



# AL RAJHI PAYMENT GATEWAY

## MERCHANT INTEGRATION GUIDE - REST API'S

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This document explains the step-by-step procedures to integrate Al Rajhi payment gateway in merchants' application.

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# Chapter 1 INTRODUCTION

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## Purpose of the Document

The Payment Gateway follows industry standards and norms as prescribed by Master-Card 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 are 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.

## Target Audience

This document is intended for Partner integration teams, project managers, developers, and testers.

## Chapter 2     GETTING STARTED

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*This chapter contains detailed instructions of building merchant application with ARB Payment Gateway.*

# Start Building with ARB Payment Gateway

Alrajhi Payment Gateway offers a secure, PCI-DSS compliant approach to save Debit card, Credit card, Net-Banking, UPI and Wallet payments from the merchants.

- Once the Merchant on-boarded on ARB payment gateway, merchant would be provided with Payment gateway application URL and login credentials.

**Notes: Generate your staging account credentials. These are required to explore ARB Payment Gateway integration solutions.**

- Merchant to logs in to ARB payment gateway merchant portal and download the following:
  - Tranportal ID & Tranportal password
    - Tranportal ID** and **Tranportal password** are unique values provided by ARB Payment Gateway via registered mail as well.
    - The details are required for integration with ARB payment gateway.
  - Resource Key
    - Resource key** is a unique secret key used for secure encryption and decryption of every request.
    - This should not be shared with anyone.**

## Basic understanding of ARB Payment Gateway

The ARB payment gateway's merchant application is a well secured interface that captures payment related data between the merchant and the customer:

Some of the features are :

- View payments received from your customers
- View transactions ARB PG makes into your account
- Initiate and track the refund
- Generate and download all kinds of transaction reports

# Basics of collecting payments with ARB Payment Gateway

1. A user adds goods & services in cart and clicks the **Alrajhi Payment Gateway** button in your application (the merchant's application).
2. A checkout form is shown where the user fills in the payment details and authorizes the payment.  
There are two ways of processing the payment with ARB payment gateway with API integration:
  - Bank Hosted setup
  - Merchant Hosted setup
3. After completion of a transaction, Alrajhi Payment Gateway posts the response (success or failed) on a Callback URL defined by you (the merchant).
4. Based on the response received, you display the order status to the customer.
5. See a real-time summary of payments received and other detail in the merchant portal URL:

<https://digitalpayments.alrajhibank.com.sa/mrchptl/merchant.htm>

Navigation to transaction detail report in merchant portal is as below :

Merchant Portal ->Reports->Transaction Reports->Transaction Detail Report

6. Receive payments collected from customers in your bank account on the next business day.

# Integration Guidelines

Mandatory steps to be followed by Merchant Integration Team:

1. Verify the endpoints by sending request in postman application.
2. Frame the Json request of **Plain Trandata** with request parameters as specified in the document
3. Encrypt the plain json request with the **Resource Key** received in the mail.
4. Frame the encrypted request and send it to ARB Payment Gateway endpoint URL shared via mail.
5. After receiving the response from ARB Payment Gateway, decrypt the encrypted trandata using the resource key received in the mail.
6. Process the plain trandata - response message.

**Important Note: It is mandatory to include the customer's IP Address in the merchant's request for both bank-hosted and merchant-hosted transactions. Failure to do so will result in the payment gateway declining the transaction due to a risk assessment failure.**

## Below is the required Request Header

X-FORWARDED-FOR – The Customer IP Address must be listed first, followed by other IPs, separated by commas, if applicable.

### Here is an example of the X-FORWARDED-FOR header:

X-FORWARDED-FOR:203.0.113.195,172.20.2.10

#### In this example:

**203.0.113.195** is the customer's IP address (must always be listed first).

**172.20.2.10** are additional IPs, separated by commas, if applicable.

# Test Instruments

ARB PG APIs are complete RESTFUL API's; Merchants can test the API's on sandbox setup before testing on Live environment.

Test Card details.

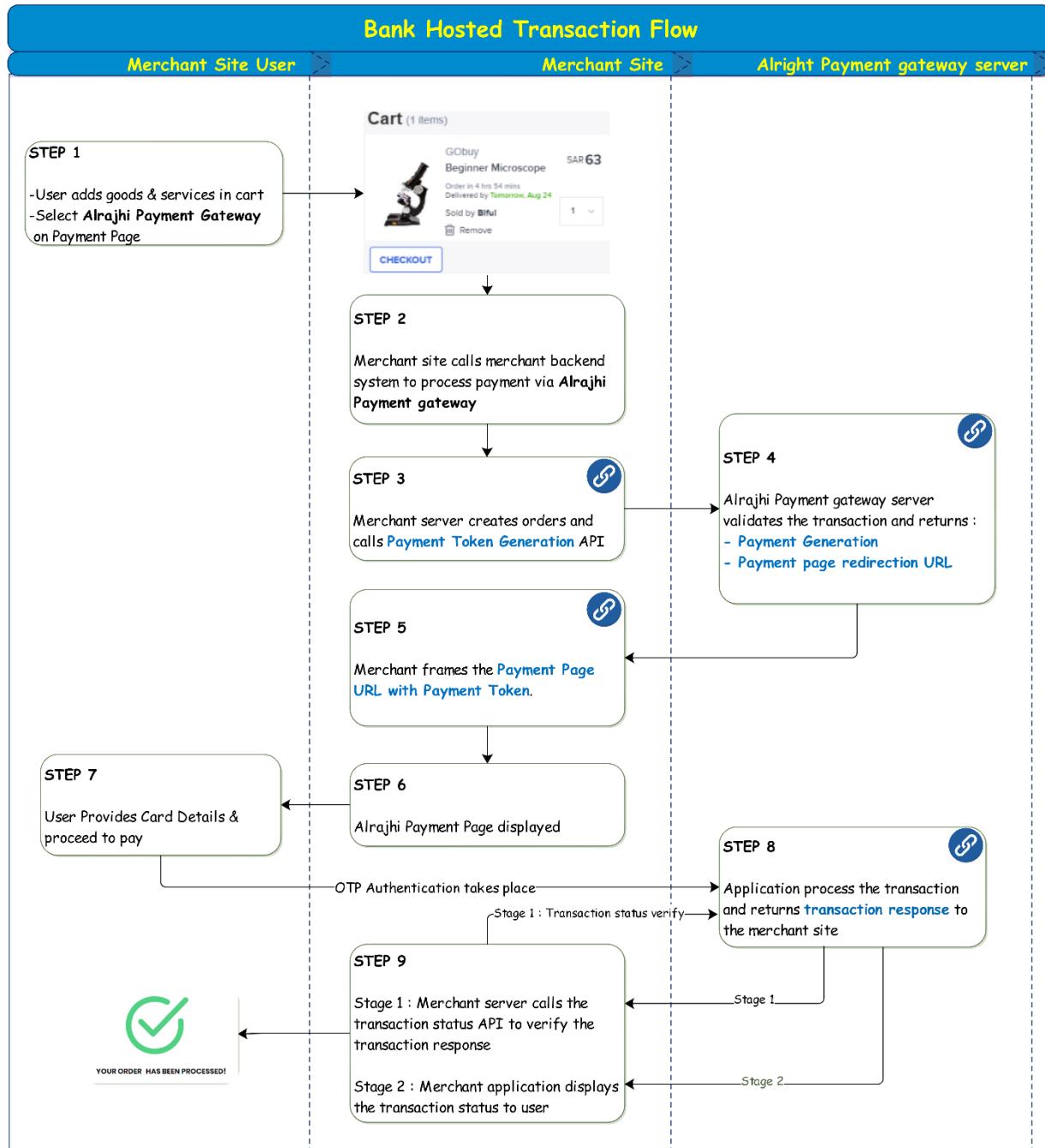
Card type	Card Number	Expiry Date	CVV
Credit	4012001037141112	12/2027	212
Credit	5297412201764352	01/2022	999

# Chapter 3 TRANSACTION FLOW

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# Bank Hosted Integration

This section illustrates how you can integrate the bank hosted flow on your website application.



1. User visits the merchant application and creates order.
2. Merchant application backend server calls [\*\*Payment Token Generation API\*\*](#) to get the transaction token.
3. ARB Payment gateway internally validates the request.
  - In case of successful validation, ARB PG provides [\*\*Payment ID\*\*](#) and [\*\*Payment Page URL\*\*](#) in the response.
    - Merchant needs to [frame the payment page URL with Payment ID](#), Hence the ARB payment page is displayed.
  - In case of failure, ARB PG provides **Error Code** and **Description**.

Note: If merchant notification is disabled, then ARB Payment gateway will provide the [final response in URL redirection](#).

4. User enters the payment details and authorizes the transaction on the ARB PG bank's page.
5. The ARB PG application process the transaction and returns the transaction response to the merchant site.
6. Merchant server calls the transaction status API to verify the transaction response.
7. Finally, the merchant application displays the transaction status to user.

## Request - Payment Token Generation API

### Attributes - Request from Merchant to ARB PG

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.
3	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
4	errorURL	M	Alphanum	Merchant error URL

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization: 4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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.

S. No	Fields	M/C/O	Field Type	Description
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	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.
10	udf4	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.
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	response URL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
13	errorURL	M	Alphanum	The merchant error URL where Payment Gateway send the response in case any error while processing the transaction.
14	langid	O	Alphabetic	Language ID . Based on language ID arabic language will be displayed on payment page. Value should be 'ar' or 'AR' for arabic language.

### Sample JSON request - Request from Merchant to ARB PG

```
[ {
    //Mandatory Parameters
    "id": "IPAY1CR6qZF7q6w",
    "trandata": "<encrypted trandata> ",
    "responseURL": "https://merchantpage/PaymentResult.jsp",
    "errorURL": "https://merchantpage/PaymentResult.jsp"
}]
```

### Plain Trandata:

Trandata will contain below parameters encrypted with AES algorithm with CBC Mode, PKCS5Padding with initialization vector value PGKEYENCDECIVSPC under Resource Key.

```
[ {
    //Mandatory Parameters
    "amt": "12.00",
    "action": "1",      // 1 - Purchase , 4 - Authorization
    "password": "q@a680$27@JLkck",
    "id": "IPAY1CR6qZF7q6w",
    "currencyCode": "682",
    "trackId": "12345656789",
    "responseURL": "https://merchantpage/PaymentResult.jsp",
    "errorURL": "https://merchantpage/PaymentResult.jsp",
    //Optional Parameters
    "udf1": "udf1text",
}]
```

```

    "udf2":"udf2text",
    "udf3":"udf3text",
    "udf4":"udf4text",
    "udf5":"udf5text",
    "langid":"ar",
  }
]
```

## MADA Mandatory Parameters

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization : 4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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	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.
10	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.
11	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
12	errorURL	M	Alphanum	The merchant error URL where Payment Gateway send the response in case any error while Processing the transaction.

### Sample JSON request - Request from Merchant to ARB PG

```
{
  //MADA Mandatory Parameters
  "amt": "12.00",
  "action": "1", // 1 - Purchase , 2 - Authorization
  "password": "q@a680$27@JLkcK",
  "id": "IPAYlCR6qZF7q6w",
  "currencyCode": "682",
  "trackId": "12345656789",
  "responseURL": "https://merchantpage/PaymentResult.jsp",
  "errorURL": "https://merchantpage/PaymentResult.jsp",
  //Optional Parameters
  "udf1": "udf1text",
  "udf2": "udf2text",
  "udf3": "udf3text",
  "udf4": "udf4text",
}
```

```
"udf5":"udf5text",
"langid":"ar",
}]
```

## Split Payment or Payout.

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	accountDetails	C	JSON Array	Conditional if Merchant Opted for Payout future. Split Payment or Payout Details.
2	bankIdCode	C	Alphanum	Bank Identification Code Min - 8 Max -12
3	iBanNum	C	Alphanum	IBAN Number Min - 24 Max - 35
4	beniciaryNa me	C	Alphabe tic	beniciaryName (English Only) Max - 100
5	serviceAmoun t	C	Numeric	Service Amount
6	valueDate	C	Numeric	Value Date Format: YYYYMMDD

### Sample JSON request - Request from Merchant to ARB PG

```
//Conditional if Merchant Opted for Split Payment or Payout.

"accountDetails": [
  {"bankIdCode":"12345d6f", "iBanNum": "567896743281926354276254",
   "beniciaryName":"AlRajhi Bank Services",
   "serviceAmount":"200.00", "valueDate":"20201231" },
  {"bankIdCode":"1234ret3", "iBanNum": "987656743281926354276254",
```

```
"beneficiaryName": "DIGITAL CO",
"serviceAmount": "300.00", "valueDate": "20201231" }] ,
```

## SADAD

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	transactionType	C	Alphanum	Minimum length : 3 , Maximum length : 15 Transaction Type Allowed Values 'PAY' 'PAY_SAVE' 'ADVANCE' 'PARTIAL_PAYMENT' 'OVER_PAYMENT'
2	billerID	C	Alphanum	Minimum length : 1 , Maximum length : 3 Biller ID
3	billAmount	C	Numeric	billAmount
4	billType	C	Alphanum	Minimum length : 7 , Maximum length : 8 Bill Type. The allowed values are: - PREPAID : Paid in advance - POSTPAID : Paid at the end
5	billNumber	C	Alphanum	Minimum length : 1 , Maximum length : 30 Bill Number as identified by SADAD
6	IDType	C	Alphanum	Minimum length : 2 , Maximum length : 2 ID Type 01 National ID Card 02 Iqama 03 Passport
7	IDNumber	C	Alphanum	Minimum : 1 , Maximum : 20 ID Number

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional -for SADAD merchant

"billingDetails" :

{"IDType": "01", "IDNumber": "1072587916", "billNumber": "00100100018", "billType": "POSTPAID", "billerID": "169", "billAmount": 5, "transactionType": "ADVANCE"

},
```

## Airline

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	airline	C	JSON Object	Conditional - for Airline Merchant
1.1	bookingReference	C	Alphanum	The booking reference number
1.1.1	itinerary	C	JSON Object	Conditional - for Airline Merchant
1.1.1.1	leg	C	JSON Array	Conditional - for Airline Merchant
1.1.1.1.1	carrierCode	C	Alphanum	The carrier code for the leg
1.1.1.1.2	departureAirport	C	Alphanum	The departure airport for the passenger
1.1.1.1.3	departureDate	C	Alphanum	The departure date for the leg
1.1.1.1.4	departureTime	C	Alphanum	The departure airport for the passenger
1.1.1.1.5	destinationAirport	C	Alphanum	The destination airport for the leg
1.1.1.1.6	destinationArrivalDate	C	Alphanum	The arrival date for the leg
1.1.1.1.7	destinationArrivalTime	C	Alphanum	The arrival time for the leg
1.1.1.1.8	fareBasis	C	Alphanum	The fare basis for the leg
1.1.1.1.9	flightNumber	C	Alphanum	The flight number for the leg
1.1.1.1.10	travelClass	C	Alphanum	The class of service for the leg
1.1.1.2	numberInParty	C	Alphanum	
1.1.1.3	originCountry	C	Alphanum	The origin Country of the itinerary
1.1.2	passenger	C	JSON Array	Conditional - for airline merchant
1.1.2.1	firstName	C	Alphanum	The passenger first name
1.1.2.2	lastName	C	Alphanum	The passenger last name
1.1.3	ticket	C	JSON Object	Conditional - for airline merchant
1.1.3.1	issue	C	JSON Object	Conditional - for airline merchant
1.1.3.1.1	carrierCode	C	Alphanum	Code of the airline that issuing the ticket
1.1.3.1.2	carrierName	C	Alphanum	Name of the airline that is issuing the ticket.
1.1.3.1.3	travelAgentCode	C	Alphanum	Code of the Travel Agent that issuing the ticket
1.1.3.1.4	travelAgentName	C	Alphanum	Name of the Travel Agent that issuing the ticket
1.1.3.2	totalFare	C	Numeric	Ticket Total Fare

1.1.3.3	totalFees	C	Numeric	Total fee for the ticket.
1.1.3.4	totalTaxes	C	Numeric	Tax portion of the order amount.

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional - for airline merchant

{
  "airline": {
    "bookingReference": "5WPU68",
    "itinerary": [
      {
        "leg": [
          {
            "carrierCode": "MH",
            "departureAirport": "MNL",
            "departureDate": "2021-05-11",
            "departureTime": "06:50:00Z",
            "destinationAirport": "KUL",
            "destinationArrivalDate": "2021-05-11",
            "destinationArrivalTime": "10:35:00Z",
            "fareBasis": "BOWMPH6",
            "flightNumber": "0805",
            "travelClass": "B"
          },
          {
            "carrierCode": "UL",
            "departureAirport": "KUL",
            "departureDate": "2021-05-11",
            "departureTime": "15:00:00Z",
            "destinationAirport": "CMB",
            "destinationArrivalDate": "2021-05-11",
            "destinationArrivalTime": "16:05:00Z",
            "fareBasis": "BOWMPH6",
            "flightNumber": "0315",
            "travelClass": "B"
          }
        ],
        "numberInParty": "1",
        "originCountry": "PHL",
        "passenger": [
          {
            "firstName": "KAI MR",
            "lastName": "QIAN"
          }
        ],
        "ticket": {
          "issue": [
            {
              "carrierCode": "UL",
              "carrierName": "SRILANKANAIRLINES",
              "travelAgentCode": "91401483",
              "travelAgentName": "MANUL08AE"
            }
          ],
          "totalFare": "54918.00",
          "totalFees": "59518.00",
          "totalTaxes": "4600.00"
        }
      }
    ]
  }
}
```

## Initial Response - Payment ID and Payment Page URL

### Attributes - Initial Response from ARB PG to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	status	M	Numeric	If the request validation success, then status will be '1'. If the validation failed, then status will be '2'
2	result	C	Alphanum	It contains payment ID and Payment URL if the validation success else this will be null
3	error	C	Alphanum	If validation failed, then Payment gateway will provide the respective error code
4	errorText	C	Alphanum	If validation failed, then Payment gateway will provide the respective error description

### Sample JSON Response - Initial Response from ARB PG to Merchant

ARB Payment gateway internally validates the request and gives payment ID and payment page URL in the response in case of successful validation, if failure then error code and description will be provided. The below response will be in plain format and there is no encryption for the below. Merchant can directly parse the response-based status and result fields as mentioned below.

#### Success:

```
[ {
  "status": "1",
  "result": "100201931620827468:https://securepayments.alrajhibank.com.sa/pg/paymentpage.htm", //Payment ID:Paymentpage URL
  "error": null,
  "errorText": null
}]
```

**Failure:**

```
[ {  
  
    "status": "2",  
  
    "error": "IPAY0100124",  
  
    "errorText": "Problem occurred while validating transaction data",  
  
    "result": null  
  
} ]
```

## Framing Payment URL

After Initial Response from ARB PG, merchant needs to frame the payment page URL like the below sample.

<https://securepayments.alrajhibank.com.sa/pg/paymentpage.htm?PaymentID=100201931620827468>

## Final Response – Transaction Status

### Attribute - Final URL redirection response from ARB PG 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 encrypted and send the encrypted value in 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. Based on this payment Id merchant can match the final URL redirection response
2	result	M	Alphanum	Transaction status . Value will be 'CAPTURED' for purchase successful and 'APPROVED' for authorization successful.
3	ref	M	Numeric	Transaction reference number (RRN)
4	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
5	date	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

S. No	Fields	M/C/O	Field Type	Description
				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	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.
10	udf4	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.
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	amt	M	Numeric	Transaction amount
13	authRespCode	M	Numeric	Auth response code provided by PG
14	authCode	M	Numeric	6 digit authorization code received from switch
15	cardType	M	Alphabetic	Card Brand name . Value will be "Visa" or "MasterCard" or "Mada".
16	actionCode	M	Alphanumeric	Action code of transaction. Possible Values

S. No	Fields	M/C/O	Field Type	Description
				1-Purchase 2-Credit 3-Void Purchase 4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)
17	card	C	AlPhanumeric	Card Number used for Performing Transaction
18	expMonth	C	AlPhanumeric	Expiry Month of the Card
19	expYear	C	AlPhanumeric	Expiry Year of the Card

### Sample JSON Response - Final

If Merchant notification is disabled, then ARB Payment gateway will provide the final response in URL redirection. Below is the sample response from ARB PG to merchant

```
[ {
  //Redirection Parameters
  "paymentId": "100201935166676976",
  "trandata": "<encrypted trandata>",
  "error": "",
  "errorText": ""
}]
```

### Plain Trandata:

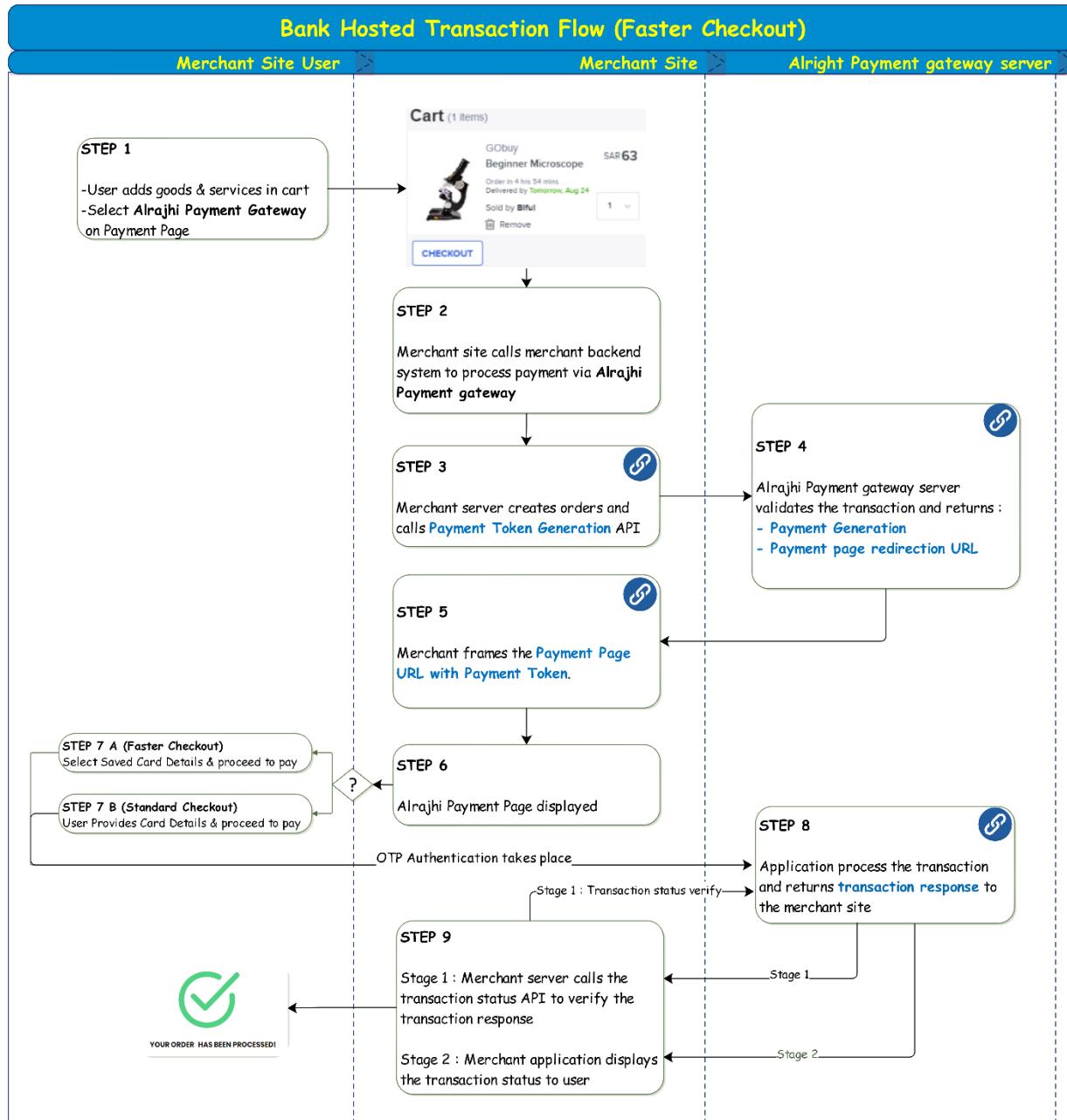
Trandata will contain below parameters encrypted.

```
[{
  "paymentId": "100201935166676976",
```

```
"result": "CAPTURED",
"transId":201935166561122,
"ref":"935110000001",
"date":"1217",
"trackId":"1003383844",
"udf1":"",
"udf2":"",
"udf3":"8870091137",
"udf4":"FC",
"udf5":"Tidal5",
"amt":"70.0,
"authRespCode","00",
"authCode":"000000",
"cardType":"Visa",
"actionCode":"1",
"card":"506968XXXXXX1063",
"expMonth":"06", //1 - 2 Digits
"expYear":"2024" //2-4 Digits
} ]
```

## Bank Hosted Integration (Faster Checkout)

This section illustrates how you can integrate the bank hosted (Faster checkout) flow on your website application. Faster Checkout functionality is supported for the merchants only when Faster Checkout flag is enabled at the terminal level.



1. User visits the merchant application and creates order.
2. Merchant application backend server calls **Payment Token Generation API** to get the transaction token.
3. ARB Payment gateway internally validates the request.
  - In case of successful validation, ARB PG provides **Payment ID and Payment Page URL** in the response.
    - Merchant needs to [frame the payment page URL with Payment ID](#), Hence the ARB payment page is displayed.
  - In case of failure, ARB PG provides **Error Code** and **Description**.

Note: If merchant notification is disabled, then ARB Payment gateway will provide the [final response in URL redirection](#).

4. Select the payment details already stored in the bank's database. (Faster checkout)  
Or  
User enters the payment details and authorizes the transaction on the ARB PG bank's page. (Standard checkout)
5. The ARB PG application process the transaction and returns the transaction response to the merchant site.
6. Merchant server calls the transaction status API to verify the transaction response.
7. Finally, the merchant application displays the transaction status to user.

## Request - Payment Token Generation API

### Attributes - Request from Merchant to ARB PG

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.
3	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
4	errorURL	M	Alphanum	Merchant error URL

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization : 4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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.

S. No	Fields	M/C/O	Field Type	Description
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	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.
10	udf4	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.
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	response URL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
13	errorURL	M	Alphanum	The merchant error URL where Payment Gateway send the response in case any error while processing the transaction.
14	langid	O	Alphabetic	Language ID . Based on language ID arabic language will be displayed on payment page. Value should be 'ar' or 'AR' for arabic language .
15	custid	M	Numeric	Unique Customer ID generated on faster checkout registration.
16	cust_card HolderName	O	Alphabetic	Cardholder Name

S. No	Fields	M/C/O	Field Type	Description
17	cust_mobile_number:	O	Numeric	Customer Mobile Number
18	cust_emailId	O	Alphanum	Customer E-mail ID

### Sample JSON request - Request from Merchant to ARB PG

```
[ {
  //Mandatory Parameters
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata> ",
  "responseURL": "https://merchantpage/PaymentResult.jsp",
  "errorURL": "https://merchantpage/PaymentResult.jsp"
}]
```

### Plain Trandata:

Trandata will contain below parameters **encrypted** with AES algorithm with CBC Mode, PKCS5Padding with initialization vector value **PGKEYENCDECIVSPC** under Resource Key.

```
[ {
  //Mandatory Parameters
  "amt": "12.00",
  "action": "1",      // 1 - Purchase , 4 - Authorization
  "password": "q@a680$27@JLkcK",
  "id": "IPAY1CR6qZF7q6w",
  "currencyCode": "682",
  "trackId": "12345656789",
```

```

"responseURL":"https://merchantpage/PaymentResult.jsp",

"errorURL":"https://merchantpage/PaymentResult.jsp",

//Optional Parameters

"udf1":"udf1text",

"udf2":"udf2text",

"udf3":"udf3text",

"udf4":"udf4text",

"udf5":"udf5text",

"langid":"ar",

//conditional if Merchant opted for Faster Checkout.

"custid":"201936122890007",

"cust_cardHolderName":"Test",

"cust_mobile_number":"7788667755",

"cust_emailId":"Test@gmail.com"

}]
  
```

## Payout Future

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	accountDetails	C	JSON Array	Conditional if Merchant Opted for Payout future. Split Payment or Payout Details.
2	bankIdCode	C	Alphanum	Bank Identification Code Min - 8 Max -12

3	iBanNum	C	Alphanum	IBAN Number Min - 24 Max - 35
4	beniciaryNa me	C	Alphabe tic	beniciaryName (English Only) Max - 100
5	serviceAmmoun t	C	Numeric	Service Amount
6	valueDate	C	Numeric	Value Date Format: YYYYMMDD

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional if Merchant opted for Payout Future.

"accountDetails": [
    {
        "bankIdCode": "12345d6f",
        "beniciaryName": "AlRajhi Bank Services",
        "iBanNum": "567896743281926354276254",
        "serviceAmount": "200.00",
        "valueDate": "20201231"
    },
    {
        "bankIdCode": "1234ret3",
        "beniciaryName": "DIGITAL CO",
        "iBanNum": "987656743281926354276254",
        "serviceAmount": "300.00",
        "valueDate": "20201231"
    }
],
```

## SADAD

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	transactionTy pe	C	Alphanu m	Minimum length : 3 , Maximum length : 15 Transaction Type Allowed Values 'PAY' 'PAY_SAVE' 'ADVANCE' 'PARTIAL_PAYMENT' 'OVER_PAYMENT'
2	billerID	C	Alphanu m	Minimum length : 1 , Maximum length : 3 Biller ID
3	billAmount	C	Numeric	billAmount
4	billType	C	Alphanu m	Minimum length : 7 , Maximum length : 8 Bill Type. The allowed values are: - PREPAID : Paid in advance - POSTPAID : Paid at the end

5	billNumber	C	Alphanum	Minimum length : 1 , Maximum length : 30 Bill Number as identified by SADAD
6	IDType	C	Alphanum	Minimum length : 2 , Maximum length : 2 ID Type 01 National ID Card 02 Iqama 03 Passport
7	IDNumber	C	Alphanum	Minimum : 1 , Maximum : 20 ID Number

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional -for SADAD merchant

"billingDetails" :

{"IDType":"01","IDNumber":"1072587916","billNumber":"00100100018","billType":"POSTPAID","billerID":"169","billAmount":5,"transactionType":"ADVANCE"
}
```

## Airline

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	airline	C	JSON Object	Conditional - for Airline Merchant
1.1	bookingReference	C	Alphanum	The booking reference number
1.1.1	itinerary	C	JSON Object	Conditional - for Airline Merchant
1.1.1.1	leg	C	JSON Array	Conditional - for Airline Merchant
1.1.1.1.1	carrierCode	C	Alphanum	The carrier code for the leg
1.1.1.1.2	departureAirport	C	Alphanum	The departure airport for the passenger
1.1.1.1.3	departureDate	C	Alphanum	The departure date for the leg
1.1.1.1.4	departureTime	C	Alphanum	The departure airport for the passenger
1.1.1.1.5	destinationAirport	C	Alphanum	The destination airport for the leg
1.1.1.1.6	destinationArrivalDate	C	Alphanum	The arrival date for the leg

1.1.1.1.7	destinationArrivalTime	C	Alphanum	The arrival time for the leg
1.1.1.1.8	fareBasis	C	Alphanum	The fare basis for the leg
1.1.1.1.9	flightNumber	C	Alphanum	The flight number for the leg
1.1.1.1.10	travelClass	C	Alphanum	The class of service for the leg
1.1.1.2	numberInParty	C	Alphanum	
1.1.1.3	originCountry	C	Alphanum	The origin Country of the itinerary
1.1.2	passenger	C	JSON Array	Conditional - for airline merchant
1.1.2.1	firstName	C	Alphanum	The passenger first name
1.1.2.2	lastName	C	Alphanum	The passenger last name
1.1.3	ticket	C	JSON Object	Conditional - for airline merchant
1.1.3.1	issue	C	JSON Object	Conditional - for airline merchant
1.1.3.1.1	carrierCode	C	Alphanum	Code of the airline that issuing the ticket
1.1.3.1.2	carrierName	C	Alphanum	Name of the airline that is issuing the ticket.
1.1.3.1.3	travelAgentCode	C	Alphanum	Code of the Travel Agent that issuing the ticket
1.1.3.1.4	travelAgentName	C	Alphanum	Name of the Travel Agent that issuing the ticket
1.1.3.2	totalFare	C	Numeric	Ticket Total Fare
1.1.3.3	totalFees	C	Numeric	Total fee for the ticket.
1.1.3.4	totalTaxes	C	Numeric	Tax portion of the order amount.

