iPay88 API 2.0
Technical Documentation
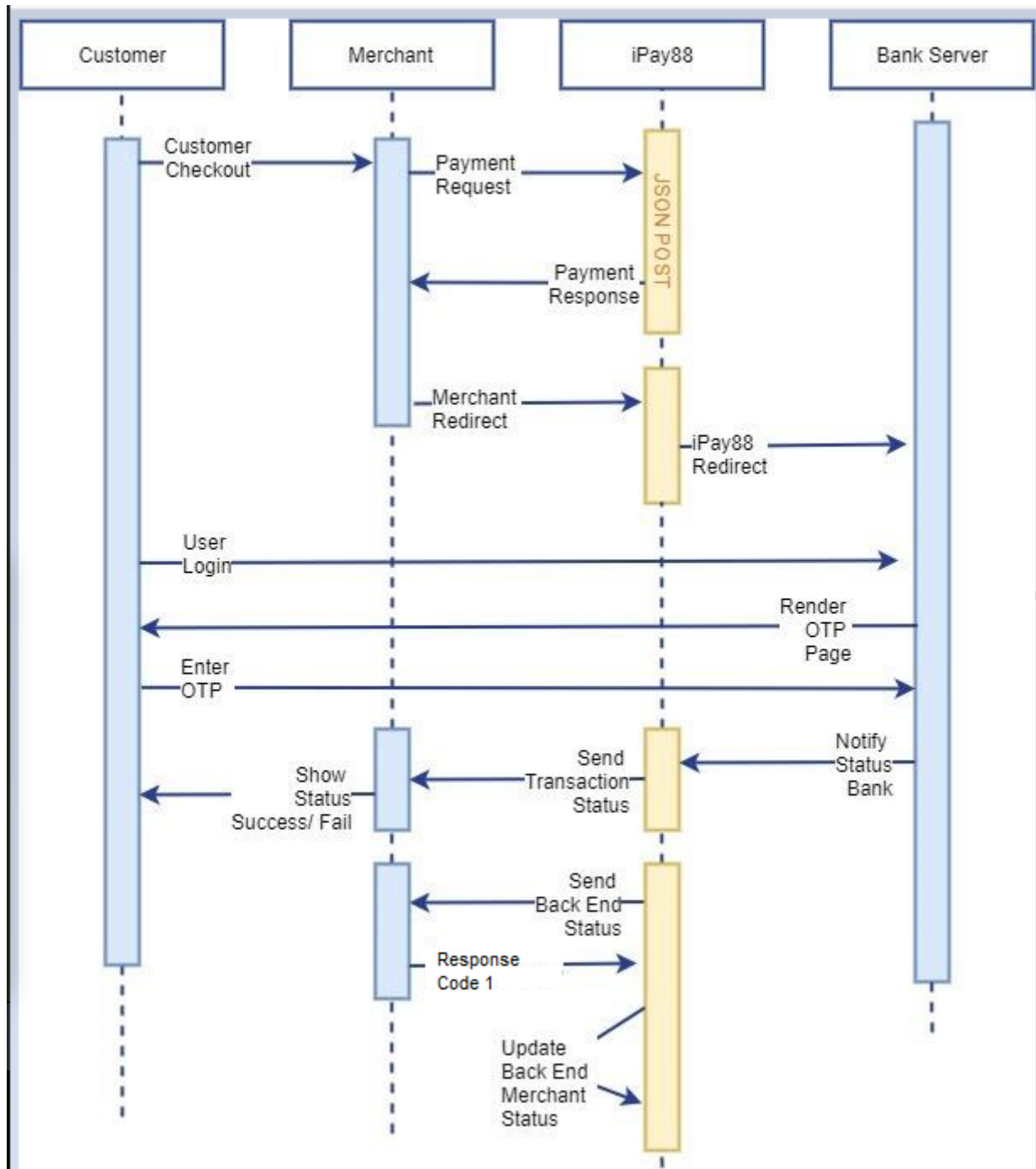
Contents

