



AL RAJHI PAYMENT GATEWAY MERCHANT INTEGRATION GUIDE - UMI

Version 1.6

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Version History

The following table displays the version history of this document:

Version No.	Created or Updated By	Reason for Change	Created or Updated on
1.2	AlRajhi Bank	Merchant integration using UMI	January 11, 2021
1.3	AlRajhi Bank	Minor change - Parameter Name - PayorIDNumber – P capital	March 27, 2022
1.4	AlRajhi Bank	As per MOF reuest, Bill Details posted on Page Number 10 to 27	,Jun 19,2022
1.5	AlRajhi Bank	Parameter Changes	Oct 26,2022
1.6	AlRajhi Bank	Form Parameter and Response Parameter	Mar 06,2023

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Chapter 1 ABOUT THIS DOCUMENT

Purpose of the Document

The Payment Gateway follows industry standards and norms as prescribed by MasterCard and Visa International as well in conformity with Payment Card Industry – Data Security Standards commonly referred to as PCI – DSS.

In order that the AL Rajhi Bank merchants is integrated in a secure and mandated manner, this reference document is being shared. The expectation being that the merchant's system integrator or auditor can refer to a document while performing integration as well as post integration. It contains the technical integration details including message formats to be used in communicating to the Payment Gateway irrespective of the merchant platform being used. The document also shares the best practices and recommendations the merchant should follow during the integration with Payment Gateway.

Chapter 2 INTEGRATION PROCESS

Integration Prerequisites

Below are the prerequisites for merchants to integrate with ARB Payment gateway. ARB will share the below parameters to merchant manually for UMI based integration.

Parameter	Sample Value	Description
Id	IPAYICR6qZF7q6w	Tranportal ID - Unique ID for each terminal.
Password	q@a68O\$27@JLkck	Tranportal Password - Used for authentication of the terminal.
Key	309897493722309897493734	Resource Key - Request data needs to be encrypted with this key.
End point URL	https://securepayments.alrajhi-bank.com.sa/pg/paymentHTTP.htm?param=paymentInit	End point URL - Merchant needs to send request to this URL.

Integration Process

Steps to be followed by Merchant Integration Team:

1. Frame the request of plain trandata with request parameters as specified in the document
2. Encrypt the plain request with the resource key using the AES algorithm encryption logic specified in the document.
3. Frame the final URL using given end point url and encrypted request to connect to ARB Payment Gateway. Encrypted request is passed as a URL parameter (trandata) to ARB Payment Gateway.
4. After receiving the response from ARB Payment Gateway , decrypt the encrypted trandata with the resource key based on AES algorithm decryption logic specified in the document.
5. Process the plain trandata - response message to display the required message to the customer.

Chapter 3 ARB PAYMENT GATEWAY TRANSACTION FLOW

Payment Gateway uses AES encryption algorithm to encrypt transaction data which includes all sensitive information.

Transaction flow for Bank hosted setup

- Customer completes the purchase and proceeds to checkout with payment options
- Merchant will be redirected to Bank's payment page, wherein customer inputs the card details on Bank's page.
- Card details are validated by ARB PG.
- Payment Gateway then will interface with respective schemes like MasterCard, VISA to process the 3D secure authentication.
- Once respective scheme / ACS complete the authentication, PG will perform Risk check.
- Once the authentication step is completed, Payment gateway completes the transaction authorization and provides the response to the merchant.

Chapter 4 BANK HOSTED INTEGRATION

- Mode of communication would be HTTP URL Redirection The

below are the parameters need to be set in merchant request

- Transaction Action Type : Describes the received transaction type (ex: 1 – Purchase)
- Amount: Stores the currency value of the selected product/entity (ex: SR. 100.00).
- Currency: Stores the currency code (ex: 682[for SAR]); based on this value, the ARB PG determines the currency in which merchant and customer need to be settled.
- Track ID : Allows you to map track ID to every transaction (ex: 112312312313)
- Tranportal ID: Unique ID for a terminal.
- Tranportal Password: Used for authentication of the terminal.
- Bill Details : Contains billing details of the MOF Agencies.
- Payor ID Type
- Payor ID Number