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional - for airline merchant

{
  "airline": { "bookingReference": "5WPU68", "itinerary": { "leg": [ {
    "carrierCode": "MH", "departureAirport": "MNL", "departureDate": "2021-05-11",
    "departureTime": "06:50:00Z", "destinationAirport": "KUL",
    "destinationArrivalDate": "2021-05-11", "destinationArrivalTime": "10:35:00Z",
    "fareBasis": "BOWMPH6", "flightNumber": "0805", "travelClass": "B" }, {
      "carrierCode": "UL", "departureAirport": "KUL", "departureDate": "2021-05-11",
      "departureTime": "15:00:00Z", "destinationAirport": "CMB",
      "destinationArrivalDate": "2021-05-11", "destinationArrivalTime": "16:05:00Z",
      "fareBasis": "BOWMPH6", "flightNumber": "0315", "travelClass": "B" } ],
    "numberInParty": "1", "originCountry": "PHL" }, "passenger": [ { "firstName": "KAI MR", "lastName": "QIAN" } ],
    "ticket": { "issue": { "carrierCode": "UL", "carrierName": "SRILANKANAIRLINES",
      "travelAgentCode": "91401483", "travelAgentName": "MANUL08AE" },
      "totalFare": "54918.00", "totalFees": "59518.00", "totalTaxes": "4600.00" } } }
}
```

## Initial Response - Payment ID and Payment Page URL

### Attributes - Initial Response from ARB PG to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	status	M	Numeric	If the request validation success, then status will be '1'. If the validation failed, then status will be '2'
2	result	C	Alphanum	It contains payment ID and Payment URL if the validation success else this will be null
3	error	C	Alphanum	If validation failed, then Payment gateway will provide the respective error code
4	errorText	C	Alphanum	If validation failed, then Payment gateway will provide the respective error description

### Sample JSON Response - Initial Response from ARB PG to Merchant

ARB Payment gateway internally validates the request and gives payment ID and payment page URL in the response in case of successful validation, if failure then error code and description will be provided. The below response will be in plain format and there is no encryption for the below. Merchant can directly parse the response-based status and result fields as mentioned below.

#### Success:

```
[ {
  "status": "1",
  "result": "100201931620827468:https://securepayments.alrajhibank.com.sa/pg/paymentpage.htm", //Payment ID:Paymentpage URL
  "error": null,
  "errorText": null
}]
```

#### Failure:

```
[ {
  "status": "2",
}]
```

```
"error": "IPAY0100124",
"errorText": "Problem occurred while validating transaction data",
"result": null
}]
```

## Framing Payment URL

After Initial Response from ARB PG, merchant needs to frame the payment page URL like the below sample.

<https://securepayments.alrajhibank.com.sa/pg/paymentpage.htm?PaymentID=100201931620827468>

## Final Response – Transaction Status

### Attribute - Final URL redirection response from ARB PG 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 encrypted and send the encrypted value in 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. Based on this payment Id merchant can match the final URL redirection response
2	result	M	Alphanum	Transaction status . Value will be 'CAPTURED' for purchase successful and 'APPROVED' for authorization successful.
3	ref	M	Numeric	Transaction reference number (RRN)
4	fcCustId	M	Numeric	Unique Customer ID generated on faster checkout registration.
5	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
6	date	M	Numeric	Transaction date and time
7	trackId	M	Numeric	Merchant unique reference no

S. No	Fields	M/C/O	Field Type	Description
8	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.
9	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.
10	udf3	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.
11	udf4	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	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.
13	amt	M	Numeric	Transaction amount
14	authRespCode	M	Numeric	Auth response code provided by PG
15	authCode	M	Numeric	6 digit authorization code received from switch
16	cardType	M	Alphabetic	Card Brand name . Value will be "Visa" or "MasterCard" or "Mada".

S. No	Fields	M/C/O	Field Type	Description
17	actionCode	M	Alphanumeric	Action code of transaction. Possible Values 1-Purchase 2-Credit 3-Void Purchase 4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)
18	card	C	Alphanumeric	Card Number used for Performing Transaction
19	expMonth	C	Alphanumeric	Expiry Month of the Card
20	expYear	C	Alphanumeric	Expiry Year of the Card

### Sample JSON Response - Final

If Merchant notification is disabled, then ARB Payment gateway will provide the final response in URL redirection. Below is the sample response from ARB PG to merchant

```
[ {
    //Redirection Parameters
    "paymentId": "100201935166676976",
    "trandata": "<encrypted trandata>",
    "error": "",
    "errorText": ""
}]
```

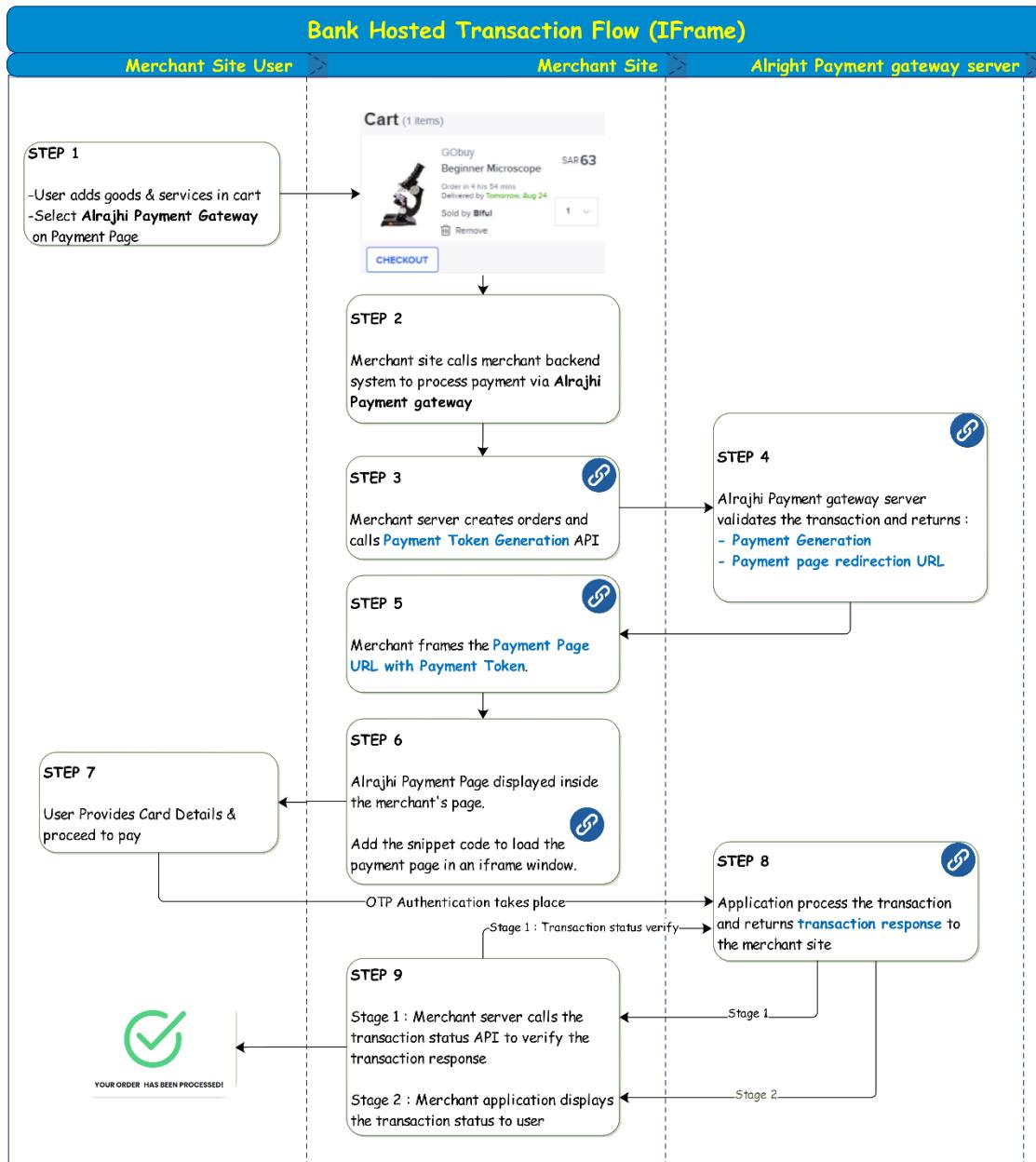
### Plain Trandata:

```
[ {
    "paymentId": "100201935166676976",
    "result": "CAPTURED",
```

```
"transId":"201935166561122",
"fcCustId":"201936122890007",
"ref":"935110000001",
"date":"1217",
"trackId":"1003383844",
"udf1":"",
"udf2":"",
"udf3":"8870091137",
"udf4":"FC",
"udf5":"Tidal5",
"amt":"70.0,
"authRespCode","00",
"authCode":"000000",
"actionCode":"1" ,
"card":"506968XXXXXX1063",
"expMonth":"06",
"expYear":"2024" //2-4 Digits
}]
```

## Bank Hosted Integration (Iframe)

Payment gateway shall support Iframe integration to enable merchants to accept online payments on their own checkout page without having to be a PCI compliant. Instead of being redirected to ARB Payment page, customers will remain on merchant website to make payments. However, at the back end, ARB PG will securely collect the payment information and get it authorized.



1. User visits the merchant application and creates order.
2. Merchant application backend server calls [Payment Token Generation API](#) to get the transaction token.
3. ARB Payment gateway internally validates the request.
  - In case of successful validation, ARB PG provides [Payment ID and Payment Page URL](#) in the response.
    - Merchant needs to [frame the payment page URL with Payment ID](#), Hence the ARB payment page is displayed.
    - Merchant needs to add the [code snippet](#) to load the payment page in an iframe window.
  - In case of failure, ARB PG provides **Error Code** and **Description**.

Note: If merchant notification is disabled, then ARB Payment gateway will provide the [final response in URL redirection](#).

4. Select the payment details already stored in the bank's database. (For faster checkout)  
Or  
User enters the payment details and authorizes the transaction on the ARB PG bank's page.
5. The ARB PG application process the transaction and returns the transaction response to the merchant site.
6. Merchant server calls the transaction status API to verify the transaction response.
7. Finally, the merchant application displays the transaction status to user.

## Request - Payment Token Generation API

### Attributes - Request from Merchant to ARB PG

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.
3	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
4	errorURL	M	Alphanum	Merchant error URL

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization : 4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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.

S. No	Fields	M/C/O	Field Type	Description
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	M	Alphanum	Merchant needs to send value 'iframe' in the UDF3 field.
10	udf4	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.
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	response URL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
13	errorURL	M	Alphanum	The merchant error URL where Payment Gateway send the response in case any error while Processing the transaction.
14	langid	O	Alphabetic	Language ID . Based on language ID arabic language will be displayed on payment page. Value should be 'ar' or 'AR' for arabic language .
15	custid	M	Numeric	Unique Customer ID generated on faster checkout registration.
16	cust_card HolderName	O	Alphabetic	Cardholder Name
17	cust_mobile_number:	O	Numeric	Customer Mobile Number

S. No	Fields	M/C/O	Field Type	Description
18	cust_emailId	O	Alphanum	Customer E-mail ID

### Sample JSON request - Request from Merchant to ARB PG

```
[ {
  //Mandatory Parameters
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata> ",
  "responseURL": "https://merchantpage/PaymentResult.jsp",
  "errorURL": "https://merchantpage/PaymentResult.jsp"
}]
```

### Plain Trandata:

Trandata will contain below parameters **encrypted** with AES algorithm with CBC Mode, PKCS5Padding with initialization vector value **PGKEYENCDECIVSPC** under Resource Key.

```
[ {
  //Mandatory Parameters
  "amt": "12.00",
  "action": "1",
  "password": "q@a680$27@JLkcK",
  "id": "IPAY1CR6qZF7q6w",
  "currencyCode": "682",
  "trackId": "12345656789",
  "udf3": "iframe",
  "responseURL": "https://merchantpage/PaymentResult.jsp",
}]
```

```

"errorURL": "https://merchantpage/PaymentResult.jsp",

//Optional Parameters

"udf1":"udf1text",

"udf2":"udf2text",

"udf4":"udf4text",

"udf5":"udf5text",

"langid":"ar",

}]

```

## Payout Future

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	accountDetails	C	JSON Array	Conditional if Merchant Opted for Payout future. Split Payment or Payout Details.
2	bankIdCode	C	Alphanum	Bank Identification Code Min - 8 Max -12
3	iBanNum	C	Alphanum	IBAN Number Min - 24 Max - 35
4	benificiaryNa me	C	Alphabe tic	benificiaryName (English Only) Max - 100
5	serviceAmoun t	C	Numeric	Service Amount
6	valueDate	C	Numeric	Value Date Format: YYYYMMDD

## Sample JSON request - Request from Merchant to ARB PG

```
//conditional if Merchant opted for Payout Future.

"accountDetails": [
    {
        "bankIdCode": "12345d6f",
        "beniciaryName": "AlRajhi Bank Services",
        "serviceAmount": "200.00",
        "valueDate": "20201231"
    },
    {
        "bankIdCode": "1234ret3",
        "beniciaryName": "DIGITAL CO",
        "serviceAmount": "300.00",
        "valueDate": "20201231"
    }
],
```

## SADAD

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	transactionType	C	Alphanum	Minimum length : 3 , Maximum length : 15 Transaction Type Allowed Values 'PAY' 'PAY_SAVE' 'ADVANCE' 'PARTIAL_PAYMENT' 'OVER_PAYMENT'
2	billerID	C	Alphanum	Minimum length : 1 , Maximum length : 3 Biller ID
3	billAmount	C	Numeric	billAmount
4	billType	C	Alphanum	Minimum length : 7 , Maximum length : 8 Bill Type. The allowed values are: - PREPAID : Paid in advance - POSTPAID : Paid at the end
5	billNumber	C	Alphanum	Minimum length : 1 , Maximum length : 30 Bill Number as identified by SADAD
6	IDType	C	Alphanum	Minimum length : 2 , Maximum length : 2 ID Type 01 National ID Card 02 Iqama 03 Passport
7	IDNumber	C	Alphanum	Minimum : 1 , Maximum : 20 ID Number

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional -for SADAD merchant

"billingDetails" :

{"IDType":"01","IDNumber":"1072587916","billNumber":"00100100018","billType":"POSTPAID","billerID":"169","billAmount":5,"transactionType":"ADVANCE"

}
```

## Airline

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	airline	C	JSON Object	Conditional - for Airline Merchant
1.1	bookingReference	C	Alphanum	The booking reference number
1.1.1	itinerary	C	JSON Object	Conditional - for Airline Merchant
1.1.1.1	leg	C	JSON Array	Conditional - for Airline Merchant
1.1.1.1.1	carrierCode	C	Alphanum	The carrier code for the leg
1.1.1.1.2	departureAirport	C	Alphanum	The departure airport for the passenger
1.1.1.1.3	departureDate	C	Alphanum	The departure date for the leg
1.1.1.1.4	departureTime	C	Alphanum	The departure airport for the passenger
1.1.1.1.5	destinationAirport	C	Alphanum	The destination airport for the leg
1.1.1.1.6	destinationArrivalDate	C	Alphanum	The arrival date for the leg
1.1.1.1.7	destinationArrivalTime	C	Alphanum	The arrival time for the leg
1.1.1.1.8	fareBasis	C	Alphanum	The fare basis for the leg
1.1.1.1.9	flightNumber	C	Alphanum	The flight number for the leg
1.1.1.1.10	travelClass	C	Alphanum	The class of service for the leg
1.1.1.2	numberInParty	C	Alphanum	
1.1.1.3	originCountry	C	Alphanum	The origin Country of the itinerary
1.1.2	passenger	C	JSON Array	Conditional - for airline merchant
1.1.2.1	firstName	C	Alphanum	The passenger first name

1.1.2.2	lastName	C	Alphanum	The passenger last name
1.1.3	ticket	C	JSON Object	Conditional - for airline merchant
1.1.3.1	issue	C	JSON Object	Conditional - for airline merchant
1.1.3.1.1	carrierCode	C	Alphanum	Code of the airline that issuing the ticket
1.1.3.1.2	carrierName	C	Alphanum	Name of the airline that is issuing the ticket.
1.1.3.1.3	travelAgentCode	C	Alphanum	Code of the Travel Agent that issuing the ticket
1.1.3.1.4	travelAgentName	C	Alphanum	Name of the Travel Agent that issuing the ticket
1.1.3.2	totalFare	C	Numeric	Ticket Total Fare
1.1.3.3	totalFees	C	Numeric	Total fee for the ticket.
1.1.3.4	totalTaxes	C	Numeric	Tax portion of the order amount.

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional - for airline merchant

{
  "airline": { "bookingReference": "5WPU68", "itinerary": { "leg": [ {
    "carrierCode": "MH", "departureAirport": "MNL", "departureDate": "2021-05-11",
    "departureTime": "06:50:00Z", "destinationAirport": "KUL",
    "destinationArrivalDate": "2021-05-11", "destinationArrivalTime": "10:35:00Z",
    "fareBasis": "BOWMPH6", "flightNumber": "0805", "travelClass": "B" }, {
      "carrierCode": "UL", "departureAirport": "KUL", "departureDate": "2021-05-11",
      "departureTime": "15:00:00Z", "destinationAirport": "CMB",
      "destinationArrivalDate": "2021-05-11", "destinationArrivalTime": "16:05:00Z",
      "fareBasis": "BOWMPH6", "flightNumber": "0315", "travelClass": "B" } ],
    "numberInParty": "1", "originCountry": "PHL" }, "passenger": [ { "firstName": "KAI MR", "lastName": "QIAN" } ],
    "ticket": { "issue": { "carrierCode": "UL", "carrierName": "SRILANKANAIRLINES",
      "travelAgentCode": "91401483", "travelAgentName": "MANUL08AE" },
      "totalFare": "54918.00", "totalFees": "59518.00", "totalTaxes": "4600.00" } } }
}
```

## Initial Response - Payment ID and Payment Page URL

### Attributes - Initial Response from ARB PG to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	status	M	Numeric	If the request validation success, then status will be '1'. If the validation failed, then status will be '2'
2	result	C	Alphanum	It contains payment ID and Payment URL if the validation success else this will be null
3	error	C	Alphanum	If validation failed, then Payment gateway will provide the respective error code
4	errorText	C	Alphanum	If validation failed, then Payment gateway will provide the respective error description

### Sample JSON Response - Initial Response from ARB PG to Merchant

ARB Payment gateway internally validates the request and gives payment ID and payment page URL in the response in case of successful validation, if failure then error code and description will be provided. The below response will be in plain format and there is no encryption for the below. Merchant can directly parse the response-based status and result fields as mentioned below.

#### Success:

```
[ {
  "status": "1",
  "result": "100201931620827468:https://securepayments.alrajhibank.com.sa/pg/paymentpage.htm", //Payment ID:Paymentpage URL
  "error": null,
  "errorText": null
}]
```

#### Failure:

```
[ {
  "status": "2",
}]
```

```
"error": "IPAY0100124",
"errorText": "Problem occurred while validating transaction data",
"result": null
}]
```

## Framing Payment URL

After Initial Response from ARB PG, merchant needs to frame the payment page URL like the below sample.

<https://securepayments.alrajhibank.com.sa/pg/paymentpage.htm?PaymentID=100201931620827468>

Merchant needs to add the following code snippet to load the payment page in an iframe window:

### Code Snippet

```

if("iframe".equals(pipe.getUdf3()))
{
  %>
<script>

  if(window.parent.document.getElementById("iframe")!=null)
  {

    var division=document.createElement("div");

    division.setAttribute("id", "payframe");

    division.setAttribute("style", "min-height: 100%; position: fixed; top: 0px; left: 0px; width: 100%; height: 100%; background: rgba(0, 0, 0, 0); padding-right: 0px; padding-left: 0px; padding-top: 0px;");

    division.innerHTML ='<div style="position: absolute; right: 0px; top: 0px; cursor: pointer; font-size: 24px; opacity: .6; width: 100%; text-align: center; line-height: 0px; z-index: 1;" class="close" id="F" onclick="javascript: window.parent.document.getElementById('iframe').parentNode.removeChild(window.parent.document.getElementById('iframe')); window.parent.document.getElementById('payframe').parentNode.removeChild(window.parent.document.getElementById('payframe'));">x</div><iframe id="iframe" style="opacity: 7; height: 100%; position: relative; background: none; display: block; border: 0px none transparent; margin-left: 0%; padding: 0px; z-index: 2; width: 100%; margin-top: 0%" allowtransparency="true" frameborder="0" allowpaymentrequest="true" src="<%=pipe.getWebAddress()%>"></iframe>';
  }
}

```

```

        document.body.appendChild(division);

    }

    else

    {

        var division=document.createElement("div");

        division.setAttribute("id", "payframe");

        division.setAttribute("style", "min-height: 100%; transition: all 0.3s ease-out 0s; position: fixed; top: 0px; left: 0px; width: 100%; height: 100%; background: rgba(0, 0, 0, 0.4); padding-right: 10px; padding-left: 250px; padding-top: 0px;");

        division.innerHTML ='<div style="position: absolute; right: 0px; top: 0px; cursor: pointer; font-size: 24px; opacity: .6; width: 24px; text-align: center; line-height: 0px; z-index: 1;" class="close" id="F" onclick="javascript: window.parent.document.getElementById('iframe').parentNode.removeChild(window.parent.document.getElementById('payframe').parentNode.removeChild(window.parent.document.getElementById('payframe'));">x</div><iframe id="iframe" style="opacity: 7; height: 100%; position: relative; background: none; display: block; border: 0px none transparent; margin-left: 7%; padding: 0px; z-index: 2; width: 65%; margin-top: 0%" allowtransparency="true" frameborder="0" allowpaymentrequest="true" src="<%=pipe.getWebAddress()%>"></iframe>';

        document.body.appendChild(division);

    }

</script>

}

else

{

    response.sendRedirect(pipe.getWebAddress());

}

```

## Final Response – Transaction Status

### Attribute - Final URL redirection response from ARB PG 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 encrypted and send the encrypted value in 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. Based on this payment Id merchant can match the final URL redirection response
2	result	M	Alphanum	Transaction status . Value will be 'CAPTURED' for purchase successful and 'APPROVED' for authorization successful.
3	ref	M	Numeric	Transaction reference number (RRN)
4	fcCustId	M	Numeric	Unique Customer ID generated on faster checkout registration.
5	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
6	date	M	Numeric	Transaction date and time
7	trackId	M	Numeric	Merchant unique reference no

S. No	Fields	M/C/O	Field Type	Description
8	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.
9	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.
10	udf3	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.
11	udf4	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	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.
13	amt	M	Numeric	Transaction amount
14	authRespCode	M	Numeric	Auth response code provided by PG
15	authCode	M	Numeric	6 digit authorization code received from switch
16	actionCode	M	Alphanumeric	Action code of transaction. Possible Values

S. No	Fields	M/C/O	Field Type	Description
				1-Purchase 2-Credit 3-Void Purchase 4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)
17	card	C	AlPhanumeric	Card Number used for Performing Transaction
18	expMonth	C	AlPhanumeric	Expiry Month of the Card
19	expYear	C	AlPhanumeric	Expiry Year of the Card

### Sample JSON Response - Final

If Merchant notification is disabled, then ARB Payment gateway will provide the final response in URL redirection. Below is the sample response from ARB PG to merchant

```
[ {
  //Redirection Parameters
  "paymentId": "100201935166676976",
  "trandata": "<encrypted trandata>",
  "error": "",
  "errorText": ""
}]
```

### Plain Trandata:

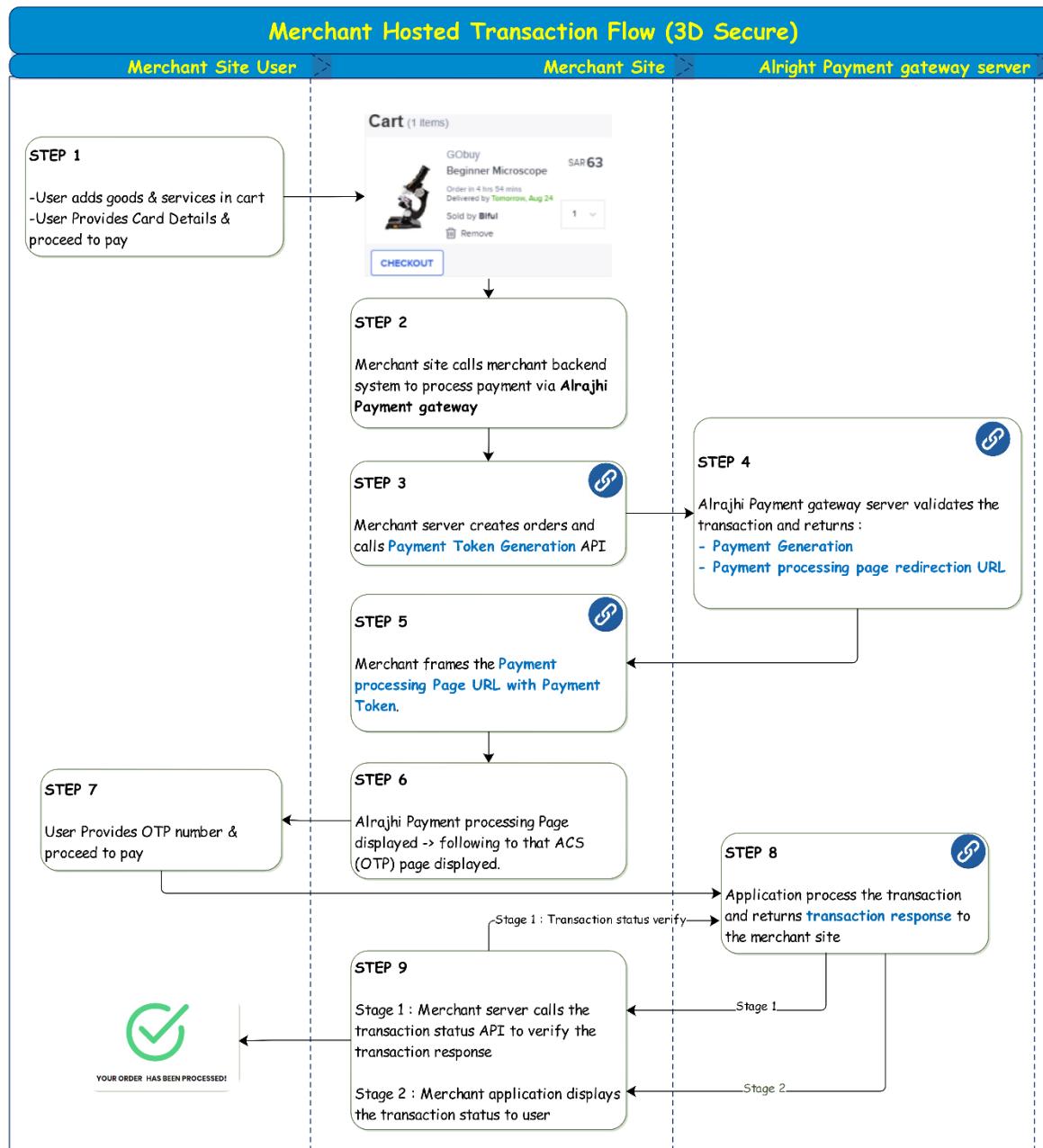
Trandata will contain below parameters encrypted.

```
[{
  "paymentId": "100201935166676976",
```

```
"result":"CAPTURED",
"transId":"201935166561122",
"fcCustId":"201936122890007",
"ref":"935110000001",
"date":"1217",
"trackId":"1003383844",
"udf1":"",
"udf2":"",
"udf3":"8870091137",
"udf4":"FC",
"udf5":"Tidal5",
"amt":"70.0,
"authRespCode","00",
"authCode":"000000",
"actionCode":"1",
"card":"506968XXXXXX1063",
"expMonth":"06", //1 - 2 Digits
"expYear":"2024" //2 - 4 Digits
}]
```

## Merchant Hosted Transaction (3D Secure)

The merchant will collect the customer's card details on their own website hence, the customer will not be redirected to the ARB payment gateway payment page, as the payment option and card details are already received by merchant. The card details are later posted to ARB payment gateway.



This section illustrates how you can integrate the merchant hosted flow on your website application.

1. User visits the merchant application and creates order.
2. User enters the payment details.
3. Merchant application backend server calls [\*\*Payment Token Generation API\*\*](#) to get the transaction token.
4. ARB Payment gateway internally validates the request.
  - In case of successful validation, ARB PG provides [\*\*Payment ID and Payment Processing Page URL\*\*](#) in the response.
    - Merchant needs to [frame the payment processing page URL with Payment ID](#), Hence the ARB payment processing page is displayed.
  - In case of failure, ARB PG provides **Error Code** and **Description**.
5. Upon authorization, the customer redirects to ARB Payment gateway.

The flow takes the user to the login ACS page of the bank, where the user needs to complete the transaction by using the OTP sent by the bank to the registered mobile number. PG then process for authorization with the respective schemes. Once payment response received from respective scheme, then ARB Payment gateway returns the response to merchant. This is URL redirection.

6. After authorization, the ARB PG application process the transaction and returns the transaction response to the merchant site. The ARB Payment gateway will provide the [final response in URL redirection](#).
7. Merchant server calls the transaction status API to verify the transaction response.
8. Finally, the merchant application displays the transaction status to user.

## Request - Payment Token Generation API

### Attributes - Request from Merchant to ARB PG

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.
3	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
4	errorURL	M	Alphanum	Merchant error URL

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization:4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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 passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.

S. No	Fields	M/C/O	Field Type	Description
8	udf2	O	Alphanum	The user (merchant) defines these fields. The field data passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.
9	udf4	O	Alphanum	The user (merchant) defines these fields. The field data passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.
10	udf3	O	Alphanum	The user (merchant) defines these fields. The field data passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.
11	udf5	O	Alphanum	The user (merchant) defines these fields. The field data 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	response URL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
13	errorURL	M	Alphanum	The merchant error URL where Payment Gateway send the response in case any error while Processing the transaction.
14	expYear	M	Numeric	Expiry year of card
15	expMonth	M	Numeric	Expiry month of card
16	member	M	Alphanum	Card holder name
17	cvv2	M	Numeric	CVV of the card
18	cardNo	M	Numeric	Cardholders card number
19	cardType	M	Alphanum	Card type Ex : Credit card – C, Debit Card – D

S. No	Fields	M/C/O	Field Type	Description
20	browserLanguage	M	Alphanum	Value representing the browser language Returned from "navigator.language" property. Length 1 to 8 characters.
21	browserColorDepth	M	Alphanum	<p>Value representing the bit depth of the colour palette for displaying images, in bits per pixel. Obtained from Cardholder browser using the "screen.colorDepth" property. Length 1 to 2 characters.</p> <p>Values Accepted :</p> <ul style="list-style-type: none"> <li>1 = 1 bit</li> <li>4 = 4 bits</li> <li>8 = 8 bits</li> <li>15 = 15 bits</li> <li>16 = 16 bits</li> <li>24 = 24 bits</li> <li>32 = 32 bits</li> <li>48 = 48 bits</li> </ul>
22	browserScreenHeight	M	Alphanum	Total height of the Cardholder's screen in pixels. Value is returned from the screen.height property. Length 1 to 6 characters.
23	browserScreenWidth	M	Alphanum	Total width of the cardholder's screen in pixels. Value is returned from the screen.width property. Length 1 to 6 characters.
24	browserJavaEnabled	M	Alphanum	Value is returned from the navigator.javaEnabled property. Boolean value.
25	browserTZ	M	Alphanum	Time difference between UTC time and the Cardholder browser local time, in minutes. Value is returned from the getTimezoneOffset() method. Length 1 to 5 characters.
26	jsEnabled	M	Alphanum	Value whether the java script is enabled in browser or not.

### Sample JSON request - Request from Merchant to ARB PG

```
[ {
```

```
//Mandatory Parameters

"id":"IPAY1CR6qZF7q6w",

"trandata":"<encrypted trandata>",

"responseURL":"https://merchantpage/PaymentResult.jsp",

"errorURL":"https://merchantpage/PaymentResult.jsp"

}]
```

### Plain Trandata:

Trandata will contain below parameters **encrypted** with AES algorithm with CBC Mode, PKCS5Padding with initialization vector value **PGKEYENCDECIVSPC** under Resource key.