1 Summary of Changes

Change Date	Author's Name	Version No.	Description
12/08/2020	Norman Indra	2.0.0	API 2
22/09/2020	Fahmi Herlambang	2.0.1	Document formatting
23/10/2020	Norman Indra	2.0.2	Remove Xfield1 from backend
12/11/2020	Norman Indra	2.0.3	Changes description
31/03/2021	Thoriq Muttaqin	2.0.4	Add KH & TH PaymentID

2 Payment Flow

3   URL Request

1.	Sandbox	https://sandbox.ipay88.co.id/ePayment/WebService/PaymentAPI/Checkout
2.	Production	https://payment.ipay88.co.id/ePayment/WebService/PaymentAPI/Checkout

4 Request Format

Merchants send parameters via JSON as a request to iPay88 Indonesia. Here are some parameters as a request :

4.1   Request Parameters

No.	Field Name	Type (Size)	Sample	M/O	Description	
			Request Format			
1.	ApiVersion	string(5)	2.0	M	Version API	
2.	MerchantCode	string(20)	ID00001	M	Merchant code assigned by iPay88	
3.	PaymentId	integer	70	M	Payment method identifier, see 9.1 for the list.	
4.	Currency	string(5)	IDR	M	Support to IDR, USD, THB, KHT	
5.	RefNo	string(20)	920201930925AM	M	Unique merchant transaction number / Order ID	
6.	Amount	integer	100000	M	The amount must only contain the exact amount without 2 digits after. For example, **Rp 10.000,00** is expressed as **10000**.	
					Amount = Sum of Each transaction + Amount Of Shipping + Amount Of Discount	
7.	ProdDesc	string(100)	Alat Elektronik	M	Product description	
8.	UserName	string(100)	Thoriq	M	Customer name	
9.	UserEmail	string(100)	thoriq@ipay88.co.id	M	Customer email for receiving receipt	
10.	UserContact	string(100)	08123123123	M	User contact number	
11.	RequestType	string(20)	REDIRECT	O	Request type identifier, see 9.2 for the list.	
12.	Remark	string(100)		O	Merchant remarks	
13.	Lang	string(20)	ISO-8859-1	M	Encoding type	
					ISO-8859-1	English
					UTF-8	Unicode
					GB2312	Chinese Simplified
					GD18030	Chinese Simplified

					BIG5	Chinese Traditional
14.		ResponseURL	string(200)	https://store.co.id/resp.asp	M	Payment response page	
15.		BackendURL	string(200)	https://store.co.id/backend.asp	M	Backend response page	
16.		Signature	string(100)		M	SHA256 signature (ex on 4.2)	
17.		FullTransactionAmount	integer	10000000	O	mandatory for BCA KlikPay	
18.		MiscFee	integer	10000000	O	for BCA KlikPay	
19.		ItemTransactions	List (n)		M	Only for installment detail with multiple product	
	1.	Id	string (50)	001	M	Product id	
	2.	Name	string(100)	Smartphone	M	Name of item	
	3.	Quantity	integer	2	M	Quantity of item	
	4.	Amount	integer	5000	M	Amount of item product	
	5.	Type	string(100)		O	Type of Product	
	6.	Url	string(100)		O	URL of the product in the merchant site / platform	
	7.	ImageUrl	string(256)		O	URL of the image of the product in the merchant site / platform	
	8.	Tenor	string(100)		O	for BCA KlikPay	
	9.	CodePlan	string(100)		O	for BCA KlikPay	
	10.	MerchantId	string(100)		O	for BCA KlikPay	
	11.	ParentType	string(100)	SELLER or ITEM	M	Possible values : SELLER, ITEM	
	12.	ParentId	string(100)	SELLER88	M	It will correspond to the SELLER ID if the parentType is SELLER, alternatively it will correspond to the ITEM ID if the parentType is ITEM	
20.		ShippingAddress			M	Shipping Address Detail	
	1.	FirstName	string(100)	Recipient first name	M	Shipping FirstName	
	2.	LastName	string(100)	Recipient last name	M	Shipping LastName	
	3.	Address	string(100)	JL. Letjen S. Parman No 22-24	M	Shipping Address	
	4.	City	string(100)	Jakarta Barat	M	Shipping City	
	5.	State	string(20)	Jakarta	M	Shipping State	
	6.	PostalCode	string(20)	11480	M	Shipping Postal Code	
	7.	Phone	string(20)	08788888888	M	Shipping Phone	
	8.	CountryCode	string(20)	ID	M	Shipping Country Code	
21.		BillingAddress			M	Billing Address detail	
	1.	FirstName	string(100)	Customer first name	M	Billing FirstName	
	2.	LastName	string(100)	Customer last name	M	Billing LastName	
	3.	Address	string(100)	JL. Letjen S. Parman No 22-24	M	Billing Address	
	4.	City	string(100)	Jakarta Barat	M	Billing City	
	5.	State	string(20)	Jakarta	M	Billing State	
	6.	PostalCode	string(20)	11480	M	Billing Postal Code	

