Marx IPG Integration Document

Version 2.0.0

Revision History

Author	Date	Description	Version
Daini Nimaya	31/07/2020	Create order in Marx Initiate the Payment	1.0.0
Daini Nimaya	06/08/2020	Redirect user to marx payment url Redirect user to the merchant return url Check the validity of the query parameter	1.0.1
Daini Nimaya	25/08/2020	Change the domain in url 3Ds authentication page	1.0.2
Daini Nimaya	11/09/2020	Change the url of the API call. Update the request parameters Add response code Add Summary results Add Gateway Code	2.0.0

Abbreviations

API	Application Programming Interface
IPG	Internet Payment Gateway
URL	Uniform Resource Locator

Step 01: Create order in Marx

The API is used to create an order request in Marx IPG side by the Merchant. Customer mail is required if the mode is MAIL and customer mobile no. is required if the mode is SMS. And if the mode is WEB customer mail and mobile no are not mandatory. It is required to send the merchant secret (which is mailed by Marx when registering the merchant) in the header of the API call.

URL : https://dev.app.marx.lk/api/v2/ipg/orders
Method: POST

Request Parameter	Type	Description	Mandatory
merchantRID	String	Merchant unique reference id of the order(This can't be duplicated)	Yes
amount	Float	Amount of the transaction	Yes
validTimeLimit	Int	Time limit of the transaction to proceed (in hours)	Yes
returnUrl	String	Url of the page to display payment result	Yes
customerMail	String	Mail address of the customer	Yes(in the case of mode is MAIL)
customerMobile	String	Mobile no of the customer	Yes(in the case of mode is SMS)
mode	String	Mode to return the marx ipg payment url to the customer. Possible values:WEB,SMS,MAIL	Yes
orderSummary	String	Description of the order	Yes
customerReference	String	Unique reference to identify the transaction separately	Yes

Response Parameter	**Type**	**Description**
status	Int	Return the status code
message	String	Return the status message
data	Object	Return the Marx ipg payment page url with tr id as a query parameter

Sample request:-

```
header:{
        key: user_secret,
        value: $2a$10$x1CAe9YuEz9G1X1ZQrTrLOJXFu2PSvrwLuBcWpgT2ecRAx5sxfOhW,
}
body:{
        "merchantRID":"CT2020/09/09/MR0001",
        "amount":300.00,
        "validTimeLimit":5,
        "returnUrl":"https://www.abc.com",
        "customerMail":"abc@gmail.com",
        "customerMobile":"0763333333",
        "mode":"WEB",
        "orderSummary":"Order Description",
        “customerReference”:”CT2020/09/09/CUST0001”
}
```

Sample response :-

```
{
   "status": 0,
   "message":"Order saved successfully" ,
   "data": {
      "payUrl": "https://dev.marxpay.com?tr=223"
   }
}
```

Step 02: Redirect the user to the marx payment url

As per the create order response, in the data object there is a variable called payUrl.Merchant redirect the user to that pay url. There,the user input the card payment details and click the pay now button.

Step 03: 3Ds Authentication page

Next the user will guide to the bank's 3Ds authentication page. User has to pass the authentication process provided by the bank, most probably it will be an OTP verification. (In the development environment you can get whatever output you like using the ACS emulator. Just select the response from the combo box)

Step 04: Redirect the user to the merchant return url

When 3Ds authentication is completed, the user will redirect to the return url which was sent by the merchant in the first api call (create order in marx). Furthermore, the return url also includes tr id and merchantRID as query parameters.

Sample redirect url: https://www.abc.com?tr=223&mur=1

Step 05: Check the validity of the query parameters

Merchant has to check the validity of the tr id and merchantRID which were received as query parameters by tallying with the values received previously and have to make the 'Initiate the payment' request.

Step 06: Initiate the Payment

The API is used to initiate the payment request from the Marx IPG side after verifying the validity of the Merchant unique reference and Marx unique reference by the Merchant. It is required to send the merchant secret (which is mailed by Marx when registering the merchant) in the header of the API call.

