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ADVANCED BANK OF ASIA LIMITED.

Online Payment Processing through PayWay Payment Gateway

API Document

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PAYWAY 2.0

SEQUENCE FLOW

Here are steps in the PayWay payment process.

- Step 1: Buyers places an order on your web site or mobile app.
- Step 2: You initiate an order from your server/app
- Step 3: You pass Order ID and Order details to Payway.
- Step 4: If Order ID and Transaction details are Valid, Payway returns a Checkout page (*on Web or WebView in native mobile*)
- Step 6: You render the Checkout page iFrame (*on Web/ WebView in native mobile*)
- Step 7: Customer Authenticate the payment.
- Step 8: PayWay sends a pushback notification.
 - On Web PayWay shows success message to customer on Checkout iFrame and send payment success notification to your server.
 - For Native Mobile app implementation, you make use pushback notification to save the status of the transaction.

1 CREATE TRANSACTION - PURCHASE API

Use this API to accept payments from Cards, ABA PAY, KHQR and other alternative available payment methods, you can initiate the transaction by posting the transaction details and the hash of transaction details to PayWay.

PayWay will then create a transaction and respond with a Checkout page , QR value or Deeplink depending on use case.

POSSIBLE USE CASES

Create Transaction API can be used in following scenarios

- **Card** or **ABA KHQR** Checkout on web
- Get QR code to display on Screen or print on Receipts and Invoices
- For native app integration get Deeplink to launch ABA mobile from your app
- Create purchase transaction with saved credentials (Credentials on file) for recurring and non-recurring payments.

API ENDPOINTS

PayWay has separate domain for Production and Sandbox environment, to use Purchase API you must target to correct URL, following are the URL for respective environment.

- TESTING URL: <https://checkout-sandbox.payway.com.kh/api/payment-gateway/v1/payments/purchase>
- PRODUCTION URL: <https://checkout.payway.com.kh/api/payment-gateway/v1/payments/purchase>
- Method: **POST**
- Content Type: multipart/form-data
- Body: form-data

Note:

- These APIs are only accessible from a whitelisted domain or IP, Developers need to supply one domain/ IP to PayWay Integration team to whitelist before calling the APIs
- Calling API from non-whitelisted domain will return error code **“6’ wrong domain”**
- Accessing API directly from browser address bar or calling with **GET** method will return **“405 Method Not Allowed”**.
- Developer must pass parameters related to the transaction along with Hash of the parameters to successfully post the transaction to PayWay.
- Hash must include all the parameters being posted to PayWay; Developers may choose to skip optional parameters that are not relevant to their usecase.

REQUEST PARAMETERS DESCRIPTION

#	Field name	Data type	Remark	Example
1	language optional	HEADER/ string[2]	Support [en, km] – to be included on header of the request to request Payment page in specific language. en – English km – Khmer	en
2	req_time mandatory	Timestamp [UTC]	Format YYYYmmddHis	20210123234559
3	merchant_id mandatory	String [30]	Merchant ID provided by PayWay Team	onlinesshop24
4	tran_id mandatory	String [20]	Transaction ID – unique order ID Must not include special characters or spaces except “-”,	24os-pr0001 or 12345 or OS12345
5	ctid optional	String [255]	Consumer token ID – used when using Credentials on file feature on PayWay	Use this parameter for second purchase transaction only
6	pwt optional	String [255]	PayWay token – used when using Credentials on file feature on PayWay	
7	firstname optional	String [20]	Use this parameter to pass customer name to Payway to record on transaction., Note: no Special characters or spaces allowed	John or ហ៊ុន
8	lastname optional	String [20]	Use this parameter to pass customer last name to Payway so we can keep record on transaction, Note: no Special characters or spaces allowed	Doe
9	email optional	String [50]	Customer Email	jhondoe@testemail.com

10	phone optional	String [8-20]	Customer Phone number You can pass this info to store on payway and to view from merchant portal	+855900000000
11	amount mandatory	decimal (10, 2)	Total amount When passing currency as KHR do not include decimal point	USD 100.00 KHR 10000
12	type optional	String [20]	Possible Values <ul style="list-style-type: none"> pre-auth, purchase <p>‘purchase’ is set as default if value is left as blank; Merchant need to pass the value as ‘pre-auth’ to create pre-auth transaction.</p>	purchase
13	payment_option mandatory	String [20]	Available payment options for payment <ul style="list-style-type: none"> cards abapay_khqr abapay_khqr_deeplink wechat alipay 	abapay_khqr
14	items optional	String [500]	base64 encode of JSON object e.g. [{'name':'test','quantity':'1','price':'1.00'}] You can include this field if you want to see the item on receipt, PayWay merchant portal	W3snbmFtZSc6J3Rlc3QnLCdxdWFudGl0eSc6JzEnLCdwcmliZSc6JzEuMDAnfV0= .
15	lifetime optional	Int	Use this parameter to set lifetime for the transaction after which the payment will not be accepted. must be included in hash if added on payload.	lifetime=10
16	return_url optional	String [255]	Convert URL to base64 string base64_encode(‘domain.com’), Dynamic Pushback URL, Method POST Use this to get pushback to a custom, webhook /Service .. note the base URL must be whitelisted	d3d3LnBhEnLCdwcmliZSc6JzEuMDAnfV0= jb20ua2gLCdxd
17	cancel_url optional	String [255]	Used for website integration only Use this parameter to redirect your customer to a specific page once click on cancel button on checkout form.	
18	continue_success_url optional	String [255]	URL string Use this parameter to redirect your customer to a specific page after the payment is successful.	www.staticmerchanturl.com
19	return_deeplink optional	String [255]	Merchant can use this link to pass a deeplink so that aba mobile app can pass success message to Merchant app. [Link] [parameters values]	<?php echo base64_encode('{ "android_scheme": "https://uat-epayment.com.kh/payments/aba", "ios_scheme": "https://uat-epayment.com.kh/app/?value={ "bankRefId": "\'####BANK_REF####\'", "msgDesc": "\'####MSG_DESC####\'", "msgCode": "\'####MSG_CODE####\'", "transactionId": "\'####TRAN_ID####\'"} }' } ?>"/>
21	custom_fields optional	String [255]	base64_encode(json_encode({custom_field})); use this to Include custom fields, which are not available on payway, you will be able to get those custom fields in pushback notification and see to see fields in Merchant portal	
22	return_params optional	String [255]	string or JSON string – can be used for remark or adding a note to the transaction. return_params will be included on payment success notification sent as callback to merchant.	‘this is a wxample note for the transaction’ or

			Note Return params are not visible in Merchant portal and can use max 500 chars	'EncryptedMessage+mxBorGgaom778oliLLimoBhosD' or “ {‘key’: ‘value’ , ‘Key’: ‘value’, ‘key’: ‘value’}
23	view_type optional	String [255]	To be included on the request to get Payment page for <ul style="list-style-type: none">• null – for QR payment• hosted_view – for native app web view.• checkout – to load checkout pop-up without redirecting• qr – this is required once you implement Alipay and WeChat QR payment	This parameter does not include in hash
24	payment_gate optional	string	<ul style="list-style-type: none">• 0• null	use this field once merchant implement Default checkout and QR on invoice.
25	payout optional	String [255]	base64_encode of Json string	base64_encode ('[{ { "acc": "000153879", "amt": 5 }, { "acc": "111111111", "amt": 10, }]')
26	skip_cof3ds optional	Int	Value = 1	It is for skip cof3ds for the second transaction purchase, and it is not included in hash
27	shipping	float		23.33
28	hash mandatory	Text	<p>Base64 encode of hash hmac sha512 encryption</p> <p>String = req_time + merchant_id + tran_id + amount + items + lifetime + ctid + pwt + firstname + lastname + email + phone + type + payment_option + return_url + cancel_url + continue_success_url + return_deeplink + custom_fields + return_params with public_key.</p> <p>Please note to keep the sequence of parameters as listed above.</p> <p>Ex in PHP: base64_encode(hash_hmac('sha512', string, \$public_key, true));</p> <ul style="list-style-type: none">• <u>Step 1</u> generate hash: (req_time + merchant_id + tran_id + amount + items + gdt + shipping + ctid + pwt + firstname + lastname + email + phone + type + payment_option + return_url + cancel_url + continue_success_url + return_deeplink + topup_channel + currency + custom_fields + return_params)• <u>Step 2</u> Encrypt with: "[\sha512_true\","fb629880e9a741dc9862a4ad260f6668\"]"	

