v5.20Bybit Pay Open API

Version	Date	Changes
1.0	2025-02-10	• Initial
5.0	2025-02-17	• Modify the state machine
5.0	2025-02-17	• Add "Pay Id" to the Payment Notify demo • Add "Authentication" description to Payment Notify • Add "MccCodes" explanation of goods details
5.0	2025-03-03	• Change `clientId` to not required when initial a refund or query the order status • Move filed `goods` into `PayOrder` structure • Move filed `customer` from `PayOrder` structure • Rename `orderAmount` to amount for all `PayOrder` type • Change request body type from json array to json object when creating a refund order • Add `merchantRefundNo` when creating a refund order • Add error code `50000` <Bybit internal error> • Add error code `400004` <Order not found> • Add error code `500105` <Order not paid> • Change `regionTime` to `registerTime` in <Customer> type • Add Type <RefundOrder>, remove fields of refund from <PayOrder> • Remove all <Customer> and <Good> data from response structure • Add <Signature Algorithm> description • Change notify request body • Change timestamp from millisecon precision to second precision
5.0	2025-03-31	• Add 5.1.4 Payment mock • Add 5.3 Payout
5.0	2025-04-16	• Add 5.4 Settlement

5.0	2025-05-09	• Add payout status
5.0	2025-05-13	• Refactor pay status mock path from `/v5/bybitpay/pay-status/mock` to `/v5/bybitpay/paystatus/mock`
5.0	2025-05-21	• Add webhook support merchant public key
5.0	2025-05-27	• Refactor payment type from `BYBIT_PAY_MERCHANT_PAYOUT` to `MERCHANT_PAYOUT`

5.0	2025-05-28	• **Add customer uid in API** `/v5/bybitpay/pay_result` **、Payment Notify**
		"**customer**":{
		"uid":"123456",
		"externalUserId": "test@gmail.com",
		"userName": "john li",
		"registerTime": "1739178959",
		"kycCountry": "AUS"
		}

5.0	2025-06-01	Add crypto scale
5.0	2025-06-30	Update signature algorithm
5.01	2025-07-04	Add 5.1.5 paymentConsult api And support fiat or crypto create order ,settlement diff currency
5.01	2025-07-04	Add payout mcc Required
5.01	2025-09-03	Add error codes

5.01	2025-09-09	Add `remarks` in API `/v5/bybitpay/create_pay` and `/v5/bybitpay/pay_result`
		"customer":{
		"externalUserId": "test@gmail.com",
		"userName": "john li",
		"registerTime": "1739178959",
		"kycCountry": "AUS",
		"remarks":""
		}

