": "Shipping Line 1",
        "address2": "Shipping Line 2"
    },
    "notificationUrl": "https://api.dev.dtcpayment.net"
},
"senderAddress": "
0x54222a1b7de8916b7682cfa1a7f274ea9f2a394089a989ddbe7aa1e2a8c9e5"
}

```

- ① Payment Transaction Brand, please refer to Enum List - Brand
- ② Payment Transaction Module, please refer to Enum List - Module
- ③ ProcessingCurrency, please refer to Enum List - Currency

Merchant QR Transaction Response Parameters

I D	Name	Max length	Type	Required	Description
1	id	a..20	Long	M	The DTC generated unique transaction-id, which is used heavily for identifying the resulted transaction in DTC system.
2	brand		int	M	The payment mode or card type that customer used for the transaction. Please refer to Enum List - Brand.
3	dtcTimestamp		LocalDateTime	M	The date-time when the request is received or created. In a 24 hour format. Time zone is using (UTC+08:00) Kuala Lumpur, Singapore.
4	gstAmount	a..63	BigDecimal	O	
5	gstRate	a..7	BigDecimal	O	
6	lastUpdatedTime		LocalDateTime	M	The datetime when the response is created. In a 24 hour format. Timezone is using (UTC+08:00) Kuala Lumpur, Singapore.
7	merchantId	a..20	Long	M	The merchant ID generated by DTC system for merchant.

I D	Name	Max length	Type	Requi red	Description
8	merchantName	a..255	String	M	The merchant's own name
9	processingAmount	a..63	BigDecimal	M	Amount of payer transaction
10	processingCurrency	a..7	Currency	M	Currency of the payer transaction
11	processingFee	a..63	BigDecimal	O	
12	referenceNo	a..255	String	M	An unique string to locate a transaction
13	requestCurrency	a..7	Currency	M	Currency of the merchant transaction
14	saleAmount	a..63	BigDecimal	O	Price of goods
15	serviceAmount	a..63	BigDecimal	O	Service fee amount
16	serviceRate	a..7	BigDecimal	O	Service fee exchange rate
17	settlementStatus		int	M	Please refer to Enum List - SettlementStatus
18	state		int	M	Payment Transaction State, please refer to Enum List -PaymentTransactionState
19	terminalId	a..20	Long	M	The terminal ID generated by DTC system for merchant. Multiple terminal routes can be added to a terminal ID.
20	tipAmount	a..63	BigDecimal	O	Tips involved in the transaction
21	totalAmount	a..63	BigDecimal	M	Total amount of payer transactions.(saleAmount+serviceAmount+gstAmount+tipAmount = totalAmount)
22	qr	a..255	String	M	The Payer scans the QR Code to initiate payment.

Response Sample (formatted)

```
{
  "header":{
    "code":200 ①
  },
  "brand":200,②
  "cardHolderName":"AAA BBB",
```

```

"dtcTimestamp": "2022-09-06 16:13:59",
"gstAmount": "0",
"gstRate": 0,
"id": 220906161400163,
"lastUpdatedTime": "2022-09-06 16:14:001",
"merchantId": 8520110007,
"merchantName": "Wise & New Life Pte Ltd. \u0028Test\u0029",
"processingAmount": "0.76086",
"processingCurrency": "USDT", ③
"processingFee": "0",
"qr": "0x4AA25e9F824D3abd268Da38a96D34efC53f36992",
"referenceNo": "1821938217",
"requestCurrency": "SGD", ④
"saleAmount": "1",
"serviceAmount": "0",
"serviceRate": 0,
"settlementStatus": 0, ⑤
"state": 0, ⑥
"terminalId": 2011100008,
"tipAmount": "0",
"totalAmount": "1"
}

```

① Response Code, please refer to Response Codes - ResponseCode

② Payment Transaction Brand, please refer to Enum List - Brand

③ ProcessingCurrency, please refer to Enum List - Currency

④ RequestCurrency, please refer to Enum List - Currency

⑤ SettlementStatus, please refer to Enum List - SettlementStatus

⑥ Payment Transaction State, please refer to Enum List -PaymentTransactionState

3.4. Query Payment Detail

Request

[POST] /api/v1/query-detail

Request Parameters

ID	Name	Max length	Type	Required	Description
1	transactionId	a..20	Long	C	The DTC generated unique transaction-id, which is used heavily for identifying the resulted transaction in DTC system.
2	referenceNo	a..255	String	C	An unique string to locate a transaction

Request Body Sample (formatted)