Merchant Request to ARB Payment gateway:

```
amt=1.00&action=1&trackid=324234&udf1=Test1&udf2=Test2&udf3=<MID>&udf4=
<TID>&udf5=Test5&udf6=Test6&udf7=Test7&udf8=Test8&udf9=Test9&udf10=Test
10&currencycode=682&langid=AR&payorIDType=NAT&PayorIDNumber=1234567891
&id=IPAY1CR6qZF7q6w&password=q@a680$27@JLkcK&responseURL=https://www.test.
com&errorURL=https://www.test.com&billDetails=[{"issuerAgencyId":"789456",
"billingAccountId":"123456","billingCycle":"123456","dueAmount":"10.00","p
aidAmount":"10.00","billReferenceInfo":"123456","agencyCode":"1234"}, {"iss
uerAgencyId":"789456","billingAccountId":"123456","billingCycle":"123456",
"dueAmount":"10.00","paidAmount":"10.00","billReferenceInfo":"123456","age
ncyCode":"1234"}, {"issuerAgencyId":"789456","billingAccountId":"123456","b
illingCycle":"123456","dueAmount":"10.00","paidAmount":"10.00","billRefere
nceInfo":"123456","agencyCode":"1234"}]
```

Note : billingCycle needs to added in the JSON Object only if the length is greater than Zero.If you are using GSON parser to convert the list into request then it automatically removes the empty parameter in the JSON Object.

- The above plain request framed needs to be encrypted using AES encryption logic.

Merchant request obtained after Encryption:

```
trandata=1C1A967D16C877543E0A1DD90D2933853F05BB0AA2E6B47BB77D27EEAF32EF
02CF6A0A5643F31C78340913929D90879615DFA9CDCCBB03761B9AE87CD76FE8633E0A1
DD90D29338545DA582B0F3500BA9375313637690531C6D7F8F7489C7CD8B73F9EC7E1C6
22DDD06B0809A709C2CB2A6EFD72F36FEB044B73810204E69FC577300F9AAF38E044F0A
34694348506778257040533E4FD48A9C61DD83E906AB93110CE0E57A1C548FA589B8F85
66FC9F
```

- Above encrypted request should be sent as URL parameter to below given end point URL using redirect call,

```
https://securepayments.alrajhibank.com.sa/pg/servlet/PaymentInitHTTPServlet
```

```
<form name="form1"
action=https://securepayments.alrajhibank.com.sa/pg/servlet/PaymentInitH
TTPServlet method="POST">
<input type="hidden" name="tranportalId" value="IPAYu4P3qVZCm8d"/>
<input type="hidden" name="responseURL"
value="https://localhost:44379/ResponseSuccess"/>
<input type="hidden" name="errorURL"
value="https://localhost:44379/ResponseError"/>
<input type="hidden" name="trandata"
value="EF7CC20B12F4224CD9545F51C19963A6FD74E58E3D4736015A6EAC32C6E04CAD7
00FBD26205B4A19DEDC451101F43ABEC5AD6BC8A6F005695897B74CF8397B81CC7370D63
DA7830C65E6EA634B490043F22926B470D4C973DA092F3A403D460BBBD1188B7CA358C7B
3F4C669643001DEE47C2476795D3E3B1292C6588D1F3C1A2DD6F4AFEF4332A475F7CDC83
BE9D4E503CD45332DC5843472643FFC55A547AFD8DE3B8602BA937853063AF0F7FD9AA7A
7C64A3A005CB3F0635295FC02124A8BCB4E61AD42CF5AB7274FC130F7B63654B037BB082
564562AA2A0CD49141E20FC605975F00AA00CE4D5A055E7FFE9EEDB3F832A220CE4EBA6F
37FFE545C0163B6F103003A8FE106C90F6110CAF5753A274D19F6759CD29CC0D12D7D789
E61DACDC56479155951F3956B663D1A5BD92BF379408561489807B83468CBA5C1E46BDAB
9E9F9BA533FB0F1DDF2C41D94D4CB02B9F1B9911536AE7D2456BA7B916DDB0DC5583A16E
3BF67F5502C0E6FDBA242B27AA81B8C102D1F0AF44EA3E2194CCFF7D8069C72CDA796143
2B830C421BAFD03DFE616DA06027FB1F333CDF2FDFF97CDE8F6FAC96B4A28284B4F75AD0
720B8B0DA2A722AB78EB2C369C35C69D7C71B4820F35C0B6507191225C828595BE13A4B2
A1B3E92F7AEE6D1F4B6F0BA9E0EC1AC175BC64CD119A29E5DEE3432CEFB75E0E4F44D1E3
402614C06E7A6367F71A420F9BFC86552D3C11D6863BEA0453B630E5835A6F8E811C387C
8A64E84F69D4C1B1BD892981C4FC72F705B3754C5D24947"/>
</form>
```