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1. Authentication

- Reference documentation: Bybit API Guide
- Create a new key: Bybit Secret Key

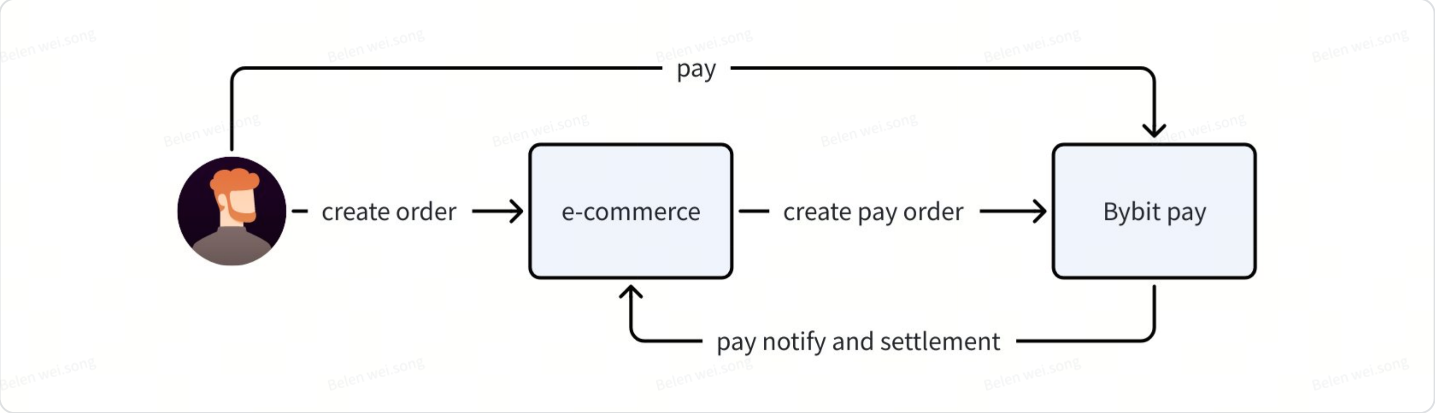
2. Version

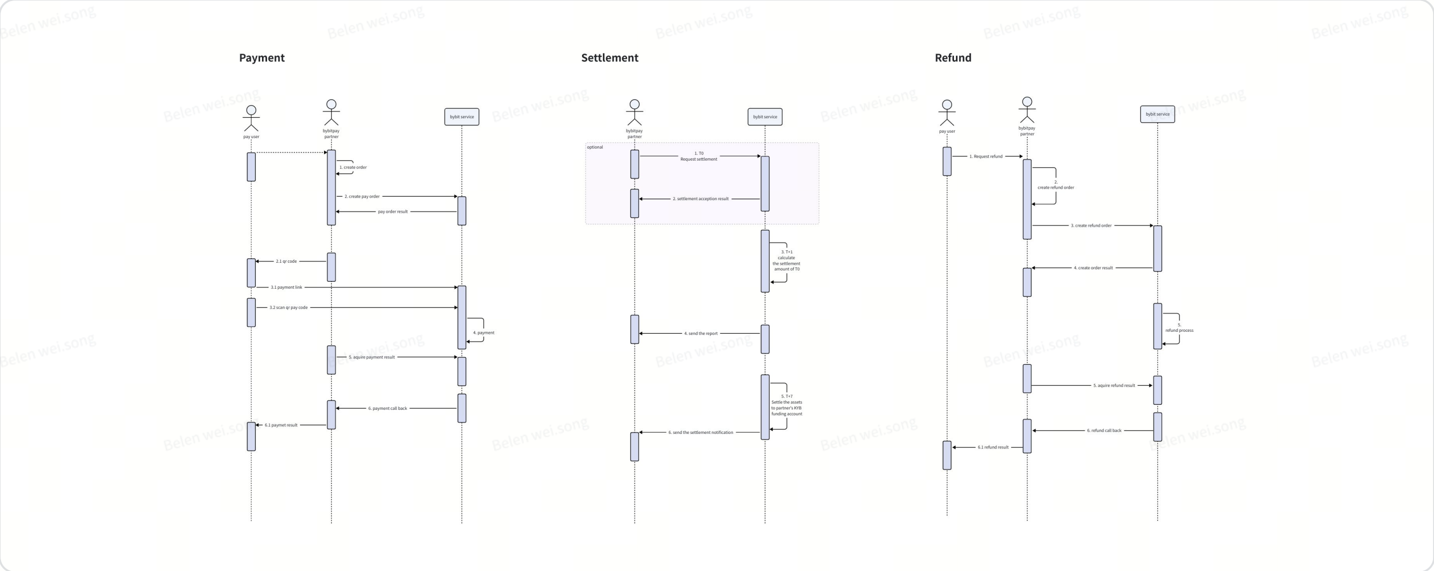
http head add version， default v5.00

代码块

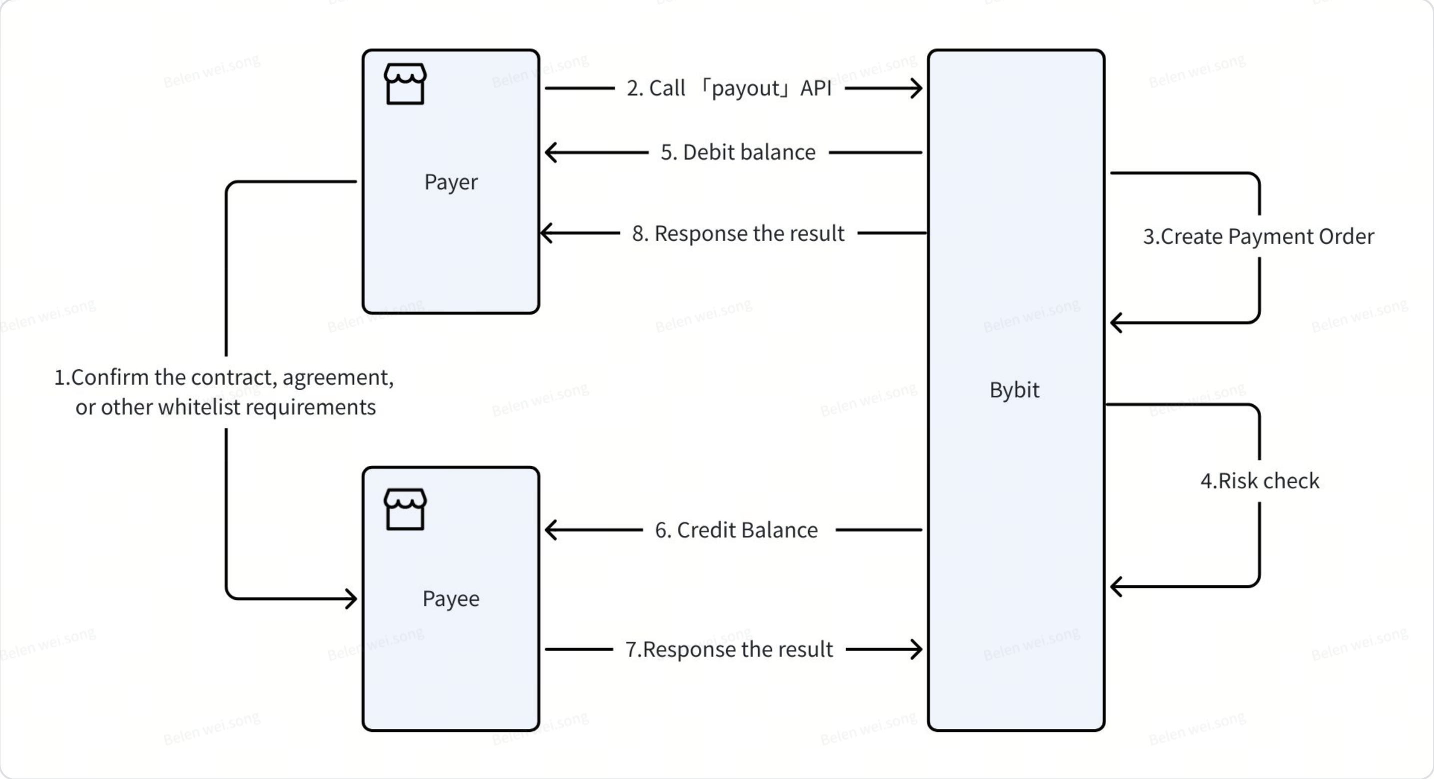
```
curl --request POST \
  --url https://api.bybit.com/payout \
  --header 'Version: 5.00' \
  --header 'Content-Type: application/json' \
  --data '{
}'
```