```
{ ①  
  "transactionId": "220817101245678",  
  "referenceNo": "1821938217"  
}
```

① The two parameters in this request are optional fields to each other

Response Parameters

I D	Name	Max length	Type	Requi red	Description
1	id	a..20	Long	M	The DTC generated unique transaction-id, which is used heavily for identifying the resulted transaction in DTC system.
2	brand		int	M	The payment mode or card type that customer used for the transaction. Please refer to Enum List - Brand.
3	dtcTimestamp		LocalDate Time	M	The date-time when the request is received or created. In a 24 hour format. Time zone is using (UTC+08:00) Kuala Lumpur, Singapore.
4	gstAmount	a..63	BigDecimal	O	
5	gstRate	a..7	BigDecimal	O	
6	lastUpdated Time		LocalDate Time	M	The datetime when the response is created. In a 24 hour format. Timezone is using (UTC+08:00) Kuala Lumpur, Singapore.
7	merchantId	a..20	Long	M	The merchant ID generated by DTC system for merchant.
8	merchantName	a..255	String	M	The merchant's own name
9	processingAmount	a..63	BigDecimal	M	Amount of payer transaction
10	processingCurrency	a..7	Currency	M	Currency of the payer transaction
11	processingFee	a..63	BigDecimal	O	
12	referenceNo	a..255	String	M	An unique string to locate a transaction
13	requestCurrency	a..7	Currency	M	Currency of the merchant transaction

I D	Name	Max length	Type	Requi red	Description
14	saleAmount	a..63	BigDeci mal	O	Price of goods
15	serviceAmo unt	a..63	BigDeci mal	O	Service fee amount
16	serviceRate	a..7	BigDeci mal	O	Service fee exchange rate
17	settlementS tatus		int	M	Please refer to Enum List - SettlementStatus
18	state		int	M	Payment Transaction State, please refer to Enum List -PaymentTransactionState
19	terminalId	a..20	Long	M	The terminal ID generated by DTC system for merchant.Multiple terminal routes can be added to a terminal ID.
20	tipAmount	a..63	BigDeci mal	O	Tips involved in the transaction
21	totalAmoun t	a..63	BigDeci mal	M	Total amount of payer transactions.(saleAmount+serviceAmount+gstAmount+ tipAmount = totalAmount)
22	acqMid	a..255	String	M	The acqMid generated by DTC system for merchant.
23	acqTid	a..255	String	M	The acqTid generated by DTC system for merchant.
24	receiptNum ber	a..255	String	M	
25	type		int	M	The PaymentTransactionType , please refer to Enum List -PaymentTransactionType
26	truncatedP an	a..255	String	C	The truncatedPan only for credit card payment
27	qrId	a..20	Long	O	The DTC generated unique qr-id
28	qr	a..255	String	O	The Payer scans the QR Code to initiate payment.

Response Sample (formatted)

```
{
  "header":{
    "code":200 ①
  },
  "id":220920212411275,
  "merchantId":8520110007,
  "merchantName":"Wise & New Life Pte Ltd. (Test)",
  "terminalId":2011100008,
  "brand":201, ②
  "acqMid":"NA",
}
```