Request from Merchant to ARB Payment gateway

S.No	Fields	M/C/O	Field Type	Description
1	trandata	M	Alphanum	All the below request parameters to be encrypted and pass the encrypted value in trandata.
2	tranportalId	M	Alphanum	Tranportal ID. Unique ID for a terminal.
3	responseURL	M	Alphanum	The merchant Response URL
4	errorURL	M	Alphanum	The merchant Error URL which contains initial level Failures

Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	Amt	M	Numeric with two digit decimals	Transaction amount
2	Action	M	Numeric	It defines the transactions actions Purchase: 1
3	Password	M	Alphanum	Tranportal password. Used for authentication of the terminal.
4	Id	M	Alphanum	Tranportal ID. Unique ID for a terminal.
5	Currencycode	M	Numeric	3-digit currency code of KSA. Ex:682
6	Trackid	M	Numeric	Merchant unique reference no

7	udf1	-O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
8	udf2	O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
9	udf3		Alphanum	This field is reserved for internal use, Please do not use this field to send additional information [Please keep it empty]
10	udf4		Alphanum	This field is reserved for internal use, Please do not use this field to send additional information [Please keep it empty]
11	udf5	O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
12	udf6	O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
13	udf7	O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
14	udf8	O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
15	udf9	O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
16	udf10	O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
18	Langid	O	Alphabetic	Language ID . Based on language ID arabic/english language will be displayed on payment page. Value should be 'ar' or 'AR' for arabic language .
19	payorIDType	M	Alphanumeric	<ul style="list-style-type: none"> Payor ID Type Ex: NAT NAT – National ID

				IQA – IQAMA ID BIS – Business ID C700 – 700 Code UOI – Unified Organization ID GCC – GCC Passport Number PAS – Passport Number BDN – Border Number
20	PayorIDNumber	M	Numeric	Payor ID Number Ex: 1234567891 <ul style="list-style-type: none"> • For NAT, id number value should start with 1 and value length should be 10 digits • For IQA, id number value should start with 2 and value length should be 10 digits • For BIS, id number length should be 10 digits • For C700, id number length should be 10 digits • For the other id types, the id number should be between 6 and 15

S. No	Fields	M/C/O	MAX	Field Type	Occurrence	Description
21	billDetails	M		String	1-20	Contains Bill details of the Agencies in JSON Array Format
22	responseURL	M		Alpha-num	1	The merchant Response URL
23	errorURL	M		Alpha-num	1	The merchant Error URL which contains initial level Failures

BillDetails Description :

S.No	Fields	M/C/O	Field Type	Length	Occurrence	Owner
1	issuerAgencyId	M	String	18	1	Agency
2	billingAccountId	M	String	6-20	1	Agency
3	billingCycle	O	Numeric	1-12	1	Agency
4	dueAmount	M	Numeric with two digit decimals		1	Agency
5	paidAmount	M	Numeric with two digit decimals		1	Agency
6	billReferenceInfo	O	Character	[Max 80]	1	Agency
7	agencyCode	M	String	4	1	Agency

Note – The Field Name should be same as mentioned in the formats, any difference (including spell mistake) would lead to error in processing the transaction.

ARB PG server will process the request and displays the 'Payment Page' with the following mandatory field to customer:

- Card Holder Name
- Card Number
- CVV
- Card Expiry Month
- Card Expiry Year
- Payor ID Type(National ID Card Type)

After customer provides all the mandatory details and clicks submit in the 'Payment Page', ARB PG will process the payment and Merchant/ARB PG displays the response to the customer based on Merchant requirement.

ARB PG Response to Merchant will be obtained as :

```
http://www.merchantdemo.com/RAW/jsp/HostedPaymentRe-
sultHTTP.jsp?trandata=084B200CE02898559A12515821BF4382528A822A404950C9DB21
7C3C675B10DA957F9343D44831D75565FBE3B6330AC4EBBDB948792764C2A9CA6795D782E8
74518662F7AAF6942103804906D1B20D70EAB87AEFEE6FB50A31C2AB346B877F254EBE84A8
DBC3263E715B50D36EA13AF08C54C9654A442B691868F9ED16EA31BD83951C7AF9997AE81A
1112C428431EBA37CBD2F24CBF3DF41ACBAE8E75AD82BCF988212E7147D0AAA8719BD751E5
54D1BB3ABC3BFF9821736E17EB74D19813743F553442AB332771D089169FA15ABD50B1308
B047C0250B11803267868971EA4499B091C13C13F8B3A6A4DF353A98884CFC99C67C921369
B8790421F030E524&auth=&ref=&amt=&result=&postdate=&avr=&authRespCode=&thre
eDSServerTranID=&dsTranID=&acsTranID=
```

- The above encrypted response received needs to be decrypted using AES algorithm decryption logic.