```
[ {

//Mandatory Parameters

"amt":"12.00",

"action":"1",      // 1 - Purchase , 4 - Authorization

"password":"q@a680$27@JLkcK",

"id":"IPAY1CR6qZF7q6w",

"currencyCode":"682",

"trackId":"123456",

"expYear":"2022",

"expMonth":"12",

"member":"cardholdername",

"cvv2":"212",

"cardNo","5453*****5539",

"cardType":"C",

"responseURL":"https://merchantpage/PaymentResult.jsp",
```

```

"errorURL":"https://merchantpage/PaymentResult.jsp",
"browserJavaEnabled":"true",
"browserLanguage":"en",
"browserColorDepth":"48",
"browserScreenHeight":"400",
"browserScreenWidth":"600",
"browserTZ":"0",
"jsEnabled":"true",
//Optional Parameters
"udf1":"udf1text",
"udf2":"udf2text",
"udf3":"udf3text",
"udf4":"udf4text",
"udf5":"udf5text",
}
  
```

## Payout Future

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	accountDetails	C	JSON Array	Conditional if Merchant Opted for Payout future. Split Payment or Payout Details.
2	bankIdCode	C	Alphanum	Bank Identification Code Min - 8 Max -12

3	iBanNum	C	Alphanum	IBAN Number Min - 24 Max - 35
4	beniciaryName	C	Alphabetic	beniciaryName (English Only) Max - 100
5	serviceAmount	C	Numeric	Service Amount
6	valueDate	C	Numeric	Value Date Format: YYYYMMDD

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional if Merchant opted for Payout Future.

"accountDetails": [
    {
        "bankIdCode": "12345d6f",
        "beniciaryName": "AlRajhi Bank Services",
        "iBanNum": "567896743281926354276254",
        "serviceAmount": "200.00",
        "valueDate": "20201231"
    },
    {
        "bankIdCode": "1234ret3",
        "beniciaryName": "DIGITAL CO",
        "iBanNum": "987656743281926354276254",
        "serviceAmount": "300.00",
        "valueDate": "20201231"
    }
],
```

## SADAD

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	transactionType	C	Alphanum	Minimum length : 3 , Maximum length : 15 Transaction Type Allowed Values 'PAY' 'PAY_SAVE' 'ADVANCE' 'PARTIAL_PAYMENT' 'OVER_PAYMENT'
2	billerID	C	Alphanum	Minimum length : 1 , Maximum length : 3 Biller ID
3	billAmount	C	Numeric	billAmount

4	billType	C	Alphanum	Minimum length : 7 , Maximum length : 8 Bill Type. The allowed values are: - PREPAID : Paid in advance - POSTPAID : Paid at the end
5	billNumber	C	Alphanum	Minimum length : 1 , Maximum length : 30 Bill Number as identified by SADAD
6	IDType	C	Alphanum	Minimum length : 2 , Maximum length : 2 ID Type 01 National ID Card 02 Iqama 03 Passport
7	IDNumber	C	Alphanum	Minimum : 1 , Maximum : 20 ID Number

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional -for SADAD merchant
"billingDetails" :
{
  "IDType": "01", "IDNumber": "1072587916", "billNumber": "00100100018", "billType": "POSTPAID", "billerID": "169", "billAmount": 5, "transactionType": "ADVANCE"
}
```

## Airline

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	airline	C	JSON Object	Conditional - for Airline Merchant
1.1	bookingReference	C	Alphanum	The booking reference number
1.1.1	itinerary	C	JSON Object	Conditional - for Airline Merchant
1.1.1.1	leg	C	JSON Array	Conditional - for Airline Merchant
1.1.1.1.1	carrierCode	C	Alphanum	The carrier code for the leg
1.1.1.1.2	departureAirport	C	Alphanum	The departure airport for the passenger

1.1.1.1.3	departureDate	C	Alphanum	The departure date for the leg
1.1.1.1.4	departureTime	C	Alphanum	The departure airport for the passenger
1.1.1.1.5	destinationAirport	C	Alphanum	The destination airport for the leg
1.1.1.1.6	destinationArrivalDate	C	Alphanum	The arrival date for the leg
1.1.1.1.7	destinationArrivalTime	C	Alphanum	The arrival time for the leg
1.1.1.1.8	fareBasis	C	Alphanum	The fare basis for the leg
1.1.1.1.9	flightNumber	C	Alphanum	The flight number for the leg
1.1.1.1.10	travelClass	C	Alphanum	The class of service for the leg
1.1.1.2	numberInParty	C	Alphanum	
1.1.1.3	originCountry	C	Alphanum	The origin Country of the itinerary
1.1.2	passenger	C	JSON Array	Conditional - for airline merchant
1.1.2.1	firstName	C	Alphanum	The passenger first name
1.1.2.2	lastName	C	Alphanum	The passenger last name
1.1.3	ticket	C	JSON Object	Conditional - for airline merchant
1.1.3.1	issue	C	JSON Object	Conditional - for airline merchant
1.1.3.1.1	carrierCode	C	Alphanum	Code of the airline that issuing the ticket
1.1.3.1.2	carrierName	C	Alphanum	Name of the airline that is issuing the ticket.
1.1.3.1.3	travelAgentCode	C	Alphanum	Code of the Travel Agent that issuing the ticket
1.1.3.1.4	travelAgentName	C	Alphanum	Name of the Travel Agent that issuing the ticket
1.1.3.2	totalFare	C	Numeric	Ticket Total Fare
1.1.3.3	totalFees	C	Numeric	Total fee for the ticket.
1.1.3.4	totalTaxes	C	Numeric	Tax portion of the order amount.

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional - for airline merchant

{
  "airline": {
    "bookingReference": "5WPU68",
    "itinerary": [
      {
        "leg": [
          {
            "carrierCode": "MH",
            "departureAirport": "MNL",
            "departureDate": "2021-05-11",
            "departureTime": "06:50:00Z",
            "destinationAirport": "KUL",
            "destinationArrivalDate": "2021-05-11",
            "destinationArrivalTime": "10:35:00Z",
            "fareBasis": "BOWMPH6",
            "flightNumber": "0805",
            "travelClass": "B"
          },
          {
            "carrierCode": "UL",
            "departureAirport": "KUL",
            "departureDate": "2021-05-11",
            "departureTime": "15:00:00Z",
            "destinationAirport": "CMB",
            "destinationArrivalDate": "2021-05-11",
            "destinationArrivalTime": "16:05:00Z",
            "fareBasis": "BOWMPH6",
            "flightNumber": "0315",
            "travelClass": "B"
          }
        ],
        "numberInParty": 1,
        "originCountry": "PHL"
      },
      "passenger": [
        {
          "firstName": "KAI MR",
          "lastName": "QIAN"
        }
      ],
      "ticket": {
        "issue": {
          "carrierCode": "UL",
          "carrierName": "Cebu Pacific Air"
        }
      }
    ]
  }
}
```

```
"carrierName": "SRILANKANAIRLINES", "travelAgentCode": "91401483",
"travelAgentName": "MANUL08AE" }, "totalFare": "54918.00", "totalFees":
"59518.00", "totalTaxes": "4600.00" } } }

} ]
```

## Initial Response - Payment ID and Payment Processing Page URL

### Attributes - Initial Response from ARB PG to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	status	M	Numeric	If the request validation success, then status will be '1'. If the validation failed, then status will be '2'
2	result	C	Alphanum	It contains payment ID and Payment URL if the validation success else this will be null
3	error	C	Alphanum	If validation failed, then Payment gateway will provide the respective error code
4	errorText	C	Alphanum	If validation failed, then Payment gateway will provide the respective error description

### Sample JSON Response - Initial Response from ARB PG to Merchant

ARB Payment gateway internally validates the request and gives payment ID and payment page URL in the response in case of successful validation, if failure then error code and description will be provided.

#### Success:

```
[ {
  "status": "1",
  "result": "700212030953264091:https://securepayments.alrajhibank.com.sa/pg/TranportalVbv.htm?paymentId=700212030953264091&id=r9Ht8R4U6g9dYtY",
  //Payment ID:Payment URL
  "error": null,
  "errorText": null
}]
```

**Failure:**

```
[ {  
  
    "status": "2",  
  
    "error": "IPAY0100124",  
  
    "errorText": "Problem occurred while validating transaction data",  
  
    "result": null  
  
} ]
```

## Framing Payment URL

After Initial Response from ARB PG, merchant needs to frame the payment page URL like the below sample.

<https://securepayments.alrajhibank.com.sa/pg/TranportalVbv.htm?paymentId=700112030953264091&id=r9Ht8R4U6g9dYtYg>

## Final Response – Transaction Status

Merchant needs to redirect the customer to ARB Payment gateway.

The flow takes the user to the login ACS page of the bank, where the user needs to complete the transaction by using the OTP sent by the bank to the registered mobile number. PG then process for authorization with the respective schemes. Once payment response received from respective scheme, then ARB Payment gateway returns the response to merchant. This is URL redirection.

### Attribute - Final URL redirection response from ARB PG to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	paymentId	M	Numeric	Unique ID generated by Payment gateway. Merchant can store the payment ID to match the final URL redirection response
2	trandata	C	Alphanum	All the below response parameters encrypted and send the encrypted value in trandata  Ex: <pre>[{"paymentId":100201935166676976,"result":"CAPTURED","ref":"935110000001","transId":201935166561122,"date":1217,"trackId":1003383844,"udf1":"","udf2":(),"udf3":8870091137,"udf4":,"FC","udf5":Tidal5,"amt":70.0,"authRespCode","00"}]</pre>
3	Error	C	Numeric	If any error, PG will provide the error code
4	ErrorText	C	Alphanum	PG will provide the error description if any transaction declined.

## 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. Based on this payment Id merchant can match the final URL redirection response
2	result	M	Alphanum	Transaction status . Value will be 'CAPTURED' for purchase successful and 'APPROVED' for authorization successful.
3	ref	M	Numeric	Transaction reference number (RRN)
4	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
5	date	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	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.

S. No	Fields	M/C/O	Field Type	Description
10	udf4	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.
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	amt	M	Numeric	Transaction amount
13	authRespCode	M	Numeric	Auth response code provided by PG
14	authCode	M	Numeric	6 digit authorization code received from switch
15	cardType	M	Alphabetic	Card Brand name . Value will be "Visa" or "MasterCard" or "Mada".
16	actionCode	M	Alphanumeric	Action code of transaction. Possible Values 1-Purchase 2-Credit 3-Void Purchase 4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)
17	card	C	Alphanumeric	Card Number used for Performing Transaction
18	expMonth	C	Alphanumeric	Expiry Month of the Card
19	expYear	C	Alphanumeric	Expiry Year of the Card

## Sample JSON Response - Final

If Merchant notification is disabled, then ARB Payment gateway will provide the final response in URL redirection. Below is the sample response from ARB PG to merchant

```
[ {
  "paymentId": "100201935044735860",
  "trandata": "<encrypted trandata>",
  "Error": "",
  "ErrorText": ""
}]
```

## Plain Trandata:

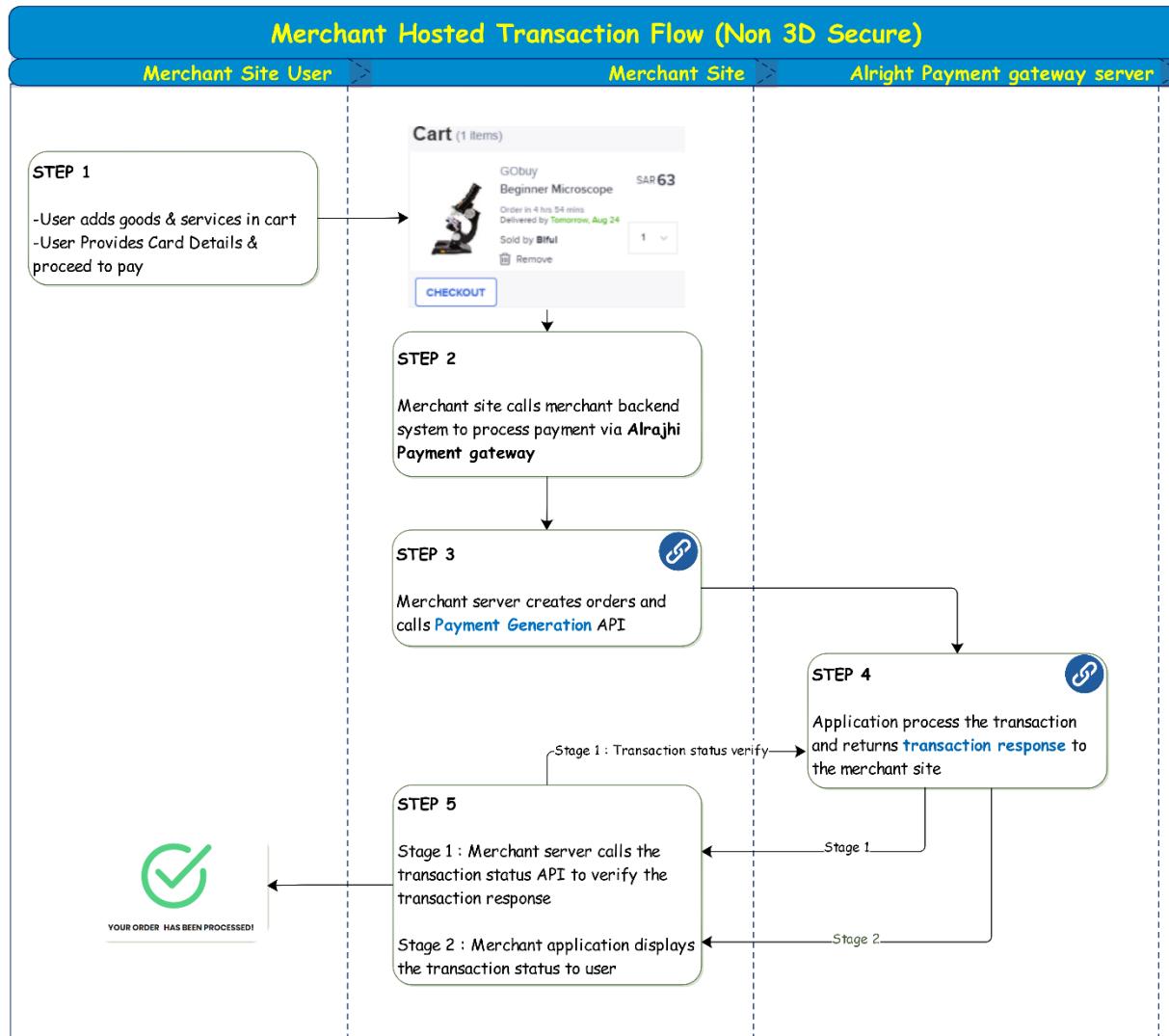
Trandata will contain below parameters encrypted.

```
[ {
  "paymentId": "100201935166676976",
  "result": "CAPTURED",
  "transId": 201935166561122,
  "ref": "935110000001",
  "date": "1217",
  "trackId": "1003383844",
  "udf1": "",
  "udf2": "",
  "udf3": "8870091137",
  "udf4": "FC",
  "udf5": "Tidal5",
}]
```

```
"amt":"70.0",
"authRespCode","00",
"authCode":"000000",
"cardType":"Visa",
"actionCode":"1",
"card":"506968XXXXXX1063",
"expMonth":"06", //1 - 2 Digits
"expYear":"2024" //2 - 4 Digits
}]
```

# Merchant Hosted Transaction (Non 3D Secure)

This section illustrates how you can integrate the merchant hosted flow (Non 3D Secure) on your website application.



1. User visits the merchant application and creates order.
2. User enters the payment details.
3. Merchant application backend server calls [\*\*Payment Token Generation API\*\*](#) to get the transaction token and to process payment via Alrajhi Payment gateway
4. After authorization, the ARB PG application process the transaction and returns the transaction response to the merchant site. The ARB Payment gateway will provide the [final response in URL redirection](#).
5. Merchant server calls the transaction status API to verify the transaction response.
6. Finally, the merchant application displays the transaction status to user.

## Request - Payment Token Generation API

### Attributes - Request from Merchant to ARB PG

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization:4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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	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.
10	udf4	O	Alphanum	The user (merchant) defines these fields. The field data passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.
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	expYear	M	Numeric	Expiry year of card
13	expMonth	M	Numeric	Expiry month of card
14	member	M	Alphanum	Card holder name
15	cvv2	M	Numeric	CVV of the card
16	cardNo	M	Numeric	Cardholders card number
17	cardType	M	Alphanum	Card type Ex : Credit card - C, Debit Card - D

### Sample JSON request - Request from Merchant to ARB PG

```
[ {
  //Mandatory Parameters
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata>"
}]
```

#### Plain Trandata:

```
[ {
```

```
//Mandatory Parameters

"amt":"12.00",
"action":"1",      // 1 - Purchase , 4 - Authorization
"password":"q@a680$27@JLkcK",
"id":"IPAY1CR6qZF7q6w",
"currencyCode":"682",
"trackId":"123456",
"expYear":"2022",
"expMonth":"12",
"member":"cardholdername",
"cvv2":"212",
"cardNo","5453*****5539",
"cardType":"C",
//Optional Parameters

"udf1":"udf1text",
"udf2":"udf2text",
"udf3":"udf3text",
"udf4":"udf4text",
"udf5":"udf5text",
}]
```

## Payout Future

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	accountDetails	C	JSON Array	Conditional if Merchant Opted for Payout future. Split Payment or Payout Details.
2	bankIdCode	C	Alphanum	Bank Identification Code Min - 8 Max -12
3	iBanNum	C	Alphanu m	IBAN Number Min - 24 Max - 35
4	beniciaryNa me	C	Alphabe tic	beniciaryName (English Only) Max - 100
5	serviceAmoun t	C	Numeric	Service Amount
6	valueDate	C	Numeric	Value Date Format: YYYYMMDD

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional if Merchant opted for Payout Future.

"accountDetails": [
    {
        "bankIdCode": "12345d6f",
        "iBanNum": "567896743281926354276254",
        "beniciaryName": "AlRajhi Bank Services",
        "serviceAmount": "200.00",
        "valueDate": "20201231"
    },
    {
        "bankIdCode": "1234ret3",
        "iBanNum": "987656743281926354276254",
        "beniciaryName": "DIGITAL CO",
        "serviceAmount": "300.00",
        "valueDate": "20201231"
    }
]
```

## SADAD

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	transactionType	C	Alphanum	Minimum length : 3 , Maximum length : 15 Transaction Type Allowed Values 'PAY' 'PAY_SAVE' 'ADVANCE' 'PARTIAL_PAYMENT' 'OVER_PAYMENT'
2	billerID	C	Alphanum	Minimum length : 1 , Maximum length : 3 Biller ID
3	billAmount	C	Numeric	billAmount
4	billType	C	Alphanum	Minimum length : 7 , Maximum length : 8 Bill Type. The allowed values are: - PREPAID : Paid in advance - POSTPAID : Paid at the end
5	billNumber	C	Alphanum	Minimum length : 1 , Maximum length : 30 Bill Number as identified by SADAD
6	IDType	C	Alphanum	Minimum length : 2 , Maximum length : 2 ID Type 01 National ID Card 02 Iqama 03 Passport
7	IDNumber	C	Alphanum	Minimum : 1 , Maximum : 20 ID Number

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional -for SADAD merchant

"billingDetails" :

{"IDType":"01","IDNumber":"1072587916","billNumber":"00100100018","billType":"POSTPAID","billerID":"169","billAmount":5,"transactionType":"ADVANCE"}}
```

## Airline

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	airline	C	JSON Object	Conditional - for Airline Merchant
1.1	bookingReference	C	Alphanum	The booking reference number
1.1.1	itinerary	C	JSON Object	Conditional - for Airline Merchant
1.1.1.1	leg	C	JSON Array	Conditional - for Airline Merchant
1.1.1.1.1	carrierCode	C	Alphanum	The carrier code for the leg
1.1.1.1.2	departureAirport	C	Alphanum	The departure airport for the passenger
1.1.1.1.3	departureDate	C	Alphanum	The departure date for the leg
1.1.1.1.4	departureTime	C	Alphanum	The departure airport for the passenger
1.1.1.1.5	destinationAirport	C	Alphanum	The destination airport for the leg
1.1.1.1.6	destinationArrivalDate	C	Alphanum	The arrival date for the leg
1.1.1.1.7	destinationArrivalTime	C	Alphanum	The arrival time for the leg
1.1.1.1.8	fareBasis	C	Alphanum	The fare basis for the leg
1.1.1.1.9	flightNumber	C	Alphanum	The flight number for the leg
1.1.1.1.10	travelClass	C	Alphanum	The class of service for the leg
1.1.1.2	numberInParty	C	Alphanum	
1.1.1.3	originCountry	C	Alphanum	The origin Country of the itinerary
1.1.2	passenger	C	JSON Array	Conditional - for airline merchant
1.1.2.1	firstName	C	Alphanum	The passenger first name
1.1.2.2	lastName	C	Alphanum	The passenger last name
1.1.3	ticket	C	JSON Object	Conditional - for airline merchant
1.1.3.1	issue	C	JSON Object	Conditional - for airline merchant
1.1.3.1.1	carrierCode	C	Alphanum	Code of the airline that issuing the ticket
1.1.3.1.2	carrierName	C	Alphanum	Name of the airline that is issuing the ticket.
1.1.3.1.3	travelAgentCode	C	Alphanum	Code of the Travel Agent that issuing the ticket
1.1.3.1.4	travelAgentName	C	Alphanum	Name of the Travel Agent that issuing the ticket
1.1.3.2	totalFare	C	Numeric	Ticket Total Fare

1.1.3.3	totalFees	C	Numeric	Total fee for the ticket.
1.1.3.4	totalTaxes	C	Numeric	Tax portion of the order amount.

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional - for airline merchant

{
  "airline": { "bookingReference": "5WPU68", "itinerary": { "leg": [ {
    "carrierCode": "MH", "departureAirport": "MNL", "departureDate": "2021-05-11",
    "departureTime": "06:50:00Z", "destinationAirport": "KUL",
    "destinationArrivalDate": "2021-05-11", "destinationArrivalTime": "10:35:00Z",
    "fareBasis": "BOWMPH6", "flightNumber": "0805", "travelClass": "B" }, {
      "carrierCode": "UL", "departureAirport": "KUL", "departureDate": "2021-05-11",
      "departureTime": "15:00:00Z", "destinationAirport": "CMB",
      "destinationArrivalDate": "2021-05-11", "destinationArrivalTime": "16:05:00Z",
      "fareBasis": "BOWMPH6", "flightNumber": "0315", "travelClass": "B" } ],
    "numberInParty": "1", "originCountry": "PHL" }, "passenger": [ { "firstName": "KAI MR", "lastName": "QIAN" } ], "ticket": { "issue": { "carrierCode": "UL",
      "carrierName": "SRILANKANAIRLINES", "travelAgentCode": "91401483",
      "travelAgentName": "MANUL08AE" }, "totalFare": "54918.00", "totalFees": "59518.00",
      "totalTaxes": "4600.00" } } }
}
```

## Final Response – Transaction Status

The ARB payment gateway verifies the transaction and returns the response to the same request.

### Attribute - Final response from ARB PG to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	trandata	M	AlphaNum	All the below response parameters will be provided in trandata field
2	error	C	Alphanum	If any error during processing, PG will provide the error code
3	errorText	C	Alphanum	If any error during processing, PG will provide the error description
4	status	M	Alphanum	If transaction success 1. If transaction failure 2.

### 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. Based on this payment Id merchant can match the final URL redirection response
2	result	M	Alphanum	Transaction status . Value will be 'CAPTURED' for purchase successful and 'APPROVED' for authorization successful.
3	ref	M	Numeric	Transaction reference number (RRN)
4	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
5	date	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.

S. No	Fields	M/C/O	Field Type	Description
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	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.
10	udf4	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.
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	amt	M	Numeric	Transaction amount
13	authRespCode	M	Numeric	Auth response code provided by PG
14	authCode	M	Numeric	6 digit authorization code received from switch
15	cardType	M	Alphabetic	Card Brand name . Value will be "Visa" or "MasterCard" or "Mada".
16	actionCode	M	Alphanumeric	Action code of transaction. Possible Values 1-Purchase 2-Credit 3-Void Purchase 4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)

S. No	Fields	M/C/O	Field Type	Description
17	card	C	AlPhanumeric	Card Number used for Performing Transaction
18	expMonth	C	AlPhanumeric	Expiry Month of the Card
19	expYear	C	AlPhanumeric	Expiry Year of the Card

### Sample JSON Response - Final

The ARB payment gateway verifies the transaction and returns the response to the same request.

```
[ {
  "tranid": "201931951332346",
  "trandata": "<encrypted trandata>",
  "status": "1", //1 for success transaction, 2 for failure transaction
  "error": null,
  "errorText": null
}]
```

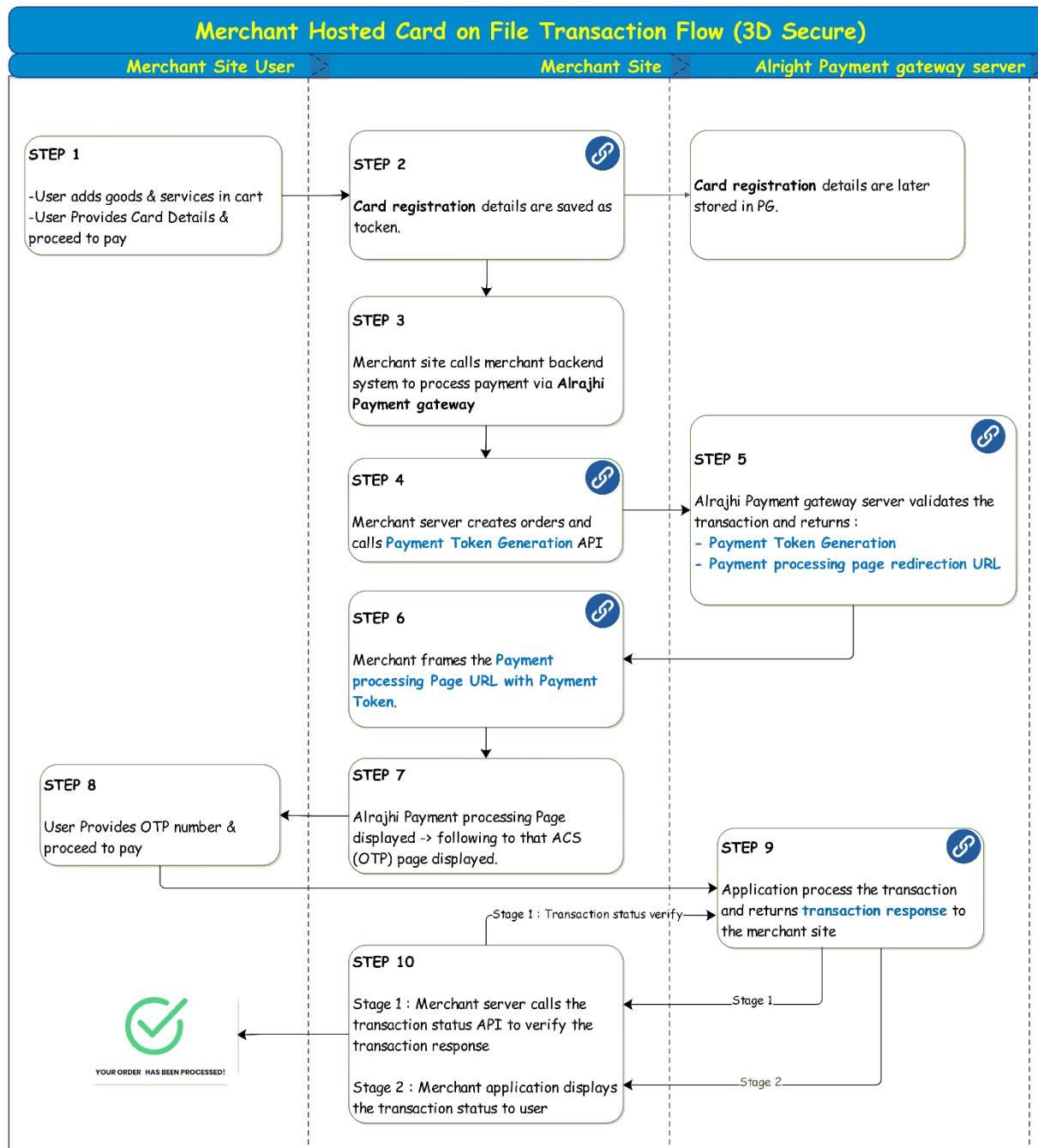
### Plain Trandata:

Trandata will contain below parameters encrypted.

```
[ {
  "paymentId": -1,
  "result": "CAPTURED",
  "amt": "10.55",
  "date": "1221",
  "ref": "935110000001",
  "udf1": "udf1text",
```

```
"udf2":"udf2text",
"udf3":"udf3text",
"udf4":"udf4text",
"udf5":"udf5text",
"trackId","3423423",
"transId":"1242345345234",
"authRespCode":"00",
"authCode":"000000",
"cardType":"Visa",
"actionCode":"1"
}]
```

# Merchant Hosted Card on File Transactions (3D secure)



1. User visits the merchant application and creates order.
2. User enters the payment card details.
3. The card details are saved as token with the merchant as well the [card registration](#) information is later posted to PG.
4. The Merchant application backend server calls [Payment Token Generation API](#) to get the transaction token.
5. ARB Payment gateway internally validates the request.
  - In case of successful validation, ARB PG provides [Payment ID and Payment Processing Page URL](#) in the response.
    - Merchant needs to [frame the payment processing page URL with Payment ID](#), Hence the ARB payment processing page is displayed.
  - In case of failure, ARB PG provides **Error Code** and **Description**.
6. Upon authorization, the customer redirects to ARB Payment gateway.

The flow takes the user to the login ACS page of the bank, where the user needs to complete the transaction by using the OTP sent by the bank to the registered mobile number. PG then process for authorization with the respective schemes. Once payment response received from respective scheme, then ARB Payment gateway returns the response to merchant. This is URL redirection.

7. After authorization, the ARB PG application process the transaction and returns the transaction response to the merchant site. The ARB Payment gateway will provide the [final response in URL redirection](#).
8. Merchant server calls the transaction status API to verify the transaction response.
9. Finally, the merchant application displays the transaction status to user.

## Saving Cards During Transaction (Card Registration)

When the merchant hosted transaction is in progress, the sensitive card information entered by the customer is saved as token in the PCI compliant merchant's database as well the information is later posted to PG. The next time the customer makes any transactions, the customer can pay directly by entering the CVV of the card and OTP received.

### Request from Merchant to ARB payment gateway

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.
3	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
4	errorURL	M	Alphanum	Merchant error URL

### Detailed description of Plain trandata request parameters

S.No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization:4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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 passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.
8	udf2	O	Alphanum	The user (merchant) defines these fields. The field data passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.

S.No	Fields	M/C/O	Field Type	Description
9	udf3	O	Alphanum	The user (merchant) defines these fields. The field data passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.
10	udf5	O	Alphanum	The user (merchant) defines these fields. The field data 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.
11	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
12	errorURL	M	Alphanum	The merchant error URL where Payment Gateway send the response in case any error while Processing the transaction.
13	expYear	M	Numeric	Expiry year of card
14	expMonth	M	Numeric	Expiry month of card
15	member	M	Alphanum	Card holder name
16	cvv2	M	Numeric	CVV of the card
17	cardNo	M	Numeric	Cardholders card number
18	cardType	M	Alphanum	Card type Ex : Credit card – C, Debit Card – D
19	cardOnFileAction	M	Alphanum	Card on File action .Mandatory field for Card On File. Value should be "transaction" for Card On File transactions.
20	cardOnFileToken	C	Numeric	Card on File Token . Unique token ID (customer ID) generated by PG per customer when customer saves the first card . Merchant needs to send this field only for saving subsequent cards for the customer and for transaction using saved cards.
21	browserLanguage	M	Alphanum	Value representing the browser language Returned from "navigator.language" property. Length 1 to 8 characters.
22	browserColorDepth	M	Alphanum	Value representing the bit depth of the colour palette for displaying images, in bits per pixel. Obtained from Cardholder browser using the "screen.colorDepth" property. Length 1 to 2 characters.  Values Accepted :

S.No	Fields	M/C/O	Field Type	Description
				1 = 1 bit 4 = 4 bits 8 = 8 bits 15 = 15 bits 16 = 16 bits 24 = 24 bits 32 = 32 bits 48 = 48 bits
23	browserScreenHeight	M	Alphanumeric	Total height of the Cardholder's screen in pixels. Value is returned from the screen.height property. Length 1 to 6 characters.
24	browserScreenWidth	M	Alphanumeric	Total width of the cardholder's screen in pixels. Value is returned from the screen.width property. Length 1 to 6 characters.
25	browserJavaEnabled	M	Alphanumeric	Value is returned from the navigator.javaEnabled property. Boolean value.
26	browserTZ	M	Alphanumeric	Time difference between UTC time and the Cardholder browser local time, in minutes. Value is returned from the getTimezoneOffset() method. Length 1 to 5 characters.
27	jsEnabled	M	Alphanumeric	Value whether the java script is enabled in browser or not.

### Request from Merchant to ARB Payment gateway:

```
[ {
  //Mandatory Parameters
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata>",
  "responseURL": "https://merchantpage/PaymentResult.jsp",
  "errorURL": "https://merchantpage/PaymentResult.jsp"
}]
```

### Plain Trandata

Trandata will contain below parameters encrypted with AES algorithm with CBC Mode, PKCS5Padding with initialization vector value **PGKEYENCDECIVSPC** under Resource key.