```

"acqTid": "0x214774e237FA1fD6895631AeBF5fc6332bb2A976",
"requestCurrency": "SGD", ③
"totalAmount": "1.00",
"saleAmount": "1.00",
"serviceRate": 0,
"serviceAmount": "0",
"gstRate": 0,
"gstAmount": "0",
"tipAmount": "0",
"processingCurrency": "USD", ④
"processingAmount": "0.76086",
"processingFee": "0",
"receiptNumber":
"0x323361d9c272979304518f42a9e0833f87367d23e3d858edaa8fe3628a616c98",
"settlementStatus": 0, ⑤
"state": 200, ⑥
"type": 200, ⑦
"referenceNo": "1663678847502",
"cardHolderName": "11 22",
"dtcTimestamp": "2022-09-20 21:24:11",
"secondaryAmount": "0.76086",
"lastUpdatedTime": "2022-09-20 22:21:51",
"qr": "0x214774e237FA1fD6895631AeBF5fc6332bb2A976",
"qrId": 3214
}

```

- ① Response Code, please refer to Response Codes - ResponseCode
- ② Payment Transaction Brand, please refer to Enum List - Brand
- ③ RequestCurrency, please refer to Enum List - Currency
- ④ ProcessingCurrency, please refer to Enum List - Currency
- ⑤ SettlementStatus, please refer to Enum List - SettlementStatus
- ⑥ PaymentTransactionState, please refer to Enum List -PaymentTransactionState
- ⑦ PaymentTransactionType , please refer to Enum List -PaymentTransactionType

3.5. Query History

Request

[POST] /api/v1/query-history

ID	Na me	Max length	Typ e	Requir ed	Description
2	qrId	a..20	Long	O	The DTC generated unique qr-id.

ID	Name	Max length	Type	Required	Description
3	qr	a..255	String	O	The Payer scans the QR Code to initiate payment.
4	brand		int	O	The payment mode or card type that customer used for the transaction. Please refer to Enum List - Brand.

Request Body Sample (formatted)

```
{
  "brand": 200,
  "qrId": 4231,
  "qr": "0x214774e237FA1fD6895631AeBF5fc6332bb2A976",
  "pageSize": 30,
  "pageNo": 1
}
```

Response Parameters

ID	Name	Max length	Type	Required	Description
1	id	a..20	Long	M	The DTC generated unique transaction-id, which is used heavily for identifying the resulted transaction in DTC system.
2	brand		int	M	The payment mode or card type that customer used for the transaction. Please refer to Enum List - Brand.
3	dtcTimestamp		LocalDateTime	M	The date-time when the request is received or created. In a 24 hour format. Time zone is using (UTC+08:00) Kuala Lumpur, Singapore.
4	gstAmount	a..63	BigDecimal	O	
5	gstRate	a..7	BigDecimal	O	
6	lastUpdatedTime		LocalDateTime	M	The datetime when the response is created. In a 24 hour format. Timezone is using (UTC+08:00) Kuala Lumpur, Singapore.
7	merchantId	a..20	Long	M	The merchant ID generated by DTC system for merchant.
8	merchantName	a..255	String	M	The merchant's own name
9	processingAmount	a..63	BigDecimal	M	Amount of payer transaction

I D	Name	Max length	Type	Requi red	Description
10	processingC urrency	a..7	Currency	M	Currency of the payer transaction
11	processingF ee	a..63	BigDeci mal	O	
12	referenceN o	a..255	String	M	An unique string to locate a transaction
13	requestCur rency	a..7	Currency	M	Currency of the merchant transaction
14	saleAmount	a..63	BigDeci mal	O	Price of goods
15	serviceAmo unt	a..63	BigDeci mal	O	Service fee amount
16	serviceRate	a..7	BigDeci mal	O	Service fee exchange rate
17	settlementS tatus		int	M	Please refer to Enum List - SettlementStatus
18	state		int	M	Payment Transaction State, please refer to Enum List -PaymentTransactionState
19	terminalId	a..20	Long	M	The terminal ID generated by DTC system for merchant.Multiple terminal routes can be added to a terminal ID.
20	tipAmount	a..63	BigDeci mal	O	Tips involved in the transaction
21	totalAmoun t	a..63	BigDeci mal	M	Total amount of payer transactions.(saleAmount+serviceAmount+gstAmount+tipAmount = totalAmount)
22	acqMid	a..255	String	M	The acqMid generated by DTC system for merchant.
23	acqTid	a..255	String	M	The acqTid generated by DTC system for merchant.
24	receiptNum ber	a..255	String	M	
25	type		int	M	The PaymentTransactionType , please refer to Enum List -PaymentTransactionType
26	truncatedP an	a..255	String	C	The truncatedPan only for credit card payment
27	qr	a..255	String	O	The Payer scans the QR Code to initiate payment.

Response Sample (formatted)