Response obtained after Decryption (Plain Trandata):

```
paymentid=100201961241057197&result=CAP-
TURED&auth=000000&ref=924710000002&tranid=201961258932815&post-
date=0904&trackid=35435&udf1=Test1&udf2=Test2&udf3=<MID>&udf4=<TID>&udf5=T
est5&udf6=Test6&udf7=Test7&udf8=Test8&udf9=Test9&udf10=Test10&amt=1.00&auth
RespCode=00
```

Note: Success Response should be handled based on decrypted trandata parameter only.

Detailed description of response from ARB payment gateway to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	paymentid	M	Numeric	Unique payment Id generated by PG and merchant can use this ID to match the response from PG
2	Trandata	C	Alphanum	All the below response parameters are encrypted and sent as Trandata
3	Error	C	Alphanum	If any error, PG will send the error code
4	errorText	C	Alphanum	If any error, PG will send the error description

Detailed description of Plain trandata parameters

S. No	Fields	M/C/O	Field Type	Description
1	paymentid	M	Numeric	Unique ID generated by payment gateway.
2	Result	M	Alphanum	Transaction status
3	Ref	M	Numeric	Transaction reference number (RRN)
4	Tranid	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
5	Postdate	M	Numeric	Transaction date and time
6	Trackid	M	Numeric	Merchant unique reference no
7	udf1	O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
8	udf2	O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
9	udf3		Alphanum	This field is reserved for internal use, Please do not use this filed to send additional information [Please keep it empty]
10	udf4		Alphanum	This field is reserved for internal use, Please do not use this filed to send additional information [Please keep it empty]
11	udf5	O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
12	udf6	O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
13	udf7	O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
14	udf8	O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
15	udf9	O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in

S. No	Fields	M/C/O	Field Type	Description
				the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
16	udf10	O	Alphanum	The user (merchant) defines these fields. The field data is passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field is left blank when no data needs to be passed.
17	Amt	M	Numeric with two digit decimals	Transaction amount
18	authRespCode	M	Numeric	Auth response code provided by PG
19	Auth	M	Numeric	6 digit authorization code received from switch

Chapter 5 ENCRYPTION AND DECRYPTION CODE

Sample Encryption and Decryption Code for JAVA

```
public static String encryptAES(String key,String encryptString) throws Exception{
```

```
    String AES_IV = "PGKEYENCDECIVSPC";
    Byte [] encryptedText=null;
    IvParameterSpec ivspec=null;
    SecretKeySpec skeySpec=null;
    Cipher cipher=null;
    Byte [] text=null;
    String s=null;
    try {
        ivspec = new IvParameterSpec(AES_IV.getBytes("UTF-8"));
        skeySpec = new SecretKeySpec(key.getBytes("UTF-8"), "AES");
        cipher = Cipher.getInstance("AES/CBC/PKCS5Padding");
        cipher.init(Cipher.ENCRYPT_MODE, skeySpec,ivspec); text =
        encryptString.getBytes("UTF-8");
        encryptedText = cipher.doFinal(text);
        s = byteArrayToHexString(encryptedText);
    } catch (Exception e) {
        e.printStackTrace()
        ;
    }
    finally
    {
        encryptedText=null;
        ivspec=null;
        skeySpec=null;
        cipher=null;
        text=null;
    }
    return s.toUpperCase();
}
```

```
public static String decryptAES(String key,String encryptedString) throws
Exception{
```

```
    String AES_IV = "PGKEYENCDECIVSPC";
    SecretKeySpec skeySpec=null;
```



```
IvParameterSpec ivspec=null;
Cipher cipher =null;
Byte [] textDecrypted=null;
Try {
    Byte [] b = hexStringToByteArray(encryptedString);
    sKeySpec = new SecretKeySpec(key.getBytes("UTF-8"), "AES");
    ivspec = new IvParameterSpec(AES_IV.getBytes("UTF-8"));
    cipher = Cipher.getInstance("AES/CBC/PKCS5Padding");
    cipher.init(Cipher.DECRYPT_MODE, sKeySpec, ivspec);
    textDecrypted = cipher.doFinal(b);
} catch (Exception e) {
    e.printStackTrace()
    ;
}
finally
{
    sKeySpec=null;
    ivspec=null;
    cipher =null;
}
return(new String(textDecrypted));
}
```