	7.	Phone	string(20)	08788888888	M	Billing Phone
	8.	CountryCode	string(20)	ID	M	Billing Country Code
22.	Sellers		List (n)		M	Only For Seller Detail
	1.	Id	string(100)	Your-seller-id	M	Seller's ID
	2.	Name	string(100)	Your-seller-name	M	Seller's Name
	3.	SelleridNumber	string(100)	Your-seller-id-number	M	Seller's identifier number (KTP / SIM / etc)
	4.	Email	string(100)	seller@ipay88.co.id	M	Seller's Email
	5.	Address			M	Seller's Shop
		1.	FirstName	string(100)	Seller First name	M	Seller's Shop FirstName
		2.	LastName	string(100)	Seller Last Name	M	Seller's Shop LastName
		3.	Address	string(100)	JL. Letjen S. Parman No. 22-24	M	Seller's Shop Address
		4.	City	string(100)	DKI Jakarta	M	Seller's Shop City
		5.	State	string(100)	Jakarta Barat	M	Seller's Shop State
		6.	PostalCode	string(6)	11480	M	Seller's Shop Postal Code
		7.	Phone	string(20)	08788888888	M	Seller's Shop Phone
		8.	CountryCode	string(16)	ID	M	Seller's Shop Country Code
23.	SettingField		List (n)			
	1.	Name	string(100)	TenorInstallment	O	For other : example installment
	2.	Value	string(100)	3	O	For other : example installment

4.2 Request Signature

This signature must be included in the request of every transaction than encrypted using SHA256.
This hash signature for a request is a hash of the following five fields:

1. MerchantKey (Provided by iPay88 OPSG and share between iPay88 and merchant only)
2. MerchantCode (Provided by iPay88 OPSG and share between iPay88 and merchant only)
3. RefNo
4. Amount
5. Currency

The fields must set in the following order:

|| MerchantKey || MerchantCode || RefNo || Amount || Currency ||

Example:
MerchantKey = "apple"
MerchantCode = "ID00001"
RefNo = "A00000001"
Amount = "3000" (Note: 3000 represent amount as Rp 3.000)
Currency = "IDR"

The hash would be calculated on the following string:

||Apple||ID00001||A00000001||3000||IDR||

The resulting has signature value equals to (using SHA256 algorithm):

3ee767e49d29c46b6187db2fe511287ccd986e874a057fa2e1bb222442b68f63

To ensure the signature generated was correct, visit the link below for signature comparison.
https://payment.ipay88.co.id/epayment/testing/TestSignaturev2.asp

4.3 Code Example

PHP :

```php
<?php
echo hash('sha256', "||" . MerchantKey . "||" . MerchantCode . "||" . RefNo . "||" . Amount . "||" . Currency . "||");
?>
```

JAVA :

```java
String sha256hex = org.apache.commons.codec.digest.DigestUtils.sha256Hex("||" + MerchantKey + "||" + MerchantCode + "||" + RefNo + "||" + Amount + "||" + Currency + "||" );
```