URL : https://dev.app.marx.lk/api/v2/ipg/orders/{tr_id}
Method: PUT

Parameter	Parameter Type	Data Type	Description	Mandatory
tr_id	Query Parameter	Long	Value of the tr id which was return as a query parameter in ‘create order’ request	Yes
merchantRID	Request parameter	String	Merchant unique reference id of the order	Yes

Response Parameter	Type	Description
status	Int	Return the status code
message	String	Return the status message
data	Object	Return an object containing all details of the transaction.

Sample request :-

```
header:{
        key: user_secret,
        value: $2a$10$x1CAe9YuEz9G1X1ZQrTrLOJXFu2PSvrwLuBcWpgT2ecRAx5sxfOhW,
}


body:{
        "merchantRID":"CT2020/09/09/MR0001"
}
```

Sample response :-

```
{
  "status": 0,
  "message": "Payment completed successfully",
  "data": {
  "summaryResult": "SUCCESS",
  "gatewayResponse": {
    "authorizationResponse": {
      "commercialCard": "!01",
      "commercialCardIndicator": "0",
      "date": "0909",
      "posData": "1025100006600",
      "posEntryMode": "812",
      "processingCode": "000000",
      "responseCode": "00",
      "returnAci": "Y",
      "stan": "88825",
      "time": "073729",
      "cardSecurityCodeError": "M",
      "financialNetworkCode": null,
      "transactionIdentifier": null
    },
    "device": {
      "browser": "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/85.0.4183.83 Safari/537.36",
      "ipAddress": "112.134.151.166"
    },
    "gatewayEntryPoint": "WEB_SERVICES_API",
    "merchant": "0020009",
    "order": {
      "amount": 1250.5,
      "chargeback": {
        "amount": 0,
        "currency": "LKR"
      },
      "creationTime": "2020-09-09T07:37:29.552Z",
      "currency": "LKR",
      "id": "cea0f7e3-d326-4b13-84ed-1eef783dc29b",
      "merchantCategoryCode": "5999",
      "status": "CAPTURED",
      "totalAuthorizedAmount": 1250.5,
      "totalCapturedAmount": 1250.5,
      "totalRefundedAmount": 0
    },
    "response": {
      "acquirerCode": "00",
      "acquirerMessage": "Approved",
      "cardSecurityCode": {
        "acquirerCode": "M",
        "gatewayCode": "MATCH"
      },
      "gatewayCode": "APPROVED"
    },
    "result": "SUCCESS",
    "sourceOfFunds": {
      "provided": {
        "card": {
          "brand": "VISA",
          "expiry": {
            "month": "10",
            "year": "22"
          },
          "fundingMethod": "CREDIT",
          "nameOnCard": "H N Binura Salindra",
          "number": "424242xxxxxx4242",
          "scheme": "VISA",
          "storedOnFile": "NOT_STORED"
        }
      },
      "type": "CARD"
    },
    "timeOfRecord": "2020-09-09T07:37:29.564Z",
    "transaction": {
      "id": "8c904eef-6fbc-43a3-8a35-178c91e85b3a",
      "amount": 1250.5,
      "authenticationStatus": null,
      "authorizationCode": "021221",
      "currency": "LKR",
      "receipt": "025307088825",
      "source": "INTERNET",
      "terminal": "0005",
      "type": "PAYMENT",
      "acquirer": {
        "batch": 20200909,
        "date": "0909",
        "id": "CARGILLSBANK_S2I",
        "merchantId": "0020009",
        "settlementDate": "2020-09-09",
        "timeZone": "+0530",
        "transactionId": null
```

```
        },
        "stan": null
      },
      "version": "54",
      "3DSecure": {
        "veResEnrolled": "Y",
        "xid": "xPKZQJKyUR0vEAwRulkRcxvn2MM="
      },
      "3DSecureId": "59ae390b-1e55-4db9-ab04-d326b4be4d1a"
    }
  }
}
```

Note:- Please skip step 4, step 5 and step 6 if you created the order using marx merchant web portal. Otherwise these steps are mandatory to complete the payment.