```
[ {
  //Mandatory Parameters
  "amt": "12.00",
  "action": "1", // 1 - Purchase , 4 - Authorization
  "password": "q@a680$27@JLkcK",
  "id": "IPAY1CR6qZF7q6w",
  "currencyCode": "682",
  "trackId": "123456",
  "expYear": "2022",
  "expMonth": "12",
  "member": "cardholdername",
  "cvv2": "212",
  "cardNo": "5453*****5539",
  "cardType": "C",
  "responseURL": "https://merchantpage/PaymentResult.jsp",
  "errorURL": "https://merchantpage/PaymentResult.jsp",
  "cardOnFileAction": "transaction",
  "browserJavaEnabled": "true",
  "browserLanguage": "en",
  "browserColorDepth": "48",
  "browserScreenHeight": "400",
  "browserScreenWidth": "600",
  "browserTZ": "0",
}
```

```
"jsEnabled": "true",  
  
    //Conditional - To be excluded when a customer saves first card. Required  
    //for saving subsequent cards for a customer.  
  
    "cardOnFileToken": "201936122890007",  
  
    //Optional Parameters  
  
    "udf1": "udf1text",  
  
    "udf2": "udf2text",  
  
    "udf3": "udf3text",  
  
    "udf4": "udf4text",  
  
    "udf5": "udf5text"  
}  
]
```

## Request - Payment Token Generation API

### Request from Merchant to ARB payment gateway

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.
3	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
4	errorURL	M	Alphanum	Merchant error URL

### Detailed description of Plain trandata request parameters

S.No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization:4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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 passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.
8	udf2	O	Alphanum	The user (merchant) defines these fields. The field data passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.
9	udf3	O	Alphanum	The user (merchant) defines these fields. The field data passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.

S.No	Fields	M/C/O	Field Type	Description
10	udf5	O	Alphanum	The user (merchant) defines these fields. The field data 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.
11	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
12	errorURL	M	Alphanum	The merchant error URL where Payment Gateway send the response in case any error while Processing the transaction.
13	member	M	Alphanum	Card holder name
14	cvv2	M	Numeric	CVV of the card
15	cardType	M	Alphanum	Card type Ex : Credit card – C, Debit Card – D
16	cardOnFileAction	M	Alphanum	Card on File action .Mandatory field for Card On File. Value should be "transaction" for Card On File transactions
17	cardOnFileToken	M	Numeric	Card on File Token . Unique token ID (customer ID) generated by PG per customer when customer saves the first card .
18	maskedCardNo	M	Alphanum	Masked card number for card on file . First 6 and last 4 digits visible.
19	browserLanguage	M	Alphanum	Value representing the browser language Returned from "navigator.language" property. Length 1 to 8 characters.
20	browserColorDepth	M	Alphanum	<p>Value representing the bit depth of the colour palette for displaying images, in bits per pixel. Obtained from Cardholder browser using the "screen.colorDepth" property. Length 1 to 2 characters.</p> <p>Values Accepted :</p> <ul style="list-style-type: none"> <li>1 = 1 bit</li> <li>4 = 4 bits</li> <li>8 = 8 bits</li> <li>15 = 15 bits</li> <li>16 = 16 bits</li> <li>24 = 24 bits</li> <li>32 = 32 bits</li> <li>48 = 48 bits</li> </ul>

S.No	Fields	M/C/O	Field Type	Description
21	browserScreenHeight	M	Alphanumeric	Total height of the Cardholder's screen in pixels. Value is returned from the screen.height property. Length 1 to 6 characters.
22	browserScreenWidth	M	Alphanumeric	Total width of the cardholder's screen in pixels. Value is returned from the screen.width property. Length 1 to 6 characters.
23	browserJavaEnabled	M	Alphanumeric	Value is returned from the navigator.javaEnabled property. Boolean value.
24	browserTZ	M	Alphanumeric	Time difference between UTC time and the Cardholder browser local time, in minutes. Value is returned from the getTimezoneOffset() method. Length 1 to 5 characters.
25	jsEnabled	M	Alphanumeric	Value whether the java script is enabled in browser or not.

### Request from Merchant to ARB Payment gateway:

```
[ {
  //Mandatory Parameters
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata>",
  "responseURL": "https://merchantpage/PaymentResult.jsp",
  "errorURL": "https://merchantpage/PaymentResult.jsp"
}]
```

### Plain Trandata

Trandata will contain below parameters encrypted with AES algorithm with CBC Mode, PKCS5Padding with initialization vector value **PGKEYENCDECIVSPC** under Resource key.

```
[ { //Mandatory Parameters
  "amt": "12.00",
```

```

"action":"1",      // 1 - Purchase , 4 - Authorization

"password":"q@a680$27@JLkcK",

"id":"IPAYlCR6qZF7q6w",

"currencyCode":"682",

"trackId":"123456",

"member":"cardholdername",

"cvv2":"212",

"cardType":"C",

"responseURL":"https://merchantpage/PaymentResult.jsp",

"errorURL":"https://merchantpage/PaymentResult.jsp",

"cardOnFileAction":"transaction",

"cardOnFileToken":"201936122890007",

"maskedCardNo":"545301*****5539",

"browserJavaEnabled":"true",

"browserLanguage":"en",

"browserColorDepth":"48",

"browserScreenHeight":"400",

"browserScreenWidth":"600",

"browserTZ":"0",

"jsEnabled":"true",

//Optional Parameters

"udf1":"udf1text",

"udf2":"udf2text",

"udf3":"udf3text",

```

```
"udf4":"udf4text",
"udf5":"udf5text"
}]
```

## Initial Response - Payment ID and Payment Page URL

### Initial Response from PG to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	status	M	Numeric	If the request validation success, then status will be '1'. If the validation failed, then status will be '2'
2	result	C	Alphanum	It contains payment ID and Payment URL if the validation success else this will be null
3	error	C	Alphanum	If validation failed, then Payment gateway will provide the respective error code
4	errorText	C	Alphanum	If validation failed, then Payment gateway will provide the respective error description

### Plain Response:

ARB Payment gateway internally validates the request and gives payment ID and payment page URL in the response if the validation success. If failure then, Error code and description will be provided.

```

Success:

[ {
  "status": "1",
  "result": "700212030953264091:https://securepayments.alrajhibank.com.sa/pg/TranportalVbv.htm?paymentId=700212030953264091&id=r9Ht8R4U6g9dYtY",
  //Payment ID:Payment URL
  "error": null,
  "errorText": null
} ]


Failure:

[ {
  "status": "2",
  "error": " IPAY0100124",
}
]

```

```
"errorText": "Problem occurred while validating transaction data",
"result": null
}]
```

## Framing Payment URL

Merchant needs to frame the URL like the below sample

<https://securepayments.alrajhibank.com.sa/pg/TranportalVbv.htm?paymentId=700112030953264091&id=r9Ht8R4U6g9dYtYq>

## Final Response – Transaction Status

Merchant needs to redirect the customer to ARB Payment gateway.

Customer browser will redirect to ACS page and will complete the authentication. PG then process for authorization with the respective schemes. Once payment response received from respective scheme, then ARB Payment gateway returns the response to merchant. This is URL redirection. Below is sample response from ARB PG to merchant,

### Final Response from ARB payment gateway to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	paymentId	M	Numeric	Unique ID generated by Payment gateway. Merchant can store the payment ID to match the final URL redirection response
2	trandata	C	Alphanum	All the response parameters encrypted and sent in encrypted value in trandata
3	Error	C	Numeric	If any error, PG will provide the error code
4	ErrorText	C	Alphanum	PG will provide the error description if any transaction declined.

### Detailed description of Plain trandata response parameters

S. No	Fields	M/C/O	Field Type	Description
1	paymentId	M	Numeric	Unique ID generated by payment gateway. Based on this payment Id merchant can match the final URL redirection response
2	result	M	Alphanum	Transaction status . Value will be 'CAPTURED' for purchase successful and 'APPROVED' for authorization successful.
3	ref	M	Numeric	Transaction reference number (RRN)
4	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
5	date	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.

S. No	Fields	M/C/O	Field Type	Description
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	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.
10	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.
11	amt	M	Numeric	Transaction amount
12	authRespCod e	M	Numeric	Auth response code provided by PG
13	authCode	M	Numeric	6 digit authorization code received from switch
14	cardType	M	Alphabet ic	Card Brand name . Value will be "Visa" or "MasterCard" or "Mada".
15	cardOnFileTok en	M	Numeric	Unique token ID (customer ID) generated by PG per customer when customer saves the first card . This should be sent in merchant request when the customer saves the subsequent cards next time.
16	maskedCardN o	M	AlphaNu m	Masked card number for card on file transactions. First 6 digits and last 4 digits will be visible.
17	actionCode	M	Alphanumeri c	Action code of transaction. Possible Values 1-Purchase 2-Credit 3-Void Purchase 4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)
18	card	C	AlPhanu meric	Card Number used for Performing Transaction
19	expMonth	C	AlPhanu meric	Expiry Month of the Card
20	expYear	C	AlPhanu meric	Expiry Year of the Card

## Sample JSON Response - Final

```
Redirection Parameters

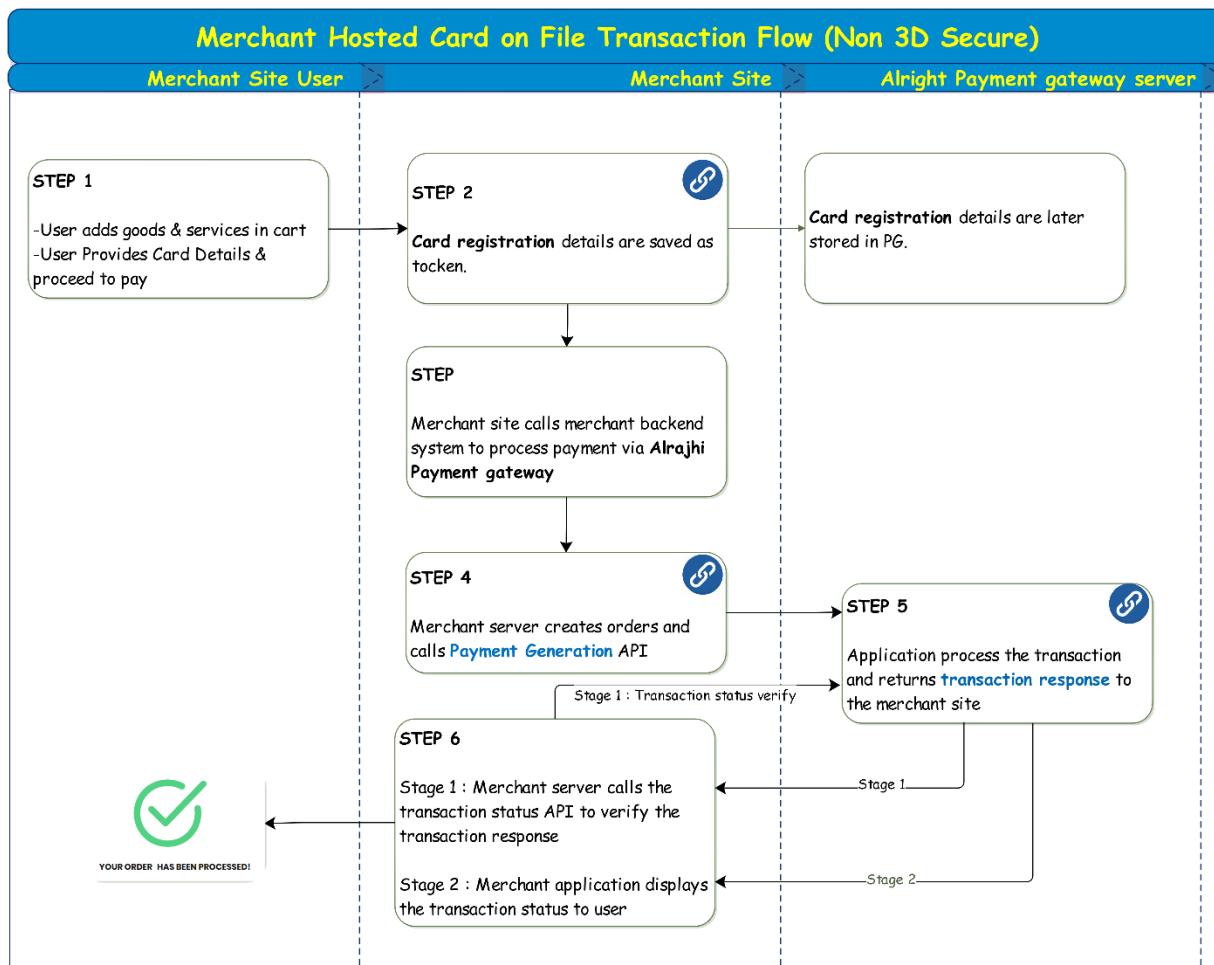
[ {
    "paymentId": "100201935044735860",
    "trandata": "<encrypted trandata>",
    "Error": "",
    "ErrorText": ""
}]
```

## Plain Trandata

```
[ {"paymentId": "100201935044735860",
  "result": "CAPTURED",
  "amt": "10.55",
  "date": 1221,
  "ref": "935110000001",
  "udf1": "udf1text",
  "udf2": "udf2text",
  "udf3": "udf3text",
  "udf4": "udf4text",
  "udf5": "udf5text",
  "trackId": "3423423",
  "transId": "1242345345234",
  "authRespCode": "00",
  "authCode": "000000",}
```

```
"cardType":"Visa",
"cardOnFileToken":"201936122890007",
"maskedCardNo":"545301*****5539"
"actionCode":"1",
"card":"506968XXXXXX1063",
"expMonth":"06", //1 - 2 Digits
"expYear":"2024" //2 - 4 Digits
} ]
```

# Merchant Hosted Card on File Transactions (Non-3D secure)



1. User visits the merchant application and creates order.
2. User enters the payment card details.
3. The card details are saved as [card registration](#) token and posted to PG.
4. Merchant application backend server calls [Payment Token Generation API](#) to get the transaction token and to process payment via Alrajhi Payment gateway
5. After authorization, the ARB PG application process the transaction and returns the transaction response to the merchant site. The ARB Payment gateway will provide the [final response in URL redirection](#).
6. Merchant server calls the transaction status API to verify the transaction response.
7. Finally, the merchant application displays the transaction status to user.

## Saving Cards During Transaction (Card Registration)

When the merchant hosted transaction is in progress, the sensitive card information entered by the customer is saved as token in the PCI compliant merchant's database as well the information is later posted to PG. The next time the customer makes any transactions, the customer can pay directly by entering the CVV of the card.

### Request from Merchant to ARB payment gateway

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization:4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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.

S. No	Fields	M/C/O	Field Type	Description
9	udf3	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.
10	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.
11	expYear	M	Numeric	Expiry year of card
12	expMonth	M	Numeric	Expiry month of card
13	member	M	Alphanum	Card holder name
14	cvv2	M	Numeric	CVV of the card
15	cardNo	M	Numeric	Cardholders card number
16	cardType	M	Alphanum	Card type Ex : Credit card – C, Debit Card - D
17	cardOnFileAction	M	Alphanum	Card on File action .Mandatory field for Card On File. Value should be "transaction" for Card On File transactions
18	cardOnFileToken	C	Numeric	Card on File Token . Unique token ID (customer ID) generated by PG per customer when customer saves the first card . Merchant needs to send this field only for saving subsequent cards for the customer and for transaction using saved cards.

**Below is the sample encrypted request from Merchant to PG**

```
[ {
  //Mandatory Parameters
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata>"
}]
```

**Below are the plain Trandata request**


---

```
{
  //Mandatory Parameters
  "amt":"12.00",
  "action":"1",      // 1 - Purchase , 4 - Authorization
  "password":"q@a680$27@JLkcK",
  "id":"IPAY1CR6qZF7q6w",
  "currencyCode":"682",
  "trackId":"123456",
  "expYear":"2022",
  "expMonth":"12",
  "member":"cardholdername",
  "cvv2":"212",
  "cardNo","5453*****5539",
  "cardType":"C",
  "cardOnFileAction":"transaction",
  //Conditional - To be excluded for saving first card for a customer .
  //Required for saving subsequent cards for the customer.
  "cardOnFileToken":"201936122890007",
  //Optional Parameters
  "udf1":"udf1text",
  "udf2":"udf2text",
  "udf3":"udf3text",
  "udf4":"udf4text",
  "udf5":"udf5text"
}
```

## Request - Payment Token Generation API

### Request from Merchant to ARB payment gateway

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization:4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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	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.

S. No	Fields	M/C/O	Field Type	Description
10	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.
11	member	M	Alphanum	Card holder name
12	cvv2	M	Numeric	CVV of the card
13	cardType	M	Alphanum	Card type Ex : Credit card – C, Debit Card - D
14	cardOnFileAction	M	Alphanum	Card on File action .Mandatory field for Card On File. Value should be "transaction" for Card On File transactions
15	cardOnFileToken	M	Numeric	Card on File Token . Unique token ID (customer ID) generated by PG per customer when customer saves the first card .
16	maskedCardNo	M	Alphanum	Masked card number for card on file. First 6 and last 4 digits visible.

**Below is the sample encrypted request from Merchant to PG**

```
[ {
  //Mandatory Parameters
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata>"
}]

Below are the plain Trandata request

[ {
  //Mandatory Parameters
  "amt": "12.00",
  "action": "1",      // 1 - Purchase , 4 - Authorization
  "password": "q@a680$27@JLkcK",
}
```

```
"id":"IPAY1CR6qZF7q6w",
"currencyCode":"682",
"trackId":"123456",
"member":"cardholdername",
"cvv2":"212",
"cardType":"C",
"cardOnFileAction":"transaction",
"cardOnFileToken":"201936122890007",
"maskedCardNo":"545301*****5539",

//Optional Parameters
"udf1":"udf1text",
"udf2":"udf2text",
"udf3":"udf3text",
"udf4":"udf4text",
"udf5":"udf5text"
}]
```

## Final Response – Transaction Status

Once ARB payment gateway verifies the transaction and returns the response to the same request.

### Response from ARB Payment Gateway to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	trandata	M	AlphaNum	All the response parameters will be provided in trandata field
2	error	C	Alphanum	If any error during processing, PG will provide the error code
3	errorText	C	Alphanum	If any error during processing, PG will provide the error description
4	status	M	Alphanum	If transaction success 1. If transaction failure 2.

### Detailed description of Plain trandata response parameters

S. No	Fields	M/C/O	Field Type	Description
1	paymentId	M	Numeric	Unique ID generated by payment gateway. Based on this payment Id merchant can match the final URL redirection response
2	result	M	Alphanum	Transaction status . Value will be 'CAPTURED' for purchase successful and 'APPROVED' for authorization successful.
3	ref	M	Numeric	Transaction reference number (RRN)
4	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
5	date	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.

S. No	Fields	M/C/O	Field Type	Description
9	udf3	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.
10	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.
11	amt	M	Numeric	Transaction amount
12	authRespCod e	M	Numeric	Auth response code provided by PG
13	authCode	M	Numeric	6 digit authorization code received from switch
14	cardType	M	Alphabet ic	Card Brand name . Value will be "Visa" or "MasterCard" or "Mada".
15	cardOnFileTok en	M	Numeric	Unique token ID (customer ID) generated by PG per customer when customer saves the first card . This should be sent in merchant request when the customer saves the subsequent cards next time.
16	maskedCardN o	M	AlphaNum	Masked card number for card on file transactions. First 6 digits and last 4 digits will be visible.
17	actionCode	M	Alphanumeri c	Action code of transaction. Possible Values 1-Purchase 2-Credit 3-Void Purchase 4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)
18	card	C	AlPhanu meric	Card Number used for Performing Transaction
19	expMonth	C	AlPhanu meric	Expiry Month of the Card
20	expYear	C	AlPhanu meric	Expiry Year of the Card

**Below is the sample encrypted response from PG to Merchant**

```
[ {
```

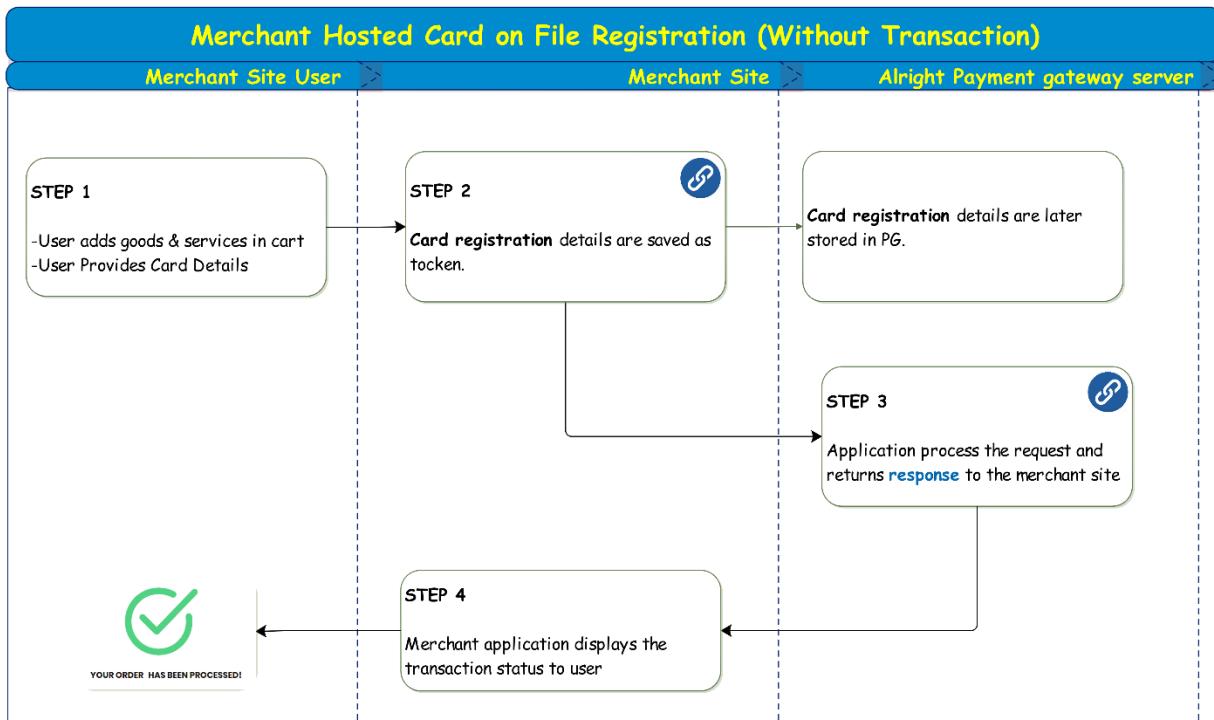
```
"tranid": "201931951332346",
"trandata": "<encrypted trandata>",
"status": "1", //1 for success transaction, 2 for failure transaction
"error": null,
"errorText": null
} ]
```

### Plain trandata in response

```
[ {
  "paymentId": -1,
  "result": "CAPTURED",
  "amt": "10.55",
  "date": "1221",
  "ref": "935110000001",
  "udf1": "udf1text",
  "udf2": "udf2text",
  "udf3": "udf3text",
  "udf4": "udf4text",
  "udf5": "udf5text",
  "trackId": "3423423",
  "transId": "1242345345234",
  "authRespCode": "00",
```

```
"authCode":"000000",
"cardType":"Visa",
"cardOnFileToken":"201936122890007",
"maskedCardNo":"545301*****5539"
"actionCode":"1"
}
```

# Merchant Hosted Card on File Registrations (without transaction)



1. User visits the merchant application and click card registration option.
2. Merchant application backend server calls [Card Registration Token Generation API](#) to get the token and to register the card details in Alrajhi Payment gateway
3. After authorization, the ARB PG application saves the card details and returns the transaction response to the merchant site. The ARB Payment gateway will provide the [final response in URL redirection](#).
4. Finally, the merchant application displays the transaction status to user.

## Request – Card Registration Token Generation API

### Request from Merchant to ARB payment gateway

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
2	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
3	expYear	M	Numeric	Expiry year of card
4	expMonth	M	Numeric	Expiry month of card
5	cardNo	M	Numeric	Cardholders card number
6	cardOnFileAction	M	Alphanum	Card on File action . Value should be "registration" for registration without transaction.
7	cardOnFileToken	C	Numeric	Card on File Token . Unique token ID (customer ID) generated by PG per customer when customer saves the first card . Merchant needs to send this field only for saving subsequent cards for the customer.

**Below is the sample encrypted request from Merchant to PG**

```
[ {
  //Mandatory Parameters
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata>"
}]
```

**Below are the plain Trandata request**

```
[ {
  //Mandatory Parameters
  "password": "q@a680$27@JLkcK",
  "id": "IPAY1CR6qZF7q6w",
  "expYear": "2022",
  "expMonth": "12",
  "cardNo": "5453*****5539",
  "cardOnFileAction": "registration",
  //conditional Parameter - To be excluded for saving first card for a
  //customer. Required for saving subsequent cards for the customer.
  "cardOnFileToken": "201936122890007"
}]
```

## Response – Card Registration Status

### Response from ARB payment gateway to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	trandata	C	Alphanum	All the below response parameters encrypted and send the encrypted value in trandata
2	error	C	Numeric	If any error, PG will provide the error code
3	errorText	C	Alphanum	PG will provide the error description if registration fails.
4	status	M	Numeric	1 for registration success case, 2 for failure case

### Detailed description of Plain trandata response parameters

S. No	Fields	M/C/O	Field Type	Description
1	cardOnFileToken	M	Numeric	Card on File Token . Unique token ID (customer ID) generated by PG per customer when customer saves the first card .
2	maskedCardNo	M	AlphaNum	Masked card number for card on file.

### Below is the sample encrypted response from PG to Merchant

```
[{"trandata": "<encrypted trandata>",

"status":"1", //1 for registration success case, 2 for failure case

"error":"",
"errorText":""}

}]
```

### Plain Trandata for PG response to Merchant

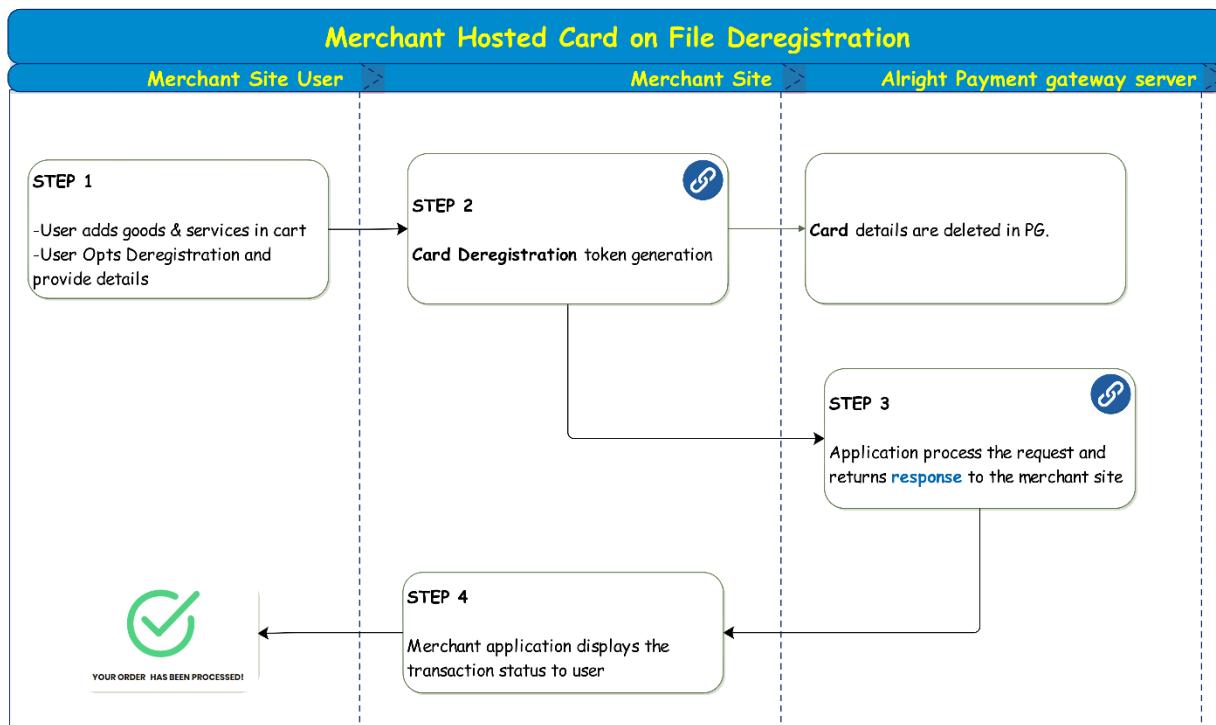
```
[{

"cardOnFileToken":"201936122890007",

"maskedCardNo":"545301*****5539"

}]
```

# Merchant Hosted Card on File Deregistration



1. User visits the merchant application and click card deregistration option.
2. Merchant application backend server calls [\*\*Card Deregistration Token Generation API\*\*](#) to get the token and to deregister the card details in Alrajhi Payment gateway
3. After authorization, the ARB PG application deletes the card details and returns the transaction response to the merchant site. The ARB Payment gateway will provide the [final response in URL redirection](#).
4. Finally, the merchant application displays the transaction status to user.

## Request – Card Deregistration Token Generation API

### Attributes - Request from Merchant to ARB PG

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
2	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
3	cardOnFileAction	M	Alphanum	Card on File action. Value should be "deregistration" for deregistration of Card on File.
4	cardOnFileToken	M	Numeric	Card on File Token. Unique token ID (customer ID) generated by PG per customer.
5	maskedCardNo	M	Alphanum	Card on File masked card number. First 6 digits and last 4 digits to be visible.

### Below is the sample encrypted request from Merchant to PG

```
[ {
  //Mandatory Parameters
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata>"
}]
```

**Below are the plain Trandata request**

```
[{  
    //Mandatory Parameters  
  
    "password": "q@a680$27@JLkcK",  
  
    "id": "IPAY1CR6qZF7q6w",  
  
    "cardOnFileAction": "deregistration",  
  
    "cardOnFileToken": "201936122890007",  
  
    "maskedCardNo": "545301*****5539"  
}]
```

## Response – Card Deregistration Status

### Response from ARB payment gateway to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	error	C	Numeric	If any error, PG will provide the error code
2	errorText	C	Alphanum	PG will provide the error description if deregistration fails.
3	status	M	Numeric	1 for deregistration success case, 2 for failure case

### Below is the sample response from PG to Merchant