4.4 Request Sample JSON

```json
{
    "APIVersion": "2.0",
    "MerchantCode": "ID00001",
    "PaymentId": "71",
    "Currency": "IDR",
    "RefNo": "10182019103003AM",
    "Amount": "500000",
    "ProdDesc": "Alat Elektronik",
    "RequestType": "Seamless",
    "UserName": "Technical Support",
    "UserEmail": "techsupp@ipay88.co.id",
    "UserContact": "081234567890",
    "Remark": "",
    "Lang": "iso-8859-1",
    "ResponseURL":
"https://sandbox.ipay88.co.id/epayment/fujipaystatusv2.asp",
    "BackendURL":
"http://sandbox.ipay88.co.id/ePayment/testing/RequestForm_savetemp.asp",
    "Signature":
"b469c7da241554364e55b65ca807ffc501bdf981126c248c636ac9e38592fc12",
    "ItemTransactions": [
        {
            "Id": "00001",
            "Name": "Smartphone Wireless Charger",
            "Quantity": "1",
            "Amount": "300000",
            "ParentType": "SELLER",
            "ParentId": "SELLER123"
        },
        {
```

```json
            "Id": "00002",
            "Name": "Powerbank 10000maH",
            "Quantity": "1",
            "Amount": "200000",
            "ParentType": "SELLER",
            "ParentId": "SELLER456"
        },
        {
            "Id": "shippingfee",
            "Name": "Shipping Fee",
            "Quantity": "1",
            "Amount": "5000"
        },
        {
            "Id": "discount",
            "Name": "Discount",
            "Quantity": "1",
            "Amount": "5000"
        }
    ],
    "ShippingAddress": {
        "FirstName": "Techsupp",
        "LastName": "Alpha",
        "Address": "Jl. Test Blok R No.1",
        "City": "Jakarta",
        "State": "DKI Jakarta",
        "PostalCode": "18800",
        "Phone": "08123456789",
        "CountryCode": "1"
    },
    "BillingAddress": {
        "FirstName": "Techsupp",
        "LastName": "Alpha",
        "Address": "Jl. Test Blok R No.1",
        "City": "Jakarta",
        "State": "DKI Jakarta",
        "PostalCode": "18800",
        "Phone": "08123456789",
        "CountryCode": "1"
    },
    "Sellers": [
        {
            "Id": "SELLER123",
            "Name": "Sellername",
            "LegalId": "3274011001900001",
            "SellerIdNumber": null,
            "Email": "sellername@gmail.com",
            "Url": "www.sunrise.com",
            "address": {
                "FirstName": "Seller",
```

```json
                "LastName": "Alpha",
                "Address": "Jalan Tentara Pelajar no 49",
                "City": "Jakarta Utara",
                "State": "DKI Jakarta",
                "PostalCode": "12960",
                "Phone": "08123456789",
                "CountryCode": "IDN"
            }
        },
        {
            "Id": "SELLER456",
            "Name": "Sellername B",
            "LegalId": "3173021507910004",
            "SellerIdNumber": null,
            "Email": "sellernameb@gmail.com",
            "Url": "www.tokobagus.com",
            "address": {
                "FirstName": "Seller",
                "LastName": "Beta",
                "Address": "Jalan Krici raya IX",
                "City": "Jakarta Selatan",
                "State": "DKI Jakarta",
                "PostalCode": "12960",
                "Phone": "08123456789",
                "CountryCode": "IDN"
            }
        }
    ],
    "SettingField": [
        {
            "Name": "TenorInstallment",
            "Value": "3"
        }
    ]
}
```

5 Response Format

iPay88 Indonesia send parameters via JSON as a response to Merchant. Here are some parameters as a response:

5.1 Response Parameters

No.	Field Name	Type	Sample	Description
			Response Format	
1.	RefNo	string	720201745653AM	Unique merchant transaction number / Order ID
2.	Signature	string	b469c7da241554364e55b65ca807ffc501bdf981126c248c636ac9e38592fc12	Signature generated with sha256 (see 4.2)
3.	VirtualAccountAssigned	string	IDR	Virtual Account number
4.	TransactionExpiryDate	string	18-08-2020 07:57	Expired date for Virtual Account (DD-MM-YYYY HH:MM)
5.	CheckoutID	string	T0036521900	iPay88 OPSG Transaction ID
6.	Code	string	"1" – Payment Request Received "0" – Fail	Transaction Status
7.	Message	string	Data received	Transaction Message