EXAMPLE REQUEST

Submit required parameter as form-data

<pre>1. "req_time": "20210123234559", 2. "merchant_id": "onlinesshop24", 3. "tran_id": "00002894", 4. "firstname": "Fristname", 5. "lastname": "Customer Last name", 6. "email": "ema_il@textdomain.com", 7. "phone": "0965965965", 8. "amount": 5000, 9. "type": "purcahse", 10. "payment_option": "abapay_khqr", 11. "items": "W3snbmFtZSc6J3Rlc3QnLCdxdWFudG10eSc6JzEnLCdwcm1jZSc6JzEuMDAnfV0=", 12. "continue_success_url": "www.staticmerchanturl.com/Success", 13. "return_deeplink": "J3siYW5kcm9pZFCIsXCJiJIMjI1wiLFwidHJhbnNhY3Rpb25JZFwiO1wiIyMjVFJBT19JRCMjI1wifSJ9Jw== ",</pre>

```
14. "custom_fields":{" eyJQdXJyWhzZSBvcmlciByZWYiO3VzdG9tZm1lbGQyIjoidmFsdWUgZm9yIGN1c3RvbSBmaWVsZCJ9"}",
15. "return_params":"500 Character notes included here will be returned on pushback notification after transaction is
    successful.",
16. "hash":"K3nd/2Z4g45Paoqx06QA3UQeHRC2Ts37zjudG7DqyyU2Cq0cvOFMYqwtEsXkaEmNOSiFh6Y+IHRdwnA2WA/M/Qg=="
```

EXAMPLE RESPONSE

Response from PayWay Create transaction API differs based on the parameter value of **payment_option** parameter you pass to PayWay and the services enabled for your merchant profile.

1.1 DEFAULT CHECKOUT - WEB

For **Card payment** or **ABA KHQR** method on website or, you will pass **payment_option** value as '**cards**' or '**abapay_khqr**'. PayWay will respond with Checkout webpage for the requested payment page, which you can render in an iFrame on your website or implement WebView on mobile application.

1.2 DEFAULT CHECKOUT – NATIVE APP WEB VIEW

For **Cards Payment** or **ABA KHQR** method implementation on WebView on Native app

- you will pass **payment_option** value as '**cards**' or '**abapay_khqr_deeplink**'
- include following snippet
 - `<input type="hidden" name="payment_option" value="cards"/>`.
 - `<input type="hidden" name="view_type" value="<?php echo $view_type="hosted_view "; ?>"/>`.
- Remove following items from your POST request
 - Remove js url: `<script src="https://checkout.payway.com.kh/plugins/checkout2-0.js"></script>`
 - Remove target="aba_webservice" in `<form/>` tag.

1.3 QR PAYMENT

For QR Payment implementation to display on POS Screen, Kiosk or print on Receipts and Invoices you will pass **payment_option** value as null . PayWay will respond with QR string that you can convert to QR and render on your screen.

Note:

- QR payment has to be enabled for your profile to get QR string as a default response for your profile
- If you use your merchant credentials for both QR payment and online checkout you may have to use additional parameter '**payment_gate ='0'**' for checkout on web

1.4 DEEPLINK FOR NATIVE APP

For ABA KHQR payment method on mobile app integration, you will pass **payment_option** value as "**abapay_khqr_deeplink**". PayWay will then respond with Deeplink to ABA mobile along with the unique transaction values that you can use launch ABA mobile to complete payment.

Notes

- Call as Rest API
- Include header referrer on the request.

EXAMPLE REQUEST

To receive abapay_deeplink that you can use to native app integration, use [Purchase API](#) with **payment_option** as **abapay_khqr_deeplink**.

EXAMPLE RESPONSE

```
1.  {"status":
2.  {"code": "00", "message": "Success!"},
3.  "description": "success",
4.  "payment_gate": "0"
5.  "qrString": "ABA1004512511032001203116131016327983181421Merchant040a367f91e5643bf2eac8a486ef87c82cbc12d2374",
6.  "abapay_deeplink": "abamobilebank:\\\\ababank.com?type=payway&qrcode=ABA100451256327983181421Foreigner2d2374",
7.  "app_store": "https:\\\\itunes.apple.com\\a1\\app\\aba-mobile-bank\\id968860649?mt=8",
8.  "play_store": "https:\\\\play.google.com\\store\\apps\\details?id=com.paygo24.ibank"
9.  }
```

HANDLE RESPONSE

Use the following code snippet to handle deeplink from PayWay API response to open ABA mobile to complete payment.

ANDROID

```
1. //
2. private fun openDeepLink(qrString: String) {
3.     try {
4.         val url = "${ABA_SCHEME}://${ABA_DOMAIN}?type=payway&qrcode=${qrString}" // value from "abapay_deeplink"
5.         val intent = Intent(Intent.ACTION_VIEW, Uri.parse(url))
6.         startActivity(intent)
7.     } catch (ex: Exception) {
8.         val intent: Intent = Intent(Intent.ACTION_VIEW).apply {
9.             intent.data = Uri.parse("market://details?id=com.paygo24.ibank")
10.        }
11.        startActivity(intent)
12.    }
13.    finish()
14. }
15. companion object {
16.     const val ABA_SCHEME = "abamobilebank"
17.     const val ABA_DOMAIN = "ababank.com"
18. }
```

IOS

```
1. // model - mapping from API response
2. // - deeplink - ABA mobile app scheme Or Appstore - ABA mobile app store link
3. guard
4. let deeplinkURL = URL(string: model.deeplink),
5. let appStoreURL = URL(string: model.appStore) else {
6.     // Something went wrong, check url respond from API.
7.     return
8. }
9. UIApplication.shared.open(deeplinkURL, options: [:]) { success in if !success
10. // Open app store
11. UIApplication.shared.open(appStoreURL, options: [:]) }
```

CHECKOUT ERROR CODE

Error Code	Error Description
1	Invalid Hash, Hash generated is incorrect and not following the guideline to generate the Hash.
2	Invalid Transaction ID, unsupported characters included in Transaction ID
3	Invalid Amount format does not need to include decimal point for KHR transaction. example for USD 100.00 for KHR 100
4	Duplicate Transaction ID, the transaction ID already exists in PayWay, generate new transaction.
5	Invalid Continue Success URL, (Domain must be registered in PayWay backend to use success URL)
6	Invalid Domain Name (Request originated from non-whitelisted domain need to register domain in PayWay backend)
7	Invalid Return Param (String must be lesser than 500 chars)
8	-
9	Invalid Limit Amount (The amount must be smaller than value that allowed in PayWay backend)
10	Invalid Shipping Amount
11	PayWay Server Side Error
12	Invalid Currency Type (Merchant is allowed only one currency - USD or KHR)
13	Invalid Item, value for items parameters not following the guideline to generate the base64 encoded array of item list.
14	-
15	Invalid Channel Values for parameter <i>topup_channel</i>
16	Invalid First Name - unsupported special characters included in value
17	Invalid Last Name
18	Invalid Phone Number
19	Invalid Email Address
20	Required purchase details when checkout
21	Expired production key,

2 PAYMENT SUCCESS PUSHBACK NOTIFICATION

Once the payment is complete, PayWay will call back merchant URL to post the payment status of the Transaction.

Merchant shall provide a webhook to PayWay integration team to configure on Merchant profile., The URL will be used to post the transaction status.

EXAMPLE RESPONSE

```
1. {
2.   "tran_id": "1632300046",
3.   "apv": "000011",
4.   "status": 0
5. }
```

RESPONSE PARAMETERS DESCRIPTION

#	Field name	Data type	Remark	Example
1	tran_id	String		1632300046
2	apv	String		565856
3	status	int		0
4	return_params	String	once merchant add this field from request form and this field will include on pushback notification	000asd011163230daereytio004_ae6123433xeuilc1

3 CHECK TRANSACTION API

The Check transaction API gives you the status of the transaction. PayWay recommends using this API to reconcile with PayWay database after you receive the response.

Additional Possible Parameters on response can be added to response, see list below.