```
[ {
  "status": "1", //1 for deregistration success case, 2 for failure case
  "error": "",
  "errorText": ""
}]
```

## Merchant Hosted Transaction Flow (Inquiry, Void, Refund, Capture Transactions)

- Inquiry Transactions:** As an added security measure ARB Payment Gateway allows merchants to do an inquiry of already completed transaction by passing certain details of the payment message, ARB Payment Gateway provides response to this request with appropriate fields in the response; the merchant is expected to verify the relevant fields like Transaction amount, transaction status and other transaction fields.
- Refund Transactions:** Merchant collects the cancellation request and initiate the transaction using Refund API. Merchant may initiate refund for full amount or partial amount; Payment Gateway will allow amount until it reached to original transaction amount.
- Authorization Extension Transactions (MADA):** As per the current functionality, only MADA is supporting Authorization Extension. Authorization Extension is nothing but extending the Authorization period not the Authorized amount.

Transaction Type	Action Code
Inquiry	8
void	3
refund	2
capture	5
Void Authorization Transactions (MADA)	9
Authorization Extension transactions (MADA)	14

**Note:** Capture transactions need to be performed within 7 days.  
 UDF7 should be sent as "R" for Non-Save Card Capture transactions [i.e., Action Code = 5].  
 Auth Extension and refund needs to be performed within 14 days.

## Request

### Request from Merchant to ARB Payment Gateway

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.

### Detailed description of Plain Tran data request parameters

S. No	Fields	M/C/O	Field Type	Description
1	id	M	AlphaNum	Unique Tranportal ID.
2	password	M	Alphanum	Tranportal password.
3	action	M	Numeric	Transaction action Ex: "2" for Refund "3" for Void purchase "8" for Inquiry "5" for Capture "9" for Void Auth – only MADA "14" for Auth Extension – only MADA
4	amt	M	Numeric	Transaction amount
5	currencyCode	M	Numeric	Currency code of merchant
6	trackId	O	Numeric	A unique tracking id issued by the merchant's system
7	udf5	M	Alphanum	When merchant want to perform refund/Void/Inquiry/Void Auth / Auth Extension based on PaymentID / TransID / TrackID then merchant need to pass, a word PaymentID / TRANID/ TrackID in Udf5 field.
8	Customer ID	O	Alphanum	When Merchant required to perform Preatuh for unschedule transaction
9	transId	M	Numeric	When merchant want to perform refund/Void/Inquiry/Void Auth/ Auth Extension based on PaymentID / TransID / TrackID then merchant need to pass the value of, PaymentID / TRANID/ TrackID in this field

10	udf10	O	Alphanum	<p><b>Applicable only for MADA :</b></p> <p>Need to mention whether the transaction is partial capture or Full Capture in case of MADA transactions.</p> <p>Udf10 fields needs to be set as below,</p> <p><b>PARTIALCAPTURE</b> for Partial Capture <b>FINALCAPTURE</b> for Final Capture</p>
----	-------	---	----------	---

### Below is the sample encrypted request from Merchant to PG

```
[ {
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata>",
} ]
```

### Below are the plain trandata request

Based on TransID (Payment Gateway Transaction ID):

```
[ {
  "amt": "70.00",
  "action": "<action code>",
  "password": "q@a680$27@JLkcK",
  "id": "IPAY1CR6qZF7q6w",
  "currencyCode": "682",
  "trackId": "696921377",
  "udf5": "TRANID",
  "transId": "201931951332346",
  "udf10": "FULLCAPTURE" //Applicable only for MADA capture transactions
} ]
```

### Based on Payment ID (Payment ID):

```
[ {
  "amt": "70.00",
  "action": "<action code>",
  "password": "q@a680$27@JLkcK",
  "id": "IPAY1CR6qZF7q6w",
  "currencyCode": "682",
  "trackId": "696921377",
  "udf5": "PaymentID",
  "transId": "100201931948635783",
  "udf10": "FULLCAPTURE" //Applicable only for MADA capture transactions
}]
```

### Based on TrackID (Merchant Transaction ID/Track ID):

```
[ {
  "amt": "70.00",
  "action": "<action code>",
  "password": "q@a680$27@JLkcK",
  "id": "IPAY1CR6qZF7q6w",
  "currencyCode": "682",
  "trackId": "696921377",
  "udf5": "TrackID",
  "transId": "696921377",
  "udf10": "FULLCAPTURE" //Applicable only for MADA capture transactions
}]
```

## Response

### Response from ARB Payment Gateway to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	trandata	M	AlphaNum	All the below response parameters will be provided in trandata field
2	error	C	Alphanum	If any error during processing, PG will provide the error code
3	errorText	C	Alphanum	If any error during processing, PG will provide the error description
4	status	M	Alphanum	If transaction success 1. If transaction failure 2.

### Detailed description of Plain trandata response parameters

S. No	Fields	M/C/O	Field Type	Description
1	paymentId	M	Numeric	Unique ID generated by payment gateway. Based on this payment Id merchant can match the final URL redirection response
2	result	M	Alphanum	Transaction status, Value will be "CAPTURED" for Refund Successful and "NOT CAPTURED" for Refund Failure and "VOIDED" for Void Purchase / Void Authorization Successful and "NOT VOIDED" for Void Purchase / Void Authorization Failure  For MADA: If Refund request is initiated after one Month and declined with response code "199" then PG will internally initiate the manual Refund if it is accepted then the result is "PROCESSING" otherwise "NOT PROCESSED".
3	ref	M	Numeric	Transaction reference number (RRN)
4	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
5	date	M	Numeric	Transaction date and time

S. No	Fields	M/C/O	Field Type	Description
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	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.
10	udf4	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.
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	amt	M	Numeric	Transaction amount
13	authRespCode	M	Numeric	Auth response code provided by PG
14	authCode	M	Numeric	6 digit authorization code received from switch
15	cardType	M	Alphabetic	Card Brand name . Value will be "Visa" or "MasterCard" or "Mada".
16	actionCode	M	Alphanumeric	Action code of transaction. Possible Values 1-Purchase 2-Credit 3-Void Purchase

S. No	Fields	M/C/O	Field Type	Description
				4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)
17	origTransactionID	C	Alphanumeric	It is applicable only for Supporting Transactions action code like 2,3,5,9 and 14. It refers to the "transId" of the Source/Original transaction
18	card	C	Alphanumeric	Card Number used for Performing Transaction
19	expMonth	C	Alphanumeric	Expiry Month of the Card
20	expYear	C	Alphanumeric	Expiry Year of the Card

### Below is the sample encrypted response from PG to Merchant

```
[ {
  "tranid": "201931951332346",
  "trandata": "<encrypted trandata>",
  "status": "1", //1 for success transaction, 2 for failure transaction
  "error": null,
  "errorText": null
}]
```

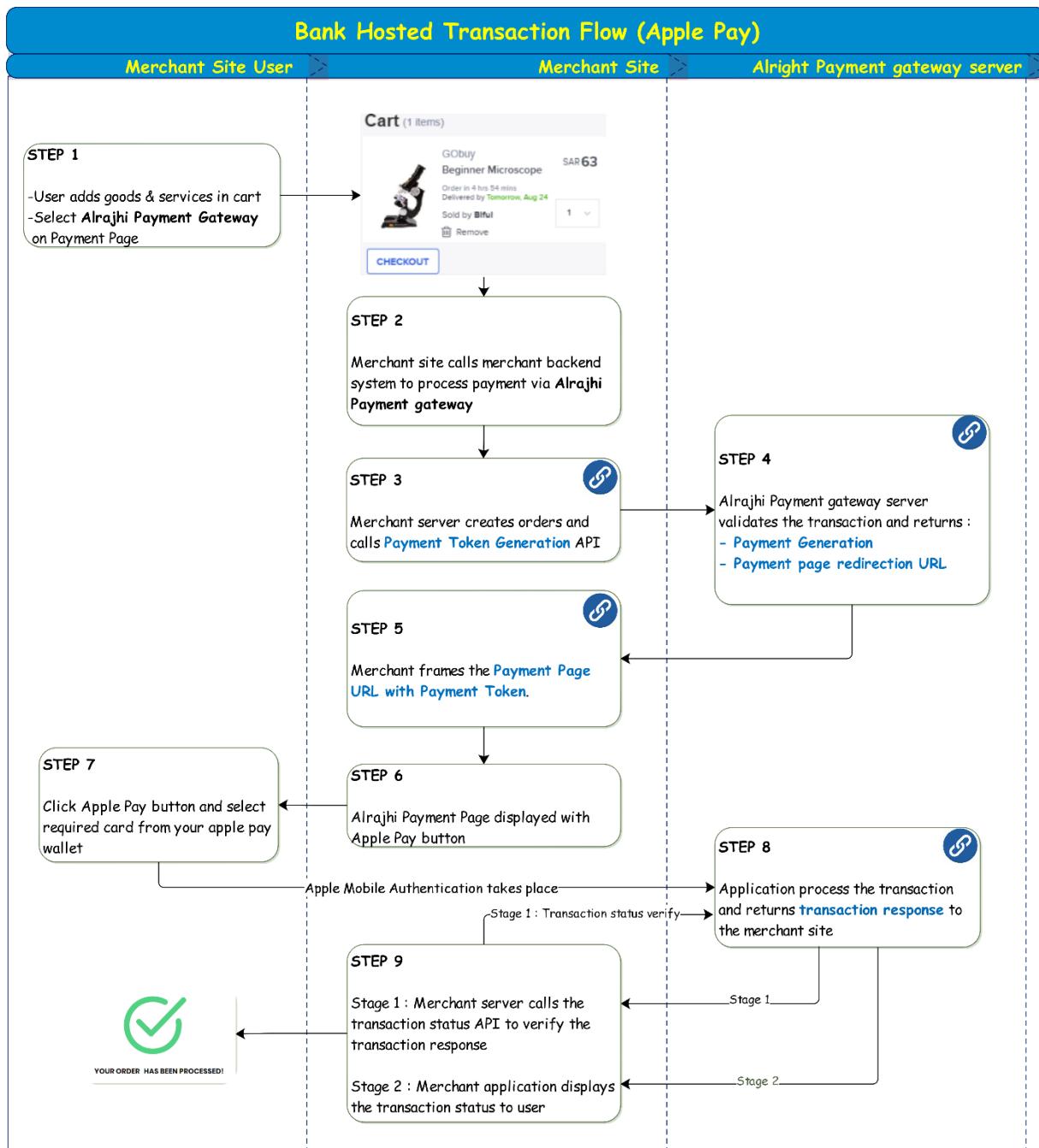
### Plain trandata in response

```
[ {
  "paymentId": "100201934525118923",
  "result": "success",
  "date": "1221",
```

```
"udf1":"udf1text",
"udf2":"udf2text",
"udf3":"udf3text",
"udf4":"udf4text",
"udf5":"PaymentID",
"trackId","3423423",
"transId":"201931951332346",
"ref":"935110000001",
"authRespCode":"00",
"authCode":"000000",
"cardType":"Visa",
"card":"506968XXXXXX1063",
"expMonth":"06", //1 - 2 Digits
"expYear":"2024" //2 - 4 Digits
}]
```

## Bank Hosted Integration Flow (Apple Pay)

This section illustrates how you can integrate the bank hosted flow on your website application.



1. User visits the merchant application and creates order.
2. Merchant application backend server calls **Payment Token Generation API** to get the transaction token.
3. ARB Payment gateway internally validates the request.
  - In case of successful validation, ARB PG provides **Payment ID and Payment Page URL** in the response.
    - Merchant needs to [frame the payment page URL with Payment ID](#), Hence the ARB payment page is displayed with Apple Pay button.
  - In case of failure, ARB PG provides **Error Code** and **Description**.

Note: If merchant notification is disabled, then ARB Payment gateway will provide the [final response in URL redirection](#).

4. User click the Apple Pay button and selects the required card details from apple wallet and performs apple authorization.
5. The ARB PG application process the transaction and returns the transaction response to the merchant site.
6. Merchant server calls the transaction status API to verify the transaction response.
7. Finally, the merchant application displays the transaction status to user.

## Request - Payment Token Generation API

### Attributes - Request from Merchant to ARB PG

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.
3	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
4	errorURL	M	Alphanum	Merchant error URL

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization : 4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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.

S. No	Fields	M/C/O	Field Type	Description
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	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.
10	udf4	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.
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	response URL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
13	errorURL	M	Alphanum	The merchant error URL where Payment Gateway send the response in case any error while Processing the transaction.
14	langid	O	Alphabetic	Language ID . Based on language ID arabic language will be displayed on payment page. Value should be 'ar' or 'AR' for arabic language .

### Sample JSON request - Request from Merchant to ARB PG

```
[ {
  //Mandatory Parameters
```

```

  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata> ",
  "responseURL": "https://merchantpage/PaymentResult.jsp",
  "errorURL": "https://merchantpage/PaymentResult.jsp"
}
  
```

Trandata will contain below parameters **encrypted** with AES algorithm with CBC Mode, PKCS5Padding with initialization vector value **PGKEYENCDECIVSPC** under Resource Key.

### **Plain Trandata:**

```

[ {
  //Mandatory Parameters
  "amt": "12.00",
  "action": "1",      // 1 - Purchase , 4 - Authorization
  "password": "q@a680$27@JLkcK",
  "id": "IPAY1CR6qZF7q6w",
  "currencyCode": "682",
  "trackId": "12345656789",
  "responseURL": "https://merchantpage/PaymentResult.jsp",
  "errorURL": "https://merchantpage/PaymentResult.jsp",
  //Optional Parameters
  "udf1": "udf1text",
  "udf2": "udf2text",
  "udf3": "udf3text",
  "udf4": "udf4text",
  "udf5": "udf5text",
}
  
```

```
"langid":"ar",
}]
```

## MADA Mandatory Parameters

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization : 4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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	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.
10	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.
11	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
12	errorURL	M	Alphanum	The merchant error URL where Payment Gateway send the response in case any error while Processing the transaction.

### Sample JSON request - Request from Merchant to ARB PG

```
{
  //MADA Mandatory Parameters
  "amt":"12.00",
  "action":"1", // 1 - Purchase , 2 - Authorization
  "password":"q@a680$27@JLkcK",
  "id":"IPAY1CR6qZF7q6w",
  "currencyCode":"682",
  "trackId":"12345656789",
  "responseURL":"https://merchantpage/PaymentResult.jsp",
  "errorURL":"https://merchantpage/PaymentResult.jsp",

  //Optional Parameters
  "udf1":"udf1text",
  "udf2":"udf2text",
  "udf3":"udf3text",
  "udf4":"udf4text",
  "udf5":"udf5text",
  "langid":"ar",
}

]
```

## Split Payment or Payout.

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	accountDetails	C	JSON Array	Conditional if Merchant Opted for Payout future. Split Payment or Payout Details.
2	bankIdCode	C	Alphanum	Bank Identification Code Min - 8 Max -12
3	iBanNum	C	Alphanum	IBAN Number Min - 24 Max - 35
4	beniciaryNa me	C	Alphabe tic	beniciaryName (English Only) Max - 100
5	serviceAmoun t	C	Numeric	Service Amount
6	valueDate	C	Numeric	Value Date Format: YYYYMMDD

### Sample JSON request - Request from Merchant to ARB PG

```
//Conditional if Merchant Opted for Split Payment or Payout.

"accountDetails": [
  {
    "bankIdCode": "12345d6f",
    "iBanNum": "567896743281926354276254",
    "beniciaryName": "AlRajhi Bank Services",
    "serviceAmount": "200.00",
    "valueDate": "20201231"
  },
  {
    "bankIdCode": "1234ret3",
    "iBanNum": "987656743281926354276254",
    "beniciaryName": "DIGITAL CO",
    "serviceAmount": "300.00",
    "valueDate": "20201231"
  }
],
```

## SADAD

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	transactionType	C	Alphanum	Minimum length : 3 , Maximum length : 15 Transaction Type Allowed Values 'PAY' 'PAY_SAVE' 'ADVANCE' 'PARTIAL_PAYMENT' 'OVER_PAYMENT'
2	billerID	C	Alphanum	Minimum length : 1 , Maximum length : 3 Biller ID
3	billAmount	C	Numeric	billAmount
4	billType	C	Alphanum	Minimum length : 7 , Maximum length : 8 Bill Type. The allowed values are: - PREPAID : Paid in advance - POSTPAID : Paid at the end
5	billNumber	C	Alphanum	Minimum length : 1 , Maximum length : 30 Bill Number as identified by SADAD
6	IDType	C	Alphanum	Minimum length : 2 , Maximum length : 2 ID Type 01 National ID Card 02 Iqama 03 Passport
7	IDNumber	C	Alphanum	Minimum : 1 , Maximum : 20 ID Number

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional -for SADAD merchant

"billingDetails" :

{"IDType":"01","IDNumber":"1072587916","billNumber":"00100100018","billType":"POSTPAID","billerID":"169","billAmount":5,"transactionType":"ADVANCE"
},
```

## Airline

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	airline	C	JSON Object	Conditional - for Airline Merchant
1.1	bookingReference	C	Alphanum	The booking reference number
1.1.1	itinerary	C	JSON Object	Conditional - for Airline Merchant
1.1.1.1	leg	C	JSON Array	Conditional - for Airline Merchant
1.1.1.1.1	carrierCode	C	Alphanum	The carrier code for the leg
1.1.1.1.2	departureAirport	C	Alphanum	The departure airport for the passenger
1.1.1.1.3	departureDate	C	Alphanum	The departure date for the leg
1.1.1.1.4	departureTime	C	Alphanum	The departure airport for the passenger
1.1.1.1.5	destinationAirport	C	Alphanum	The destination airport for the leg
1.1.1.1.6	destinationArrivalDate	C	Alphanum	The arrival date for the leg
1.1.1.1.7	destinationArrivalTime	C	Alphanum	The arrival time for the leg
1.1.1.1.8	fareBasis	C	Alphanum	The fare basis for the leg
1.1.1.1.9	flightNumber	C	Alphanum	The flight number for the leg
1.1.1.1.10	travelClass	C	Alphanum	The class of service for the leg
1.1.1.2	numberInParty	C	Alphanum	
1.1.1.3	originCountry	C	Alphanum	The origin Country of the itinerary
1.1.2	passenger	C	JSON Array	Conditional - for airline merchant
1.1.2.1	firstName	C	Alphanum	The passenger first name
1.1.2.2	lastName	C	Alphanum	The passenger last name
1.1.3	ticket	C	JSON Object	Conditional - for airline merchant
1.1.3.1	issue	C	JSON Object	Conditional - for airline merchant
1.1.3.1.1	carrierCode	C	Alphanum	Code of the airline that issuing the ticket
1.1.3.1.2	carrierName	C	Alphanum	Name of the airline that is issuing the ticket.
1.1.3.1.3	travelAgentCode	C	Alphanum	Code of the Travel Agent that issuing the ticket
1.1.3.1.4	travelAgentName	C	Alphanum	Name of the Travel Agent that issuing the ticket
1.1.3.2	totalFare	C	Numeric	Ticket Total Fare

1.1.3.3	totalFees	C	Numeric	Total fee for the ticket.
1.1.3.4	totalTaxes	C	Numeric	Tax portion of the order amount.

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional - for airline merchant

{
  "airline": { "bookingReference": "5WPU68", "itinerary": { "leg": [ {
    "carrierCode": "MH", "departureAirport": "MNL", "departureDate": "2021-05-11",
    "departureTime": "06:50:00Z", "destinationAirport": "KUL",
    "destinationArrivalDate": "2021-05-11", "destinationArrivalTime": "10:35:00Z",
    "fareBasis": "BOWMPH6", "flightNumber": "0805", "travelClass": "B" }, {
      "carrierCode": "UL", "departureAirport": "KUL", "departureDate": "2021-05-11",
      "departureTime": "15:00:00Z", "destinationAirport": "CMB",
      "destinationArrivalDate": "2021-05-11", "destinationArrivalTime": "16:05:00Z",
      "fareBasis": "BOWMPH6", "flightNumber": "0315", "travelClass": "B" } ],
    "numberInParty": "1", "originCountry": "PHL" }, "passenger": [ { "firstName": "KAI MR", "lastName": "QIAN" } ], "ticket": { "issue": { "carrierCode": "UL",
      "carrierName": "SRILANKANAIRLINES", "travelAgentCode": "91401483",
      "travelAgentName": "MANUL08AE" }, "totalFare": "54918.00", "totalFees": "59518.00",
      "totalTaxes": "4600.00" } } }
}
```

## Initial Response - Payment ID and Payment Page URL

### Attributes - Initial Response from ARB PG to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	status	M	Numeric	If the request validation success, then status will be '1'. If the validation failed, then status will be '2'
2	result	C	Alphanum	It contains payment ID and Payment URL if the validation success else this will be null
3	error	C	Alphanum	If validation failed, then Payment gateway will provide the respective error code
4	errorText	C	Alphanum	If validation failed, then Payment gateway will provide the respective error description

### Sample JSON Response - Initial Response from ARB PG to Merchant

ARB Payment gateway internally validates the request and gives payment ID and payment page URL in the response in case of successful validation, if failure then error code and description will be provided. The below response will be in plain format and there is no encryption for the below. Merchant can directly parse the response-based status and result fields as mentioned below.

#### Success:

```
[ {
  "status": "1",
  "result": "100201931620827468:https://securepayments.alrajhibank.com.sa/pg/paymentpage.htm", //Payment ID:Paymentpage URL
  "error": null,
  "errorText": null
}]
```

#### Failure:

```
[ {
  "status": "2",
}]
```

```
"error": "IPAY0100124",
"errorText": "Problem occurred while validating transaction data",
"result": null
}]
```

## Framing Payment URL

After Initial Response from ARB PG, merchant needs to frame the payment page URL like the below sample.

<https://securepayments.alrajhibank.com.sa/pg/paymentpage.htm?PaymentID=100201931620827468>

## Final Response – Transaction Status

### Attribute - Final URL redirection response from ARB PG 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 encrypted and send the encrypted value in 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. Based on this payment Id merchant can match the final URL redirection response
2	result	M	Alphanum	Transaction status . Value will be 'CAPTURED' for purchase successful and 'APPROVED' for authorization successful.
3	ref	M	Numeric	Transaction reference number (RRN)
4	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
5	date	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

S. No	Fields	M/C/O	Field Type	Description
				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	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.
10	udf4	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.
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	amt	M	Numeric	Transaction amount
13	authRespCode	M	Numeric	Auth response code provided by PG
14	authCode	M	Numeric	6 digit authorization code received from switch
15	cardType	M	Alphabetic	Card Brand name . Value will be "Visa" or "MasterCard" or "Mada".
16	actionCode	M	Alphanumeric	Action code of transaction. Possible Values

S. No	Fields	M/C/O	Field Type	Description
				1-Purchase 2-Credit 3-Void Purchase 4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)
17	card	C	AlPhanumeric	Card Number used for Performing Transaction
18	expMonth	C	AlPhanumeric	Expiry Month of the Card
19	expYear	C	AlPhanumeric	Expiry Year of the Card

### Sample JSON Response - Final

If Merchant notification is disabled, then ARB Payment gateway will provide the final response in URL redirection. Below is the sample response from ARB PG to merchant

```
[ {
  //Redirection Parameters
  "paymentId": "100201935166676976",
  "trandata": "<encrypted trandata>",
  "error": "",
  "errorText": ""
}]
```

### Plain Trandata:

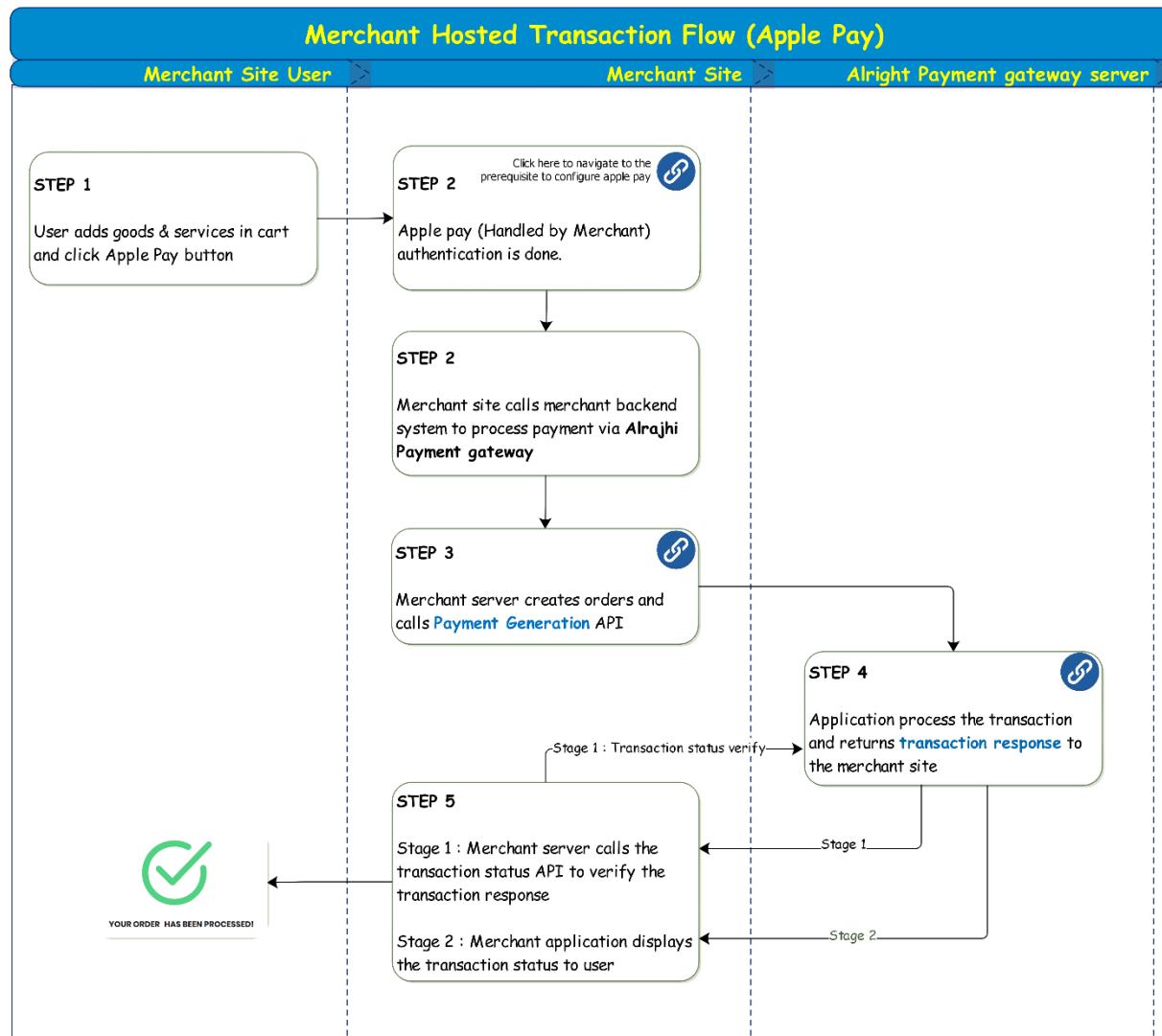
Trandata will contain below parameters encrypted.

```
[{
  "paymentId": "100201935166676976",
```

```
"result": "CAPTURED",
"transId":201935166561122,
"ref":"935110000001",
"date":"1217",
"trackId":"1003383844",
"udf1":"",
"udf2":"",
"udf3":"8870091137",
"udf4":"FC",
"udf5":"Tidal5",
"amt":"70.0,
"authRespCode","00",
"authCode":"000000",
"cardType":"Visa",
"actionCode":"1"
}]
```

# Merchant Hosted Transaction Flow (Apple Pay)

This section illustrates how you can integrate the merchant hosted flow (Apple Pay) on your website application.



1. User visits the merchant application and creates order.
2. In the merchant page, the **Apple Pay** button is displayed. User clicks the **Apple Pay** button and select required card from apple wallet. (The **Apple Pay** button in merchant page is handled by the merchants by following the [prerequisites](#) steps)

3. Merchant application backend server calls [\*\*Payment Token Generation API\*\*](#) to get the transaction token and to process payment via Alrajhi Payment gateway
4. After authorization, the ARB PG application process the transaction and returns the transaction response to the merchant site. The ARB Payment gateway will provide the [final response in URL redirection](#).
5. Merchant server calls the transaction status API to verify the transaction response.
6. Finally, the merchant application displays the transaction status to user.

## Request - Payment Token Generation API

### Attributes - Request from Merchant to ARB PG

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization:4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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	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.
10	udf4	O	Alphanum	The user (merchant) defines these fields. The field data passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.
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	expYear	M	Numeric	Expiry year of card
13	expMonth	M	Numeric	Expiry month of card
14	member	M	Alphanum	Card holder name
15	cvv2	M	Numeric	CVV of the card
16	cardNo	M	Numeric	Cardholders card number
17	cardType	M	Alphanum	Card type Ex : Credit card - C, Debit Card - D

### Sample JSON request - Request from Merchant to ARB PG

```
[ {
    //Mandatory Parameters
    "id": "IPAY1CR6qZF7q6w",
    "trandata": "<encrypted trandata>"
}]
```

### **Plain Trandata:**

```
[ {  
  
    //Mandatory Parameters  
  
    "amt":"12.00",  
  
    "action":"1",      // 1 - Purchase , 4 - Authorization  
  
    "password":"q@a680$27@JLkcK",  
  
    "id":"IPAYlCR6qZF7q6w",  
  
    "currencyCode":"682",  
  
    "trackId":"123456",  
  
    "expYear":"2022",  
  
    "expMonth":"12",  
  
    "member":"cardholdername",  
  
    "cvv2":"212",  
  
    "cardNo","5453*****5539",  
  
    "cardType":"C",  
  
    //Optional Parameters  
  
    "udf1":"udf1text",  
  
    "udf2":"udf2text",  
  
    "udf3":"udf3text",  
  
    "udf4":"udf4text",  
  
    "udf5":"udf5text",  
  
} ]
```

## SADAD

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	transactionType	C	Alphanum	Minimum length : 3 , Maximum length : 15 Transaction Type Allowed Values 'PAY' 'PAY_SAVE' 'ADVANCE' 'PARTIAL_PAYMENT' 'OVER_PAYMENT'
2	billerID	C	Alphanum	Minimum length : 1 , Maximum length : 3 Biller ID
3	billAmount	C	Numeric	billAmount
4	billType	C	Alphanum	Minimum length : 7 , Maximum length : 8 Bill Type. The allowed values are: - PREPAID : Paid in advance - POSTPAID : Paid at the end
5	billNumber	C	Alphanum	Minimum length : 1 , Maximum length : 30 Bill Number as identified by SADAD
6	IDType	C	Alphanum	Minimum length : 2 , Maximum length : 2 ID Type 01 National ID Card 02 Iqama 03 Passport
7	IDNumber	C	Alphanum	Minimum : 1 , Maximum : 20 ID Number

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional -for SADAD merchant

"billingDetails" :

{"IDType":"01","IDNumber":"1072587916","billNumber":"00100100018","billType":"POSTPAID","billerID":"169","billAmount":5,"transactionType":"ADVANCE"
},
```

## Final Response – Transaction Status

The ARB payment gateway verifies the transaction and returns the response to the same request.

### Attribute - Final response from ARB PG to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	trandata	M	AlphaNum	All the below response parameters will be provided in trandata field
2	error	C	Alphanum	If any error during processing, PG will provide the error code
3	errorText	C	Alphanum	If any error during processing, PG will provide the error description
4	status	M	Alphanum	If transaction success 1. If transaction failure 2.

### 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. Based on this payment Id merchant can match the final URL redirection response
2	result	M	Alphanum	Transaction status . Value will be 'CAPTURED' for purchase successful and 'APPROVED' for authorization successful.
3	ref	M	Numeric	Transaction reference number (RRN)
4	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
5	date	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.