Sample Encryption and Decryption Code For JAVASCRIPT

```
function aesEncrypt(trandata, key)
{
    var iv = "PGKEYENCDECIVSPC";
    var rkEncryptionIv = aesjs.utils.utf8.toBytes(iv);
    var enckey= aesjs.utils.utf8.toBytes(key);
    var aesCtr = new aesjs.ModeOfOperation.cbc(enckey, rkEncryptionIv);
    var textBytes = aesjs.utils.utf8.toBytes(trandata);
    var encryptedBytes = aesCtr.encrypt(aesjs.padding.pkcs7.pad(textBytes));
    var encryptedHex = aesjs.utils.hex.fromBytes(encryptedBytes);
    return encryptedHex;
}

function AESdecryption(encryptedHex, key)
{
    var iv = "PGKEYENCDECIVSPC";
    var enckey= aesjs.utils.utf8.toBytes(key);
    var rkEncryptionIv = aesjs.utils.utf8.toBytes(iv);
    var encryptedBytes = aesjs.utils.hex.toBytes(encryptedHex);
    var aesCbc = new aesjs.ModeOfOperation.cbc(enckey, rkEncryptionIv);
    var decryptedBytes = aesCbc.decrypt(encryptedBytes);
    var decryptedText = aesjs.utils.utf8.fromBytes(decryptedBytes);
    return decryptedText;
}
```

Chapter 6 TRANSACTION RESULT CODES

Result Codes

The result parameter in the ARB Payment Gateway transaction response helps the merchant to determine the transaction status. The merchant should first check for any error received; if no error received, check for the result parameter and basis of the same, determine whether the transaction is successful or failed. Mentioned below are the values that could be sent in the response by the ARB Payment Gateway in the result parameter to the merchant response URL.

Result Code	Description
CAPTURED	Transaction was captured (successful) (For Action Code "1 - Purchase").
NOT CAPTURED	Transaction was not captured (failed) (For Action Code "1 - Purchase").
CANCELED	The transaction is cancelled by the customer after the payment Page was presented.

Chapter 7 TROUBLESHOOTING

Known Error Codes

The error codes are listed below:

The following table contains the known error codes and their descriptions:

Error Code	Error Code Description
IPAY0100114	Duplicate Record, transaction ID already exist
IPAY0100115	Transaction denied due to missing original transaction id.
IPAY0100116	Transaction denied due to invalid original transaction id.
IPAY0100118	Transaction denied due to card number length error
IPAY0100119	Transaction denied due to invalid card number
IPAY0100120	Transaction denied due to invalid payment instrument
IPAY0100121	Transaction denied due to invalid card holder name.
IPAY0100122	Transaction denied due to invalid address.
IPAY0100123	Transaction denied due to invalid postal code.
IPAY0100124	Problem occurred while validating transaction data
IPAY0100125	Payment instrument not enabled.
IPAY0100126	Brand not enabled.
IPAY0100127	Problem occurred while doing validate original transaction
IPAY0100128	Transaction denied due to Institution ID mismatch
IPAY0100129	Transaction denied due to Merchant ID mismatch
IPAY0100130	Transaction denied due to Terminal ID mismatch
IPAY0100131	Transaction denied due to Payment Instrument mismatch
IPAY0100132	Transaction denied due to Currency Code mismatch
IPAY0100133	Transaction denied due to Card Number mismatch
IPAY0100134	Transaction denied due to invalid Result Code
IPAY0100135	Problem occurred while doing perform action code reference id (Validate Original Transaction)
IPAY0200028	Problem occurred while loading default institution configuration (Validate Original Transaction)

Error Code	Error Code Description
IPAY0100136	Transaction denied due to previous capture check failure (Validate Original Transaction)
IPAY0100138	Transaction denied due to capture amount versus auth amount check failure (Validate Original)
IPAY0100139	Transaction denied due to void amount versus original amount check failure (Validate Original)
IPAY0100140	Transaction denied due to previous void check failure (Validate Original Transaction)
IPAY0100141	Transaction denied due to authorization already captured (Validate Original Transaction)
IPAY0100142	Problem occurred while validating original transaction
IPAY0200030	No external connection details for Extr Conn id :
IPAY0200031	Alternate external connection details not found for the alt Extr Conn id :
IPAY0100143	Transaction action is null
IPAY0100144	ISO MSG is null. See log for more details!
IPAY0100145	Problem occurred while loading default messages in ISO Formatter
IPAY0100147	Problem occurred while formatting purchase request in B24 ISO Message Formatter
IPAY0100150	Problem occurred while formatting Reverse purchase request in B24 ISO Message Formatter
IPAY0100152	Problem occurred while formatting authorization request in B24 ISO Message Formatter
IPAY0100153	Problem occurred while formatting Capture request in B24 ISO Message Formatter
IPAY0100155	Problem occurred while formatting reverse authorization request in B24 ISO Message Formatter
IPAY0100156	Problem occurred while formatting Reverse Capture request in B24 ISO Message Formatter
IPAY0100159	External message system error
IPAY0100160	Unable to process the transaction.
IPAY0100163	Problem occurred during transaction.
IPAY0100166	Transaction Not Processed due to Empty Authentication Status
IPAY0100167	Transaction Not Processed due to Invalid Authentication Status
IPAY0100168	Transaction Not Processed due to Empty Enrollment Status
IPAY0100169	Transaction Not Processed due to Invalid Enrollment Status
IPAY0100170	Transaction Not Processed due to invalid CAVV
IPAY0100171	Transaction Not Processed due to Empty CAVV
IPAY0100172	Problem occurred while converting amount.
IPAY0100173	Problem occurred while building refund request.