API ENDPOINTS

- TESTING URL: <https://checkout-sandbox.payway.com.kh/api/payment-gateway/v1/payments/check-transaction>
- PRODUCTION URL: <https://checkout.payway.com.kh/api/payment-gateway/v1/payments/check-transaction>
- Method: **POST**

REQUEST PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	language <small>optional</small>	HEADER/string [2]	Support [en, km] – to be included on header of the request to request Payment page in specific language. en – English km – Khmer	en
2	req_time	Timestamp [UTC]	Format YYYYmmddHis	20210123234559
3	merchant_id <small>mandatory</small>	String [30]	Merchant id provided by PayWay integration team.	onlinesshop24
4	tran_id <small>mandatory</small>	String [20]	Transaction ID – unique order ID	24os-pr0001 or 12345 or OS12345
5	hash <small>mandatory</small>	Text	Base64 encode of hash hmac sha512 encryption merchant_id + tran_id with public_key. Ex in php: base64_encode(hash_hmac('sha512', request_body, \$public_key, true)); public_key – ABA eMerchant integration team will share during client onboard. <ul style="list-style-type: none">• Step 1 Generate Hash hash: (req_time + merchant_id + tran_id)• Step 2 Encrypt with: "["sha512_true","fb629880e9a741dc9862a4ad260f6668"]"	

EXAMPLE REQUEST

```
1. {  
  "req_time": "20210922050705",  
  "merchant_id": "ec000002",  
  "tran_id": "trx-20201019130940",  
  "hash": "20210922050705ec000002trx-20201019130940"  
}
```

EXAMPLE RESPONSE

Default response

```
1. {  
2.   "status": 0,  
3.   "description": "approved",  
4.   "amount": 5,  
5.   "totalAmount": 5,  
6.   "apv": "",  
7.   "datetime": "2021-12-24 12:36:15",  
8.   "original_currency": "USD",  
9.   "payout": [  
10.     {  
11.       "acc": "002099542",  
12.       "amt": "5914500"  
13.     },  
14.     {  
15.       "acc": "002099539",  
16.       "amt": "60000"  
17.     },  
18.     {  
19.       "acc": "002099540",  
20.       "amt": "30000"  
21.     },  
22.     {  
23.       "acc": "002099541",
```

```
24.         "amt": "20500"
25.     }
26. ]
27. }
28.
```

Additional Possible Parameters that can be included on response.

```
1. {
2.     "tran_id": "00002894",
3.     "firstname": "Fristname",
4.     "lastname": "Customer Last name",
5.     "email": "helloworld@gmail.com",
6.     "original_currency": "USD",
7.     "bank_ref": "",
8.     "payer_account": "*163",
9.     "phone": "+855923232323",
10.    "payment_type": "ABA Pay" or "visa" or, "JCB" or "mastercard"
11. }
12.
13.
```

RESPONSE PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	status	int	Possible responses	0 – Approved, PRE_AUTH, PREAUTH_APPROVED 1 – Created 2 – Pending 3 – Declined 4 – Refunded 5 – Wrong Hash 11 – Other Server-side Error
2	description	String		approved
3	tran_id	String	This parameter can be added on request	trx-20201019130940
4	datetime			2021-08-21 15:00:23
5	apv	String		90909999
6	payment_type	String	<ul style="list-style-type: none">cardsabapay_khqrabapay_khqr_deeplinkwechatalipay	ABA Pay
7	amount			5
8	refund_amount			0
9	totalAmount			5
10	first_name	String	This parameter can be added on request	Bun
11	last_name	String	This parameter can be added on request	Warth
12	email	String	This parameter can be added on request	helloworld@gmail.com
13	topup_channel			
14	phone	String	This parameter can be added on request	+855923232323
15	bank_ref	String	This parameter can be added on request	100FT90908989787
16	original_currency	String	This parameter can be added on request	USD
17	payer_account	String	This parameter can be added on request	*****7163
18	Payout		This will be included as default if merchant creates transaction with Payout feature.	:[{ "acc": "002099542", "amt": "5914500" }, { "acc": "002099539", "amt": "60000" }, { "acc": "002099540", "amt": "30000" },]

	<pre>{ "acc": "002099541", "amt": "20500" }</pre>
--	---

4 TRANSACTION LIST API

The Transaction List API returns you the list of the transaction that matches your query. PayWay recommends using this API to reconcile your transactions with PayWay database after you receive payment success pushback notification.

API ENDPOINTS

- TESTING URL: <https://checkout-sandbox.payway.com.kh/api/payment-gateway/v1/payments/transaction-list>
- PRODUCTION URL: <https://checkout.payway.com.kh/api/payment-gateway/v1/payments/transaction-list>
- Method: **POST**

REQUEST PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	Language <small>optional</small>	HEADER/string [2]	Support [en, km] – to be included on header of the request to request Payment page in specific language. en – English km – Khmer	en
2	req_time	Timestamp [UTC]	Format YYYYmmddHis	20210123234559
3	merchant_id <small>mandatory</small>	String [30]	Merchant id provided by PayWay integration team	onlinesshop24
4	from_date <small>optional</small>		Search from date YYYY-mm-dd H:i:s. Default is today 00:00:00	
5	to_date <small>optional</small>		Search to date YYYY-mm-dd H:i:s. Default is today 23:59:59	
6	from_amount <small>optional</small>		Search amount in transaction	
7	to_amount <small>optional</small>		Search amount in transaction	
8	status <small>optional</small>		Transaction Status [APPROVED, DECLINED, PENDING, PRE-AUTH, CANCELLED, REFUNDED]. Separate value by comma, ex: Approved, DECLINED	
9	hash <small>mandatory</small>		Base64 encode of hash hmac sha512 encryption <ul style="list-style-type: none">• hash: (req_time + merchant_id + from_date + to_date + from_amount + to_amount + status)• Encrypt with: ["sha512_true","fb629880e9a741dc9862a4ad260f6668"]	

EXAMPLE REQUEST

```
1. {
2.   "req_time": "20210922080553",
   "merchant_id": "ec000002",
   "from_date": "2021-09-20 00:00:00",
   "to_date": "2021-09-25 00:00:00",
   "from_amount": "",
   "to_amount": "",
   "status": null,
   "hash": "8LkYR4qU27iimCProPerTYiscwCCPyYu4JMrw/70HZJv+sGghd6MqBRinja1LwRtPbkgs40c11E1jH6Uqhua1mg=="
3. }
```

EXAMPLE RESPONSE

```
1. {
2.   "data": [
3.     {
       "transaction_id": "1632096553",
       "transaction_date": "2021-09-20 07:10:50",
       "apv": "239137",
       "status": "APPROVED",
       "payment_type": "ABA Pay",
       "original_amount": "5.5 USD",
       "refund_amount": "0 USD",
       "payment_amount": "5.5 USD",
       "first_name": "Theareak",
       "last_name": "Chea",
       "email": "chea.theareak@ababank.com",
       "phone": "+855123456789",
       "bank_ref": "100FT30140517093"
     },
4.     {
5.       "transaction_id": "724734",
       "transaction_date": "2021-09-22 14:49:44",
```

```

        "apv": "344574",
        "status": "APPROVED",
        "payment_type": "ABA Pay",
        "original_amount": "15 USD",
        "refund_amount": "0 USD",
        "payment_amount": "15 USD",
        "first_name": "RAIN",
        "last_name": "RAIN",
        "email": "sithikabou@gmail.com",
        "phone": "85512356461",
        "bank_ref": "100FT30140517976"      },
6.      {
7.        "transaction_id": "245435",
        "transaction_date": "2021-09-22 15:02:04",
        "apv": "171624",
        "status": "APPROVED",
        "payment_type": "ABA Pay",
        "original_amount": "7.9 USD",
        "refund_amount": "0 USD",
        "payment_amount": "7.9 USD",
        "first_name": "RAIN",
        "last_name": "RAIN",
        "email": "sithikabou@gmail.com",
        "phone": "85512356461",
        "bank_ref": "100FT30140518000"      }
8.    ],
9.    "status": {
        "code": "00",
        "message": "Success!",
        "lang": "en"      }
10. }
```

RESPONSE PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	status	Array		{ "code": "00", "message": "Success!", "lang": "en" }
2	code	String [2]	Possible Values 00 – Success	00
3	lang	String [2]	Possible Values <ul style="list-style-type: none">en - Englishkm – Khmer	
4	data	JSON		

5 REFUND TRANSACTION

With the refund API **you can issue a refund to customer if the transaction is within 30 Days**. The payment is immediately refunded to the payment method associated with Transaction.

There are 2 types of refunds, you can perform full refund or a partial refund.

- a **full refund** - the whole amount of Transaction will be refunded, or
- a **partial refund** - only a certain part of the amount is refunded.

NOTE

- Only paid transactions with status 'Success' can be refunded.
- **Only Transaction within 30 days of payment date can be refunded.**
- A refund can be issued, even if the settlement is still pending.
- Your settlement account will be debited to fulfill the refund.
- Refund can fail if your settlement account has insufficient funds to fulfill the refund.
- Partial refunds can be initiated multiple times until the total amount paid is refunded.
- Refund APIs requires selerate RSA key for encryption and, you can get it from integration support team upon request.