S. No	Fields	M/C/O	Field Type	Description
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	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.
10	udf4	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.
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	amt	M	Numeric	Transaction amount
13	authRespCode	M	Numeric	Auth response code provided by PG
14	authCode	M	Numeric	6 digit authorization code received from switch
15	cardType	M	Alphabetic	Card Brand name . Value will be "Visa" or "MasterCard" or "Mada".
16	actionCode	M	Alphanumeric	Action code of transaction. Possible Values 1-Purchase 2-Credit 3-Void Purchase 4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)

S. No	Fields	M/C/O	Field Type	Description
17	Card	C	AlPhanumeric	Card Number used for Performing Transaction
18	expMonth	C	AlPhanumeric	Expiry Month of the Card
19	expYear	C	AlPhanumeric	Expiry Year of the Card

### Sample JSON Response - Final

The ARB payment gateway verifies the transaction and returns the response to the same request.

```
[ {
  "tranid": "201931951332346",
  "trandata": "<encrypted trandata>",
  "status": "1", //1 for success transaction, 2 for failure transaction
  "error": null,
  "errorText": null
}]
```

### Plain Trandata:

Trandata will contain below parameters encrypted.

```
[ {
  "paymentId": -1,
  "result": "CAPTURED",
  "amt": "10.55",
  "date": "1221",
  "ref": "935110000001",
  "udf1": "udf1text",
```

```
"udf2":"udf2text",
"udf3":"udf3text",
"udf4":"udf4text",
"udf5":"udf5text",
"trackId","3423423",
"transId":"1242345345234",
"authRespCode":"00",
"authCode":"000000",
"cardType":"Visa",
"actionCode":"1",
"card":"506968XXXXXX1063",
"expMonth":"06", //1 - 2 Digits
"expYear":"2024" //2 - 4 Digits
}]
```

## Pre-Authentication Transactions (Airline)

Pre-authorization (pre-auth) is a process of authenticating and temporary blocking of the certain amount available on the card, based on the card details provided at the time of booking.

1. User visits the merchant application and creates order.
2. User enters the payment card details.
3. Call the Pre-auth API to block amount from the user's account.
4. Merchant proceed with order/service completion.
5. Once the fulfilment is complete, call Capture API with the final amount to capture the amount from user's card and then notify the payment status to the user.

## Request

### Request from Merchant to ARB payment gateway

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization:4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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	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.

S. No	Fields	M/C/O	Field Type	Description
10	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.
11	expYear	M	Numeric	Expiry year of card
12	expMonth	M	Numeric	Expiry month of card
13	member	M	Alphanum	Card holder name
14	cvv2	M	Numeric	CVV of the card
15	cardNo	M	Numeric	Cardholders card number
16	cardType	M	Alphanum	Card type Ex : Credit card – C, Debit Card – D
17	eci	M	Alphanum	Electronic commerce indicator received from third Party MPI
18	ucaf	M	Alphanum	UCAF received from third Party MPI
19	cavv	M	Alphanum	CAVV received from third Party MPI

### Below is the sample encrypted request from Merchant to PG

```
[ {
  //Mandatory Parameters
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata>"
}]
```

### Below are the plain Trandata request

```
[{
  //Mandatory Parameters
  "amt": "12.00",
```

```
"action":"1",
"password":"q@a680$27@JLkcK",
"id":"IPAYlCR6qZF7q6w",
"currencyCode":"682",
"trackId":"123456",
"expYear":"2022",
"expMonth":"12",
"member":"cardholdername",
"cvv2":"212",
"cardNo","5453*****5539",
"cardType":"C",
"eci":"7",
"ucaf":"1",
"cavv":"JcboZXndOg40CBECC2BGbheAAAA=",

//Optional Parameters

"udf1":"udf1text",
"udf2":"udf2text",
"udf3":"udf3text",
"udf4":"udf4text",
"udf5":"udf5text",
```

## Payout Future

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	accountDetails	C	JSON Array	Conditional if Merchant Opted for Payout future. Split Payment or Payout Details.
2	bankIdCode	C	Alphanum	Bank Identification Code Min - 8 Max -12
3	iBanNum	C	Alphanu m	IBAN Number Min - 24 Max - 35
4	beniciaryNa me	C	Alphabe tic	beniciaryName (English Only) Max - 100
5	serviceAmoun t	C	Numeric	Service Amount
6	valueDate	C	Numeric	Value Date Format: YYYYMMDD

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional if Merchant opted for Payout Future.

"accountDetails": [
    {
        "bankIdCode": "12345d6f",
        "iBanNum": "567896743281926354276254",
        "beniciaryName": "AlRajhi Bank Services",
        "serviceAmount": "200.00",
        "valueDate": "20201231"
    },
    {
        "bankIdCode": "1234ret3",
        "iBanNum": "987656743281926354276254",
        "beniciaryName": "DIGITAL CO",
        "serviceAmount": "300.00",
        "valueDate": "20201231"
    }
]
```

## SADAD

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	transactionType	C	Alphanum	Minimum length : 3 , Maximum length : 15 Transaction Type Allowed Values 'PAY' 'PAY_SAVE' 'ADVANCE' 'PARTIAL_PAYMENT' 'OVER_PAYMENT'
2	billerID	C	Alphanum	Minimum length : 1 , Maximum length : 3 Biller ID
3	billAmount	C	Numeric	billAmount
4	billType	C	Alphanum	Minimum length : 7 , Maximum length : 8 Bill Type. The allowed values are: - PREPAID : Paid in advance - POSTPAID : Paid at the end
5	billNumber	C	Alphanum	Minimum length : 1 , Maximum length : 30 Bill Number as identified by SADAD
6	IDType	C	Alphanum	Minimum length : 2 , Maximum length : 2 ID Type 01 National ID Card 02 Iqama 03 Passport
7	IDNumber	C	Alphanum	Minimum : 1 , Maximum : 20 ID Number

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional -for SADAD merchant

"billingDetails" :

{"IDType":"01","IDNumber":"1072587916","billNumber":"00100100018","billType":"POSTPAID","billerID":"169","billAmount":5,"transactionType":"ADVANCE"
}
```

## Response

Once ARB payment gateway verifies the transaction and returns the response to the same request.

### Response from ARB Payment Gateway to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	trandata	M	AlphaNum	All the below response parameters will be provided in trandata field
2	error	C	AlphaNum	If any error during processing, PG will provide the error code
3	errorText	C	AlphaNum	If any error during processing, PG will provide the error description
4	status	M	AlphaNum	If transaction success 1. If transaction failure 2.

### Detailed description of Plain trandata response parameters

S. No	Fields	M/C/O	Field Type	Description
1	paymentId	M	Numeric	Unique ID generated by payment gateway. Based on this payment Id merchant can match the final URL redirection response
2	result	M	AlphaNum	Transaction status . Value will be 'CAPTURED' for purchase successful and 'APPROVED' for authorization successful.
3	ref	M	Numeric	Transaction reference number (RRN)
4	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
5	date	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.

S. No	Fields	M/C/O	Field Type	Description
9	udf3	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.
10	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.
11	amt	M	Numeric	Transaction amount
12	authRespCod e	M	Numeric	Auth response code provided by PG
13	authCode	M	Numeric	6 digit authorization code received from switch
14	cardType	M	Alphabet ic	Card Brand name . Value will be "Visa" or "MasterCard" or "Mada".
15	actionCode	M	Alphanumeri c	Action code of transaction. Possible Values 1-Purchase 2-Credit 3-Void Purchase 4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)
16	card	C	AlPhanumeri c	Card Number used for Performing Transaction
17	expMonth	C	AlPhanumeri c	Expiry Month of the Card
18	expYear	C	AlPhanumeri c	Expiry Year of the Card

**Below is the sample encrypted response from PG to Merchant**

```
[ {  
  
  "tranid": "201931951332346",  
  
  "trandata": "<encrypted trandata>",
```

```

    "status":"1", //1 for success transaction, 2 for failure transaction
    "error":null,
    "errorText": null
  }]

```

### Plain trandata in response

```

[ {
  "paymentId": -1,
  "result": "CAPTURED",
  "amt": "10.55",
  "date": "1221",
  "ref": "935110000001",
  "udf1": "udf1text",
  "udf2": "udf2text",
  "udf3": "udf3text",
  "udf4": "udf4text",
  "udf5": "udf5text",
  "trackId": "3423423",
  "transId": "1242345345234",
  "authRespCode": "00",
  "authCode": "000000",
  "cardType": "Visa",
  "actionCode": "1",
  "card": "506968XXXXXX1063",
  "expMonth": "06", //1 - 2 Digits
}
]

```

```
"expYear":"2024" //2 - 4 Digits  
} ]
```

## Invoice Payment Transaction Flow

1. Customer visits the merchant site and selects the merchandise and confirms to pay using the payment gateway.
2. Merchant redirects the customer with the Invoice transaction data to the payment gateway.
3. Payment Gateway verifies the invoice transaction request from the merchant and generates the invoice Payment URL based on the invoice type.
4. Payment gateway will provide the response to merchant with invoice Payment URL.
5. Merchant to redirect the Payment URL to Payment Gateway.
  - There are two types of invoice transactions namely Dedicated and Open invoice.
    - a) If the initiated transaction type is dedicated, Merchant need to send the buyer details in the request.  
PG presents the hosted payment page with buyer details to customer and prompts the customer to enter the card credentials.
    - b) If the initiated transaction type is open then merchant no need to send buyer details.
6. Payment gateway will get the buyer detail and process the transaction with the respective schemes.
7. Once the transaction complete, PG will send the response to merchant and customer via mail & SMS.

## Request - Payment Token Generation API

### Request from Merchant to ARB Payment gateway

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.

### Dedicated Invoice detailed description of Plain Trandata request parameters.

S. No	Fields	M/C/O	Field Type	Description
1	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
2	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
3	currencyCode	M	Numeric	3-digit currency code of KSA. Ex:682
4	invoiceId	M	Alphanum	50-digit unique Id.
5	itemDesc	M	Alphanum	500-digit Item Description.
5	invoiceType	M	Alphabetic	1-digit value "D" or "O" (D-dedicated invoice / O – Open Invoice)
6	buyerName	M	Alphabetic	50-digit Buyer Name.
7	amt	M	Numeric	Transaction amount.
8	email	M	alphanum	Buyer mail Id.
9	mobile	M	Numeric	Buyer Mobile Number.
10	expiryDate	O	Alphanum	Expiry Date of the payment Link. Date Format: "dd-MM-yyyy hh:mm:ss"

### Open Invoice detailed description of Plain Trandata request parameters.

S. No	Fields	M/C/O	Field Type	Description
1	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
2	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
3	currencyCo de	M	Numeric	3-digit currency code of KSA. Ex: "682"
4	invoiceId	M	Alphanum	50-digit unique Id.
5	itemDesc	M	Alphanum	500-digit Item Description
5	invoiceType	M	Alphabetic	1-digit value "D" or "O" (D-dedicated invoice / O – Open Invoice)
7	amt	O	numeric	Transaction amount. Ex: "100.00"
10	expiryDate	O	Alphanum	Expiry Date of the payment Link. Date Format: "dd-MM-yyyy hh:mm:ss"

## Initial Response - Payment ID and Processing Page URL

ARB Payment gateway internally validates the request and gives invoice payment page URL in the response in case of successful validation, if failure then error code and description will be provided. The below response will be in plain format and there is no encryption for the below. Merchant can directly parse the response-based on the status and result fields as mentioned below.

### Initial Response from PG to Merchant for Dedicated and Open Invoice

S. No	Fields	M/C/O	Field Type	Description
1	status	M	Numeric	If the request validation success, then status will be '1'. If the validation failed, then status will be '2'
2	result	C	Alphanum	It contains invoice Payment URL if the validation success
3	error	C	Alphanum	If validation failed, then Payment gateway will provide the respective error code
4	errorText	C	Alphanum	If validation failed, then Payment gateway will provide the respective error description

```

Success:
[ {
  "status": "1",
  "result": "https://securepayments.alrajhibank.com.sa/mrchptl/iP.htm?Id=Y3FT9"  

  //Invoice Payment Page URL
}

Failure:
[ {
  "status": "2",
  "error": "IPAY0100124",
  "errorText": " Problem occurred while validating transaction data"
}
]

```

- If success, Merchant needs to redirect the invoice payment page URL like the below sample  
<https://securepayments.alrajhibank.com.sa/mrchptl/iP.htm?Id=Y3FT9>
- Once merchant redirects the link, ARB Payment Gateway shows the invoice Payment Page to customer based on the invoice type.

## Final Response

After validating the customer card details then ARB Payment gateway will provide the final response to merchant and customer via mail & SMS.

## Webhook Merchant Notification Flow

For Webhook transactions, ARB PG will send risk based, authentication based or transaction/payment based notification request to merchant as below :

### Detailed Notification Request from PG to Merchant for Webhook

S. No	Fields	M/C/ O	Field Type	Description
1	type	M	Alphanum(20)	Type of Notification to the Merchant
2	payLoad	M	JSON Object	Payment Status Info. All the Payment Gateway related information's available in the payload fields (Further table below)
3	result	M	JSON Object	Transaction Status - Contains the Transaction status for the transaction (table below)
4	responseURL	M	Alphanum	Merchant Response URL

### payLoad Detailed Field description

S. No	Fields	M/C/O	Field Type	Description
1	paymentId	M	Alphanum[20]	Payment ID -  Unique Id generated by Payment Gateway, this is the same ID that Payment Gateway had provided along with the PaymentPage URL for the initial request
2	transId	M	Alphanum[19]	Transaction ID -  Unique Transaction ID generated by Payment Gateway
3	ref	M	Alphanum[12]	RRN - The reference number of the transaction known to payment scheme. This number or series of letters is used for referential purposes by some acquiring/issuing bank/institutions and should be stored properly
4	paymentTimestamp	M	Alphanum	Timestamp - ARB request initiation Timestamp
5	trackId	M	Alphanum[25] 5]	Merchant Track ID -

S. No	Fields	M/C/O	Field Type	Description
				Track ID value that was sent by merchant in the Purchase request
6	udf1	O	Alphanum[25 5]	User Defined Field 1 -  Same udf value that merchant has sent in the initial transaction request to Payment Gateway
7	udf2	O	Alphanum[25 5]	User Defined Field 2 -  Same udf value that merchant has sent in the initial transaction request to Payment Gateway
8	udf3	O	Alpphanum[2 55]	User Defined Field 3  - Same udf value that merchant has sent in the initial transaction request to Payment Gateway
9	udf4	O	Alphanum[25 5]	User Defined Field 4  -Same udf value that merchant has sent in the initial transaction request to Payment Gateway
10	udf5	O	Alphanum255 ]	User Defined Field 5  -Same udf value that merchant has sent in the initial transaction request to Payment Gateway
11	udf6	O	Alphanum [255]	User Defined Field 6  -Same udf value that merchant has sent in the initial transaction request to Payment Gateway
12	udf7	O	Alphanum[25 5]	User Defined Field 7  -Same udf value that merchant has sent in the initial transaction request to Payment Gateway
13	udf8	O	Alphanum[25 5]	User Defined Field 8  -Same udf value that merchant has sent in the initial transaction request to Payment Gateway
14	udf9	O	Alphanum255 ]	User Defined Field 9  -Same udf value that merchant has sent in the initial transaction request to Payment Gateway

S. No	Fields	M/C/O	Field Type	Description
15	udf10	O	Alphanum[25] 5]	User Defined Field 10  -Same udf value that merchant has sent in the initial transaction request to Payment Gateway
16	amt	M	Numeric with decimal places - Max 12 digit with 2 digit decimal places	Transaction amount -  Transaction Amount as sent by merchant in the request
17	authRespCode	O	Alphanum[3]	Authorization Response Code – Authorization code received from the issuer bank
18	authCode	O	Alphanum[6]	Authorization Code -  The resulting authorization number of the transaction from the issuing bank. This number or series of letters is used for referential purposes by some acquiring/issuing bank/institutions and should be stored properly
19	actionCode	C	Alphanumeric	Action code of transaction. Possible Values 1-Purchase 2-Credit 3-Void Purchase 4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)
20	origTransactionID	C	Alphanumeric	It is applicable only for Supporting Transactions action code like 2,3,5,9 and 14. It refers to the "transId" of the Source/Original transaction
21	card	C	AlPhanumeric	Card Number used for Performing Transaction
22	expMonth	C	AlPhanumeric	Expiry Month of the Card
23	expYear	C	AlPhanumeric	Expiry Year of the Card

### result Parameter detailed description

S. No	Fields	M/C/O	Field Type	Description
1	status	M	Alphanum[30]	Status of the Payment
2	error	M	Alphanum[255]	Error code of the transaction
3	errorText	M	Alphanum[255]	Error description

### Notification Response from Merchant to PG for Webhook

S. No	Fields	M/C/O	Field Type	Description
1	status	M	Numeric	Merchant Notification acknowledgment status

### Webhook from PG:

```

PAYMENT

[{"result": [{"status": "CAPTURED"}], "responseURL": "http://172.22.0.121:9207/MerchDemoREST/NotifyResponse.htm", "payLoad": [{"date": "0415", "authRespCode": "00", "authCode": "623666", "transId": "202110527755152", "trackId": "04d26d6c-ca9f-4ac3-b65d-6c5bff7af1a6", "udf5": "Select", "udf10": "null", "amt": 10, "udf3": "null", "udf4": "null", "udf1": "null", "udf2": "null", "ref": "110533003557", "udf9": "null", "udf8": "null", "paymentTimeStamp": "2021-04-15T02:58:30.448Z", "actionCode": "1", "card": "401200XXXXXX1112", "expMonth": "6", "expYear": "24"}], "type": "PAYMENT"}]

PAYMENT FAILURE

[{"result": [{"errorText": "00", "error": "IPAY00001", "status": "NOT CAPTURED"}], "responseURL": }

```

```
"http://172.22.0.121:9207/MerchDemoREST/NotifyResponse.htm", "payLoad": [{"date": "0414", "ref": "110423000769", "authRespCode": "00", "authCode": "544377", "paymentId": "700202110427042639", "transId": "202110472940732", "trackId": "e061c0ec-b32e-456b-9ac2-8196fb8f16ec", "amt": 100, "paymentTimestamp": "2021-04-13T22:48:21.082Z", "actionCode": "1", "card": "401200XXXXXX1112", "expMonth": "6", "expYear": "24"}], "type": "PAYMENT FAILURE"}]
```

**Purchase HOST TIME OUT Webhook notification request (Action code will be Change in payload for each segments as per document.)**

```
[{"result": [{"status": "HOST TIMEOUT"}], "responseURL": "https://partner.se.com.sa/RESTAdapter/AlRajhi/PayNotification", "payLoad": [{"date": "0527", "authRespCode": "000", "authCode": "163025", "trackId": "ec4e181a-16e9-406e-a132-bdfda42e4e91", "transId": "202214720027040", "udf5": "TrackID", "cardType": "Ma da", "udf6": "10018496416", "udf10": "", "amt": "5.0", "udf3": "null", "udf4": "null", "udf1": "null", "udf2": "null", "ref": "214721008795", "udf9": "null", "paymentId": "700202214780010325", "udf7": "", "udf8": "null", "actionCode": "1", "paymentTimestamp": "2022-05-27T08:27:34.155Z", "card": "401200XXXXXX1112", "expMonth": "6", "expYear": "24"}], "type": "PAYMENT"}]
```

#### RISK FAILURE

```
[{"result": [{"errorText": "X", "error": "IPAY00002", "status": "IPAY0100045 - DENIED BY RISK"}]}, {"responseURL": "http://172.22.0.121:9207/MerchDemoREST/NotfiyRsponse.htm", "payLoad": [{"authRespCode": "X", "trackId": "605965227", "transId": "202101752650620", "udf5": "UDF5", "cardType": "Visa", "udf6": "UDF6", "udf10": "UDF10", "amt": 35.0, "udf3": "UDF3", "udf4": "UDF4", "udf1": "UDF1", "udf2": "UDF2", "result": "IPAY0100045 - DENIED BY RISK", "udf9": "UDF9", "paymentId": "600202101747330225", "udf7": "UDF7", "udf8": "UDF8", "actionCode": "1", "card": "401200XXXXXX1112", "expMonth": "6", "expYear": "24"}], "type": "RISK FAILURE"}]
```

#### Refund Webhook notification request

```
[{"result": [{"status": "CAPTURED"}]}, {"responseURL": "https://partner.se.com.sa/RESTAdapter/AlRajhi/PayNotification", "payLoad": [{"date": "0527", "authRespCode": "000", "authCode": "163025", "trackId": "ec4e181a-16e9-406e-a132-bdfda42e4e91", "transId": "202214720027040", "udf5": "TrackID", "cardType": "Ma da", "udf6": "10018496416", "udf10": "", "amt": "5.0", "udf3": "null", "udf4": "null", "udf1": "null", "udf2": "null", "ref": "214721008795", "udf9": "null", "paymentId": "700202214780010325", "udf7": "", "udf8": "null", "actionCode": "1", "paymentTimestamp": "2022-05-27T08:27:34.155Z", "card": "401200XXXXXX1112", "expMonth": "6", "expYear": "24"}], "type": "REFUND"}]
```

```
da","udf6":"10018496416","udf10":"FINALCAPTURE","amt":"5.0","udf3":"nul
l","udf4":"null","udf1":"null","udf2":"null","ref":"214721008795","udf9
":"null","origTransactionID":"202214779988486","paymentId":700202214780
010325,"udf7":"","udf8":"null","actionCode":"2","paymentTimestamp":"202
2-05-
27T08:27:34.155Z","card":"401200XXXXXX1112","expMonth":"12","expYear":"
36"}],"type":"PAYMENT"}]
```

#### **VOIDED Webhook notification request**

```
[{"result":[{"status":"VOIDED"}],"responseURL":"https://partner.se.com.
sa/RESTAdapter/AlRajhi/PayNotification","payLoad":[{"date":"0527","auth
RespCode":"000","authCode":"163025","trackId":"ec4e181a-16e9-406e-a132-
bdfda42e4e91","transId":202214720027040,"udf5":"TrackID","cardType":"Ma
da","udf6":10018496416,"udf10":"","amt":5.0,"udf3":null,"udf4":n
ull,"udf1":null,"udf2":null,"ref":214721008795,"udf9":null,"or
igTransactionID":202214779988486,"paymentId":700202214780010325,"udf7"
:"", "udf8":null,"actionCode":3,"paymentTimestamp":2022-05-
27T08:27:34.155Z,"card":401200XXXXXX1112,"expMonth":6,"expYear":2
4}],"type":"PAYMENT"}]
```

#### **NOT VOIDED Webhook notification request**

```
[{"result":[{"status":"NOT
VOIDED"}],"responseURL":"https://partner.se.com.sa/RESTAdapter/AlRajhi/
PayNotification","payLoad":[{"date":"0527","authRespCode":000,"authCo
de":163025,"trackId":ec4e181a-16e9-406e-a132-
bdfda42e4e91,"transId":202214720027040,"udf5":TrackID,"cardType":Ma
da,"udf6":10018496416,"udf10":"","amt":5.0,"udf3":null,"udf4":n
ull,"udf1":null,"udf2":null,"ref":214721008795,"udf9":null,"or
igTransactionID":202214779988486,"paymentId":700202214780010325,"udf7"
:"", "udf8":null,"actionCode":3,"paymentTimestamp":2022-05-
27T08:27:34.155Z,"card":401200XXXXXX1112,"expMonth":6,"expYear":2
4}],"type":"PAYMENT"}]
```

#### **Auth Webhook notification request**

```
[{"result":[{"status":"APPROVED"}],"responseURL":"https://partner.se.co
m.sa/RESTAdapter/AlRajhi/PayNotification","payLoad":[{"date":"0527","au
thRespCode":000,"authCode":163025,"trackId":ec4e181a-16e9-406e-
a132-
bdfda42e4e91,"transId":202214720027040,"udf5":TrackID,"cardType":Ma
da,"udf6":10018496416,"udf10":FINALCAPTURE,"amt":5.0,"udf3":nul
l,"udf4":null,"udf1":null,"udf2":null,"ref":214721008795,"udf9
":null,"paymentId":700202214780010325,"udf7":,"udf8":null,"action
Code":4,"paymentTimestamp":2022-05-
```

```
27T08:27:34.155Z", "card": "401200XXXXXX1112", "expMonth": "6", "expYear": "24"}], "type": "PAYMENT"})]
```

#### **Auth Webhook notification request**

```
[{"result": [{"status": "NOT APPROVED"}], "responseURL": "https://partner.se.com.sa/RESTAdapter/AlRajhi/PayNotification", "payLoad": [{"date": "0527", "authRespCode": "000", "authCode": "163025", "trackId": "ec4e181a-16e9-406e-a132-bdfda42e4e91", "transId": "202214720027040", "udf5": "TrackID", "cardType": "Mada", "udf6": "10018496416", "udf10": "FINALCAPTURE", "amt": "5.0", "udf3": "null", "udf4": "null", "udf1": "null", "udf2": "null", "ref": "214721008795", "udf9": "null", "paymentId": "700202214780010325", "udf7": "", "udf8": "null", "actionCode": "4", "paymentTimestamp": "2022-05-27T08:27:34.155Z", "card": "401200XXXXXX1112", "expMonth": "6", "expYear": "24"}], "type": "PAYMENT"})]
```

#### **Capture Webhook notification request**

```
[{"result": [{"status": "APPROVED"}], "responseURL": "https://partner.se.com.sa/RESTAdapter/AlRajhi/PayNotification", "payLoad": [{"date": "0527", "authRespCode": "000", "authCode": "163025", "trackId": "ec4e181a-16e9-406e-a132-bdfda42e4e91", "transId": "202214720027040", "udf5": "TrackID", "cardType": "Mada", "udf6": "10018496416", "udf10": "FINALCAPTURE", "amt": "5.0", "udf3": "null", "udf4": "null", "udf1": "null", "udf2": "null", "ref": "214721008795", "udf9": "null", "origTransactionID": "202214779988486", "paymentId": "700202214780010325", "udf7": "", "udf8": "null", "actionCode": "5", "paymentTimestamp": "2022-05-27T08:27:34.155Z", "card": "401200XXXXXX1112", "expMonth": "6", "expYear": "24"}], "type": "PAYMENT"})]
```

#### **Manual Refund Failure**

```
[{"result": [{"status": "NOT PROCESSED"}], "responseURL": "https://partner.se.com.sa/RESTAdapter/AlRajhi/PayNotification", "payLoad": [{"date": "0527", "authRespCode": "124", "authCode": "163025", "trackId": "ec4e181a-16e9-406ea132bdfda42e4e91", "transId": "202214720027040", "udf5": "TrackID", "cardType": "Mada", "udf6": "10018496416", "udf10": "", "amt": "5.0", "udf3": "null", "udf4": "null", "udf1": "null", "udf2": "null", "ref": "214721008795", "udf9": "null", "origTransactionID": "202214779988486", "paymentId": "700202214780010325", "udf7": "", "udf8": "null", "actionCode": "2", "paymentTimestamp": "2022-05-27T08:27:34.155Z", "card": "401200XXXXXX1112", "expMonth": "12", "expYear": "36"}], "type": "PAYMENT"})]
```

**Note :** "origTransactionID": "202101747330225" – Condition Parameter

**Merchant should send acknowledgment to PG as below:**

Merchant Response Sample:

```
[ {  
    "status": "1"  
} ]
```

If PG doesn't receive any acknowledgement from merchant , PG will keep sending the notification request till the acknowledgement is received .

## Merchant Notification Flow for Bank Hosted Transactions

If Notification enabled at Merchant level,

1. Payment gateway will initiate REST call to send the transaction status notification request to merchant and wait for the acknowledgement.
2. If PG receives the acknowledgment from merchant, then Payment Gateway logs the response and provides the transaction update to Cortex system for processing the settlement and Payment Gateway sends the final response to merchant. The final response will be URL redirection.
3. Merchant displays transaction result to customer.
4. In case, if PG does not receive the acknowledgment from merchant, then PG will initiate the VOID transaction to respective scheme to reverse the transaction and there is no payment advise initiated to Cortex.

If Notification disabled at Merchant level,

1. Payment Gateway logs the response and provides the transaction update to Cortex system for processing the settlement and Payment Gateway sends final response to merchant and this will be URL redirection.
2. Merchant displays transaction result to customer.

## Request - Notification Generation API

### Notification request from PG to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	paymentId	M	Numeric	Unique ID generated by Payment gateway. Merchant can store the payment ID to match the final URL redirection response
2	trandata	M	Alphanum	All the below response parameters encrypted and send the encrypted value in trandata

### 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. Based on this payment Id merchant can match the final URL redirection response
2	result	M	Alphanum	Transaction status
3	ref	M	Numeric	Transaction reference number (RRN)
4	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
5	date	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	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.

S. No	Fields	M/C /O	Field Type	Description
10	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.
11	amt	M	Numeric	Transaction amount
12	authRespCode	M	Numeric	Auth response code provided by PG
13	authCode	M	Numeric	6 digit authorization code received from switch
14	actionCode	C	Alphanumeric	Action code of transaction. Possible Values 1-Purchase 2-Credit 3-Void Purchase 4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)

Below is the sample merchant notification request and response,

#### Notification Request from ARB payment gateway to Merchant:

```
[ {
  "paymentId":100201935044735860,
  "trandata":"<encrypted trandata>"
}]
```

#### Plain Trandata:

```
[ {"paymentId":100201935166676976,
  "result":"CAPTURED",
  "ref":"935110000001",
  "transId":"201935166561122",}
```

```
"date":"1217",
"trackId":"1003383844",
"udf1":"",
"udf2":"",
"udf3":"8870091137",
"udf4":"FC",
"udf5":"Tidal5",
"amt":"70.0,
"authRespCode","00",
"authCode":"000000",
"actionCode":"1",
"card":"401200XXXXXX1112",
"expMonth":"12", // 1 - 2 digits
"expYear":"2036" // 2 - 4 digits
} ]
```

## Response - Acknowledgement

### Notification response from Merchant to ARB Payment gateway

S. No	Fields	M/C /O	Field Type	Description
1	status	M	Numeric	Status should be '1'
2	result	M	Alphanum	Merchant response URL for which PG will provide the final URL redirection response

### Acknowledgment response from merchant to PG:

```
[ {
  "status": "1",
  "result": "https://merchant.com/finalresultURL"
}]
```

## Final response to merchant

If ARB payment gateway receives the acknowledgement from merchant, PG logs the response and provide the response back to merchant. This will be URL redirection.

### Response from PG to merchant.

```
[ {
  "paymentId": "100201935166676976",
  "trandata": "<encrypted trandata>",
  "Error": "",
  "ErrorText": ""
}]
```

### Plain Trandata:

```
[ {
  "paymentId": "100201935166676976",
  "result": "CAPTURED",
  "ref": "935110000001",
  "transId": "201935166561122",
  "date": "1217",
  "trackId": "1003383844",
  "udf1": "",
  "udf2": "",
  "udf3": "8870091137",
  "udf4": "FC",
  "udf5": "Tidal5",
  "amt": "70.0",
  "authRespCode": "00",
}]
```

```
"authCode":"000000",
"actionCode":"1",
"card":"401200XXXXXX1112",
"expMonth":"12", // 1 - 2 digits
"expYear":"2036" // 2 - 4 digits
} ]
```

## Response – No Acknowledgement

If there is no acknowledgement from Merchant After initiating the merchant notification, PG will wait for the response based on the configured time and no acknowledgement from merchant then PG will void the transaction and update the response back to merchant error URL received in the initial API request.

```
[ {  
  
    "paymentId": "100201935166676976",  
  
    "Result": "Voided",  
  
    "error": "IPAY0200025",  
  
    "errorText": "!ERROR!-IPAY0200025 - Problem occurred while getting  
merchant acknowledgement & transaction reversed",  
  
    "trackId": "123456",  
  
    "amt": "12.0"  
  
} ]
```

## Issuer Country API (Card Bin Check)

Perform a BIN lookup using this API call. Merchant can send card bin number to PG and PG will respond with card issuer country details.

**End Point:** <https://securepayments.alrajhibank.com.sa/pg/payment/bincheck.htm>

### Request from Merchant to PG

Detailed description of Request from Merchant to ARB payment gateway

S. No	Fields	M/C/ O	Field Type	Description
1	bin	M	Numeric	Card Bin First six digits of the card Number
2	id	M	Alphanum	Tranportal ID. Merchant can download the same in merchant portal
3	password	M	Alphanum	Tranportal password. Merchant can download the same in merchant portal.