5.2 Response Sample JSON

```
{
  "RefNo": "10182019103003AM",
  "Signature": "b469c7da241554364e55b65ca807ffc501bdf981126c248c636ac9e38592fc12",
  "CheckoutID": "3acf947c2e40b975d07d60906aff9ef832357ba573b933faa007140d84492cb2",
  "Code": "1",
  "Message": "CheckoutURL generated"
}
```

6   Payment Redirect

After getting response from iPay 88, merchant need to redirect using form method post using CheckoutID from payment response.

1.	Sandbox	https://sandbox.ipay88.co.id/PG/
2.	Production	https://payment.ipay88.co.id/PG/

6.1   Payment Redirect Param HTTP POST

<table>
<tr><th colspan="5">Response Format</th></tr>
<tr><th>No.</th><th>Field Name</th><th>Type (Size)</th><th>Sample</th><th>Description</th></tr>
<tr><td>1.</td><td>CheckoutID</td><td>string(20)</td><td>3acf947c2e40b975d07d60906aff9ef832357ba573b933faa007140d84492cb2</td><td>Unique ID Ipay88 generated from payment response</td></tr>
<tr><td>2.</td><td>Signature</td><td>integer</td><td>b469c7da241554364e55b65ca807ffc501bdf981126c248c636ac9e38592fc12</td><td>Signature generated with sha256 (see 4.2)</td></tr>
</table>

6.2   Payment Redirect Sample HTTP POST

```
<form method="POST" name="redirect" action="{redirect url}">
    <input type="hidden" name="CheckoutID" value="{CheckoutID}" />
    <input type="hidden" name="Signature" value="{Signature}" />
</form>
<script language=javascript>
    document.redirect.submit();
</script>
```

7 BackendPost

Backendpost will be send after user payment attempt using method POST with type application/json. Ipay88 will sent backendpost with 3 times retry until merchant response with Code 1.

7.1 BackendPost Param

No.	Field Name	Type	Description
1.	MerchantCode	string	Merchant code assigned by iPay88
2.	PaymentId	string	Payment method identifier
3.	Refno	string	Merchant Reference Number
4.	Amount	number	Transaction Amount, with .00
5.	Currency	string	Transaction Currency
6.	Remark	string	Additional Value
7.	TransId	string	IPay88 transaction ID
8.	AuthCode	string	Code from Bank
9	TransactionStatus	string	Transaction Status
10.	ErrDesc	string	Transaction Error Description
11.	Signature	string	Signature generated using sha1
12.	PaymentDate	string	Transaction Date

7.2   BackendPost Signature

This signature must be included in the request of every transaction than encrypted using SHA256. This hash signature for a request is a hash of the following five fields:

1. MerchantKey (Provided by iPay88 OPSG and share between iPay88 and merchant only)
2. MerchantCode (Provided by iPay88 OPSG and share between iPay88 and merchant only)
3. PaymentID (see 9.1 for the list)
4. RefNo
5. Amount
6. Currency
7. TransactionStatus (the status of transaction, can be obtain from ipay88)

The fields must set in the following order:

|| merchantkey || MerchantCode || PaymentId || RefNo || Amount || Currency || PaymentStatus ||

Example:
MerchantKey = "apple"
MerchantCode = "ID00001"
PaymentID = "1"
RefNo = "A00000001"
Amount = "3000.00" (Note: 3000.00 represent amount as Rp 3.000)
Currency = "IDR"
PaymentStatus = "1"

The hash would be calculated on the following string:

||apple||ID00001||1||A00000001||3000.00||IDR||1||

The resulting has signature value equals to (using SHA256 algorithm):

ed14e9c0373a1e1f887c29929fd8d063a402f6b1924d78df0763e03bae025ee0

To ensure the signature generated was correct, visit the link below for signature comparison
https://payment.ipay88.co.id/epayment/testing/TestSignaturev2.asp