API ENDPOINTS

- TESTING URL: <https://checkout-sandbox.payway.com.kh/api/merchant-portal/merchant-access/online-transaction/refund>
- PRODUCTION URL: <https://checkout.payway.com.kh/api/merchant-portal/merchant-access/online-transaction/refund>
- Method: **POST**

REQUEST PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	request_time mandatory	Timestamp [UTC]	Format YYYYmmddHis	20210123234559
2	merchant_id mandatory	String [20]	Merchant id provided by PayWay integration team	onlinesshop24
3	merchant_auth mandatory	Text	{"mc_id":"ec000002","tran_id":"00002894", "refund_amount":"0.01"} RSA.PUBLIC(merchant_id, tran_id, refund_amount) (Encrypt using the public key)	884113079983ac7b7d18f69bd11ec72c3e460be35f2a3 2650b607ad6e9
4	hash mandatory	Text	Encrypted with Api Keys sha512(request_time + merchant_id + merchant_auth)API_Keys	3nd/2Z4g45Paoqx06QA3UQeHRC2Ts37zjudG7DqyyU2 FMYqwtEsXkaEmNOSiFh6Y+IHRdwnA2WA/M/Qg==

Note:

Please calculate merchant_auth

EXAMPLE REQUEST

```
1. {  
2.   "request_time": "20210922050705",  
3.   "merchant_id": "ec000002",  
4.   "merchant_auth": "9aaa43e6929a75208cdb29ab498d9604600101d8dc00-20201019130940",  
5.   "hash": "EVDFA2118UD0boKhkAc0brmRIU263x3pwIltgxEI6JfhLmpE/X+5KIGNiG8tIQU64p0tvtfbMa2b5q9CCt+sWw=="  
6. }
```

EXAMPLE RESPONSE

```
1. {  
2.   "grand_total": 1.5,  
3.   "total_refunded": 0.09,  
4.   "currency": "USD",  
5.   "transaction_status": "REFUNDED",  
6.   "status": {  
7.     "code": "00",  
8.     "message": "Success!" }  
9. }
```

RESPONSE PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	grand_total	Double		
2	total_refunded	Double		
3	currency	String		

4	transaction_status	String
5	status	Array
5.5	code	String
5.5	message	String

6 PRE-AUTHORIZATION

Pre-Authorization payment, also known as Pre-Auth, enables you to block (pre-authorize) the funds on customer’s debit/credit card or ABA Account, instead of charging customer immediately. The funds are blocked for certain days depending on your business agreement.

During that time, you can either collect (Complete Pre-Auth), or release (Cancel Pre-Auth) the blocked funds.

Pre-auth payments are suitable for situations when during the purchasing process there is no guarantee that the goods will be available later or the price is likely to change at the end of the service provided.

Note:

- Pre-Auth transactions are auto cancelled in 30 days from the date of transaction was created, if not complete the transaction
- Pre-auth auto cancellation days can be reduced based on your needs
- Pre-Authorization is disabled by default on your merchant profile, to enable this service please contact PayWay representative

6.1 CREATE PRE-AUTH

Creating a pre auth transaction is like creating a purchase transaction, only difference is while you send a purchase request you must include the parameter “**type**” value as “**pre-auth**” funds will be blocked on customer’s debit/credit card or ABA Account once customer authenticate the transaction.

Use [Purchase API](#) with parameter **type** value as “pre-auth”.

Note: to use payout with per-auth you’ll need to include additional parameters on pre-auth complete request.

6.2 COMPLETE PRE-AUTH

Use this API to collect the amount you requested to block with create Pre-Auth transaction from customer’s debit/credit or ABA Account.

API ENDPOINTS

- TESTING URL: <https://checkout-sandbox.payway.com.kh/api/merchant-portal/merchant-access/online-transaction/pre-auth-completion>
- PRODUCTION URL: <https://checkout.payway.com.kh/api/merchant-portal/merchant-access/online-transaction/pre-auth-completion>
- Method: **POST**

REQUEST PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	language <small>optional</small>	HEADER/string [2]	Support [en, km] – to be included on header of the request to request Payment page in specific language. en – English km – Khmer	em
2	request_time <small>mandatory</small>	Timestamp [UTC]	Format YYYYmmddHis	20210123234559
3	merchant_id <small>mandatory</small>	String [30]	Merchant id provided by PayWay integration team	onlineshop24
4	merchant_auth <small>mandatory</small>		{"mc_id":"ec000002","tran_id":"00002894", "complete_amount":"0.01"} encrypt using the public key	b1453eac8cd686f90542c9d7dc026a3f70678afd
5	hash <small>mandatory</small>	Text	Encrypted with sha512(merchant_auth_encryption + request_time+ merchant_id)	"3nd/2Z4g45Paoqx06QA3UQeHRC2Ts37judG7Dqy yU2Cq0cvOFMYqwtEsXkaEmNOSiFh6Y+IHRdwnA2 WA/M/Qg=="

EXAMPLE REQUEST

```
1. {
```

```
2.  "request_time": "20200728095315",
3.  "merchant_id": "ec100002",
4.  "merchant_auth": "b1453eac8cd686f90542c9d7dc026a3f70678afd",
5.  "hash": "w33R2bVPVKY9M4WmeGoQUUcmtrJYFofFuMrgTMBLj/g8kPfXgnpK/qpjptO+1D0nKbpFktqM/iPWEyQ6/1lsnJbw=="
6.  }
```

EXAMPLE RESPONSE

```
1.  {
2.    "grand_total": 1.5,
3.    "currency": "USD",
4.    "transaction_status": "APPROVED",
5.    "status": {
6.      "code": "00",
7.      "message": "Success!" }
8.  }
```

RESPONSE PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	grand_total	Double		
2	currency	String		
3	transaction_status	String		
4	status	Array		
4.5	code	String		
4.5	message	String		

6.3 CANCEL PRE-AUTH

Use this API to release the blocked amount on customer card or ABA Account.

API ENDPOINTS

- TESTING URL: <https://checkout-sandbox.payway.com.kh/api/merchant-portal/merchant-access/online-transaction/pre-auth-cancellation>
- PRODUCTION URL: <https://checkout.payway.com.kh/api/merchant-portal/merchant-access/online-transaction/pre-auth-cancellation>
- Method: **POST**

REQUEST PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	language <i>optional</i>	HEADER/string [2]	Support [en, km]	en
2	request_time <i>mandatory</i>	Timestamp [UTC]	Format YYYYmmddHis	20210123234559
3	merchant_id <i>mandatory</i>	String [30]	Mobile or Application ID	onlinesshop24
4	merchant_auth <i>mandatory</i>	string	{"mc_id":"ec000002","tran_id":"00002894"}	b1453eac8cd686f90542c9d7dc026a3f70678afd
5	hash <i>mandatory</i>	Text	Encrypted with sha512(merchant_id + merchant_auth_encryption + request_time)	"3nd/2Z4g45Paoqx06QA3UQeHRC2Ts37zjudG7DqyyU2Cq0cvO+IHRdwnA2WA/M/Qg=="

EXAMPLE REQUEST

```
1. {
2.   "request_time": "20200728095315",
   "merchant_id": "ec100002",
   "merchant_auth": "b1453eac8cd686f90542c9d7dc026a3f70678afd",
   "hash": "wR2bVPVKY9M4WmeGoQUUcmtrJYFofFuMrgTMBLj/g8kPfXgnpK/qpjpt0+1D0nKbpFktqM/iPWeyQ6/11snJbw=="
3. }
```

EXAMPLE RESPONSE

```
1. {
2.   "grand_total": 1.5,
   "currency": "USD",
   "transaction_status": "CANCELLED",
   "status": {
     "code": "00",
     "message": "Success!"
   }
3. }
```

RESPONSE PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	grand_total	Double		1.5
2	currency	String		USD
3	transaction_status	String		
4	code	String		00
5	message	String		Success!

7 ACCOUNT-ON-FILE (AOF)

Using PayWay's Account on File (AoF) service, ABA account holder can authorize merchant to store their ABA account token for future payment without entering the Mobile PIN again.

Merchant will only receive unique token for the linked ABA account and never see Account details while the real account details are securely stored on PayWay payment gateway.

The token can be used to initiate a payment during customer checkout, or the transactions can be started by merchants for scheduled and recurring payments depending on business need.

7.1.1 LINK ACCOUNT API

Use this API to request a QR on Web Platform or Deeplink on Mobile app to initiate linking ABA Account.

There are 2 ways how merchant can save payer's ABA account details in own system:

- If payer processing payment through merchant's website on PC then merchant should display QR code for scanning with ABA Mobile app. During scanning QR with ABA Mobile app payer agrees to save its account on merchant side. Only ABA Mobile app can be used to scanning this QR code.
- If payer processing payment through merchant's website or application on mobile device with pre-installed ABA Mobile app merchant should display button with deep link. Pressing (tap) on the button with link will launch ABA Mobile app where payer can select account that want to save on merchant application. ABA Mobile should be pre-installed on payer's device otherwise it will be redirected to App store or Play store.