Error Code	Error Code Description
IPAY0100175	Problem occurred in refund process.
IPAY0100039	Invalid payment id .
IPAY0200009	Problem occurred while getting payment details.
IPAY0100041	Payment details missing.
IPAY0100042	Transaction time limit exceeds.
IPAY0200011	Problem occurred while getting IP block details.
IPAY0100043	IP address is blocked already
IPAY0100044	Problem occurred while loading payment page.
IPAY0100045	Denied by Risk
IPAY0200013	Problem occurred while updating description details in payment log.
IPAY0100047	Payment Page validation failed due to invalid Order Status:
IPAY0200015	Problem occurred while getting terminal details.
IPAY0100050	Invalid terminal key.
IPAY0100051	Missing terminal key.
IPAY0100053	Problem occurred while processing direct debit.
IPAY0100054	Payment details not available
IPAY0100056	Instrument not allowed in Terminal and Brand
IPAY0200016	Problem occurred while getting payment instrument.
IPAY0200018	Problem occurred while getting transaction details
IPAY0100057	Transaction denied due to invalid processing option action code
IPAY0100058	Transaction denied due to invalid instrument
IPAY0100059	Transaction denied due to invalid currency code.
IPAY0100060	Transaction denied due to missing amount.
IPAY0100061	Transaction denied due to invalid amount.
IPAY0100062	Transaction denied due to invalid Amount/Currency.
IPAY0100063	Transaction denied due to invalid track ID
IPAY0100064	Transaction denied due to invalid UDF1:
IPAY0100065	Transaction denied due to invalid UDF2:
IPAY0100066	Transaction denied due to invalid UDF3:
IPAY0100067	Transaction denied due to invalid UDF4:
IPAY0100068	Transaction denied due to invalid UDF5:
IPAY0100069	Missing payment instrument.
IPAY0100070	Transaction denied due to failed card check digit calculation.

Error Code	Error Code Description
IPAY0100071	Transaction denied due to missing CVD2.
IPAY0100072	Transaction denied due to invalid CVD2.
IPAY0100073	Transaction denied due to invalid CVV.
IPAY0100074	Transaction denied due to missing expiry year.
IPAY0100075	Transaction denied due to invalid expiry year.
IPAY0100076	Transaction denied due to missing expiry month.
IPAY0100077	Transaction denied due to invalid expiry month.
IPAY0100078	Transaction denied due to missing expiry day.
IPAY0100079	Transaction denied due to invalid expiry day.
IPAY0100080	Transaction denied due to expiration date.
IPAY0100081	Card holder name is not present
IPAY0100082	Card address is not present
IPAY0100083	Card postal code is not present
IPAY0100086	Transaction denied due to missing CVV.
IPAY0100095	Terminal inactive.
IPAY0100098	Terminal Action not enabled for Transaction request, Terminal "termid" ,Tran Action : "action"
IPAY0100099	Terminal Payment Instrument not enabled for Transaction request, Terminal "termid" , Tran Instrument:"PAYMENT_INSTRUMENT"
IPAY0100100	Problem occurred while authorize
IPAY0200019	Problem occurred while getting risk profile details
IPAY0100102	Denied by risk : Maximum Floor Limit Check - Fail
IPAY0100103	Transaction denied due to Risk : Maximum transaction count
IPAY0100104	Transaction denied due to Risk : Maximum processing amount
IPAY0200022	Problem occurred while getting currency.
IPAY0100106	Invalid payment instrument
IPAY0200024	Problem occurred while getting brand rules details.
IPAY0100107	Instrument not enabled.
IPAY0200025	Problem occurred while getting terminal details.
IPAY0100109	Invalid subsequent transaction, payment id is null or empty.
IPAY0200026	Problem occurred while getting transaction log details.
IPAY0200027	Missing encrypted card number.
IPAY0100111	Card decryption failed.