```
{
```

```

"header": {
  "code": 200
},
"page": {
  "current": 1,
  "size": 30,
  "total": 2,
  "records": [
    {
      "id": 220920212411275,
      "state": 200,
      "type": 200,
      "settlementStatus": 0,
      "merchantId": 8520110007,
      "merchantName": "Wise & New Life Pte Ltd. (Test)",
      "terminalId": 2011100008,
      "brand": 201,
      "acqMid": "NA",
      "acqTid": "0x214774e237FA1fD6895631AeBF5fc6332bb2A976",
      "requestCurrency": "SGD",
      "totalAmount": "1.00",
      "saleAmount": "1.00",
      "serviceRate": 0,
      "serviceAmount": "0",
      "gstRate": 0,
      "gstAmount": "0",
      "tipAmount": "0",
      "processingCurrency": "USDT",
      "processingAmount": "0.76086",
      "processingFee": "0",
      "receiptNumber":
"0x323361d9c272979304518f42a9e0833f87367d23e3d858edaa8fe3628a616c98",
      "referenceNo": "1663678847502",
      "cardHolderName": "11 22",
      "dtcTimestamp": "2022-09-20 21:24:11",
      "secondaryAmount": "0.76086",
      "lastUpdatedTime": "2022-09-20 22:21:51",
      "qr": "0x214774e237FA1fD6895631AeBF5fc6332bb2A976"
    },
    {
      "id": 2506241145190106694,
      "type": 71001,
      "state": 200,
      "settlementStatus": 3,
      "merchantId": 8524010424,
      "merchantName": "Mary Lopez",
      "terminalId": 25061900067,
      "brand": 201,
      "module": 1002,
      "acqMid": "NA",
      "acqTid": "0x38c09CaacBb6eb8b76003B88CD38fC294cbd56D7",

```

```

        "requestCurrency": "SGD",
        "totalAmount": "1",
        "saleAmount": "1",
        "exchangeRate": 1.24284,
        "processingCurrency": "USDC",
        "processingAmount": "0.81",
        "processingFee": "0",
        "receiptNumber":
"0xfb2edef6b6088840b756cb234925508b2fc2bfafc6c76635d1b88eb7fd14b1d9",
        "referenceNo": "1750736702181",
        "truncatedPan": "0xC900521959fF10BFAD5e900a776A1EbAcf3822F6",
        "txnExpiry": "2025-06-24 11:50:18",
        "dtcTimestamp": "2025-06-24 11:45:18",
        "secondaryAmount": "0.81",
        "lastUpdatedTime": "2025-06-24 12:55:25",
        "additionalData": {
            "account": "0",
            "txn_ids":
"0xfb2edef6b6088840b756cb234925508b2fc2bfafc6c76635d1b88eb7fd14b1d9",
            "address_id": "2841",
            "institution": "SAFEHERON"
        },
        "amountDetails": [],
        "qr": "0x38c09CaacBb6eb8b76003B88CD38fC294cbd56D7"
    }
}
]
}

```

3.6. Generate Static QR

Request

[POST] /api/v1/generate-static-qr

ID	Name	Max length	Type	Required	Description
1	referenceNo	a..255	String	M	An unique string to locate a static qr.
2	brand		int	M	The payment mode or card type that customer used for the transaction. Please refer to Enum List - Brand.
3	module		int	M	Please refer to Enum List - Module.

Request Body Sample (formatted)