API ENDPOINTS

- TESTING URL: <https://checkout-sandbox.payway.com.kh/api/aof/request-qr>
- PRODUCTION URL: <https://checkout.payway.com.kh/api/aof/request-qr>
- Method: **POST**

REQUEST PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	req_time mandatory	Timestamp [UTC]	Format YYYYmmddHis	20210123234559
2	merchant_id mandatory	String [20]	Merchant id provided by PayWay integration team	onlinesshop24
3	return_param	String [20]		
4	return_url	Text	Convert URL to base64 string base64_encode('domain.com'), Dynamic Pushback URL, Method POST	"e5596529ddad43802fd1211d2503cd594a71e360381b8f15d6fbfa"
5	hash mandatory	Text	Base64 encode of hash hmac sha512 encryption merchant_id + req_time with public_key. Ex: in php: \$hash = base64_encode(hash_hmac('sha512', \$merchant_id . \$req_time, \$public_key, true));	"waNDRBqpuvXM3BACX+X1Sxtg4U+Q/5dII5C/VT+RuVUeflZ4GBpZLA7uSmByHLc56hI0H1zrT3+cOwJQn/eHYw=="

EXAMPLE REQUEST

```
1. {
2.   "req_time": "20210723080525",
3.   "merchant_id": "ec1000002",
4.   "return_param": null,
5.   "return_url": "e5596529ddad43802fd1211d2503cd594a71e360381b8f15d6fbfa",
6.   "hash": "waNDRBqpuvXM3BACX+X1Sxtg4U+Q/5dII5C/VT+RuVUeflZ4GBpZLA7uSmByHLc56hI0H1zrT3+cOwJQn/eHYw=="
7. }
```

EXAMPLE RESPONSE

```
1. {
2.   "status":
3.     {
4.       "code": "00",
5.       "message": "QR generated successfully"
6.     },
7.   "deeplink": "abamobilebank://ababank.com?type=account_on_file&qrcode=ABAAOF%2BhEGxkym0GCTuGTSatzgFsexgxkuw%
8.   "qr_string": "ABAAOF+hEGxkym0GCTuGTSatzgFsesgxkuw+8P0J3qJEbdUOWAMN0PdBi2Q/+xEVex6SbF19enqLB2xU46jTzVY1h3M9b8kJA=",
9.   "qr_image": "https://payway-staging.ababank.com/assets/abaqr/abaqr-8f89f23955e7e68c5616270_27526ftvKQv8JML.png",
10.  "expire_in": 1627113926
11. }
```

Note:

- for Web implementation the 'qr_image' is to be rendered on the webpage so customer can Scan and Authorize linking of account.
- For Mobile app integration 'deeplink' is to be used for calling ABA mobile so customer can enter the pin to Authorize the linking of account.

RESPONSE PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	Code	String		Possible Response status <ul style="list-style-type: none">00 Generate QR successfully04 Parameter Validation Required
2	Message	String		
3	deeplink	String		abamobilebank://ababank.com?type=account_on_file&qrcode=ABAAOF%2BhEGxkym0GCTuGTSatzgFsesgxkuw%2FB4OzkNFrPIVDZTF68PNPJ1IM9b8kJA%3D%3D
4	qr_string	String		ABAAOF+hEGxkym0GCTuGTSatzgFsesgxkuw+8P0J3qIEbdUOWAMN0PdBi2Q/+xEVex6SbF19enqLB2xU46jTzVeWUNLRXJ/GG+4OzkNFrPIVDZTF68PNPJ1IM9b8kJA==
5	qr_image	String		https://payway-staging.ababank.com/assets/abaqr/abaqr-8f89f2395ad495aba3a15e70a6e68c56162702752.png
6	expire_in	String		1627113926

The response contains deeplink, qr_string, qr_image and expiration time (as timestamp). Parameter "qr_string" can be converted as QR for desktop browsers so the customer can scan it with their ABA Mobile and Enter pin ABA account in merchant's online store.

Parameter "deeplink" must be represented as HTTP link in merchant mobile application or merchant website on mobile device. It allows customers clicking on it to automatically launch ABA Mobile.

See the sample code under [1.2 Deeplink for Native app integration](#) for how to open ABA Mobile using the deeplink.

7.1.2 LINKED ACCOUNT PUSHBACK NOTIFICATION.

After ABA account holder authorize linking their account by scanning the QR or with Deeplink, PayWay will pushback a unique Account Token with non-sensitive payer details to the Callback URL provided by Merchant. Merchant must store this token for the future purchase request.

EXAMPLE RESPONSE

```
1. {
2.   "tran_id": "aof-370732ef43",
3.   "status": 0,
4.   "return_params":
5.     {
6.       "ctid": "37195a893ed5304ea...",
7.       "payment_status": "",
8.       "card_status":
9.         {
10.           "status": "00",
11.           "pwt": "371932f4102dacb606a8ca1e...",
12.           "mask_account": "*****0123",
13.           "expired_in": 5184000
14.         },
15.       "return_param": "5644"
16.     }
17. }
```

RESPONSE PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	tran_id	string		aof-370732ef43
2	status	string		0
3	return_params	string		
4	ctid	string		37195a893ed5304ea
5	payment_status	string		
6	card_status	string		
7	status	string		00
8	pwt	string		371932f4102dacb606a8ca1e371932f41a8ca1e
9	mask_account	string		*****0123
10	expire_in	string		5184000
11	return_param	string		5644

7.2 REMOVE ACCOUNT API

Use this APIs to allow customers to be able to remove the linked account.

API ENDPOINTS

- TESTING URL: <https://checkout-sandbox.payway.com.kh/api/aof/remove-account>
- PRODUCTION URL: <https://checkout.payway.com.kh/api/aof/remove-account>
- Method: **POST**

REQUEST PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	req_time mandatory	Timestamp [UTC]	Format YYYYmmddHis	20210123234559
2	merchant_id mandatory	String [20]	Mobile or Application ID	onlinesshop24
3	ctid mandatory	String		Consumer token ID
4	pwt mandatory	String		PayWay token
5	hash mandatory	text	Base64 encode of hash hmac sha512 encryption merchant_id + req_time + ctid + pwt with public_key. Ex in php: \$hash = base64_encode(hash_hmac('sha512', \$merchant_id . \$ctid . \$pwt, \$public_key, true));	

EXAMPLE REQUEST

```
1. {
2.   "ctid": "239acf04eace99ea15...",
3.   "merchant_id": "ec000002",
4.   "pwt": "23932588e6e1a330fedb1c135ac8df6ba1b...",
5.   "req_time": "20200211101409",
6.   "hash": "NWJkOTdhNGQ0NDY1YjB1ODRjOTVhMjVjZWl0ZjY0NzUyNjRiMjh1YWQ1MmN1N2ViMTc..."
7. }
```

EXAMPLE RESPONSE

```
1. {
2.   "status": {
3.     "code": "00",
4.     "message": "Success"}
5. }
```

RESPONSE PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
	code	String		Possible Statuses
	message	String		<ul style="list-style-type: none">• 00 QR is valid• 01 Invalid api-key• 04 Parameter Validation Required

7.3 RENEW EXPIRED ACCOUNT API

Validity of the Linked account token is only for 60 Days. Merchant must renew the token to continue using AoF on your customer profile.

Note the account token can be renewed before it expires.

API ENDPOINTS

- TESTING URL: <https://checkout-sandbox.payway.com.kh/api/aof/renew-expired-account>
- PRODUCTION URL: <https://checkout.payway.com.kh/api/aof/renew-expired-account>
- METHOD: POST

REQUEST PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	req_time mandatory	Timestamp [UTC]	Format YYYYmmddHis	20210123234559

2	merchant_id mandatory	String [20]	Mobile or Application ID	onlinesshop24
3	ctid mandatory	String	Consumer token ID	
4	pwt mandatory	String	PayWay token	
5	hash mandatory	Text	Encrypt with: (###conString###) Encryption method: ###encrypt###	<ul style="list-style-type: none">hash: (merchant_id + ctid + pwt + req_time)Encrypt with: "CALL_C_sha512('CURR_FIELD', 'fb62988kjad260f6668');"

EXAMPLE REQUEST

```
1. {
2.   "req_time": "20210315030017",
3.   "merchant_id": "ec000002",
4.   "ctid": "3757acf04eace99ea1590857c7066acf260e",
5.   "pwt": "375732588e6e1a330fedb1c135ac8df6ba1b671278cfef7d73c9dfac86883115bdbc4",
6.   "hash": "XQhWgSbvuiuo+y9rOkRKfSGORCDuMyLDfTV0n6DwDz8r8wsdRA5hWbNf+dXDzqt1a3cmXnRpClSw9YSwQ0+wvsg=="
7. }
```

EXAMPLE RESPONSE

```
1. {
2.   "status": {
3.     "code": "00",
4.     "message": "Success"
5.   }
6. }
```

RESPONSE PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	code	string		Possible Response Status
2	message	String		<ul style="list-style-type: none">00 Success11 other - server-side error

7.4 PURCHASE WITH LINKED ACCOUNT

Creating a transaction with Account on File is like creating a purchase transaction using [Create Transaction - Purchase API](#), the difference is while you send a purchase request you must include the parameters '**ctid**', '**pwt**' along with other mandatory parameters.

the transaction will be auto approved and immediately charge customer without having them to enter the pin.