3. Flowchart

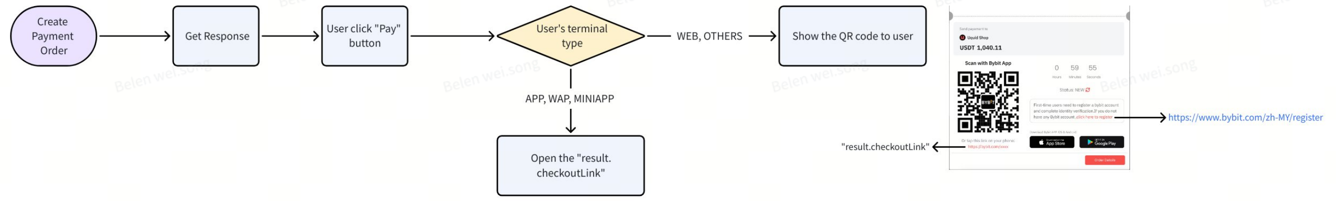




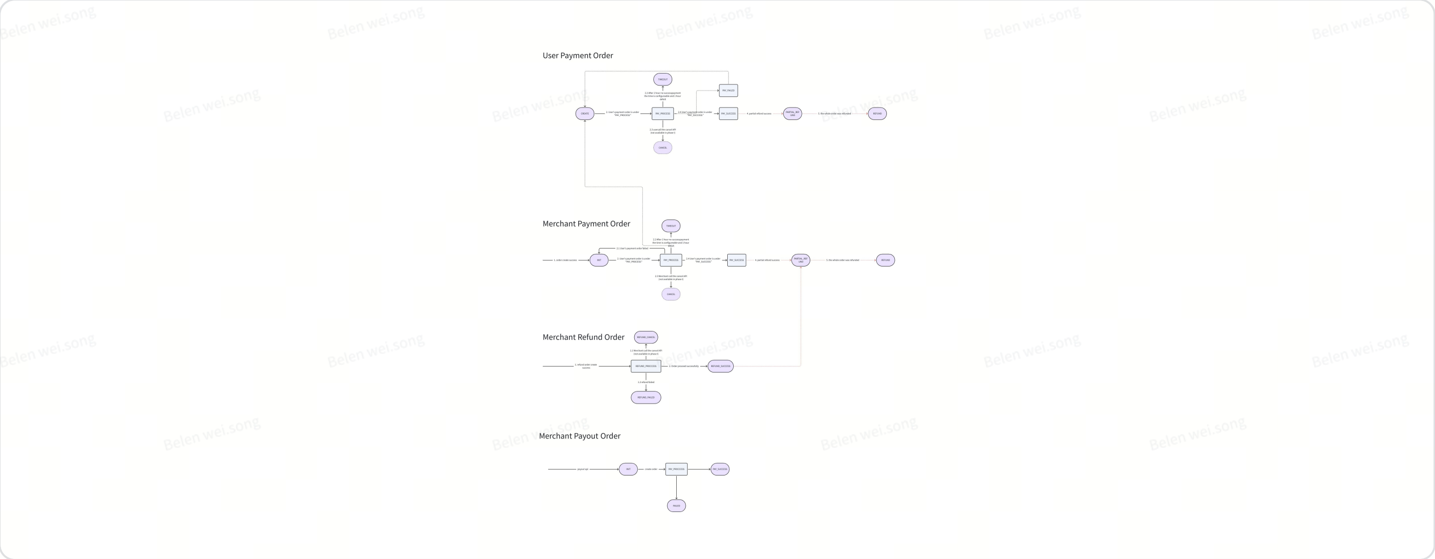
payout Flowchart



4. Users' Guide after creating payment order



5. Order Status


User Payment Order
TIMEOUT
PAY_FAILED
CREATE
2. User's payment order is under "PAY_PROCESS"
2.2 After 1 hour no successpayment the time is configureable and 1 hour defult
PAY_PROCESS
2.4 User's payment order is under "PAY_SUCCESS"
PAY_SUCCESS
4. partial refund success
PARTIAL_REFUND
5. the whole order was refunded
REFUND
2.3 usercall the cancel API (not available in phase I)
CANCEL
Merchant Payment Order
TIMEOUT
2.2 After 1 hour no successpayment the time is configureable and 1 hour defult
2.1 User's payment order failed
1. order create success
INIT
2. User's payment order is under "PAY_PROCESS"
PAY_PROCESS
2.4 User's payment order is under "PAY_SUCCESS"
PAY_SUCCESS
4. partial refund success
PARTIAL_REFUND
5. the whole order was refunded
REFUND
2.3 Merchant call the cancel API (not available in phase I)
CANCEL
Merchant Refund Order
REFUND_CANCEL
1.1 Merchant call the cancel API (not available in phase I)
1. refund order create success
REFUND_PROCCESS
2. Order proceed successfully
REFUND_SUCCESS
1.2 refund failed
REFUND_FAILED
Merchant Payout Order
payout api
INIT
create order
PAY_PROCCESS
PAY_SUCCESS
FAILED

6. API Documentation

6.1 Scan Payment

6.1.1 Payment Creation

- **Data Type:** JSON (content-type: application/json)
- **Request Method:** POST
- **Path:** `/v5/bybitpay/create_pay`

Request Body:

Field Name	Type	Required	Description
merchantId	string	Yes	Onboarding merchant UID
merchantName	string	No	If not filled in, we will show users the name of your company doing KYB on the Bybit platform
clientId	string	No	Merchant Client ID
paymentType	string	Yes	Payment Type
customer	<Customer Type>	No	Customer info
merchantTradeNo	string	Yes	Merchant Order Number
quotationId	string	No	Return Result quotationId to create order
goods	array< `Good Type` >	Yes	Product Description
orderAmount	string	Yes	Order Amount

currency	string	Yes	Order Currency (uppercase, e.g., EUR, USD, USDT)
currencyType	string	Yes	Currency Type (`fiat` or `crypto`)
successUrl	string	Yes	URL to return after successful payment (max 256 characters)
failedUrl	string	Yes	URL to return after failed payment (max 256 characters)
webhookUrl	string	Yes	API URL to call when order is successful or failed (max 256 characters)
orderExpireTime	int64	No	Order expiration time in UTC timestamp (second precision), default is 1 hour, max is 1 hour
env	`Env Type`	Yes	Transaction Source
riskInfo	<RiskInfo>	No	Risk info for order pay
remark	string	No	Payment remark ,max 50 characters

Request demo

代码块

```
{
    "currency": "USDT",
    "currencyType": "crypto",
    "env": {
        "browserVersion": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/133.0.0.0 Safari/537.36",
        "device": "xxde",
        "ip": "127.0.0.1",
        "terminalType": "APP"
    },
    "failedUrl": "",
    "customer":{
        "externalUserId": "test@gmail.com",
        "userName": "john li",
        "registerTime": "1739178959",
        "kycCountry": "AUS"
    },
    "goods": [
        {
            "shoppingName": "test good",
            "mccCode": "1520",
            "goodsName": "test",
            "goodsDetail": "test"
        }
    ],
    "merchantId": "305142568",
    "merchantName": "uquid",
    "merchantTradeNo": "841e4ba2-c7ec-40b1-a071-a2a45de7bd00",
    "orderAmount": "100",
    "orderExpireTime": 0,
    "paymentType": "E_COMMERCE",
    "successUrl": "www.bybit.com/successUrl",
    "webhookUrl": "www.bybit.com/successUrl"
}
```

Response:

Field Name	Type	Required	Description
retCode	number	Yes	Return Code, 100000: success, not 0: failed, See<Error Code>
retMsg	string	Yes	Return Message
result	object	Yes	Return Result information
result.payId	string	Yes	Pay-order ID created successfully
result.terminalType	string	Yes	Transaction source (APP, WEB, WAP, MINIAPP, OTHERS)
result.expireTime	number	Yes	Order expiration time in UTC timestamp (second precision)
result.checkoutLink	string	Yes	Unified checkout link in Bybit, redirect for payment
result.qrContent	string	Yes	QR code content (base64 Image, valid for 1 hour), developers generate QR image
result.order	`PayOrder`	Yes	Bybit PayOrder Detail
result.customer	<Customer Type>	No	Customer info

Response demo

代码块

```

{
    "retCode": 100000,
    "retMsg": "success",
    "result": {
        "payId": "01JXHW8QAEZXSA5HTJYT3AS357",
        "terminalType": "WEB",
        "expireTime": 1749729103,
        "checkoutLink": "bybitapp://open/route?targetUrl=by-
mini%3A%2F%2Fpay%2FscanResult%3ForderNo%3D01JXHW8QAEZXSA5HTJYT3AS357",
        "qrContent":
"data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAZAAAAGQCAIAAAAP3aGbAACAAElEQVR4
nOz9B3gV1fb4D2fOnF7TKyQkNBMp0jvSVXpTWgS8l35RVCAUAfFSLnBBQaQXpStCpEZBRAIxgBQpgVA
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```

```
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```
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}
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6.1.2 Payment Result

- **Data Type:** JSON (content-type: application/json)
- **Request Method:** GET
- **Path:** `/v5/bybitpay/pay_result`

Query Parameters:

Field Name	Type	Required	Description
merchantId	string	Yes	Merchant ID
clientId	string	No	Merchant Client ID
paymentType	<Payment Type>	Yes	Payment Type
merchantTradeNo	string	No	Merchant Order Number if paymentType is `E_COMMERCE` ,Merchant Refund Order Number if paymentType is `E_COMMERCE_REFUND` (required if payId is not provided)
payId	string	No	Bybit Pay ID if paymentType is `E_COMMERCE` ,Bybit refund ID if paymentType is `E_COMMERCE_REFUND` , (required if merchantTradeNo is not provided) **【Recommend】**

Request demo

- Query Pay Order

```
{{base_url}}/v5/bybitpay/pay_result?merchantId=305142568&paymentType=E_COMMERCE&merchantTradeNo=fe43f6b0-fb6c-4f17-af07-d069746ec760
```

- Query Refund Order

```
{{url}}/v5/bybitpay/pay_result?merchantId=305142568&paymentType=E_COMMERCE_REFUND&merchantTradeNo=b4b7c249-3ff1-4a85-9fc9-b95420a3cec0
```

Response:

Field Name	Type	Required	Description
retCode	number	Yes	Return Code, 100000: success, not 0: failed, See<Error Code>
retMsg	string	Yes	Return Message
result.order	<PayOrder Type>	Yes	Bybit PayOrder Detail
result.customer	<Customer Type>	Yes	Bybit user info