### Below is the sample request from Merchant to PG

```
{
  "bin": "515735",
  "id": "IPAYAq03cVHs2q",
  "password": "1$Q$VP73S2gycg@"
}
```

## Response from PG to Merchant

Detailed description of Response from ARB payment gateway to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	bin	C	Numeric	Card Bin First six digits of the card Number
2	bank	C	Alphanum	Bank name for the card bin issuer
3	country	C	Alphanum	Country name for the card bin
4	countryco de	C	Alphanum	Country Code for the card bin
5	card	C	Alphanum	Card Type . Ex : MasterCard /Visa
6	errorText	C	Alphanum with special chars	If validation failed, then payment gateway will provide the respective error description
7	error	C	Alphanum	If validation failed, then Payment gateway will provide the respective error code
8	status	M	Numeric	If the request validation is success, then status will be '1'. If the validation failed, then status will be '2'

### Below is the sample response from PG to Merchant (Success Case)

```
{
  "country": "SAUDI ARABIA",
  "bank": "Al Bank Al Saudi Al Fransi",
  "bin": "446404",
  "countrycode": "SAU",
  "card": "MADA",
  "status": "1"
}
```

**Below is the sample response from PG to Merchant (Error Case)**

```
{  
    "errorText": "!ERROR! - IPAY0100380-Bin number should be of 6 digits.",  
    "error": "IPAY0100380",  
    "status": "2"  
}
```

# Bank Hosted Recurring Transaction Flow (3D Secure)

Recurring Billing API methods enable merchant user (via payment gateway) to manage regular subscription payments.

## Request - Payment Token Generation API

### Request from Merchant to ARB Payment gateway

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.
3	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
4	errorURL	M	Alphanum	Merchant error URL

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization : 4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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	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.
10	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.
11	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
12	errorURL	M	Alphanum	The merchant error URL where Payment Gateway send the response in case any error while Processing the transaction.

### Request from Merchant to ARB Payment gateway:

```
[ {
  //Mandatory Parameters
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata> ",
  "responseURL": "https://merchantpage/PaymentResult.jsp",
  "errorURL": "https://merchantpage/PaymentResult.jsp"
}]
```

### Plain Trandata:

Trandata will contain below parameters encrypted with AES algorithm with CBC Mode, PKCS5Padding with initialization vector value **PGKEYENCDECIVSPC** under Resource Key

```
[ {
  //Mandatory Parameters
  "amt":"12.00",
  "action":"1",      // 1 - Purchase , 2 - Authorization
  "password":"q@a680$27@JLkcK",
  "id":"IPAYlCR6qZF7q6w",
  "currencyCode":"682",
  "trackId":"12345656789",
  "responseURL":"https://merchantpage/PaymentResult.jsp",
  "errorURL":"https://merchantpage/PaymentResult.jsp",
  "udf1":"1", //To identify Recurring based transactions
  "udf2":"SI", //To identify Recurring based transactions
  //Optional Parameters
  "udf3":"udf3text",
  "udf4":"udf4text",
  "udf5":"udf5text",
  "langid":"ar",
}
```

## Split Payment or Payout.

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/ O	Field Type	Description
1	accountDetails	C	JSON Array	Conditional if Merchant Opted for Payout future. Split Payment or Payout Details.
2	bankIdCode	C	Alphanum	Bank Identification Code Min - 8 Max -12
3	iBanNum	C	Alphanum	IBAN Number Min - 24 Max - 35
4	beniciaryName	C	Alphabe tic	beniciaryName (English Only) Max - 100
5	serviceAmount	C	Numeric	Service Amount
6	valueDate	C	Numeric	Value Date Format: YYYYMMDD

### Sample JSON request - Request from Merchant to ARB PG

```
//Conditional if Merchant Opted for Split Payment or Payout.

"accountDetails": [
  {
    "bankIdCode": "12345d6f",
    "iBanNum": "567896743281926354276254",
    "beniciaryName": "AlRajhi Bank Services",
    "serviceAmount": "200.00",
    "valueDate": "20201231"
  },
  {
    "bankIdCode": "1234ret3",
    "iBanNum": "987656743281926354276254",
    "beniciaryName": "DIGITAL CO",
    "serviceAmount": "300.00",
    "valueDate": "20201231"
  }
],
```

## SADAD

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C /O	Field Type	Description
1	transactionType	C	Alphanum	Minimum length : 3 , Maximum length : 15 Transaction Type Allowed Values 'PAY' 'PAY_SAVE' 'ADVANCE' 'PARTIAL_PAYMENT' 'OVER_PAYMENT'
2	billerID	C	Alphanum	Minimum length : 1 , Maximum length : 3 Biller ID
3	billAmount	C	Numeric	billAmount
4	billType	C	Alphanum	Minimum length : 7 , Maximum length : 8 Bill Type. The allowed values are: - PREPAID : Paid in advance - POSTPAID : Paid at the end
5	billNumber	C	Alphanum	Minimum length : 1 , Maximum length : 30 Bill Number as identified by SADAD
6	IDType	C	Alphanum	Minimum length : 2 , Maximum length : 2 ID Type 01 National ID Card 02 Iqama 03 Passport
7	IDNumber	C	Alphanum	Minimum : 1 , Maximum : 20 ID Number

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional -for SADAD merchant

"billingDetails" :

{"IDType":"01","IDNumber":"1072587916","billNumber":"00100100018","billType":"POSTPAID","billerID":"169","billAmount":5,"transactionType":"ADVANCE"

},
```

## Initial Response - Payment ID and Payment Page URL

### Initial Response from PG to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	status	M	Numeric	If the request validation success, then status will be '1'. If the validation failed, then status will be '2'
2	result	C	Alphanum	It contains payment ID and Payment URL if the validation success else this will be null
3	error	C	Alphanum	If validation failed, then Payment gateway will provide the respective error code
4	errorText	C	Alphanum	If validation failed, then Payment gateway will provide the respective error description

- ARB Payment gateway internally validates the request and gives payment ID and payment page URL in the response in case of successful validation, if failure then error code and description will be provided. The below response will be in plain format and there is no encryption for the below. Merchant can directly parse the response-based status and result fields as mentioned below.

#### Success:

```
[ {
  "status": "1",
  "result": "100201931620827468":https://securepayments.alrajhibank.com.sa/pg/paymentpage.htm, //Payment ID:Paymentpage URL
  "error": null,
  "errorText": null }
]

Failure:

[ {
  "status": "2",
  "error": "IPAY0100124",
  "errorText": "Problem occurred while validating transaction data",
```

```
    "result": null  
}  
]
```

## Framing Payment URL

- If success, Merchant needs to frame the payment page URL like the below sample

```
https://securepayments.alrajhibank.com.sa/pg/paymentpage.htm?PaymentID=100201931620827468
```

- If Merchant notification is disabled, then ARB Payment gateway will provide the final response in URL redirection. Below is the sample response from ARB PG to merchant

## Final Response – Transaction Status

### Final URL redirection 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 encrypted and send the encrypted value in 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. Based on this payment Id merchant can match the final URL redirection response
2	result	M	Alphanum	Transaction status . Value will be 'CAPTURED' for purchase successful and 'APPROVED' for authorization successful.
3	ref	M	Numeric	Transaction reference number (RRN)
4	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
5	date	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.

S. No	Fields	M/C /O	Field Type	Description
9	udf3	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.
10	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.
11	amt	M	Numeric	Transaction amount
12	authRespCode	M	Numeric	Auth response code provided by PG
13	authCode	M	Numeric	6 digit authorization code received from switch
14	cardType	M	Alphabet ic	Card Brand name . Value will be "Visa" or "MasterCard" or "Mada".
15	custid	M	Alphanu m	Customer ID needs to be sent in the subsequent Merchant Initiating recurring transactions
16	actionCode	M	Alphanu meric	Action code of transaction. Possible Values 1-Purchase 2-Credit 3-Void Purchase 4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)
17	card	C	AlPhanu meric	Card Number used for Performing Transaction
18	expMonth	C	AlPhanu meric	Expiry Month of the Card
19	expYear	C	AlPhanu meric	Expiry Year of the Card

### Sample JSON Response - Final

```
//Redirection Parameters
```

- "paymentId":"100201935166676976",
- "trandata":"<encrypted trandata>",
- "error": "",
- "errorText": ""

### **Plain Trandata:**

---

```
[ {
  "paymentId": "100201935166676976",
  "result": "CAPTURED",
  "transId": 20193516656122,
  "ref": "935110000001",
  "date": "1217",
  "trackId": "1003383844",
  "udf1": "",
  "udf2": "",
  "udf3": "8870091137",
  "udf4": "FC",
  "udf5": "Tidal5",
  "amt": "70.0",
  "authRespCode": "00",
  "authCode": "000000",
  "cardType": "Visa",
  "custid": "202014785236784",
  "actionCode": "1",
  "card": "506968XXXXXX1063",
}
```

```
"expMonth":"06", //1 - 2 Digits  
"expYear":"2024" //2 - 4 Digits  
}]
```

# Merchant Hosted Recurring Transaction Flow (3D Secure)

Recurring Billing API methods enable merchant user to manage regular subscription payments.

## Request - Payment Token Generation API

### Request from Merchant to ARB payment gateway

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.
3	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
4	errorURL	M	Alphanum	Merchant error URL

### Detailed description of Plain trandata request parameters

S.No	Fields	M/C /O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization:4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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 passed along with a transaction request and then returned in the transaction response.

S.No	Fields	M/C /O	Field Type	Description
				Merchant should ensure that field left blank when no data needs to be passed.
8	udf2	O	Alphanum	The user (merchant) defines these fields. The field data passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.
9	udf3	O	Alphanum	The user (merchant) defines these fields. The field data passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.
10	udf5	O	Alphanum	The user (merchant) defines these fields. The field data 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.
11	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
12	errorURL	M	Alphanum	The merchant error URL where Payment Gateway send the response in case any error while Processing the transaction.
13	expYear	M	Numeric	Expiry year of card
14	expMonth	M	Numeric	Expiry month of card
15	member	M	Alphanum	Card holder name
16	cvv2	M	Numeric	CVV of the card
17	cardNo	M	Numeric	Cardholders card number
18	cardType	M	Alphanum	Card type Ex : Credit card – C, Debit Card – D
19	browserLanguage	M	Alphanum	Value representing the browser language Returned from "navigator.language" property. Length 1 to 8 characters.
20	browserColorDept h	M	Alphanum	Value representing the bit depth of the colour palette for displaying images, in bits per pixel. Obtained from Cardholder browser using the "screen.colorDepth" property. Length 1 to 2 characters.  Values Accepted :

S.No	Fields	M/C /O	Field Type	Description
				1 = 1 bit 4 = 4 bits 8 = 8 bits 15 = 15 bits 16 = 16 bits 24 = 24 bits 32 = 32 bits 48 = 48 bits
21	browserScreenHeight	M	Alphanumeric	Total height of the Cardholder's screen in pixels. Value is returned from the screen.height property. Length 1 to 6 characters.
22	browserScreenWidth	M	Alphanumeric	Total width of the cardholder's screen in pixels. Value is returned from the screen.width property. Length 1 to 6 characters.
23	browserJavaEnabled	M	Alphanumeric	Value is returned from the navigator.javaEnabled property. Boolean value.
24	browserTZ	M	Alphanumeric	Time difference between UTC time and the Cardholder browser local time, in minutes. Value is returned from the getTimezoneOffset() method. Length 1 to 5 characters.
25	jsEnabled	M	Alphanumeric	Value whether the java script is enabled in browser or not.

### Request from Merchant to ARB Payment gateway:

```
[ {
  //Mandatory Parameters
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata>",
  "responseURL": "https://merchantpage/PaymentResult.jsp",
  "errorURL": "https://merchantpage/PaymentResult.jsp"
}]
```

## Plain Trandata

Trandata will contain below parameters encrypted with AES algorithm with CBC Mode, PKCS5Padding with initialization vector value **PGKEYENCDECIVSPC** under Resource key.

```
[ {
    //Mandatory Parameters
    "amt": "12.00",
    "action": "1",      // 1 - Purchase , 4 - Authorization
    "password": "q@a680$27@JLkcK",
    "id": "IPAY1CR6qZF7q6w",
    "currencyCode": "682",
    "trackId": "123456",
    "expYear": "2022",
    "expMonth": "12",
    "member": "cardholdername",
    "cvv2": "212",
    "cardNo": "5453*****5539",
    "cardType": "C",
    "responseURL": "https://merchantpage/PaymentResult.jsp",
    "errorURL": "https://merchantpage/PaymentResult.jsp",
    "browserJavaEnabled": "true",
    "browserLanguage": "en",
    "browserColorDepth": "48",
    "browserScreenHeight": "400",
    "browserScreenWidth": "600",
    "browserTZ": "0",
}
```

```

"jsEnabled": "true",

"udf1": "1", //To identify Recurring based transactions

"udf2": "SI", //To identify Recurring based transactions

//Optional Parameters

"udf3": "udf3text",

"udf4": "udf4text",

"udf5": "udf5text",
  
```

## Payout Future

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	accountDetails	C	JSON Array	Conditional if Merchant Opted for Payout future. Split Payment or Payout Details.
2	bankIdCode	C	Alphanum	Bank Identification Code Min - 8 Max - 12
3	iBanNum	C	Alphanum	IBAN Number Min - 24 Max - 35
4	beniciaryNa me	C	Alphabe tic	beniciaryName (English Only) Max - 100
5	serviceAmoun t	C	Numeric	Service Amount
6	valueDate	C	Numeric	Value Date Format: YYYYMMDD

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional if Merchant opted for Payout Future.

"accountDetails": [
    {"bankIdCode": "12345d6f", "benificiaryName": "AlRajhi Bank Services", "serviceAmount": "200.00", "valueDate": "20201231" },
    {"bankIdCode": "1234ret3", "benificiaryName": "DIGITAL CO", "serviceAmount": "300.00", "valueDate": "20201231" }
]
```

## SADAD

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/ C/ O	Field Type	Description
1	transactionType	C	Alphanum	Minimum length : 3 , Maximum length : 15 Transaction Type Allowed Values 'PAY' 'PAY_SAVE' 'ADVANCE' 'PARTIAL_PAYMENT' 'OVER_PAYMENT'
2	billerID	C	Alphanum	Minimum length : 1 , Maximum length : 3 Biller ID
3	billAmount	C	Numeric	billAmount
4	billType	C	Alphanum	Minimum length : 7 , Maximum length : 8 Bill Type. The allowed values are: - PREPAID : Paid in advance - POSTPAID : Paid at the end
5	billNumber	C	Alphanum	Minimum length : 1 , Maximum length : 30 Bill Number as identified by SADAD
6	IDType	C	Alphanum	Minimum length : 2 , Maximum length : 2 ID Type 01 National ID Card 02 Iqama 03 Passport
7	IDNumber	C	Alphanum	Minimum : 1 , Maximum : 20 ID Number

### Sample JSON request - Request from Merchant to ARB PG

```
//conditional -for SADAD merchant

    "billingDetails" :

    {"IDType":"01","IDNumber":"1072587916","billNumber":"00100100018","billType":"POSTPAID","billerID":"169","billAmount":5,"transactionType":"ADVANCE"

}
```

## Initial Response - Payment ID and Payment Page URL

ARB Payment gateway internally validates the request and gives payment ID and payment page URL in the response if the validation success. If failure then, Error code and description will be provided.

### Initial Response from PG to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	status	M	Numeric	If the request validation success, then status will be '1'. If the validation failed, then status will be '2'
2	result	C	Alphanumeric	It contains payment ID and Payment URL if the validation success else this will be null
3	error	C	Alphanumeric	If validation failed, then Payment gateway will provide the respective error code
4	errorText	C	Alphanumeric	If validation failed, then Payment gateway will provide the respective error description

### Plain Response:

```

Success:

[ {
  "status": "1",
  "result": "700212030953264091:https://securepayments.alrajhibank.com.sa/pg/TranportalVbv.htm?paymentId=700212030953264091&id=r9Ht8R4U6g9dYtY",
  //Payment ID:Payment URL
  "error":null,
  "errorText": null
} ]


Failure:

[ {
  "status": "2",
  "error": " IPAY0100124",
}
]

```

```
"errorText": "Problem occurred while validating transaction data",  
"result": null  
} ]
```

## Framing Payment URL

Merchant needs to frame the payment page URL like the below sample

<https://securepayments.alrajhibank.com.sa/pg/TranportalVbv.htm?paymentId=700112030953264091&id=r9Ht8R4U6g9dYtYg>

## Final Response – Transaction Status

Merchant needs to redirect the customer to ARB Payment gateway.

Customer browser will redirect to ACS page and will complete the authentication. PG then process for authorization with the respective schemes. Once payment response received from respective scheme, then ARB Payment gateway returns the response to merchant. This is URL redirection. Below is sample response from ARB PG to merchant,

### Final Response from ARB payment gateway to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	paymentId	M	Numeric	Unique ID generated by Payment gateway. Merchant can store the payment ID to match the final URL redirection response
2	trandata	C	Alphanum	All the below response parameters encrypted and send the encrypted value in trandata  Ex: [{"paymentId": "100201935166676976", "result": "CAPTURED", "ref": "93511000001", "transId": "201935166561122", "date": "1217", "trackId": "1003383844", "udf1": "", "udf2": "", "udf3": "8870091137", "udf4": "FC", "udf5": "Tidal5", "amt": "70.0", "authRespCode": "00"}]
3	error	C	Numeric	If any error, PG will provide the error code
4	errorText	C	Alphanum	PG will provide the error description if any transaction declined.

### Detailed description of Plain trandata response parameters

S. No	Fields	M/C/O	Field Type	Description
1	paymentId	M	Numeric	Unique ID generated by payment gateway. Based on this payment Id merchant can match the final URL redirection response
2	result	M	Alphanum	Transaction status . Value will be 'CAPTURED' for purchase successful and 'APPROVED' for authorization successful.
3	ref	M	Numeric	Transaction reference number (RRN)

S. No	Fields	M/C/ O	Field Type	Description
4	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
5	date	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	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.
10	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.
11	amt	M	Numeric	Transaction amount
12	authRespCode	M	Numeric	Auth response code provided by PG
13	authCode	M	Numeric	6 digit authorization code received from switch
14	cardType	M	Alphabetic	Card Brand name . Value will be "Visa" or "MasterCard" or "Mada".
15	custid	M	Alphanum	Customer ID needs to be sent in the subsequent Merchant Initiating recurring transactions
16	actionCode	M	Alphanum	Action code of transaction. Possible Values 1-Purchase

S. No	Fields	M/C/ O	Field Type	Description
				2-Credit 3-Void Purchase 4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)

### Sample JSON Response - Final

#### Redirection Parameters

- "paymentId": "100201935044735860",
- "trandata": "<encrypted trandata>",
- "Error": "",
- "ErrorText": ""

### Plain Trandata

```
[{"paymentId": "100201935044735860",
"result": "CAPTURED",
"amt": "10.55",
"date": 1221,
"ref": "935110000001",
"udf1": "udf1text",
"udf2": "udf2text",
"udf3": "udf3text",
"udf4": "udf4text",
"udf5": "udf5text"},
```

```
"trackId": "3423423",
"transId": "1242345345234",
"authRespCode": "00",
"authCode": "000000",
"cardType": "Visa",
"custid": "202014785236784",
"actionCode": "1"
}
```

# Recurring Payment for MADA – Merchant Initiated Initial Response - Payment ID and Payment Page URL

Merchant forwards the API request to ARB Payment gateway, below is sample request.

## Request

### Request from Merchant to ARB payment gateway

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization:4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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.

S. No	Fields	M/C/O	Field Type	Description
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	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.
10	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.
11	cardType	M	Alphanum	Card type Ex : Credit card – C, Debit Card – D
12	browserLanguage	M	Alphanum	Value representing the browser language Returned from "navigator.language" property. Length 1 to 8 characters.
13	browserColorDepth	M	Alphanum	<p>Value representing the bit depth of the colour palette for displaying images, in bits per pixel. Obtained from Cardholder browser using the "screen.colorDepth" property. Length 1 to 2 characters.</p> <p>Values Accepted :</p> <ul style="list-style-type: none"> <li>1 = 1 bit</li> <li>4 = 4 bits</li> <li>8 = 8 bits</li> <li>15 = 15 bits</li> <li>16 = 16 bits</li> <li>24 = 24 bits</li> <li>32 = 32 bits</li> <li>48 = 48 bits</li> </ul>
14	browserScreenHeight	M	Alphanum	Total height of the Cardholder's screen in pixels. Value is returned from the screen.height property. Length 1 to 6 characters.
15	browserScreenWidth	M	Alphanum	Total width of the cardholder's screen in pixels. Value is returned from the screen.width property. Length 1 to 6 characters.
16	browserJavaEnabled	M	Alphanum	Value is returned from the navigator.javaEnabled property. Boolean value.

S. No	Fields	M/C/O	Field Type	Description
17	browserTZ	M	Alphanum	Time difference between UTC time and the Cardholder browser local time, in minutes. Value is returned from the getTimezoneOffset() method. Length 1 to 5 characters.
18	jsEnabled	M	Alphanum	Value whether the java script is enabled in browser or not.

### Below is the sample encrypted request from Merchant to PG

```
[ {
  //Mandatory Parameters
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata>"
}]
```

### Below are the plain Trandata request

```
{
  //Mandatory Parameters
  "amt": "12.00",
  "action": "1",
  "password": "q@a680$27@JLkcK",
  "id": "IPAY1CR6qZF7q6w",
  "currencyCode": "682",
  "trackId": "123456",
  "cardType": "C",
  "browserJavaEnabled": "true",
  "browserLanguage": "en",
  "browserColorDepth": "48",}
```

```
"browserScreenHeight":"400",
"browserScreenWidth":"600",
"browserTZ":"0",
"jsEnabled":"true",
"udf1":"1", //To identify Merchant Initiated Recurring transaction
"udf2":"SI", //To identify Merchant Initiated Recurring transaction

//Optional Parameters
"udf3":"udf3text",
"udf4":"udf4text",
"udf5":"udf5text",
```

## Response

Once ARB payment gateway verifies the transaction and returns the response to the same request.

### Response from ARB Payment Gateway to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	trandata	M	AlphaNum	All the below response parameters will be provided in trandata field
2	error	C	AlphaNum	If any error during processing, PG will provide the error code
3	errorText	C	AlphaNum	If any error during processing, PG will provide the error description
4	status	M	AlphaNum	If transaction success 1. If transaction failure 2.

### Detailed description of Plain trandata response parameters

S. No	Fields	M/C/ O	Field Type	Description
2	result	M	AlphaNum	Transaction status . Value will be 'CAPTURED' for purchase successful and 'APPROVED' for authorization successful.
3	ref	M	Numeric	Transaction reference number (RRN)
4	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
5	date	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.

S. No	Fields	M/C/ O	Field Type	Description
9	udf3	O	Alphanu m	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.
10	udf5	O	Alphanu m	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.
11	amt	M	Numeric	Transaction amount
12	authRespCode	M	Numeric	Auth response code provided by PG
13	authCode	M	Numeric	6 digit authorization code received from switch
14	cardType	M	Alphabet ic	Card Brand name . Value will be "Visa" or "MasterCard" or "Mada".
15	actionCode	M	Alphanu meric	Action code of transaction. Possible Values 1-Purchase 2-Credit 3-Void Purchase 4-Authorization 5-Capture 8-Inquiry 9-Void Authorization 14-Authorization Extension(MADA)
16	card	C	AlPhanu meric	Card Number used for Performing Transaction
17	expMonth	C	AlPhanu meric	Expiry Month of the Card
18	expYear	C	AlPhanu meric	Expiry Year of the Card

**Below is the sample encrypted response from PG to Merchant**


---

```
[ {  
  "tranid": "201931951332346",
```

```

  "trandata": "<encrypted trandata>",

  "status":"1", //1 for success transaction, 2 for failure transaction

  "error":null,
  "errorText": null

}
  
```

### Plain trandata in response

---

```

[ {
  "paymentId": -1,
  "result": "CAPTURED",
  "amt": "10.55",
  "date": "1221",
  "ref": "935110000001",
  "udf1": "udf1text",
  "udf2": "udf2text",
  "udf3": "udf3text",
  "udf4": "udf4text",
  "udf5": "udf5text",
  "trackId": "3423423",
  "transId": "1242345345234",
  "authRespCode": "00",
  "authCode": "000000",
  "cardType": "Visa",
  "actionCode": "1" ,
  "card": "506968XXXXXX1063",
}
  
```

```
"expMonth":"06", //1 - 2 Digits  
"expYear":"2024" //2 - 4 Digits  
}]
```

# Merchant Hosted Transaction Flow (Apple Pay PSP Integration)

- For Apple Pay Purchase Transactions Merchant forwards the API request to ARB Payment gateway below is sample request.
- Action Code for Purchase Transactions is 1

**Below is the sample encrypted request from Merchant to PG**

```
[ {
  "id": "IPAYlCR6qZF7q6w",
  "trandata": "<encrypted trandata>"
}]
```

**Below are the plain Trandata request**

```
[ {
  "password": "OLE34@zAfcR5$2!",
  "trackId": "466418734",
  "amt": "50.00",
  "action": "1",
  "id": "IPAYN6dz0roK9DR",
  "currencyCode": "682",
  "trxnType": "APPLEPAYPSP",
  //conditional-for SADAD merchant.
  "billingDetails" :
  { "IDType": "01", "IDNumber": "1072587916", "billNumber": "00100100018", "billType": "POST-PAID", "billerID": "169", "billAmount": 5, "transactionType": "ADVANCE" }
}]
```

```
//Apple Pay Plain Integration

"applePay" :

"{"appleCardType":"credit",

"deviceManufacturerIdentifier":"049510030273",

"displayName":"Al Rajhi Tradings",

"appleCurrencyCode":"682",

"devicePAN":"5453010005456656",

"tokenExpiryDate":"270127",

"transactionIdentifier":"F6A7FB5DA676E2EB50C4DDA9DE81A4AF6BE642991A2D382CF
FCADC0FFA5109A0",

"onlinePaymentCryptogram":"BQFpOOTmAAHWt55aiasnDQABAAA=",

"paymentDataType":"3DSecure",

"eciIndicator":"02",

"network":"MASTERCARD"}"

}]
```

### Attributes - Request from Merchant to ARB PG

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Transport ID. Merchant can download the Transport id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.
3	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
4	errorURL	M	Alphanum	Merchant error URL

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1 Authorization: 4
3	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
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	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.
10	udf4	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.
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	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
13	errorURL	M	Alphanum	The merchant error URL where Payment Gateway send the response in case any error while processing the transaction.
14	langid	O	Alphabetic	Language ID . Based on language ID arabic language will be displayed on payment page. Value should be 'ar' or 'AR' for arabic language.
15	billingDetails	C	JSON Object	SADAD Billing Details Mandatory for SADAD Bill Pay Transaction
16	trxnType	C	String	All the Apple Pay PSP transactions should send "APPLEPAYPSP" to identify the Apple based transactions. Mandatory for Merchant Hosted Apple Pay PSP Transaction.

17	applePay	C	JSON String	To send the Apple Pay transaction Information for Plain transaction Mandatory for Merchant Hosted Apple Pay PSP Transaction
----	----------	---	-------------	---

### Detailed description of billingDetails request parameters

S. No	Fields	M/C/O	Field Type	Description
1	transactionType	C	Alphanum	Transaction Type. Minimum length: 3, Maximum length: 15 Allowed Values 'PAY' 'PAY_SAVE' 'ADVANCE' 'PARTIAL_PAYMENT' 'OVER_PAYMENT'
2	billerID	C	Alphanum	Biller ID. Minimum length: 1, Maximum length: 3.
3	billAmount	C	Numeric	Billing Amount
4	billType	C	Alphanum	Bill Type. Minimum length: 7, Maximum length: 8. The allowed values are: - PREPAID: Paid in advance - POSTPAID: Paid at the end
5	billNumber	C	Alphanum	Bill Number as identified by SADAD. Minimum length: 1, Maximum length: 30.
6	IDType	C	Alphanum	ID Type Minimum length: 2, Maximum length: 2. 01 - National ID Card 02 - Iqama 03 - Passport
7	IDNumber	C	Alphanum	Minimum: 1, Maximum: 20

				ID Number
--	--	--	--	-----------

### Detailed description of applePay JSON request parameters

S. No	Fields	M/C/O	Field Type	Description
1	network	M	String	Network Information received from Apple
2	displayName	C	String	Display Name received from Apple
3	appleCardType	M	String	Card Type received from Apple received from Apple
4	devicePAN	M	String	Device PAN received from Apple after decrypting the PayLoad
5	tokenExpiryDate	M	String	Token Expiry Date received from Apple after de-crypting the PayLoad
6	eciIndicator	M	String	ECI Indicator received from Apple after decrypting the PayLoad
7	onlinePaymentCryptogram	M	String	Online payment cryptogram received from Apple after decrypting the PayLoad
8	paymentDataType	M	String	Payment Data Type received from Apple after de-crypting the PayLoad
9	deviceManufacturerIdentifier	M	String	Device Manufacturing Identifier received from Apple after decrypting the PayLoad
10	transactionIdentifier	M	String	Transaction Identifier received from the Apple
11	appleCurrencyCode	M	String	Currency Code received from Apple

## JS WIDGET Integration

Refer Document "**ARB Payment Gateway REST API Merchant JS Widget Integration\_V1.0.pdf**"

# Merchant Hosted Transaction Flow (Credit Card Installment Integration)

- To Offer credit card installment, the merchant must first retrieve the available installment options from the ARB Payment Gateway. Then, the merchant initiates a purchase transaction with the selected installment plan through an API Request to ARB Payment gateway.
- Action Code for Purchase Transactions is 1.

## Initial - Get Installment Plans

Retreive the available installment options for a credit card from the ARB Payment Gateway.

### Endpoint - UAT

<https://securepayments.alrajhibank.com.sa/pg/payment/getInstallment.htm>

## Request - Get Installment Plans

### Attributes - Request from Merchant to ARB PG

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description

1	id	M	Alphanum	Tranportal ID. Merchant download the same in merchant portal
2	password	M	Alphanum	Tranportal password. Merchant download the same in merchant portal.
3	trackId	M	Numeric	Merchant unique reference no
4	amt	M	Numeric	Transaction amount
5	currencyCode	M	Numeric	3-digit currency code of KSA. Ex:682
6	cardNo	M	Numeric	Cardholder's credit card number

**Below is the sample encrypted request from Merchant to PG**

```
[ {
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata>"
}]
```

**Below are the plain Trandata request**

```
[ {
  "id": "IPAY1CR6qZF7q6w",
  "password": "OLE34@zAfcR5$2!",
  "trackId": "466418734",
  "amt": "1000.00",
  "currencyCode": "682",
  "cardNo": "5453*****5539"
}]
```

## Response - Get Installment Plans

Once ARB payment gateway verifies the transaction and returns the response to the same request.

### Response from ARB Payment Gateway to Merchant

S. No	Fields	M/C/ O	C/ Field Type	Description
1	trandata	M	AlphaNum	All the below response parameters will be provided in trandata field
2	id	M	AlphaNum	Tranportal ID.
3	error	C	AlphaNum	If any error during processing, PG will provide the error code
4	errorText	C	AlphaNum	If any error during processing, PG will provide the error description
5	status	M	AlphaNum	If any error during processing, PG will provide the error status as 2.

### Detailed description of Plain trandata response parameters

S. No	Fields	M/C/ O	C/ Field Type	Description
1	trackId	M	Numeric	Merchant unique reference no
2	amt	M	Numeric	Transaction amount
3	currencyCode	M	Numeric	3-digit currency code of KSA. Ex:682
4	cardNo	M	Numeric	Cardholder's credit card number
5	installmentPlans	M	Json Array	Installment Plans

### Detailed description of installmentPlans response parameters

S. No	Fields	M/C/O	Field Type	Description
1	numinstalments	M	Numeric	Number of Installments. This value should be passed in transaction under udf7 on selection of this installment.
2	instalmentAmount	M	Numeric	Installment Amount
3	shortcode	M	Alphanum	Installment Short Code. This value should be passed along with Number of Installments in transaction under udf7 on selection of this installment.
4	instalmenttype	M	Alphanum	Installment Type

**Below is the sample encrypted response from PG to Merchant**

<u>Failure</u> <pre>[ {   "status": "2",   "error": "IPAY0700002",   "errorText": "!ERROR!-IPAY0700002-Credit instalment is not applicable for this bin." }]</pre>
<u>Success</u> <pre>[ {   "id": "IPAY1CR6qZF7q6w",   "trandata": "&lt;encrypted trandata&gt;" }]</pre>

**Below are the plain Trandata response**

[ {
-----

```

  "id": "IPAY1CR6qZF7q6w",
  "trackId": "466418734",
  "amt": "1000.00",
  "currencyCode": "682",
  "cardNo": "5453*****5539",
  "installmentPlans":
  [{"numinstalments": "12", "instalmentAmount": "83.33", "shortcode": "T001", "instalmenttype": "12"}, {"numinstalments": "6", "instalmentAmount": "166.67", "shortcode": "T002", "instalmenttype": "6"}]
}
  
```

## Merchant Hosted Credit Card Installment Transaction

Credit card installment purchase transactions to subscribe the regular installment payments post selection of installment plan by customer from merchant payment page.