Use Purchase API with parameters '**ctid**', '**pwt**', that you received while linking ABA account, upon successful payment PayWay will pushback payment status with the Transaction id.

API ENDPOINTS

- TESTING URL: <https://checkout-sandbox.payway.com.kh/api/payment-gateway/v1/payments/purchase>
- PRODUCTION URL: <https://checkout.payway.com.kh/api/payment-gateway/v1/payments/purchase>
- Method: POST

EXAMPLE REQUEST

```
1. {
2.   "req_time": "20200722113241",
3.   "tran_id": "scl-00011",
4.   "ctid": "234acf04eace99ea15...",
5.   "pwt": "23432588e6e1a330fedb1c135ac8df6ba1b...",
6.   "firstname": "chhengleap",
7.   "lastname": "soem",
8.   "email": "soem.chhengleap@ababank.com",
9.   "phone": "0969890686",
10.  "amount": "0.50",
11.  "items": "W3sibmFtZSI6InRlc3QiLCJxdWFudG10eSI6IjEiLCJwcm1jZSI6IjEuMDAifV0=",
12.  "hash": "JTRVo/P16biznpocQ3LbPLB2nLRMayuYiSjk4L42y10nKx2hF/6CVsa81NlqXSuw7og3vuHd3Hz3rKc6BLud2A=="
13. }
```

PAYMENT SUCCESS PUSHBACK NOTIFICATION.

Upon successful payment with the saved token PayWay will pushback the payment status with the Transaction id.


```
1. {  
2.   "tran_id":"1632300046",  
3.   "apv":"000011",  
4.   "status":0  
5. }
```

CHECKOUT ERROR CODE

in case of having any issue while using the API, the table below could help you to quickly understand what went wrong.

1	00 Success
2	01 Invalid Header Key
3	02 Wrong Hash
4	03 Token Expired
5	04 Parameter Validation Required
6	05 Parameter Invalid Format
7	06 The Request is Expired
8	07 Invalid Data
9	08 Login Fail
10	09 Fail to connect to PwPwd system
11	10 Invalid hash token
12	11 Maximum number of requests is tries has been exceeded
13	12 Invalid authentication info
14	13 Validation phone number is already used!
15	14 Invalid sort type [asc, desc]
16	15 You have no permission to access this feature
17	16 Request Timeout
18	17 Restrict User
19	18 Invalid ABA Account Number
20	21 Already registered, go to login, or reset password if you forgot.
21	22 This account already registered on another app, please contact support for detail.
22	403 Forbidden

8 CARD-ON-FILE (COF)

PayWay's Card on File (CoF) allow Card holder (Visa/Master card/ UPII/JCB) to authorize merchants to store their Cards token which can be used for future payments without having customer to enter card details. Using the Saved token, transactions can be initiated by consumers or the merchants (for scheduled or recurring payments) depends of business needs.

Merchant will only see the tokenized (encrypted) details of the cards while the real cards details are securely stored at PayWay payment gateway.

8.1 REQUEST ADD CARD

Use this api to request PayWay save card web page where customer can safely enter the card details and authorize linking the card for future payments.

API ENDPOINTS

- TESTING URL: <https://checkout-sandbox.payway.com.kh/api/payment-gateway/v1/cof/initial>
- PRODUCTION URL: <https://checkout.payway.com.kh/api/payment-gateway/v1/cof/initial>
- Method: POST

REQUEST PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	merchant_id mandatory	String [20]	Mobile or Application ID	onlinesshop24
2	ctid	String	Consumer token ID, Merchant no need to pass this value once user add card for the first time. they just pass this param once user request add second card	
3	return_param mandatory	String	Will be included no pushback notification	
4	firstname mandatory	String	Customers First name	
5	lastname mandatory	String	Customers Last name	
6	email	String		
7	phone	String		
8	return_url	String	Convert URL to base64 string base64_encode('domain.com') Dynamic Pushback URL, Method Post	d3d3LnBheChoduTeriS5jb20ua2gLCdxdW
9	continue_add_card_success_url	String	useful for redirecting customer to specific pager after add card	
10	hash mandatory	Text	Encrypt "merchant_id+ctid+return_param, key" with hash_hmac sha512 after that convert the output using Base64. E.g., in php <div><pre>1. \$hash = base64_encode(hash_hmac('sha512', \$merchant_id . \$ctid . \$return_param, \$key, true));</pre></div>	

EXAMPLE REQUEST

Request as form-data

```
1.  "merchant_id":"onlinesshop24",  
2.  "ctid": "00002894",  
3.  "firstname":"Fristname",  
4.  "lastname":"Customer Last name",  
5.  "email":"ema_il@textdomain.com",  
6.  "phone":"0965965965",  
7.  "return_url":" d3d3LnBheChoduTeriS5jb20ua2gLCdxdW",  
8.  "continue_add_card_success_url":" www.staticmerchanturl.com/Success",
```

9. "hash": "K3nd/2Z4g45Paoqx06QA3UQeHRC2Ts37zjudG7DqyyU2Cq0cv0FMYqwtEsXkaEmNOSiFh6Y+IHRdwnA2WA/M/Qg==",

```
1. <!doctype html>
2. <html lang="en">
3. <head>
4. <meta charset="utf-8">
5. <meta http-equiv="X-UA-Compatible" content="IE=edge">
6. <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
7. <meta name="description" content="">
8. <meta name="author" content="PayWay">
9. <title>PayWay Add Card Sample</title>
10. <link href="http://demo.payway.com.kh/css/bootstrap.min.css" rel="stylesheet">
11. <link rel="stylesheet" href="https://payway-staging.ababank.com/checkout-popup.html?
12. file=css"/>
13. <style type="text/css">
14. /* Your css style*/
15. </style>
16. <script src="http://demo.payway.com.kh/js/jquery-2.2.4.min.js"></script>
17. <script src="http://demo.payway.com.kh/js/bootstrap.min.js"></script>
18. <script src="https://payway-staging.ababank.com/checkout-popup.html?file=js"></script>
19. <script>
20. $(document).ready(function () {
21. $('#add_card_button').click(function () {
22. ABApayway.addCard();
23. });
24. });
25. </script>
26. </head>
27. <body>
28. <div class="container">
29. <a href="#" id="add_card_button" class="btn btn-primary add-to-card">Add New Card</a>
30. </div>
31. <!-- The Modal -->
32. <div id="aba_main_modal" class="aba-modal">
33. <!-- Modal content -->
34. <div class="aba-modal-content add-card">
35. <form method="POST" target="aba_webservice" action="https://payway-staging.ababank.com/en
36. /api/request/add-card/" id="aba_merchant_add_card">
37. <input type="hidden" name="firstname" value="Samnang"/>
38. <input type="hidden" name="lastname" value="Sok"/>
39. <input type="hidden" name="phone" value="0123456789"/>
40. <input type="hidden" name="email" value="sok.samnang@gmail.com"/>
41. <input type="hidden" name="ctid" value="239acf04eace99ea1590857c7066acf260e"/>
42. <input type="hidden" name="merchant_id" value="###"/>
43. <input type="hidden" name="return_param" value="rp-1582083583"/>
44. <input type="hidden" name="hash" value="###"/>
45. </form>
46. </div>
47. </div>
48. </body>
49. </html>
50.
```

EXAMPLE RESPONSE

PayWay will respond with a save card web page which you can render in an iFrame, so customer can securely enter card details on the PayWay add Card page and Merchants will never have to touch the Card details.

8.1.1 ADD CARD PUSHBACK NOTIFICATION

Upon successful authentication from customer to save card, PayWay will call merchant's callback URL to pass payers Card token. Merchant shall save this Card Token for the future purchase request.

```
1. {
2.   "tran_id": "test123",
3.   "status": 0,
4.   "return_params": {
5.     "tran_id": "test123",
6.     "ctid": "32738871649e295c69976a1c17dd97a8da0f",
7.     "payment_status": "APPROVED",
8.     "card_status": {
9.       "status": 0,
10.      "pwt": "327310RyqrdLR7HRda13a0e031fd37c716cd02279b0dfd40",
11.      "mask_pan": "**** * 0040",
12.      "card_type": "Visa"
13.    },
14.    "return_param": "test123"
15.  }
16. }
```

8.2 PURCHASE WITH SAVED CARD

Merchant can initiate payment with the saved card token using the [CREATE TRANSACTION - PURCHASE API](#) and passing ctid and pwt along with all mandatory parameters.

API ENDPOINTS

- TESTING URL: <https://checkout-sandbox.payway.com.kh/api/payment-gateway/v1/payments/purchase>
- PRODUCTION URL: <https://checkout.payway.com.kh/api/payment-gateway/v1/payments/purchase>
- Method: POST

EXAMPLE REQUEST

- Hash must include all the parameters being passed to PayWay
- Upon successful payment PayWay will call back merchant URL to post the payment status of the Transaction.