```

{
    "referenceNo": "220817101245678",

```

```

    "brand": 201,
    "module": 1002
  }

```

Response Parameters

ID	Name	Max length	Type	Required	Description
1	qrId	a..20	Long	M	The DTC generated unique qr-id
2	qr	a..255	String	M	The Payer scans the QR Code to initiate payment.
3	qrStatus		int	M	Static QR Status, please refer to Enum List -StaticQRStatus
4	brand		int	M	The payment mode or card type that customer used for the transaction. Please refer to Enum List - Brand.
5	module		int	M	Please refer to Enum List - Module.
6	reference No	a..255	String	M	An unique string to locate a transaction
7	currencies		List	M	The currency list customers can use to pay for this wallet.Please refer to Enum List - Currency.
8	dtcTimestamp		LocalDateTime	M	The date-time when the request is received or created. In a 24 hour format. Time zone is using (UTC+08:00) Kuala Lumpur, Singapore.
9	lastUpdatedTime		LocalDateTime	M	The datetime when the response is created. In a 24 hour format. Timezone is using (UTC+08:00) Kuala Lumpur, Singapore.

Response Sample (formatted)

```

{
  "header": {
    "code": 200
  },
  "qrId": 3214,
  "qrStatus": 1,
  "dtcTimestamp": "2022-09-06 16:13:59",
  "brand": 201,
  "module": 1002,
  "currencies": ["USD", "USD"],
  "qr": "0x4AA25e9F824D3abd26BDa38a96D34efC53f36992",
  "referenceNo": "220817101245678",
  "lastUpdatedTime": "2022-09-06 16:13:59"
}

```

3.7. Query Static QR

Request

[POST] /api/v1/query-static-qr

ID	Name	Max length	Type	Required	Description
1	qrId	a..20	Long	C	The DTC generated unique qr-id. S/n 1 to 3 at least one to be mandatory
2	qr	a..255	String	C	The Payer scans the QR Code to initiate payment. S/n 1 to 3 at least one to be mandatory
3	referenceNo	a..255	String	C	An unique string to locate a static qr. S/n 1 to 3 at least one to be mandatory

Request Body Sample (formatted)

```
{
  "referenceNo": "220817101245678",
  "qrId": 3214,
  "qr": "0x4AA25e9F824D3abd26BDa38a96D34efC53f36992"
}
```

Response Parameters

ID	Name	Max length	Type	Required	Description
1	qrId	a..20	Long	M	The DTC generated unique qr-id, which is used heavily for identifying the resulted qr in DTC system.
2	qr	a..255	String	M	The Payer scans the QR Code to initiate payment.
3	qrStatus		int	M	Static QR Status, please refer to Enum List -StaticQRStatus
4	brand		int	M	The payment mode or card type that customer used for the transaction. Please refer to Enum List - Brand.
5	module		int	M	Please refer to Enum List - Module.
6	referenceNo	a..255	String	M	An unique string to locate a qr.
7	currencies		List	M	The currency list customers can use to pay for this wallet.Please refer to Enum List - Currency.
8	dtcTimestamp		LocalDateTime	M	The date-time when the request is received or created. In a 24 hour format. Time zone is using (UTC+08:00) Kuala Lumpur, Singapore.

ID	Name	Max length	Type	Required	Description
9	lastUpdatedTime		LocalDateTime	M	The datetime when the response is created. In a 24 hour format. Timezone is using (UTC+08:00) Kuala Lumpur, Singapore.

Response Sample (formatted)

```
{
  "header": {
    "code": 200
  },
  "qrId": 3214,
  "qrStatus": 1,
  "dtcTimestamp": "2022-09-06 16:13:59",
  "brand": 201,
  "module": 1002,
  "currencies": ["USDT", "USDC"],
  "qr": "0x4AA25e9F824D3abd26BDa38a96D34efC53f36992",
  "referenceNo": "220817101245678",
  "lastUpdatedTime": "2022-09-06 16:13:59"
}
```


Chapter 4. Notification

4.1. Payment Notification

By using the '*TransactionId*' & '*TerminalId*' & '*MerchantId*' inside the GET parameters of the notification. Users can use these data to further query the trading results and verify the trading data. The following are the important points of this push notification:

- It is a GET request toward `notify_url`.
- The result is in a GET formatted params. Push notification result example:

```
notify_url?transactionId=220819125034757&merchantId=8520120002&terminalId=2205250071&referenceNo=220819125034757&state=200
```

Key	Max length	Type	Description
TransactionId	a..20	Long	The DTC generated unique transaction-id, which is used heavily for identifying the resulted
TerminalId	a..20	Long	The terminal ID generated by DTC system for merchant. Multiple terminal routes can be added to a terminal ID.
MerchantId	a..20	Long	The merchant ID generated by DTC system for merchant.
referenceNo	a..255	String	An unique string to locate a transaction
state		int	Payment Transaction State, please refer to Enum List -PaymentTransactionState

Appendix A: Response Codes

ResponseCode

Code	Descriptor
200	Success
400	Bad Request
403	Forbidden
405	Method Not Allowed
452	Denied By Risk
453	Invalid Type
500	Server Error
503	Service Unavailable
520	Host Error

Appendix B: Enum List

Brand

Name	ID	Descriptor
UNDEFINED	0	Undefined
VISA	1	Visa
MASTERCARD	2	MasterCard
AMEX	3	American Express
JCB	4	JCB
DINERS	5	Diners Club
DISCOVER	6	Discover
CUP	7	Discover
WECHATPAY	101	WeChat Pay
ALIPAY	102	Alipay
GRABPAY	103	GrabPay
PAYNOW	104	PayNow
QUICKPASS	105	QuickPass
BINANCE_PAY	106	Binance Pay
CRYPTO_HOSTED	201	Crypto Hosted

Module

Name	ID	Descriptor
WECHAT	5	WeChat
CIMB	6	CIMB
WORLDPAY	8	Worldpay
GOOGLE_PAY	9	Google Pay
SAMSUNG_PAY	10	Samsung Pay
BINANCE_PAY	11	Binance Pay
ETHEREUM	1002	Ethereum
TRON	1003	Tron
BSC	1007	BNB Smart Chain
BASE	1008	Base
SOLANA	1009	Solana
ARBITRUM	1010	Arbitrum
DTCPAY	5001	dtcpay

Currency

Name	ID	Category	Code	Descriptor
AUD	1	0	036	Australian dollar
CNY	2	0	156	Chinese yuan
EUR	3	0	978	Euro
HKD	4	0	344	Hong Kong dollar
JPY	5	0	392	Japanese yen
SGD	6	0	702	Singapore dollar
USD	7	0	840	United States dollar
USDT	8	1	null	USD Tether
BTC	9	1	null	Bitcoin
ETH	10	1	null	Ethereum
TRX	11	1	null	Tron
GBP	12	0	826	Pound sterling
WUSD	13	1	null	Worldwide USD
USDC	14	1	null	USD Coin

CurrencyCategory

Name	ID	Descriptor
FIAT	0	Fiat Currency
CRYPTO	1	Crypto Currency
E_MONEY	2	e-Money Currency

SettlementStatus

Name	ID	Descriptor
PENDING	0	Pending
ACQ_SETTLED	1	Acquirer Settled
APPROVED	2	Settlement Approved
PAID	3	Settlement Paid
SUBMITTED	6	Settlement Submitted
REJECTED	8	Settlement Rejected

PaymentTransactionState

Name	ID	Descriptor
PENDING	0	Pending
SUCCESS	200	Success

Name	ID	Descriptor
AUTHORIZED	101	Authorized
PARTIAL_PAYMENT	103	Partial Payment
REVERSED	301	Reversed
CANCELLED	302	Cancelled
DENIED	900	Denied
REFUNDED	401	Refunded
CAPTURED	221	Captured
EXPIRED	990	Expired

PaymentTransactionType

Name	ID	Descriptor
TOKENIZE	0	Tokenize
AUTHORIZATION	100	Authorization
SALE	200	Sale
CAPTURE	220	Capture
VOID	300	Void
REFUNDED	400	Refund
MERCHANT_DYNAMIC_QR	71001	Merchant Dynamic QR
CONSUMER_QR	72001	Consumer QR
STATIC_QR	72002	Static QR

StaticQrStatus

Name	ID	Descriptor
DISABLED	1	Disabled
ENABLED	2	Enabled