7.3   Code Example

PHP :

```php
<?php
echo hash('sha256', "||" . MerchantKey . "||" . MerchantCode . "||" . PaymentId . "||" . RefNo . "||" .
Amount . "||" . Currency . "||" . PaymentStatus . "||" );
?>
```

JAVA :

```java
String sha256hex = org.apache.commons.codec.digest.DigestUtils.sha256Hex("||" + MerchantKey + "||"
+ MerchantCode + "||" + PaymentId + "||" + RefNo + "||" + Amount + "||" + Currency + "||" +
PaymentStatus + "||");
```

7.4   BackendPost Sample Data

```
{
  "MerchantCode": "ID00001",
  "PaymentId": "1",
  "RefNo": "49202082951AM",
  "Amount": "3000.00",
  "Currency": "IDR",
  "Remark": "",
  "TransId": "T0041414200",
  "AuthCode": "494320",
  "Status": "1",
  "ErrDesc": "",
  "Signature": "e874f0e14f2a356c5612fd1c767d4a1b4857a329bedd8361fbb7623aa8991de6",
  "IssuerBank": "PT. BANK CENTRAL ASIA TBK",
  "PaymentDate": "09-04-2020 15:30"
}
```

8 Merchant BackendPost Response

Merchant must response with specific value of backend post that being sent to merchant BackendURL.

8.1 Merchant BackendPost Response Param

No.	Field Name		Type	Description
1.	Code		string	0 for Failed, 1 for Success
2.	Message			
	1.	Indonesia	string	Message in Indonesia
	2.	English	string	Message in English

8.2 Merchant BackendPost Response Sample Data

```
{
    "Code":"1"
    "Message":
    {
      "English":"Status Received",
      "Indonesian":"Pembayaran diterima"
    }
}
```

9 Others

Other list for parameter that being sent to IPay88.

9.1 Payment ID List

PaymentId	Name	Currency	Description
6	Paypal	USD	
9	Maybank VA	IDR	
11	CIMB Clicks	IDR	
13	Linkaja	IDR	
14	IB Muamalat	IDR	
17	Mandiri ATM	IDR	
19	PaybyQR	IDR	
21	ATM BCA	IDR	
23	Danamon	IDR	
24	Convenience Store	IDR	
25	BCA VA	IDR	
26	BNI VA	IDR	
30	BCA VA	IDR	
31	Permata VA	IDR	
31	Permata ATM	IDR	
36	ePay BRI	IDR	
37	Online SBI	IDR	
38	Maybank IB	IDR	
39	QNB	IDR	
41	Credit/Debit Card	IDR	
41	Credit/Debit Card	IDR	
47	Credit/Debit Card	IDR	2D Payment
48	Credit/Debit Card	IDR	2D Payment
49	Credit/Debit Card	IDR	GPN
51	Recurring Payment	IDR	
52	Credit/Debit Card	IDR	PreAuth Payment
55	Kredivo	IDR	
56	Credit/Debit Card	IDR	PreAuth Payment
60	Alfamart	IDR	
61	BRI VA	IDR	
63	OVO	IDR	Payment by App
64	Permata VA	IDR	
65	Indomaret	IDR	
66	Maybank2U	IDR	
68	BNI VA	IDR	

69	Mandiri VA	IDR	
70	Indodana	IDR	
71	Akulaku	IDR	
77	Dana	IDR	
81	CIMB Clicks	IDR	
2003	Acleda Xpay	USD	
2238	Chip Mong Bank	USD	
2235	E-Wings Online Web USD	USD	
2011	Pi Pay	USD	
2009	Metfone eMoney	USD	
3081	KBank	THB	
3069	BBL	THB	
3001	BAY	THB	
3003	SCB	THB	
3088	Prompt Pay QR	THB	
3082	Line Pay	THB	

9.2 Request Type List

Request Type	Description
REDIRECT	Default method using checkout form
SEAMLESS	Seamless method using API