8.2.1 PAYMENT SUCCESS PUSHBACK NOTIFICATION.

Upon successful payment with the saved token PayWay will pushback the payment status with the Transaction id.

```
1. {  
2.   "tran_id": "1632300046",  
3.   "apv": "000011",  
4.   "status": 0  
5. }
```

8.3 REQUEST REMOVE CARD

Use this APIs to allow customers to be able to remove the linked Card token.

API ENDPOINTS

- TESTING URL: <https://checkout-sandbox.payway.com.kh/api/payment-gateway/v1/cof/remove>
- PRODUCTION URL: <https://checkout.payway.com.kh/api/payment-gateway/v1/cof/remove>
- Method: POST

REQUEST PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	merchant_id mandatory	String [20]	Mobile or Application ID	onlinesshop24
2	ctid mandatory	String	Consumer token ID	
3	pwt mandatory	String	PayWay token	
4	hash mandatory	String	Base64 encode of hash hmac sha512 encryption merchant_id + ctid + pwt with public_key.	

EXAMPLE REQUEST

```
1. {
2.   "merchant_id": "onlinesshop24",
3.   "ctid": "lalsa6asd5",
4.   "pwt": "lalsa6asd5",
5.   "hash": "K3nd/2Z4g45Paoqx06QA3UQeHRC2Ts37zjudG7DqyyU2Cq0cv0FMYqwtEsXkaEmNOSiFh6Y+IHRdwnA2WA/M/Qg==",
6. }
```

EXAMPLE RESPONSE

```
1. {
2.   "status": {
3.     "code": "00",
4.     "message": "Success"
5.   }
6. }
7.
```

8.4 PURCHASE AND SAVE CARD

Use this API to allow customer to save the card token while making purchase, This API will respond with PayWay checkout webpage which you can render in iFrame, this PayWay checkout page will have toggle button to save the card, upon transactions success PayWay will return two push notification.

1. Payment Success
2. Saved Card Token

API ENDPOINTS

- TESTING URL: <https://checkout-sandbox.payway.com.kh/api/payment-gateway/v1/payments/purchase>
- PRODUCTION URL: <https://checkout.payway.com.kh/api/payment-gateway/v1/payments/purchase>
- Method: POST

Use same [CREATE TRANSACTION - PURCHASE API](#) with additional parameter 'ctid' to receive the saved card token .

EXAMPLE REQUEST

```
1. {
2.   "req_time":"20210123234559",
3.   "merchant_id":"onlinesshop24",
4.   "ctid":"lalsa6asd5",
5.   "tran_id":"00002894",
6.   "firstname":"Fristname",
7.   "lastname":" Customer Last name",
8.   "email":"ema_il@textdomain.com",
9.   "phone":"0965965965",
10.  "amount":5000,
11.  "type":"purcahse",
12.  "payment_option":"cards",
13.  "items":"W3snbmFtZSc6J3Rlc3QnLCdxdWFudG10eSc6JzEnLCdwcm1jZSc6JzEuMDAnfV0=",
14.  "currency":"KHR",
15.  "continue_success_url":" www.staticmerchanturl.com/Success",
16.  "return_deeplink":,
17.  "custom_fields":{"Purcahse order ref":"Po-MX9901", "Customfield2":"value for custom field"},
18.  "return_params":"500 Characters notes included here to be returned on pushback notification",
19.  "hash":"K3nd/2Z4g45Paoqx06QA3UQeHRC2Ts37zjudG7DqyyU2Cq0cv0FMYqwtEsXkaEmNOSiFh6Y+IHRdwnA2WA/M/Qg==",
20. }
```

EXAMPLE RESPONSE

PayWay will respond with Checkout page, with a toggle button on it, you can render this webpage in iframe on your webpage or WebView in your native app.

8.4.1 PURCHASE AND ADD CARD PUSHBACK NOTIFICATION

Upon transactions success with Purchase and Save card, PayWay will return two push notification.

1. See [Payment status Pushback Notification](#) – for confirm the payment status of the transaction

```
1. {
2.   "tran_id":"1632300046",
3.   "apv":"000011",
4.   "status":0
5. }
```

2. See [Add Card Pushback Notification](#) – for pass the card token details if customer chose to link the card.

```
3. {
4.   'tran_id' => string,
5.   'ctid' => string,
6.   'payment_status' => string,
7.   'card_status'
8.   {
9.     'status' => string,
10.    'pwt' => string,
11.    'mask_pan' => string,
12.    'card_type' => string,
13.  }
14. }
```

GENERAL RESPONSE STATUS

General Status descriptions for Card on file feature.

Status code	Status value	Description
0	Success	successfully
7	Fail	invalid return_param
11	Fail	other - server-side error
16	Fail	invalid firstname
17	Fail	invalid lastname
18	Fail	invalid phone number
19	Fail	invalid email
26	Fail	invalid merchant_id
27	Fail	invalid ctid
28	Fail	invalid pwt
29	Fail	invalid pwt or ctid

9 EXCHANGE RATE

With the Exchange rate API you can fetch the latest exchange rate from ABA bank, the exchange rates are exactly like the prices you will find on <https://www.ababank.com/en/forex-exchange/>

NOTE

- Only works with production credentials.
- Rates are set daily.

API ENDPOINTS

- PRODUCTION URL: <https://checkout.payway.com.kh/api/payment-gateway/v1/exchange-rate>
- SANDBOX URL : Exchange rate api is not available in sandbox
- Method: **POST**

REQUEST PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	req_time mandatory	BODY/Timestam p[UTC]	Format YYYYmmddHis	
2	merchant_id mandatory	BODY/String	Merchant id provided by PayWay integration team	
3	hash mandatory	BODY/Text	Base64 encode of hash hmac sha512 encryption req_time + merchant_id with public_key. Ex in php: base64_encode(hash_hmac('sha512', request_body, public_key, true)); hash: (req_time + merchant_id) Encrypt with: "CALL_C_hashHmac512('CURR_FIELD', 'fb629880e9a741dc9862a4ad260f6668');"	

Note: Please calculate hash

EXAMPLE REQUEST

```
1. {
2.   "req_time": "20220613042638",
3.   "merchant_id": "ec000002",
4.   "hash":
5.     "51e8b6ba9f81f472e5e622bcf4bc7d2032f6d4fc0a52a03734764bb6f098a996c410203ca1801b8ae66e8521136ecfac6fdb2aff10290e0c20133886946e8253"
6. }
```

EXAMPLE RESPONSE

```
1.  {
2.    "status": {
3.      "code": "00", "message": "Success!"    },
4.    "date": "09092020124026",
5.    "exchange_rates": {
6.      "AUD": {
7.        "sell": "2956.04",
8.        "buy": "2595.94"
9.      },
10.     "VND": {
11.       "sell": "0.1842",
12.       "buy": "0.1565"
13.     },
14.     "CNY": {
15.       "sell": "648.87",
16.       "buy": "544.18"
17.     },
18.     "SGD": {
19.       "sell": "3069.02",
20.       "buy": "2643.65"
21.     },
22.     "JPY": {
23.       "sell": "35.831",
24.       "buy": "30.8027"
25.     },
26.     "KRW": {
27.       "sell": "3.4857",
28.       "buy": "2.9678"
29.     },
30.     "GBP": {
31.       "sell": "5587.65",
```

```
32.         "buy": "5097.61"
33.     },
34.     "HKD": {
35.         "sell": "531.54",
36.         "buy": "456.03"
37.     },
38.     "EUR": {
39.         "sell": "4702.55",
40.         "buy": "4290.13"
41.     },
42.     "MYR": {
43.         "sell": "990.13",
44.         "buy": "849.46"
45.     },
46.     "USD": {
47.         "sell": "4150.",
48.         "buy": "4000."
49.     },
50.     "CAD": {
51.         "sell": "3254.16",
52.         "buy": "2803.12"
53.     },
54.     "THB": {
55.         "sell": "125.19",
56.         "buy": "120.53"
57.     }
58. }
59. }
60.
61.
```

RESPONSE PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	status	JSON		
1.1	code	String		
1.2	message	String		
2	date	String		
3	exchange_rates	JSON		
3.1	Currency code	String	Possible values <ul style="list-style-type: none">AUDVNDCNYSGDJPYKRWGBPHKDEURMYRUSDCADTHB	
3.2	Buy	String	Buying price	
3.3	Sell	String	Selling price	

10 PAYMENT LINK

6.1 CREATE PAYMENT LINK

Creating payment link

API ENDPOINTS

- TESTING URL: <https://pw-admin-sandbox.ababank.com/api/merchant-portal/merchant-access/payment-link/create>
- PRODUCTION URL:
- Method: **POST**