Response demo

- Pay Order Response

代码块

```
{
    "retCode": 100000,
    "retMsg": "success",
    "result": {
        "order": {
            "merchantId": "305142568",
            "clientId": "",
            "paymentType": "E_COMMERCE",
            "merchantTradeNo": "fe43f6b0-fb6c-4f17-af07-d069746ec760",
            "payId": "01JN5WJNK8ZYK8B7JGKTVNXCPN",
            "status": "TIMEOUT",
            "amount": "100",
            "currency": "USDT",
            "currencyType": "crypto",
            "createTime": 1740733241,
            "paymentTime": 0,
            "finishTime": 0,
            "refundOrders": []
        },
        "customer":{
            "uid":"123456",
            "externalUserId": "test@gmail.com",
            "userName": "john li",
            "registerTime": "1739178959",
            "kycCountry": "AUS"
        }
    }
}
```

- Refund Order Response

代码块

```
{
    "retCode": 100000,
    "retMsg": "success",
    "result": {
        "order": {
            "merchantId": "305142568",
            "clientId": "",
            "paymentType": "E_COMMERCE",
            "merchantTradeNo": "fe43f6b0-fb6c-4f17-af07-d069746ec760",
            "payId": "01JN5WJNK8ZYK8B7JGKTVNXCPN",
            "status": "PAY_SUCCESS",
            "amount": "100",
            "currency": "USDT",
            "currencyType": "crypto",
            "createTime": 1740733241,
            "paymentTime": 1740733241,
            "finishTime": 0,
            "customer":{
                "uid":"123456",
                "externalUserId": "test@gmail.com",
                "userName": "john li",
                "registerTime": "1739178959",
                "kycCountry": "AUS"
            },
            "refundOrders": [
                {
                    "refundId": "D41717457E604297B96E1E7E8D238302",
                    "refundType": "MERCHNT_SELF_REFUND",
                    "merchantTradeNo": "fe43f6b0-fb6c-4f17-af07-d069746ec760",
                    "merchantRefundNo": "b4b7c249-3ff1-4a85-9fc9-b95420a3cec0",
                    "payId": "01JN5WJNK8ZYK8B7JGKTVNXCPN",
                    "refundStatus": "REFUND_SUCCESS",
                    "amount": "100",
                    "createTime": 1740748919
                }
            ]
        }
    }
}
```

6.1.3 Payment Notify

- **webhook_url:** Provided in `create_payorder` API
- **Webhook Body Type:** `PayOrder/RefundOrder/Payout Type`
- **Webhook Method:** `POST`
- **Authentication:**
    - Share the IP whitelist with each other
    - Bybit Pay will encrypt the callbacks via RSA_SHA256. Partners can provide the public key, sign date put in result head. For details, please see <Signature Algorithm>
- **Headers**

Content-Type: `application/json`

timestamp: xxx

publicKey: xxx

signature: xxx

- **RequestBody**

Field Name	Type	Required	Description
paymentType	<PaymentType>	Yes	Payment type
-	<PayOrder>	No	Returned if paymentType is `E_COMMERCE`
-	<RefundOrder>	No	Returned if paymentType is `E_COMMERCE_REFUND`

Response demo

- Notify PayOrder

代码块

```
{
    "paymentType": "E_COMMERCE",
    "merchantId": "12",
    "clientId": "xx",
    "merchantTradeNo": "123456",
    "payId": "123456",
    "status": "INIT",
    "amount": "100",
    "currency": "USDT",
    "currencyType": "crypto",
    "createTime": 1740488831,
    "paymentTime": 1740488831,
    "finishTime": 1740488831,
    "customer":{
        "uid":"123456",
        "externalUserId": "test@gmail.com",
        "userName": "john li",
        "registerTime": "1739178959",
        "kycCountry": "AUS"
    }
}
```

- Notify Refund Order

代码块

```
{
    "paymentType": "E_COMMERCE_REFUND",
    "refundId": "123",
    "refundType": "MERCHNT_SELF_REFUND",
    "merchantTradeNo": "123456",
    "merchantRefundNo": "123456",
    "payId": "123456",
    "refundStatus": "REFUND_SUCCESS",
    "amount": "1739178959",
    "createTime": 1740488831,
    "customer":{
        "uid":"123456",
        "externalUserId": "test@gmail.com",
        "userName": "john li",
        "registerTime": "1739178959",
        "kycCountry": "AUS"
    }
}
```

5.1.4 Payment status mock(only sanbox testnet)

- **Data Type:** JSON (content-type: application/JSON)
- **Request Method:** POST
- **Path:** `/v5/bybitpay/paystatus/mock`

Request Body:

Field Name	Type	Required	Description
merchantId	string	Yes	Merchant ID
clientId	string	No	Merchant Client ID
paymentType	<Payment Type>	Yes	Payment Type
merchantTradeNo	string	No	Merchant Order Number if paymentType is `E_COMMERCE` ,Merchant Refund Order Number if paymentType is `E_COMMERCE_REFUND` (required if payId is not provided)
payId	string	No	

			Bybit Pay ID if paymentType is `E_COMMERCE` ,Bybit refund ID if paymentType is `E_COMMERCE_REFUND` , (required if merchantTradeNo is not provided)**【Recommend】**
status	string	Yes	Order Status

Request demo

代码块

```
//E_COMMERCE
{
    "paymentType": "E_COMMERCE",
    "merchantId": "12",
    "clientId": "xx",
    "merchantTradeNo": "123456",
    "payId": "123456",
    "status": "PAY_SUCCESS"
}

//E_COMMERCE
{
    "paymentType": "E_COMMERCE_REFUND",
    "merchantId": "12",
    "clientId": "xx",
    "merchantTradeNo": "123456",
    "payId": "123456",
    "status": "REFUND_SUCCESS"
}
```

Response:

Field Name	Type	Required	Description
retCode	number	Yes	Return Code, 100000: success, not 0: failed, See<Error Code>
retMsg	string	Yes	Return Message
result.order	<PayOrder Type>	Yes	Bybit PayOrder Detail

Response demo

- Pay Order Response

代码块

```
{
    "retCode": 100000,
    "retMsg": "success",
    "result": {
        "order": {
            "merchantId": "305142568",
            "clientId": "",
            "paymentType": "E_COMMERCE",
            "merchantTradeNo": "fe43f6b0-fb6c-4f17-af07-d069746ec760",
            "payId": "01JN5WJNK8ZYK8B7JGKTVNXCPN",
            "status": "PAY_SUCCESS",
            "amount": "100",
            "currency": "USDT",
            "currencyType": "crypto",
            "createTime": 1740733241,
            "paymentTime": 0,
            "finishTime": 0,
            "refundOrders": []
        }
    }
}
```

5.1.5 Payment Fx Convert

- **Data Type:** JSON (content-type: application/JSON)
- **Request Method:** POST
  - **Path:** `/v5/bybitpay/fx/convert`

Request Body:

Field Name	Type	Required	Description
merchantId	string	Yes	Onboarding merchant UID
merchantName	string	No	If not filled in, we will show users the name of your company doing KYB on the Bybit platform
clientId	string	No	Merchant Client ID
paymentType	string	Yes	Payment Type

orderAmount	string	Yes	Order Amount
orderCurrency	string	Yes	Order Currency (uppercase, e.g., EUR, USD, USDT)
orderCurrencyType	string	Yes	Currency Type (`fiat` or `crypto`)
settleCurrency	string	Yes	settleCurrency ,USDT/USDC/BTC
settleCurrencyType	string	Yes	Currency Type (`fiat` or `crypto`)