Error Code	Error Code Description
IPAY0100113	“transaction id” is a subsequent transaction, but original transaction id is invalid :
IPAY0100021	Missing currency.
IPAY0100024	Invalid amount.
IPAY0100027	Invalid track id.
IPAY0100030	Invalid user defined field3.
IPAY0200007	Problem occurred while validating payment details
IPAY0200008	Problem occurred while verifying payment details.
IPAY0100037	Payment id missing.
IPAY0100040	Transaction in progress in another tab/window.
IPAY0100052	Problem occurred during merchant response encryption.
IPAY0100055	Invalid Payment Status
IPAY0200017	Problem occurred while getting payment instrument list
IPAY0100094	Sorry, this instrument is not handled
IPAY0100101	Denied by risk : Risk Profile does not exist
IPAY0200020	Problem occurred while performing transaction risk check
IPAY0200021	Problem occurred while performing risk check
IPAY0200023	Problem occurred while determining payment instrument
IPAY0100108	Perform risk check : Failed
IPAY0100110	Invalid subsequent transaction, Tran Ref id is null or empty.
IPAY0100112	Problem occurred in method loading original transaction data(card number, exp month / year) for orig_tran_id
IPAY0100117	Transaction denied due to missing card number.
IPAY0100137	Transaction denied due to refund amount greater than auth amount check failure (Validate Original Transaction)
IPAY0200029	Problem occurred while getting external connection details.
IPAY0200032	Problem occurred while getting external connection details for Extr CConn id :
IPAY0100151	Problem occurred while formatting Refund request in B24 ISO Message Formatter
IPAY0100154	Problem occurred while formatting Reverse Refund request in B24 ISO Message Formatter
IPAY0100158	Host (SWITCH) timeout
IPAY0100161	Merchant is not allowed for encryption process.
IPAY0100176	Decrypting transaction data failed.
IPAY0100177	Invalid input data received.
IPAY0100178	Merchant encryption enabled.

Error Code	Error Code Description
IPAY0100179	IVR not enabled.
IPAY0100180	Authentication not available.
IPAY0100181	Card encryption failed.
IPAY0200037	Error occurred while getting Merchant ID
IPAY0100186	Encryption enabled.
IPAY0100189	Transaction denied due to brand directory unavailable
IPAY0100190	Transaction denied due to Risk : Maximum transaction count
IPAY0100191	Denied by risk : Negative Card check - Fail
IPAY0100192	Transaction Not Processed due to Empty XID
IPAY0100193	Transaction Not Processed due to invalid XID
IPAY0100202	Error occurred in Determine Payment Instrument
IPAY0100194	Transaction denied due to Risk : Minimum Transaction Amount processing
IPAY0100195	Transaction denied due to Risk : Maximum refund processing amount
IPAY0100196	Transaction denied due to Risk : Maximum processing amount
IPAY0100197	Transaction denied due to Risk : Maximum debit amount
IPAY0100198	Transaction denied due to Risk : Transaction count limit exceeded for the IP
IPAY0100199	Transaction denied due to previous refund check failure (Validate Original Transaction)
IPAY0100200	Denied by risk : Negative BIN check - Fail
IPAY0100201	Denied by risk : Declined Card check – Fail
IPAY0100203	Problem occurred while doing perform transaction
IPAY0100204	Missing payment details
IPAY0100206	Problem occurred while getting currency minor digits
IPAY0100207	Bin range not enabled
IPAY0100208	Action not enabled
IPAY0100209	Institution config not enabled
IPAY0100213	Problem occurred while processing the hosted transaction request
IPAY0100214	Problem occurred while verifying tranportal id
IPAY0100215	Invalid tranportal id
IPAY0100216	Invalid data received
IPAY0100217	Invalid payment detail
IPAY0100218	Invalid brand id
IPAY0100219	Missing card number