REQUEST PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	request_time mandatory	Timestamp [UTC]	Format YYYYmmddHis	20210123234559
2	merchant_id mandatory	String [30]	Merchant id provided by PayWay integration team	onlinesshop24
3	merchant_auth mandatory		Ex: { "mc_id": "ec000002", "title": "Test curl 001", "amount": 0.02, "description": "Payment link created from curl", "payment_limit": 5, "expired_date": 1660708556, "return_url": "aHR0cHM6Ly9kb21haW4uY29t", "merchant_ref_no": "ref001" } (Encrypt using the public key)	b1453eac8cd686f90542c9d7dc026a3f70678afd
4	Image	image	Max: 3MB, [jpg, jpeg, png]	
5	hash mandatory	Text	Encrypted with sha512(request_time + merchant_id + merchant_auth_encryption, merchant_public_key)	"3nd/2Z4g45Paoqx06QA3UQeHRC2Ts37zjudG7Dqy yU2Cq0cvOFMYqwtEsXkaEmNOSiFh6Y+IHRdwnA2 WA/M/Qg=="

Detail about merchant_auth

#	Field name	Data type	Remark	Example
1	mc_id	String[20]	Yes	Same as merchant_id
2	title	String[250]	Yes	
3	amount	Double[19,2]	Yes	KHR (integer >= 100)
4	description	String[250]	No	
5	payment_limit	Int[11]	No	0 is Unlimited
	expired_date	Int	No	Timestamp, NULL is unlimited
	return_url	String[250]	Yes	Encrypted with base64
	merchant_ref_no	String[50]	No	

EXAMPLE REQUEST

```
1. {  
2.   "request_time": "20200728093403",  
3.   "merchant_id": "ec000002",  
4.   "merchant_auth": "39aaa43e6929a752.....08cdb29ab498d9604600101d8dc00a",  
5.   "image": "IMAGE",  
6.   "hash": "EVDFA2118UD0boKhkAcObrmRIU263x3pwIltgxEI6JfhLmpE/X+5KIGNiG8tIQU64p0tvtfbMa2b5q9CCt+sWw=="  
7. }
```

EXAMPLE RESPONSE

```
1. {
2.   "data": {
3.     "id": "MWNUuWbUudDeJSzwOowcnQ==",
4.     "title": "Test curl 001",
5.     "image": {
6.       "image": "https:\\\\domain.com\\merchants\\instore-tran\\payment_link_image_166177268687752.jpg",
7.       "filename": "payment_link_image_166177268687752.jpg",
8.       "size": 364096
9.     },
10.    "amount": 0.02,
11.    "currency": "USD",
12.    "status": "OPEN",
13.    "description": "Payment link created from curl",
14.    "payment_limit": 5,
15.    "total_amount_org": 0,
16.    "total_refund": 0,
17.    "total_amount": 0,
18.    "total_trxn": 0,
19.    "created_at": "2022-08-29 18:31:26",
20.    "updated_at": "2022-08-29 18:31:26",
21.    "expired_date": 1661772685,
22.    "return_url": "https:\\\\domain.com",
23.    "merchant_ref_no": "ref00001",
24.    "payment_link": "https:\\\\pw-admin-sandbox.ababank.com\\yS1378z"
25.  },
26.  "status": {
27.    "code": "00",
28.    "message": "Success!"
29.  },
30.  "tran_id": "20220829133125"
31. }
32.
```

RESPONSE PARAMETER DESCRIPTION

#	Field name	Data type	Remark	Example
1	grand_total	Double		
2	currency	String		
3	transaction_status	String		
4	status	Array		
4.5	code	String		
4.5	message	String		

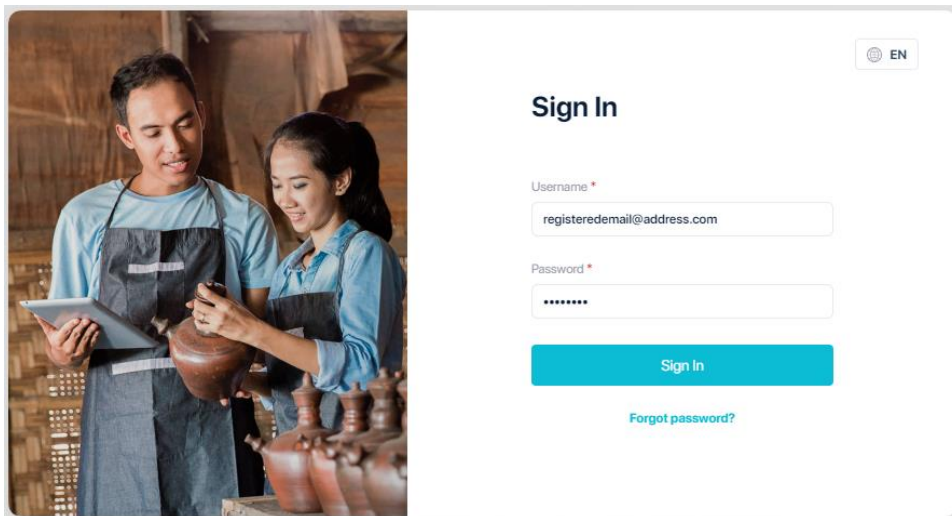
MERCHANT PORTAL

Merchant Portal is a space for our merchant where you can manage your daily operations such as

- Monitor transactions created from your Website, App and POS (Point Of Sale)
- Perform Refunds or Capture the Pre-authorized transactions
- Issue invoice to accept payments
- Manage discount programs to offer discounts at the checkout
- Monitor reports which can be useful for bookkeeping
- Manage portal users and control their access levels
- View logs
- Manage basic merchant profile information.
- Create and manage users

To log into the Merchant portal, go to our login page and supply your login details received from eMerchant integration team.

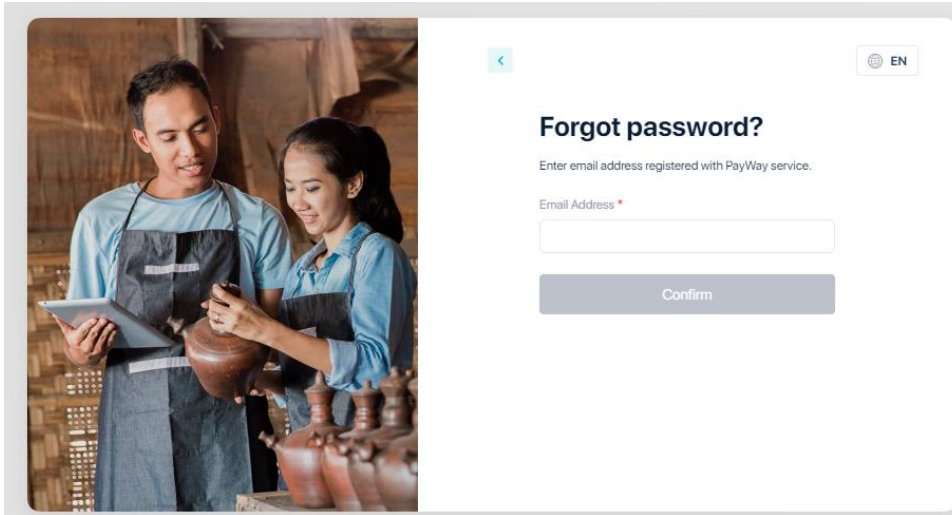
- TESTING URL: <https://merchant-sandbox.payway.com.kh/login>
 - Register here to get sandbox credentials [Sandbox-registration](#) or use the credentials share by our eMerchant integration team
- PRODUCTION URL: <https://merchant.payway.com.kh/login/>
 - Production credentials will be shared once the integration on the Sandbox environment is reviewed by our eMerchant integration team.



RESET PASSWORD

If you have forgotten the password, our '**Forgot Password**' link on login page and enter your registered email ID, the page will send a new temporary password to the email address you have registered with us.

Next login with the temporary password and system will request you to reset the password.



TEST CARDS

Use only below card for testing card payment for invoicing tool or default checkout integration in Sandbox environment for testing payment

1. "card": "5156839937706226", "exp": "0130", "cvv2": "993"
2. "card": "5156832876138436", "exp": "0130", "cvv2": "934"
3. "card": "4286090000000040", "exp": "0130", "cvv2": "361"
4. "card": "4286090000000206", "exp": "0130", "cvv2": "362"

ABA SIMULATOR APP

For Testing ABA PAY or KHQR payment during development you can use ABA Simulator app

- To Reqeuest Simulator account provide following details
 - o Name
 - o Mobile number (any country) – Format Countrycode with mobile number +855 987654321
 - o Email
 - o Company name

NOTE

- You can request eMerchant integration support team to get the Simulator app (iOS or Android)
- You can request up to max 2 test accounts per merchant
- Production app and Simulator app can be installed on the same device
- Simulator app data is not related to production data.