Request demo

代码块

```
{
    "merchantId": "305142568",
    "merchantName": "uquid",
    "paymentType": "E_COMMERCE",
    "orderAmount": "0.001",
    "orderCurrency": "ETH",
    "orderCurrencyType": "crypto",
    "settleCurrency": "USDT",
    "settleCurrencyType": "crypto",
}
or
{
    "merchantId": "305142568",
    "merchantName": "uquid",
    "paymentType": "E_COMMERCE",
    "orderAmount": "78.01",
    "orderCurrency": "EUR",
    "orderCurrencyType": "fiat",
    "settleCurrency": "USDT",
    "settleCurrencyType": "crypto",
}
```

Response:

Field Name	Type	Required	Description
retCode	number	Yes	Return Code, 100000: success, not 0: failed, See<Error Code>
retMsg	string	Yes	Return Message

result.	object	Yes	Return Result information
result.quotationId	string	Yes	Return Result quotationId to create order
result.settleCurrency	string	Yes	settleCurrency ,USDT/USDC/BTC
result.settleAmount	string	Yes	Order settle Amount

Response demo

代码块

```

{
    "retCode": 100000,
    "retMsg": "success",
    "result": {
        "quotationId": "1230000001"
        "settleCurrency": "USDT",
        "settleAmount": "10.00"
    }
}
```

6.2 Order Refund

- **Data Type:** JSON (content-type: application/json)
- **Request Method:** POST
- **Path:** `/v5/bybitpay/refund`

Request Body:

Field Name	Type	Required	Description
merchantId	string	Yes	Merchant ID
clientId	string	No	Merchant Client ID
list	array <RefundOrderItem>	Yes	Refund Order Request Item

Request demo

代码块

```
{
    "list": [
        {
            "refundType": "MERCHNT_SELF_REFUND",
            "merchantTradeNo": "fe43f6b0-fb6c-4f17-af07-d069746ec760",
            "payId": "",
            "merchantRefundNo": "b4b7c249-3ff1-4a85-9fc9-b95420a3cec0",
            "refund_amount": "101",
            "env": {
                "browserVersion": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/133.0.0.0 Safari/537.36",
                "device": "xxde",
                "ip": "127.0.0.1",
                "terminalType": "APP"
            }
        }
    ],
    "merchantId": "305142568"
}
```

Response:

Field Name	Type	Required	Description
retCode	number	Yes	Return Code, 100000: success, not 0: failed, See<Error Code>
retMsg	string	Yes	Return Message
result.refundOrders	array <RefundOrder>	Yes	Bybit refund order detail

Response demo

代码块

```
{
    "retCode": 100000,
    "retMsg": "success",
    "result": {
        "refundOrders":[
        {
            "refundId":"123",
            "refundType":"MERCHNT_SELF_REFUND",
            "merchantTradeNo":"123456",
            "merchantRefundNo":"123456",
            "payId":"123456",
            "refundStatus":"REFUND_SUCCESS",
            "amount":"100",
            "amount":"1739178959"
        }
        ]
    }
}
```

6.3 Payout

- **Data Type:** JSON (content-type: application/json)
- **Request Method:** POST
- **Path:** `/v5/bybitpay/payout`

Request Body:

Field Name	Type	Required	Description
merchantId	string	Yes	Onboarding merchant UID
merchantName	string	No	If not filled in, we will show users the name of your company doing KYB on the Bybit platform
clientId	string	No	Merchant Client ID
paymentType	string	Yes	Payment Type
merchantTradeNo	string	Yes	Merchant Order Number
amount	string	Yes	Order Amount
currency	string	Yes	Order Currency (uppercase, e.g., EUR, USD, USDT)
currencyType	string	Yes	Currency Type (`fiat` or `crypto`)
combined	bool	No	Whether combined payment is supported (`true` or `false`), default `false`。 eg: When merchant's USDT assets are insufficient for the order amount, can BTC or

			other crypto currency assets be exchanged for USDT
webhookUrl	string	No	API URL to call when order is successful or failed (max 256 characters)
payee	<Payee>	Yes	Bybit payee
env	`Env Type`	Yes	Transaction Source
riskInfo	<RiskInfo>	No	Risk info for order pay
mccCode	string	Yes	Merchant category codes,ISO 18245:2023

Request demo

代码块

```
{
    "currency": "USDT",
    "currencyType": "crypto",
    "paymentType":"MERCHANT_PAYOUT",
    "merchantId": "1546593",
    "merchantName":"merchantName",
    "merchantTradeNo": "123456",
    "amount": "0.00001",
    "combined":true,
    "payee":{
       "uid":"104326306"
    },
    "webhookUrl": "https://qatools.hrmocks.com/callback_catcher/save/bybit",
    "env": {
        "browserVersion": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/133.0.0.0 Safari/537.36",
        "device": "400017492767368721919",
        "ip": "187.12.0.1",
        "terminalType": "WEB"
    }
}
```

Response:

Field Name	Type	Required	Description

retCode	number	Yes	Return Code, 100000: success, not 0: failed, See<Error Code>
retMsg	string	Yes	Return Message
result	object	Yes	Return Result information
result.order	`PayOrder`	Yes	Bybit PayOrder Detail

Response demo

代码块

```
{
    "retCode": 100000,
    "retMsg": "success",
    "result": {
        "order": {
            "merchantId": "1546593",
            "clientId": "",
            "paymentType": "MERCHANT_PAYOUT",
            "merchantTradeNo": "123456",
            "payId": "01JXMVAX2K7YNP1081ST1KSCCC",
            "status": "INIT",
            "amount": "0.00001",
            "currency": "USDT",
            "currencyType": "crypto",
            "createTime": 1749825188,
            "paymentTime": 0,
            "finishTime": 0,
            "refundOrders": []
        }
    }
}
```

~~6.4 Settlement report~~

- **Data Type:** JSON (content-type: application/json)
- **Request Method:** POST
- **Path:** `/v5/bybitpay/settlement_record`

Request Body:

Field Name	Type	Required	Description
merchantId	string	Yes	Merchant ID
clientId	string	Yes	Merchant Client ID
PaymentType	string	Yes	Payment Type
settleAccountBeginDate	string	Yes	settle account date , like 2025-09-10
settleAccountEndDate	string	Yes	settle account date , like 2025-09-12
start	int	Yes	start ,default 0
limit	int	Yes	limit ,default 100

Request demo

代码块

```
{
    "merchantId": "123456",
    "clientId": "123456",
    "paymentType": "E_COMMERCE",
    "settleAccountBeginDate": "2025-01-01",
    "settleAccountEndDate": "2025-02-01",
    "start":"0",
    "limit":"1000"
}
```

Response:

Field Name	Type	Required	Description
retCode	number	Yes	Return Code, 0: success, not 0: failed
retMsg	string	Yes	Return Message
result.list	Array< `SettlementOrder Type` >	Yes	Settlement Order List