Error Code	Error Code Description
IPAY0100220	Invalid card number
IPAY0100221	Missing card holder name
IPAY0100222	Invalid card holder name
IPAY0100223	Missing cvv
IPAY0100224	Invalid cvv
IPAY0100225	Missing card expiry year
IPAY0100226	Invalid card expiry year
IPAY0100227	Missing card expiry month
IPAY0100228	Invalid card expiry month
IPAY0100229	Invalid card expiry day
IPAY0100230	Card expired
IPAY0100231	Invalid user defined field
IPAY0100232	Missing original transaction id
IPAY0100233	Invalid original transaction id
IPAY0100234	Problem occurred while formatting Reverse completion request in ISO Message Formatter
IPAY0100235	Problem occurred while formatting Reverse refund request in ISO Message Formatter
IPAY0100236	Problem occurred while formatting Reverse refund request in ISO Message Formatter
IPAY0100237	Problem occurred while formatting Reverse purchase request in ISO Message Formatter
IPAY0100238	Problem occurred while formatting Capture request in ISO Message Formatter
IPAY0100239	Problem occurred while formatting authorization request in ISO Message Formatter
IPAY0100240	Problem occurred while formatting refund request in ISO Message Formatter
IPAY0100241	Problem occurred while formatting purchase request in ISO Message Formatter
IPAY0100243	NOT SUPPORTED
IPAY0100244	Payment Instrument Not Configured
IPAY0100245	Problem occurred while sending/receiving ISO message
IPAY0100246	Problem occurred while doing perform ip risk check
IPAY0100249	Merchant response url is down
IPAY0100250	Payment details verification failed
IPAY0100251	Invalid payment data
IPAY0100253	Problem occurred while cancelling the transaction

Error Code	Error Code Description
IPAY0100254	Merchant not enabled
IPAY0100255	External connection not enabled
IPAY0100256	Payment encryption failed
IPAY0100257	Brand rules not enabled
IPAY0100260	Payment option(s) not enabled
IPAY0100261	Payment hashing failed
IPAY0100262	Problem occurred during VEREQ process
IPAY0100263	Transaction details not available
IPAY0100264	Signature validation failed
IPAY0100265	PARes status not successful
IPAY0100266	Brand directory unavailable
IPAY0100267	PARes status not successful
IPAY0100268	3d secure not enabled for the brand
IPAY0100269	Invalid card check digit
IPAY0100270	PARes status not successful
IPAY0100271	Problem occurred while formatting purchase request in MASTER ISO Message Formatter
IPAY0100272	Problem occurred while validating xml message format
IPAY0100273	Problem occurred while validation VERES message format
IPAY0100274	VERES message format is invalid
IPAY0100275	Problem occurred while formatting Credit request in MASTER ISO Message Formatter
IPAY0100276	Problem occurred while formatting Reverse purchase request in MASTER ISO Message Formatter
IPAY0100277	Problem occurred while formatting Reverse Credit request in MASTER ISO Message Formatter
IPAY0100278	Problem occurred while formatting reverse authorization request in MASTER ISO Message Formatter
IPAY0100279	Problem occurred while formatting Reverse Capture request in MASTER ISO Message Formatter
IPAY0100280	Problem occurred while formatting Capture request in MASTER ISO Message Formatter
IPAY0100281	Transaction Denied due to missing Master Brand
IPAY0100282	Transaction Denied due to missing Visa Brand
IPAY0100283	Problem occurred in determine payment instrument

Error Code	Error Code Description
IPAY0100284	Invalid subsequent transaction, track id is null or empty
IPAY0100285	Transaction denied due to invalid original transaction
IPAY0100289	Transaction denied due to Risk : Maximum credit amount
IPAY0100291	Problem occurred while validating original transaction
IPAY0100292	Transaction denied due to invalid PIN
IPAY0100293	Transaction denied due to duplicate Merchant trackid
IPAY0100294	Transaction denied due to missing Merchant trackid
IPAY0100295	Missing Merchant Track Id
IPAY0100327	Invalid Buyer Email ID
IPAY0100328	Invalid Buyer Mobile No.
IPAY0100329	Invalid Buyer Name
IPAY0100330	Invalid Minor digits length
IPAY0100331	Invalid Expiry Date
IPAY0100332	Invalid Invoice Id
IPAY0100333	Invalid Item Description
IPAY0100334	Invalid Udf1

Handling Final Response from Payment Gateway

Handling Transaction Response:

- By decrypting **"trandata"** Merchant can get all the required success transaction data.

Handling Failure Transaction Response:

Step1:

From payment Gateway Response, Merchant needs to check the **"trandata"** first.

If the **"trandata"** is not null.

By decrypting the trandata Merchant can get the failure transaction description by extracting the key **"result"**.

If **"result"** is null then merchant needs to use the key **"error_text"** inside **"trandata"** to get failure description.

Step 2:

If **"trandata"** is null or empty, then merchant needs to do follow below steps.

Step 3:

To get Error Description: Use Parameter Key name **"ErrorText"**.

Step 4:

To get Error Code: Use parameter key name **"Error"**.

Step 5:

To get Transaction Id: Use parameter key **"tranid"** this value can be null or empty.

Step 6:

To get Payment Id: Use parameter key **"paymentid"** this value can be null or empty.