Response Code

Code	Description
0	OPERATION SUCCESS
1	OPERATION FAILED

Possible Summary Results

Code	Description
FAILURE	The operation was declined or rejected by the gateway, acquirer or issuer.
PENDING	The operation is currently in progress or pending processing.
SUCCESS	The operation was successfully processed.
UNKNOWN	The result of the operation is unknown.

Possible Gateway Code

Code	Description
ABORTED	Transaction aborted by payer.
ACQUIRED_SYSTEM_ERROR	Acquirer system error occurred processing the transaction.
APPROVED	Transaction Approved.
APPROVED_AUTO	The transaction was automatically approved by the gateway. it was not submitted to the acquirer.
APPROVED_PENDING_SETTLEMENT	Transaction Approved - pending batch settlement.
AUTHENTICATION_FAILED	Payer authentication failed.
AUTHENTICATION_IN_PROGRESS	The operation determined that payer authentication is possible for the given card, but

	this has not been completed, and requires further action by the merchant to proceed.
BALANCE_AVAILABLE	A balance amount is available for the card, and the payer can redeem points.
BALANCE_UNKNOWN	A balance amount might be available for the card. Points redemption should be offered to the payer.
BLOCKED	Transaction blocked due to Risk or 3D Secure blocking rules.
CANCELLED	Transaction cancelled by payer.
DECLINED	The requested operation was not successful. For example, a payment was declined by issuer or payer authentication was not able to be successfully completed.
DECLINED_AVS	Transaction declined due to address verification.
DECLINED_AVS_CSC	Transaction declined due to address verification and card security code.
DECLINED_CSC	Transaction declined due to card security code.
DECLINED_DO_NOT_CONTACT	Transaction declined - do not contact issuer.
DECLINED_INVALID_PIN	Transaction declined due to invalid PIN.
DECLINED_PAYMENT_PLAN	Transaction declined due to payment plan.
DECLINED_PIN_REQUIRED	Transaction declined due to PIN required.
DEFERRED_TRANSACTION_RECEIVED	Deferred transaction received and awaiting processing.
DUPLICATE_BATCH	Transaction declined due to duplicate batch.
EXCEEDED_RETRY_LIMIT	Transaction retry limit exceeded.
EXPIRED_CARD	Transaction declined due to expired card.
INSUFFICIENT_FUNDS	Transaction declined due to insufficient funds.
INVALID_CSC	Invalid card security code.
LOCK_FAILURE	Order locked - another transaction is in progress for this order.
NOT_ENROLLED_3D_SECURE	Card holder is not enrolled in 3D Secure.

NOT_SUPPORTED	Transaction type not supported.
NO_BALANCE	A balance amount is not available for the card. The payer cannot redeem points.
PARTIALLY_APPROVED	The transaction was approved for a lesser amount than requested. The approved amount is returned in order.totalAuthorizedAmount.
PENDING	Transaction is pending.
REFERRED	Transaction declined - refer to issuer.
SUBMITTED	The transaction has successfully been created in the gateway. It is either awaiting submission to the acquirer or has been submitted to the acquirer but the gateway has not yet received a response about the success or otherwise of the payment.
SYSTEM_ERROR	Internal system error occurred processing the transaction.
TIMED_OUT	The gateway has timed out the request to the acquirer because it did not receive a response. Points redemption should not be offered to the payer.
UNKNOWN	The transaction has been submitted to the acquirer but the gateway was not able to find out about the success or otherwise of the payment. If the gateway subsequently finds out about the success of the payment it will update the response code.
UNSPECIFIED_FAILURE	Transaction could not be processed.