Response demo

代码块

```
{
   "retCode": "100000",
    "retMsg": "success",
    "result": [{
        "paymentType": "E_COMMERCE",
        "settlementTaskNo": "1111111",
        "orderBusinessDate": "2022-10-10",
        "settleAccountDate": "2022-10-10",
        "settlementCurrencyCode":"USDT",
        "totalPayAmount":"700.00",
        "totalOrderAmount":"1000.00",
        "totalRefundAmount":"100.00",
        "totalFeeAmount":"100.00",
        "settlementDetails":[{
            "paymentType": "E_COMMERCE",
            "orderAmount": "100.00",
            "OrderCurrency": "USDT",
            "orderType": "order",
            "settlementCurrencyType": "USDT",
            "merchantOrderNumber": "1739178959"
        },{
            "paymentType": "E_COMMERCE",
            "orderAmount": "200.00",
            "OrderCurrency": "USDT",
            "orderType": "order",
            "settlementCurrencyType": "USDT",
            "merchantOrderNumber": "1739178953"
        },{
        "paymentType": "E_COMMERCE",
        "settlementTaskNo": "1111111",
        "orderBusinessDate": "2022-10-11",
        "settleAccountDate": "2022-10-11",
        "settlementCurrencyCode":"USDT",
        "totalPayAmount":"800.00",
        "totalOrderAmount":"1000.00",
        "totalRefundAmount":"0.00",
        "totalFeeAmount":"100.00",
        "settlementDetails":[{
            "paymentType": "E_COMMERCE",
            "orderAmount": "100.00",
            "OrderCurrency": "USDT",
            "orderType": "order",
            "settlementCurrencyType": "USDT",
            "merchantOrderNumber": "1739178959"
        },{
            "paymentType": "E_COMMERCE",
            "orderAmount": "200.00",
            "OrderCurrency": "USDT",
            "orderType": "order",
            "settlementCurrencyType": "USDT",
            "merchantOrderNumber": "1739178953"
        }]
    }]
}
```

7. Data Models

7.1 Env

Field Name	Type	Required	Description
terminalType	string	Yes	Transaction source (APP, WEB, WAP, MINIAPP, OTHERS)
device	string	Yes	App or pc system device uquid user info
browserVersion	string	Yes	App or pc system browser version
ip	string	Yes	Ip infro

7.2 Good

Field Name	Type	Required	Description
shoppingName	string	Yes	shoppingName on bybitpay Partner,like Apple
mccCode	string	Yes	Merchant category codes,ISO 18245:2023
goodsName	string	Yes	Product name (max 160 characters)
goodsDetail	string	No	Product description (max 256 characters)

7.3 PayOrder

Field Name	Type	Required	Description
merchantId	string	Yes	Merchant ID
clientId	string	No	Merchant Client ID，support different Business type
paymentType	string	No	Payment Type
merchantTradeNo	string	Yes	Merchant Order Number
payId	string	Yes	Bybit Pay ID
status	string	Yes	Order Status， State Machine
amount	string	Yes	Order Amount
currency	string	Yes	Order Currency Crypto scale: 8 examples: 9.00000001USDT
currencyType	string	Yes	Order Type (`fiat` or `crypto`)
createTime	number	Yes	Order Creation Time (second timestamp)
paymentTime	number	Yes	Order Payment Time (second timestamp)
finishTime	number	Yes	Order Completion Time (second timestamp)
refundOrders	array<RefundOrder>	Yes	Refund Orders
remark	string	No	Payment remark ,max 50 characters

7.4 RefundOrder

Field Name	Type	Required	Description
refundId	string	No	Bybit refund ID (required if `merchantRefundNo` is not provided)
refundType	string	Yes	refund type
merchantTradeNo	string	Yes	Merchant Order Number
merchantRefundNo	string	No	Merchant Refund Number (required if `refundId` is not provided)

payId	string	Yes	Bybit Pay ID
refundStatus	string	Yes	Order refund Status
refundCurrency	string	No	refund currency,default order currency
amount	string	Yes	Order Amount
createTime	number	Yes	Order Creation Time (second timestamp)

7.5 RefundOrderItem

Field Name	Type	Required	Description
refundType	string	Yes	refund type
merchantTradeNo	string	No	Merchant Order Number(required if `payId` is not provided)
payId	string	No	Bybit Pay ID(required if `merchantTradeNo` is not provided)
merchantRefundNo	string	Yes	Merchant Refund Number
refundAmount	string	Yes	Refund amount, support partial refund
env	<Env>	Yes	
riskInfo	<RiskInfo>	No	Risk info for order pay
customer	<CustomerType>	No	Customer info

7.6 SettlementOrder

Field Name	Type	Required	Description
paymentType	string	Yes	PaymentType
settlementTaskNo	string	Yes	Merchant SettlementTaskNo
orderBusinessDate	string	Yes	order date , like 2025-09-09
settleCreateDate	string	Yes	settle create date , like 2025-09-10

settleAccountDate	string	Yes	settle account date , like 2025-09-11
settleAccountAmount	string	Yes	settleAccountAmount
totalPayableAmount	string	Yes	merchants order totalPayable amount
totalPayAmount	string	Yes	bybit pay to merchants amount
totalPrincipalAmount	string	Yes	totalPrincipalAmount
totalOrderAmount	string	Yes	merchants order amount
totalRefundAmount	string	Yes	merchants order refund amount
totalFeeAmount	string	Yes	merchants fee amount
previousRollingReseverAmount	string	Yes	previous Rolling Resever Amount
currentRollingReserveDeductionAmount	string	Yes	Current Rolling Reserve Deduction Amount
fixedReserveDeductionAmount	string	Yes	fixed Reserve Deduction Amount
settlementDetails	List<SettlementOrderDetail>	Yes	Settlement Order Detail

SettlementOrderDetail

Field Name	Type	Required	Description
settlementVoucherNumber	string	Yes	settlement Voucher Number
merchantOrderNumber	string	Yes	merchant Order Number
orderType	string	Yes	orderType, order/refund
originalOrderNumberRefund	string	Yes	original OrderNumber of Refund
orderStartTime	string	Yes	order Start Time
merchantNumber	string	Yes	merchant Number
clearingBatchNumber	string	Yes	clearingBatchNumber
orderAmount	string	Yes	total Order Amount
OrderCurrency	string	Yes	OrderCurrency

orderClearingCurrencyType	string	Yes	order Clearing Currency Type:CRYPTO/FIAT
OrderClearingExchangeRate	string	Yes	OrderClearingExchangeRate
principalClearingAmount	string	Yes	principalClearingAmount
principalClearingCurrencyType	string	Yes	principalClearingCurrencyType
principalClearingCurrency	string	Yes	Principal Clearing Currency
principalClearingExchangeRate	string	Yes	principalClearingExchangeRate
marginClearingAmount	string	Yes	marginClearingAmount
margin Clearing Currency Type	string	Yes	Margin Clearing Currency Type
margin Clearing Currency	string	Yes	Margin Clearing Currency
margin Clearing Exchange Rate	string	Yes	Margin Clearing Exchange Rate
feeClearingAmount	string	Yes	Fee Clearing Amount
feeClearingCurrency Type	string	Yes	Fee Clearing Currency Type
feeClearingCurrency	string	Yes	Fee Clearing Currency
feeClearingExchangeRate	string	Yes	Fee Clearing Exchange Rate
marginReturnClearingAmount	string	Yes	Margin Return Clearing Amount
marginReturnClearingCurrencyType	string	Yes	Margin Return Clearing Currency Type
marginReturnClearingCurrency	string	Yes	Margin Return Clearing Currency
marginReturnClearingExchangeRate	string	Yes	Margin Return Clearing Exchange Rate

7.7 PaymentType

Field Name	Type	Description
E_COMMERCE	string	Bybit QR Pay for e-commerce
E_COMMERCE_REFUND	string	BYBIT QR Pay refund for e-commerce
QR_PAY	string	Bybit QR Pay for stand qrcode pay
QR_PAY_REFUND	string	Bybit QR Pay refund for stand qrcode pay

MERCHANT_PAYOUT	string	Bybit pay payout for merchant

7.8 PaymentMethedDetail

Field Name	Type	Description
PaymentType	List string	Payment Type
fiatCurrency	List string	Fiat Currency
cryptoCurrency	List string	Crypto Currency

7.9 Customer

Field Name	Type	Description	
uid	string	bybit user unique id	
externalUserId	string	External merchant user ID	
userName	string	User name in Merchant	
registerTime	int64	User register time in UTC timestamp (second precision)	
kycCountry	string	3 ISO country codes, like AUS	
remarks	string	External order remarks	

7.10 RiskInfo

Field Name	Type	Required	Description
terminalType	string	Yes	Transaction source (APP, WEB, WAP, MINIAPP, OTHERS)

7.11 RefundType

Type	Description

MERCHNT_SELF_REFUND	Merchant refund by Kyb fundingaccount
STAND_SETTLEMENT_REFUND	Settlement refund on T1、T7 report

6.12 Payee

Field Name	Type	Required	Description
uid	string	Yes	Payee bybit uid

8. MccCodes

Table A1 Codes defined by ISO 18245

9. Signature Algorithm

8.1. Encrypt

1. Get the current timestamp `${timestamp}`
2. Combine `${timestamp}` and request body (if the http method is `POST`, the request body is `json` text, if the http method is `GET`, the request body is unescape `query` string, like `name=foo&age=18` is valid, `name%3dfoo%26age%3d18` is invalid) into a new string `$content`
3. Sign `$content` with `sha256` and `PKCS1V15, 1024`
4. Encode the signed bytes content to `base64`

e.g. We sign the following data. The timestamp is `1751441054`, the RSA key is

代码块

```
-----The following key pairs are for testing only-----
-----BEGIN RSA PUBLIC KEY-----
```

```
MIGJAoGBAOFSnhqtu40TOtok+yXeB+O76PXb/VAJU4Yih6hViOdSGd7imWmCSZyP
psl3TmLhUoB+rTzYDdYrlYYng6cVn6yUhxjpMWD4Qp5K4GzjvUM0f+AxlKYMj8OQ
AgDPmZG1a5ydFrje4PLytC7sUw3GP4TTk8xg6iMHmYPdRDv7AEWdAgMBAAE=
-----END RSA PUBLIC KEY-----

-----BEGIN RSA PRIVATE KEY-----
MIICXwIBAAKBgQDhUp4arbuNEzraJPsl3gfju+j12/1QCVOGIoeoVYjnUhne4plp
gkmcj6bJd05i4VKAfq082A3WK5WGJ4OnFZ+slIcY6TFg+EKeSuBs471DNH/gMZSm
DI/DkAIAz5mRtWucnRa43uDy8rQu7FMNxj+E05PMYOojB5mD3UQ7+wBFnQIDAQAB
AoGBAIqpeCi83516xw32EiSEleBdBIlA34vAoYj7ePZr5PtN+CPE2Von1rslYCO9
axzIwyfWTTATWbiCS9sqOAe78+1t3shU0ryXelWQ95LOdiMp0ZvU3ya6MzSVuiuL
6gOQYu8kzRqCzqvyMNdAHFMmP0iESefYegaiU46yQo2ZZAtVAkEA/N6gl4tYJBef
e/Gxi7qhuIKz0mvfA/yieRuiVhFb25oJaagU6hBuzegmbs45hh+n4bw8AA9k0bvi
3IBIdV/CbwJBAOQcsOPf+lrs4PEJYUQ8/eqiG7tgIUeXxuerfPYMAzvJ7EU1u72o
/5V9zdim+hPq+9cvsqO7dkJx+cEpgwHKzrMCQQDoYqArJP/Hi34hpaiIxOdCbbtc
MY4uV8noiqDRf/pvAkyMMM+nm5p42FQZmKP8wrLCHP72/y6kIIsIIUx1sZ85AkEA
15eWR4jEoXMIFkd7Onc6tKuJ8kokqfl08DhP3mv0EmoBeFgUnGhBRxSjnIQUDwck
Bnj6KW1fk+UM29dUDjmTqQJBAITyP16eBWjlzcgaxoT2d/d7S7AXvgCxCzRRi5ph
IavMyjrhDKyBGZ0mI6eoREaC4bxl31RRkYtg9mNeU3TxsBM=
-----END RSA PRIVATE KEY-----
```

json request body:

代码块

```
{"merchantId":"bybit","clientId":"xx","paymentType":"E_COMMERCE","merchantTradeNo":"8751738a-97a4-49da-8b64-185ffcb98a7a","payId":"01JXWP4XK4ZRVYD3HT9PD52KCD","status":"PAY_SUCCESS","amount":"1.23","currency":"USDT","currencyType":"crypto","createTime":1750088344,"paymentTime":1750088344,"finishTime":1750088344,"customer":{"external_user_id":"123","user_name":"tester","register_time":"1750088344","kyc_country":"HK","uid":"foo"}}
```

1. Get the current timestamp `1751441054`
2. Combine `${timestamp}` and request body (if the http method is `POST` , the request body is `json` text, if the http method is `GET` , the request body is unescape `query` string, like `name=foo&age=18` is valid, `name%3dfoo%26age%3d18` is invalid) into a new string `$content`

> 代码块
>
> ```
> 1751441054{"merchantId":"bybit","clientId":"xx","paymentType":"E_COMMERCE","merchantTradeNo":"8751738a-97a4-49da-8b64-185ffcb98a7a","payId":"01JXWP4XK4ZRVYD3HT9PD52KCD","status":"PAY_SUCCESS","am
> ```

```
ount":"1.23","currency":"USDT","currencyType":"crypto","createTime":1750088344,"paymentTime":1750088344,"finishTime":1750088344,"customer":{"external_user_id":"123","user_name":"tester","register_time":"1750088344","kyc_country":"HK","uid":"foo"}}
```

3. Sign `$content` with `sha256` and `PKCS1V15, 1024`
4. Encode the encrypted bytes in base64

代码块

```
vOyN+NnfWppnhxS6y1D+CAllj6Z/3np1Tm+nrt16e/EDl4VZjU2sVPSS/cBcf5Hy/jBarA8Y7yrvYqJonJAsAZcFKu9twW2XWyMbURC63Iumh5gkAE9UEx4/irpX4W6KXhqc2+7wc1tapC5zfVWRMIQ5Dh+7VscxLY+/WjKb/Vw=
```

8.2 Decrypt

1. Get `timestamp` , `signature` from request header.
2. Get request body (if the http method is `POST` , the request body is `json` text, if the http method is `GET` , the request body is `unescape query` string)
3. Combine `${timestamp}` and response body into a new string `$content`
4. decode the signature bytes from `base64` .
5. Encrypt string content with `sha256` and verify signature base `PKCS1V15,1024` .

e.g. We provided the following data.

代码块

```
vOyN+NnfWppnhxS6y1D+CAllj6Z/3np1Tm+nrt16e/EDl4VZjU2sVPSS/cBcf5Hy/jBarA8Y7yrvYqJonJAsAZcFKu9twW2XWyMbURC63Iumh5gkAE9UEx4/irpX4W6KXhqc2+7wc1tapC5zfVWRMIQ5Dh+7VscxLY+/WjKb/Vw=
```

The timestamp is `1751441054` , the RSA key is

代码块

```
-----The following key pairs are for testing only-----
-----BEGIN RSA PUBLIC KEY-----
MIGJAoGBAOFSnhqtu40TOtok+yXeB+O76PXb/VAJU4Yih6hViOdSGd7imWmCSZyP
psl3TmLhUoB+rTzYDdYrlYYng6cVn6yUhxjpMWD4Qp5K4GzjvUM0f+AxlKYMj8OQ
AgDPmZG1a5ydFrje4PLytC7sUw3GP4TTk8xg6iMHmYPdRDv7AEWdAgMBAAE=
-----END RSA PUBLIC KEY-----

```

```
-----BEGIN RSA PRIVATE KEY-----
MIICXwIBAAKBgQDhUp4arbuNEzraJPsl3gfju+j12/1QCVOGIoeoVYjnUhne4plp
gkmcj6bJd05i4VKAfq082A3WK5WGJ4OnFZ+slIcY6TFg+EKeSuBs471DNH/gMZSm
DI/DkAIAz5mRtWucnRa43uDy8rQu7FMNxj+E05PMYOojB5mD3UQ7+wBFnQIDAQAB
AoGBAIqpeCi83516xw32EiSEleBdBIlA34vAoYj7ePZr5PtN+CPE2Von1rslYCO9
axzIwyfWTTATWbiCS9sqOAe78+1t3shU0ryXelWQ95LOdiMp0ZvU3ya6MzSVuiuL
6gOQYu8kzRqCzqvyMNdAHFMmP0iESefYegaiU46yQo2ZZAtVAkEA/N6gl4tYJBef
e/Gxi7qhuIKz0mvfA/yieRuiVhFb25oJaagU6hBuzegmbs45hh+n4bw8AA9k0bvi
3IBIdV/CbwJBAOQcsOPf+lrs4PEJYUQ8/eqiG7tgIUeXxuerfPYMAzvJ7EU1u72o
/5V9zdim+hPq+9cvsqO7dkJx+cEpgwHKzrMCQQDoYqArJP/Hi34hpaiIxOdCbbtc
MY4uV8noiqDRf/pvAkyMMM+nm5p42FQZmKP8wrLCHP72/y6kIIsIIUx1sZ85AkEA
15eWR4jEoXMIFkd7Onc6tKuJ8kokqfl08DhP3mv0EmoBeFgUnGhBRxSjnIQUDwck
Bnj6KW1fk+UM29dUDjmTqQJBAITyP16eBWjlzcgaxoT2d/d7S7AXvgCxCzRRi5ph
IavMyjrhDKyBGZ0mI6eoREaC4bxl31RRkYtg9mNeU3TxsBM=
-----END RSA PRIVATE KEY-----
```

1. Get `timestamp` , `signature` from request header.

> `timestamp` = `1751441054`
>
> `signature` = `vOyN+NnfWppnhxS6y1D+CAllj6Z/3np1Tm+nrt16e/EDl4VZjU2sVPSS/cBcf5Hy/jBarA8Y7yrvYqJonJAsAZcFKu9twW2XWyMbURC63Iumh5gkAE9UEx4/irpX4W6KXhqc2+7wc1tapC5zfVWRMIQ5Dh+7VscxLY+/WjKb/Vw=`

2. Get request body (if the http method is `POST` , the request body is `json` text, if the http method is `GET` , the request body is `unescape query` string)

> 代码块
>
> ```
> {"merchantId":"bybit","clientId":"xx","paymentType":"E_COMMERCE","merchantTradeNo":"8751738a-97a4-49da-8b64-185ffcb98a7a","payId":"01JXWP4XK4ZRVYD3HT9PD52KCD","status":"PAY_SUCCESS","amount":"1.23","currency":"USDT","currencyType":"crypto","createTime":1750088344,"paymentTime":1750088344,"finishTime":1750088344,"customer":{"external_user_id":"123","user_name":"tester","register_time":"1750088344","kyc_country":"HK","uid":"foo"}}
> ```

3. Combine `${timestamp}` and response body into a new string `$content`

> 代码块
>
> ```
> 1751441054{"merchantId":"bybit","clientId":"xx","paymentType":"E_COMMERCE","merchantTradeNo":"8751738a-97a4-49da-8b64-185ffcb98a7a","payId":"01JXWP4XK4ZRVYD3HT9PD52KCD","status":"PAY_SUCCESS","amount":"1.23","currency":"USDT","currencyType":"crypto","createTime":1750088344,"paymentTime":1750088344,"finishTime":1750088344,"customer":
> ```

```
{"external_user_id":"123","user_name":"tester","register_time":"1750088344","
kyc_country":"HK","uid":"foo"}}
```

4. Decode the signature bytes from base64
5. Encrypt string content with sha256 and verify signature base PKCS1V15,1024

10. Error Code

ErrorCode	Description	Solution
100000	success	
400000	Invalid request parameters	Verify the format of the requested data.
400002	Signature verification failed	Ensure the merchant signature is correct.
400003	Request timestamp timeout	Verify the timestamp field in the request header.
400004	Order not found	Pay(Refund) order not found
400007	Unsupported payment type	Confirm that the payment type is supported by the API.
400008	Invalid precision	Confirm that the precision is in range.
400009	Unsupported currency	Confirm that the currency is supported.
400010	Quotation failed	Fx convert quotation failed.
400603	Order timeout	Check if the order has expired.
400621	Incorrect payment amount	Verify the requested amount.
400620	Duplicate payment for order	Ensure the merchant order number has not been submitted twice.
500000	Bybit internal error	Bybit internal error, such as db error.
500008	Merchant not found	Confirm that the provided merchant ID is correct.
500100	Payment QR code has expired	Place a new order to generate a new QR code.
500101	Duplicate payment for QR code	Verify the order status before proceeding.
500102	Merchant not Available	Merchant not Available by API now

500103	Order has refund	Order has refund, do not refund again
500104	Balance not Available	Balance not available, top up to the refund account(Bybit KYB funding account)
500105	Order not paid	Order not paid
500106	Version not supported	The features are not supported in the old version, pls upgrade the api version.
600001	AUTHORIZE_CODE_INVALID	Invalid authorization code
600002	AUTHORIZE_CODE_EXPIRED	Authorization code expired
600003	AUTHORIZE_TOKEN_INVALID	Access token invalid or expired
600004	AUTHORIZE_TOKEN_EXPIRED	Access token expired
600005	AUTHORIZE_SCOPE_INVALID	Invalid authorization scope
600006	AUTHORIZE_REJECTED	User rejected authorization