### Endpoint - UAT

<https://securepayments.alrajhibank.com.sa/pg/payment/tranportal.htm>

## Request - Payment Token Generation API

### Request from Merchant to ARB payment gateway

S. No	Fields	M/ C/O Type	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.
3	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
4	errorURL	M	Alphanum	Merchant error URL

### Detailed description of Plain trandata request parameters

S.No	Fields	M /C Field / Type O	Description
1	amt	M Numeric	Transaction amount
2	action	M Numeric	It defines the transactions actions Purchase: 1
3	password	M Alphanum	Tranportal password. Merchant download the same in merchant portal.
4	id	M Alphanum	Tranportal ID. Merchant download the same in merchant portal
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 passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.
8	udf2	O Alphanum	The user (merchant) defines these fields. The field data passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.
9	udf3	O Alphanum	The user (merchant) defines these fields. The field data passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.
10	udf4	O Alphanum	The user (merchant) defines these fields. The field data passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.

S.No	Fields	M /C Field / Type O	Description
11	udf5	O Alphanum	The user (merchant) defines these fields. The field data 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	Default value should be passed as “CI” to identify the credit card installment transactions
13	udf7	O Alphanum	Credit Installment Short Code and Credit Installment Months with an underscore separator needs to be passed in the request. Example: <b>T001_12</b> wherease T001 – Credit Installment Short Code and 12 – Number of Installments. These values should be passed when udf6 passed as CI and also Short code and number of installments should be passed from Installment Plan which has been selected by customer.
14	udf8	O Alphanum	The user (merchant) defines these fields. The field data passed along with a transaction request and then returned in the transaction response. Merchant should ensure that field left blank when no data needs to be passed.
15	udf9	O Alphanum	The user (merchant) defines these fields. The field data 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 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	responseURL	M Alphanum	The merchant success URL where Payment Gateway send the notification request.

S.No	Fields	M /C Field / Type O	Description
18	errorURL	M Alphanum	The merchant error URL where Payment Gateway send the response in case any error while Processing the transaction.
19	expYear	M Numeric	Expiry year of card
20	expMonth	M Numeric	Expiry month of card
21	member	M Alphanum	Card holder name
22	cvv2	M Numeric	CVV of the card
23	cardNo	M Numeric	Cardholders card number
24	cardType	M Alphanum	Card type Ex : Credit card – C, Debit Card – D
25	browserLanguage	M Alphanum	Value representing the browser language Returned from "navigator.language" property. Length 1 to 8 characters.
26	browserColorDepth	M Alphanum	<p>Value representing the bit depth of the colour palette for displaying images, in bits per pixel. Obtained from Cardholder browser using the "screen.colorDepth" property. Length 1 to 2 characters.</p> <p>Values Accepted:</p> <ul style="list-style-type: none"> <li>1 = 1 bit</li> <li>4 = 4 bits</li> <li>8 = 8 bits</li> <li>15 = 15 bits</li> <li>16 = 16 bits</li> <li>24 = 24 bits</li> <li>32 = 32 bits</li> <li>48 = 48 bits</li> </ul>
27	browserScreenHeight	M Alphanum	Total height of the Cardholder's screen in pixels. Value is returned from the screen.height property. Length 1 to 6 characters.

S.No	Fields	M /C Field / Type O	Description
28	browserScreenWidth	M Alphanum	Total width of the cardholder's screen in pixels. Value is returned from the screen.width property. Length 1 to 6 characters.
29	browserJavaEnabled	M Alphanum	Value is returned from the navigator.javaEnabled property. Boolean value.
30	browserTZ	M Alphanum	Time difference between UTC time and the Cardholder browser local time, in minutes. Value is returned from the getTimezoneOffset() method. Length 1 to 5 characters.
31	jsEnabled	M Alphanum	Value whether the java script is enabled in browser or not.

### Request from Merchant to ARB Payment gateway:

```
[ {
  //Mandatory Parameters
  "id": "IPAY1CR6qZF7q6w",
  "trandata": "<encrypted trandata>",
  "responseURL": "https://merchantpage/PaymentResult.jsp",
  "errorURL": "https://merchantpage/PaymentResult.jsp"
}]
```

### Plain Trandata

Trandata will contain below parameters encrypted with AES algorithm with CBC Mode, PKCS5Padding with initialization vector value **PGKEYENCDECIVSPC** under Resource key.

```
[ {
    //Mandatory Parameters
    "amt":"12.00",
    "action":"1",      // 1 - Purchase
    "password":"q@a680$27@JLkck",
    "id":"IPAYlCR6qZF7q6w",
    "currencyCode":"682",
    "trackId":"123456",
    "expYear":"2022",
    "expMonth":"12",
    "member":"cardholdername",
    "cvv2":"212",
    "cardNo","5453*****5539",
    "cardType":"C",
    "responseURL":"https://merchantpage/PaymentResult.jsp",
    "errorURL":"https://merchantpage/PaymentResult.jsp",
    "browserJavaEnabled":"true",
    "browserLanguage":"en",
    "browserColorDepth":"48",
    "browserScreenHeight":"400",
    "browserScreenWidth":"600",
    "browserTZ":"0",
    "jsEnabled":"true",
    //Optional Parameters
}
```

```

"udf1":"udf1text",
"udf2":"udf2text",
"udf3":"udf3text",
"udf4":"udf4text",
"udf5":"udf5text",
//Mandatory Parameters for Credit Installment
"udf6":"CI", //To Identify Credit Card Installment Transaction
"udf7":"T001_12", //Selected Installment Plan (i.e., shortcode_numinstalments)
//Optional Parameters
"udf8":"udf8text",
"udf9":"udf9text",
"udf10":"udf10text"
}
  
```

## Initial Response - Payment ID and Payment Page URL

ARB Payment gateway internally validates the request and gives payment ID and payment page URL in the response if the validation success. If failure then, Error code and description will be provided.

### Initial Response from PG to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	status	M	Numeric	If the request validation success, then status will be '1'. If the validation failed, then status will be '2'
2	result	C	Alphanum	It contains payment ID and Payment URL if the validation success else this will be null
3	error	C	Alphanum	If validation failed, then Payment gateway will provide the respective error code

S. No	Fields	M/C/O	Field Type	Description
4	errorText	C	Alphanum	If validation failed, then Payment gateway will provide the respective error description

### Plain Response:

```

Success:
[ {
  "status": "1",
  "result": "700212030953264091:https://securepayments.alrajhibank.com.sa/pg/TranportalVbv.htm?paymentId=700212030953264091&id=r9Ht8R4U6g9dYtY",
  //Payment ID:Payment URL

  "error": null,
  "errorText": null
} ]

Failure:
[ {
  "status": "2",
  "error": "IPAY0100124",
  "errorText": " Problem occurred while validating transaction data",
  "result": null
} ]

```

## Framing Payment URL

Merchant needs to frame the payment page URL like the below sample

<https://securepayments.alrajhibank.com.sa/pg/TranportalVbv.htm?paymentId=700112030953264091&id=r9Ht8R4U6g9dYtYg>

## Final Response – Transaction Status

Merchant needs to redirects the customer to ARB Payment gateway.

Customer browser will redirect to ACS page and will complete the authentication. PG then process for authorization with the respective schemes. Once payment response received from respective scheme, then ARB Payment gateway returns the response to merchant. This is URL redirection. Below is sample response from ARB PG to merchant,

### Final Response from ARB payment gateway to Merchant

S. No	Fields	M/C/O	Field Type	Description
1	paymentId	M	Numeric	Unique ID generated by Payment gateway. Merchant can store the payment ID to match the final URL redirection response
2	trandata	C	Alphanum	All the below response parameters encrypted and send the encrypted value in trandata  Ex: <pre>[{"paymentId":100201935166676976,"result":"CAPTURED","ref":"935110000001","transId":201935166561122,"date":1217,"trackId":1003383844,"udf1":"","udf2":"","udf3":"8870091137","udf4":"FC","udf5":"Tidal5","amt":70.0,"authResponseCode","00"}]</pre>
3	error	C	Numeric	If any error, PG will provide the error code
4	errorText	C	Alphanum	PG will provide the error description if any transaction declined.

### Detailed description of Plain trandata response parameters

S. No	Fields	M/C/ O	Field Type	Description
1	paymentId	M	Numeric	Unique ID generated by payment gateway. Based on this payment Id merchant can match the final URL redirection response
2	result	M	Alphanum	Transaction status . Value will be 'CAPTURED' for purchase successful and 'APPROVED' for authorization successful.
3	ref	M	Numeric	Transaction reference number (RRN)
4	transId	M	Numeric	Unique transaction Id generated by Payment gateway and merchant can use this id for initiating supported transactions (Void, refund and inquiry)
5	date	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	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.
10	udf4	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.
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

S. No	Fields	M/C/ O	Field Type	Description
				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.
17	amt	M	Numeric	Transaction amount
18	authRespCode	M	Numeric	Auth response code provided by PG
19	authCode	M	Numeric	6 digit authorization code received from switch
20	cardType	M	Alphabetic	Card Brand name. Value will be "Visa" or "MasterCard" or "Mada".
21	actionCode	M	Alphanu m	Action code of transaction. Possible Values 1-Purchase

### Sample JSON Response - Final

#### Redirection Parameters

- "paymentId":"100201935044735860",
- "trandata": "<encrypted trandata>",
- "Error":"" ,
- "ErrorText":""

### Plain Trandata

```
[ {"paymentId":"100201935044735860",
```

```
"result": "CAPTURED",
"amt":"10.55",
"date":1221,
"ref":"935110000001",
"udf1":"udf1text",
"udf2":"udf2text",
"udf3":"udf3text",
"udf4":"udf4text",
"udf5":"udf5text",
"udf6":"CI",
"udf7":"T001_12",
"udf8":"udf8text",
"udf9":"udf9text",
"udf10":"udf10text",
"trackId","3423423",
"transId":"1242345345234",
"authRespCode":"00",
"authCode":"000000",
"cardType":"Mastercard",
"actionCode":"1"
}]
```

## Best Practices

- a) The Merchant should mandatorily maintain logs for each transaction as mentioned below
  - a. The parameters before setting the values in the respective variable.
  - b. Request from the merchant server to Payment Gateway
  - c. Response that is received from the Payment Gateway in the Merchant Response URL
- b) The Merchant should maintain "OWASP" (Open Web Application Security Project) Top 10 recommendation in their web application. (These recommendations are available on [www.owasp.org](http://www.owasp.org))
- c) The Merchant should have the latest SSL security certificate in the payment request and receive webpage, if any. Always ensure that the SSL certificate is valid and has not expired. Such certificates should be as per the approved list of the Acquiring Bank. Self signed certificates are not supported by Payment Gateway in Test and Production Environment.
- d) The Merchant should mandatory complete the UAT and ensure all results are in line with the recommended response prior to going LIVE.
- e) Any changes in the pages would need to be tested before moving to Production after proper communication to the Bank personnel and receipt of approval. If the pages have a change in logic or transaction flow particularly, the Acquiring Bank's consent is Mandatory.
- f) The transaction request and Response Handling: For ease in integration, "Sample/Demo pages "provided in the integration document are essentially for representation purposes only. The actual pages have to be necessarily developed and implemented by the Merchant's development team and used in both the Test and Production environment. The Sample demo pages are provided for the logical understanding and transaction flow only. An ideal logical flow for the merchant to process the customer input data is to collect the shopping details of the customer such as transaction amount, merchant track id and other parameters and stored in a secure storage location and validated immediately against the details of shopping cart module.
- g) Maintenance of Transaction Logs: It is essential for the transaction logs to be maintained in a secure storage location within the environment. This is crucial in order to trace transaction history in case of a dispute raised by a

customer or even internal audit purposes. These logs should ideally include the customer IP address as well apart from the other transaction details.

## Private and Public key

- If Merchant opted for private and public key future. ARBPG provide two keys for encrypting and decrypting the request and response respectively.
- Purchase Transaction: Key 1 should be used for encrypting the Request. Key 2 should be used for decrypting the response from payment gateway.
- Supporting transaction: Inquiry, Refund and Reversal transactions should be done by key 2 only i.e Key 2 should be used for encrypting and decrypting the request and response respectively from Payment Gateway. [Toc31220960](#)

# Setting Up Your Server

## Overview

- All pages that include Apple Pay must be served over HTTPS.
- Your domain must have a valid SSL certificate.
- Your server must support the Transport Layer Security (TLS) 1.2 protocol and one of the cipher suites listed below.

TLS\_RSA\_WITH\_AES\_128\_CBC\_SHA256  
 TLS\_RSA\_WITH\_AES\_128\_GCM\_SHA256  
 TLS\_DHE\_RSA\_WITH\_AES\_128\_CBC\_SHA256  
 TLS\_DHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256  
 TLS\_ECDHE\_RSA\_WITH\_AES\_128\_CBC\_SHA  
 TLS\_ECDHE\_RSA\_WITH\_AES\_128\_CBC\_SHA256  
 TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256

## Whitelist Apple Pay IP Addresses for Merchant Validation

- To enable merchant validation and receive a session object, your server must allow access over HTTPS (TCP over port 443) to the Apple Pay IP addresses and domains provided below

For production environment:

Domain	apple-pay-gateway.apple.com
17.171.78.7	apple-pay-gateway-nc-pod1.apple.com
17.171.78.71	apple-pay-gateway-nc-pod2.apple.com
17.171.78.135	apple-pay-gateway-nc-pod3.apple.com
17.171.78.199	apple-pay-gateway-nc-pod4.apple.com
17.171.79.12	apple-pay-gateway-nc-pod5.apple.com
17.141.128.7	apple-pay-gateway-pr-pod1.apple.com
17.141.128.71	apple-pay-gateway-pr-pod2.apple.com
17.141.128.135	apple-pay-gateway-pr-pod3.apple.com
17.141.128.199	apple-pay-gateway-pr-pod4.apple.com
17.141.129.12	apple-pay-gateway-pr-pod5.apple.com

17.171.78.9 apple-pay-gateway-nc-pod1-dr.apple.com  
 17.171.78.73 apple-pay-gateway-nc-pod2-dr.apple.com  
 17.171.78.137 apple-pay-gateway-nc-pod3-dr.apple.com  
 17.171.78.201 apple-pay-gateway-nc-pod4-dr.apple.com  
 17.171.79.13 apple-pay-gateway-nc-pod5-dr.apple.com  
 17.141.128.9 apple-pay-gateway-pr-pod1-dr.apple.com  
 17.141.128.73 apple-pay-gateway-pr-pod2-dr.apple.com  
 17.141.128.137 apple-pay-gateway-pr-pod3-dr.apple.com  
 17.141.128.201 apple-pay-gateway-pr-pod4-dr.apple.com  
 17.141.129.13 apple-pay-gateway-pr-pod5-dr.apple.com  
 101.230.204.232 cn-apple-pay-gateway-sh-pod1.apple.com  
 101.230.204.233 cn-apple-pay-gateway-sh-pod1-dr.apple.com  
 101.230.204.242 cn-apple-pay-gateway-sh-pod2.apple.com  
 101.230.204.243 cn-apple-pay-gateway-sh-pod2-dr.apple.com  
 101.230.204.240 cn-apple-pay-gateway-sh-pod3.apple.com  
 101.230.204.241 cn-apple-pay-gateway-sh-pod3-dr.apple.com  
 60.29.205.104 cn-apple-pay-gateway-tj-pod1.apple.com  
 60.29.205.105 cn-apple-pay-gateway-tj-pod1-dr.apple.com  
 60.29.205.106 cn-apple-pay-gateway-tj-pod2.apple.com  
 60.29.205.107 cn-apple-pay-gateway-tj-pod2-dr.apple.com  
 60.29.205.108 cn-apple-pay-gateway-tj-pod3.apple.com  
 60.29.205.109 cn-apple-pay-gateway-tj-pod3-dr.apple.com

For sandbox testing only:

17.171.85.7 apple-pay-gateway-cert.apple.com  
 101.230.204.235 cn-apple-pay-gateway-cert.apple.com

## Whitelist Apple IP Addresses for Domain Verification

- Apple uses the following IP addresses when you register or verify your merchant domain. If your domain is protected from public access and you wish to complete domain verification, you should whitelist the following IP address ranges.

17.32.139.128/27  
 17.32.139.160/27  
 17.140.126.0/27  
 17.140.126.32/27

17.179.144.128/27  
17.179.144.160/27  
17.179.144.192/27  
17.179.144.224/27  
17.253.0.0/16

# Apple Pay Process for merchant registration and certificates

## Create a merchant identifier

- In Certificates, Identifiers & Profiles, select Identifiers from the sidebar, then click the Add button (+) in the upper-left corner.
- Select Merchant IDs, then click Continue.
- Enter the merchant description and identifier name, then click Continue.
- Review the settings, then click Register.

## Create a payment processing certificate

- In Certificates, Identifiers & Profiles, select Identifiers from the sidebar.
- Under Identifiers, select Merchant IDs using the filter in the top-right.
- On the right, select your merchant identifier.
- Under Apple Pay Payment Processing Certificate, click Create Certificate.
- Click Choose File.
- Upload the Payment Processing CSR file i.e generated initially
- Click Continue.
- Click Download.
- Convert the downloaded .cer file to jks file and save to the .bin file for payment token decryption process.

## Merchant Domain Verification

- In Certificates, Identifiers & Profiles, select Identifiers from the sidebar.
- Under Identifiers, select Merchant IDs using the filter in the top-right.
- On the right, select your merchant identifier.
- Under Merchant Domains, click Add Domain.
- Enter your domain name and click save.
- Download the apple-developer-merchantid-domain-association.txt file.
- Place the downloaded file in the virtual directory of the server to complete domain validation method using virtual directory.
- Apple will initiate the request in below format to check the file is present or not.

`https://www.yourdomain.com/.well-known/apple-developer-merchantid-domain-association.txt`

### **Create a merchant identity certificate (This is only required for Bank hosted integration)**

---

- In Certificates, Identifiers & Profiles, select Identifiers from the sidebar, then select Merchant IDs from the pop-up menu on the top right.
- On the right, select your merchant identifier.
- Under Apple Pay Merchant Identity Certificate, click Create Certificate.
- Create a certificate signing request on your Mac, and click Continue.
- Click Choose File.
- Upload the Merchant CSR file i.e generated initially
- Click Continue.
- Click Download.

- Convert the downloaded .cer file to jks file and save to the trustore and keystore files to perform 2-way TLS handshake.

# Commands to generate Merchant Identity Certificate and Payment Processing Certificate

## Generating a Merchant Identity Certificate

- Generates a Certificate Signing Request (CSR) for a Merchant Identity
- Certificate per the following (and keeps the private key safely):
  - a) Command-line tools (either OpenSSL or Keytool can be used)
    - (i) OpenSSL
      - Generate key pair in a key file
 

```
openssl req -new -newkey rsa:2048 -nodes -out rsacertreq.csr -keyout rsakey.key -subj /CN=www.mydomain.com
```
    - (ii) Keytool
      - Generate key pair in a pkcs12 file
 

```
keytool -genkeypair -keyalg RSA -keystore rsakeystore.p12 -storetype pkcs12 -keysize 2048 -alias rsakeyname -dname CN=www.mydomain.com
```

      - Generate CSR from key pair in pkcs12 file
 

```
keytool -certreq -alias rsakeyname -file rsacertreq.csr -keystore rsakeystore.p12 -storetype pkcs12
```
  - Then uploads the Merchant Identity Certificate CSR in apple portal.
  - Download (and backup) the Apple signed Merchant Identity Certificate, merchant\_id.cer
  - Import merchant certificate and private key to generate P12
    - a) Command-line tools
      - (i) OpenSSL
        - convert merchant\_id.cer to PEM
 

```
openssl x509 -inform DER -in merchant_id.cer -out merchant_id.pem
```
        - Import merchant certificate and private key to generate P12
 

```
openssl pkcs12 -export -out Certificates.p12 -inkey rsakey.key -in merchant_id.pem
```
    - Convert .p12 file to jks file and save into trustore and keystore file.

a) Command-line tools

(i) Keytool

```
keytool -importkeystore -srckeystore Certificates.p12 -srcstoretype pkcs12 -destkeystore applepaytrustore.bin -deststoretype jks
```

- Ensure below mentioned Apple Root and Intermediate certificates are installed in your truststore to perform 2-way TLS handshake.

Download certificates using below links

<https://www.digicert.com/digicert-root-certificates.htm>

<https://www.apple.com/certificateauthority/>

- (i) AppleRootCA-G3.cer
- (ii) DigiCertGlobalCA-3G2.crt
- (iii) DigiCertGlobalRootG2.crt

## Generating a Payment Processing Certificate

- Generates a Certificate Signing Request (CSR) for a Payment Processing Certificate per the following (and keeps the private key safely):

a) Command-line tools

(i) OpenSSL

- Generate key pair in a key file

```
openssl ecparam -genkey -name prime256v1 -out ecckey.key
```

- Generate CSR from key pair in key file

```
openssl req -new -sha256 -key ecckey.key -out ecccertreq.csr -subj /CN=www.mydomain.com
```

(ii) Keytool

- Generate key pair in a pkcs12 file

```
keytool -genkeypair -keyalg EC -keystore ecckeystore.p12 -storetype pkcs12 -keysize 256 -alias ecckeyname -dname CN=www.mydomain.com
```

- Generate CSR from key pair in pkcs12 file

```
keytool -certreq -sigalg SHA256withECDSA -alias ecckeyname -file ecccertreq.csr -keystore ecckeystore.p12 -storetype pkcs12
```

- Then uploads the Payment Processing Certificate CSR in apple portal.

- Download (and backup) the Apple signed Payment Processing Certificate,apple\_pay.cer
- Import payment processing certificate and private key to generate P12
  - a) Command-line tools
    - (i) OpenSSL
      - convert apple\_pay.cer to PEM  
openssl x509 -inform DER -in apple\_pay.cer -out apple\_pay.pem
      - Import merchant certificate and private key to generate P12  
openssl pkcs12 -export -out ecckeystore.p12 -inkey ecckey.key -in apple\_pay.pem
  - Convert .p12 file to jks file and save into .bin file.
    - a) Command-line tools
      - (i) Keytool  
keytool -importkeystore -srckeystore Certificates.p12 -srcstoretype pkcs12 -destkeystore applepaytrustore.bin -deststoretype jks

## Merchant Hosted URPAY Integration

Merchant forwards the API request to ARB Payment gateway, below is sample request.

### Attributes - Request from Merchant to ARB PG

S. No	Fields	M/C/O	Field Type	Description
1	id	M	Alphanum	Tranportal ID. Merchant can download the Tranportal id from Merchant portal
2	trandata	M	Alphanum	All the below request parameters encrypted and pass the encrypted value in trandata.
3	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
4	errorURL	M	Alphanum	Merchant error URL

### Detailed description of Plain Trandata request parameters

S. No	Fields	M/C/O	Field Type	Description
1	amt	M	Numeric	Transaction amount
2	action	M	Numeric	It defines the transactions actions Purchase: 1
3	password	M	Alphanum	Tranportal password. Merchant can download the same from the portal.
4	id	M	Alphanum	Tranportal ID. Merchant can download from the portal
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
8	udf2	O	Alphanum	The user (merchant) defines these fields. The
9	udf3	O	Alphanum	The user (merchant) defines these fields. The
10	udf4	O	Alphanum	The user (merchant) defines these fields. The
11	udf5	O	Alphanum	The user (merchant) defines these fields. The
12	responseURL	M	Alphanum	The merchant success URL where Payment Gateway send the notification request.
13	errorURL	M	Alphanum	The merchant error URL where Payment Gateway send the response in case any error while Processing the transaction.
14	mobileNumber	M	Numeric	Contains 9 digit URPAY registered mobile number

### Sample JSON request - Request from Merchant to ARB PG

```
[ {
```

```
//Mandatory Parameters

"id":"IPAY1CR6qZF7q6w",

"trandata":"<encrypted trandata>", (encrypted with AES algorithm with CBC Mode)

"responseURL":"https://merchantpage/PaymentResult.jsp
", "errorURL":"https://merchantpage/PaymentResult.jsp

}]
```

## Plain Trandata

Trandata will contain below parameters

PKCS5Padding with initialization vector value **PGKEYENCDECIVSPC** under Resource key.

```
[ {

//Mandatory Parameters

amt:"12.00",

"action":"1", // 1 - Purchase

"password":"q@a680$27@JLkcK",

"id":"IPAY1CR6qZF7q6w",

"currencyCode":"682",

"trackId":"123456",

"mobileNumber":"980765432",

"responseURL":"https://merchantpage/PaymentResult.jsp",

"errorURL":"https://merchantpage/PaymentResult.jsp",

//Optional Parameters

"udf1":"udf1text",

"udf2":"udf2text",
```

```

    "udf3":"udf3text",
    "udf4":"udf4text",
    "udf5":"udf5text",
}
  
```

### Initial Response from PG to Merchant

S. No	Fields	M/C/ O	Field Type	Description
1	status	M	Numeri c	If the request validation success, then status will be '1'. If the validation failed, then status will be '2'
2	result	C	Alphanu m	It contains payment ID and Payment URL if the validation success else this will be null
3	error	C	Alphanu m	If validation failed, then Payment gateway will provide the respective error code
4	errorText	C	Alphanu m	If validation failed, then Payment gateway will provide the respective error description

### Plain Response

ARB Payment gateway internally validates the request and gives payment ID and payment page URL in the response if the validation success. If failure then, Error code and description will be provided.

### Success

```
[
  {
    "status": "1",
  }
]
```

```

"result": "700212030953264091: https://securepayments.alrajhibank.com.sa/pg/URPaypage.htm,

//Payment ID: Payment URL

"error": null,
"errorText": null
}]
  
```

## Failure

```

[ {
  "status": "2",
  "error": "IPAY0100124",
  "errorText": " Problem occurred while validating transaction data",
  "result": null
}]
  
```

## Framing Payment URL

Merchant needs to frame the URL like the below sample

<https://securepayments.alrajhibank.com.sa/pg/URPaypage.htm?PaymentID=700112030953264091>

## Final Response and Transaction Status

The ARB payment gateway verifies the transaction and returns the response to the same request.

## Attribute - Final response from ARB PG to Merchant

S. No	Fields	M/C /O	Field Type	Description
1	trandata	M	AlphaNum	All the below response parameters will be provided in trandata field
2	error	C	Alphanum	If any error during processing, PG will provide the error code
3	errorText	C	Alphanum	If any error during processing, PG will provide the error
4	status	M	Alphanum	If transaction success 1. If transaction failure 2.

## FAQs on Integration Process

Q1. What are the pre requisities for integration process?

- Ans. 1. Tranportal ID
- 2. Tranportal Password
- 3. Resource Key
- 4. Payment gateway endpoint

Q2. Where to get tranportal ID , Password , Resource key and end point Url's?

Ans. Tranportal Id , Password , Resource Key and end point URL's will be shared to the merchant via mail to their registered E-mail Id.

Q3. What is resource key?

Ans. Resource key is unique for a terminal . It is required for encryption of request parameters and decryption of response paramters while connecting to ARB Payment Gateway. Bank user will share the resource key in a secured manner.

Q4. What is an inquiry transaction?

Ans. ARB Payment Gateway allows merchants to do an inquiry of already completed transaction by passing certain details of the payment message, ARB Payment Gateway provides response to this request with appropriate fields in the response; merchant is expected to verify the relevant fields like Transaction amount, transaction status and other transaction fields.

Q5. What are the action codes for inquiry, refunds and Void transactions?

Ans. action codes:

### Action Codes

Action	Action code
Purchase	1
Authorization	4
Refund	2
Inquiry	8
Void	3
Capture	5
Auth Extension	14

Void Auth	9
-----------	---

Q6. Based on what parameters can transactions be inquired?

Ans. Transactions can be inquired based on transaction ID , Payment ID and Track ID of original transaction.

Q7. How to verify transactions and settlement?

Ans. After the integration testing, transactions can be verified on merchant Portal To verify if a transaction has been settled or not merchant can always refer the transaction detail report in merchant Portal. Navigation to transaction detail report in merchant portal is as below:

**Merchant Portal ->Reports->Transaction Reports->Transaction Detail Report**

Q8. What are the various result codes and their description.

**Ans.**

Result	Description
CAPTURED	Captured result will be considered as transaction success
NOT CAPTURED	This will be considered as transaction failure
APPROVED	This will be considered as transaction success for Authorization.
NOT APPROVED	This will be considered as transaction failure for Authorization.
VOIDED	Success for Void transaction
DENIED BY RISK	If the Risk validation failed, then PG will decline the transaction with this result
HOST TIMEOUT	If there is no response from respective interchange during authorization, then PG will provide the Host timeout result.
NOT PROCESSED	MADA Manual Refund Request is declined.
PROCESSING	MADA Manual Refund Request is accepted.

## 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();

}

```

- ☒ **Note:** Before encrypting encryptString value. merchant needs to encode the value with URL Encoder.

```

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));  
  
}
```

- ☒ **Note:** After decrypting encryptedString value. Merchant needs to decode the textDecrypted value with URL Decoder.

## 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;
}

Note: Before encrypting trandata value. merchant needs to encode the value with URL Encoder.

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;  
    }
```

- ☒ **Note:** After decrypting encryptedHex value. Merchant needs to decode the decryptedText value with URL Decoder.

## Sample Encryption and Decryption Code For PHP

### Encryption:

```
function encryptAES($str,$key)
{
    $str = $this->pkcs5_pad($str);

    $ivlen = openssl_cipher_iv_length($cipher="aes-256-cbc");

    $iv="PGKEYENCDECIVSPC";

    $encrypted = openssl_encrypt($str, "aes-256-cbc",$key, OPENSSL_ZERO_PADDING,
    $iv);

    $encrypted = base64_decode($encrypted);

    $encrypted = unpack ('C*', ($encrypted));

    $encrypted=$this->byteArray2Hex($encrypted);

    $encrypted = urlencode($encrypted);

    return $encrypted;
}
```

 **Note:** Before encrypting transaction data, data needs to be encoded using URL-Encoder

### Decryption:

```
function decryptAES ($codcode, $)
{
    $code = $this->hex2ByteArray(trim($code));

    $code=$this->byteArray2String($code);

    $iv = "PGKEYENCDECIVSPC";
```

```
$code = base64_encode($code);  
  
$decrypted = openssl_decrypt($code, 'AES-256-CBC', $key, OPENSSL_ZERO_PADDING,  
$iv);  
  
return $this->pkcs5_unpad($decrypted);  
  
}
```

- ☒ **Note:** After decrypting transaction data needs to be decoded using URL-Decoder

# Chapter 4 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
IPAY0100001	Missing error url.
IPAY0100002	Invalid error url.
IPAY0100003	Missing response URL.
IPAY0100004	Invalid response URL.
IPAY0100005	Missing Tranportal Id.
IPAY0100006	Invalid tranportal id.
IPAY0100007	Missing transaction data.
IPAY0100008	Terminal Not Enabled.
IPAY0100009	Institution not enabled.
IPAY0100010	Institution has not enabled for the encryption process.
IPAY0100011	Merchant has not enabled for encryption process.
IPAY0100012	Empty terminal key.
IPAY0100013	Invalid transaction data.
IPAY0100014	Terminal Authentication requested with invalid tranportal ID data.
IPAY0100015	Invalid Tranportal Password.
IPAY0100016	Password security not enabled.
IPAY0100017	Inactive terminal.
IPAY0100018	Terminal password expired.
IPAY0100019	Invalid login attempt.
IPAY0100020	Invalid Action type.
IPAY0100021	Missing currency.
IPAY0100022	Invalid currency.
IPAY0100023	Missing amount.
IPAY0100024	Invalid Transaction Amount.
IPAY0100025	Invalid amount or currency.
IPAY0100026	Invalid language id.

IPAY0100027	Invalid track id.
IPAY0100028	Invalid user defined field1.
IPAY0100029	Invalid user defined field2.
IPAY0100030	Invalid user defined field3.
IPAY0100031	Invalid user defined field4.
IPAY0100032	Invalid user defined field5.
IPAY0100033	Terminal action not enabled.
IPAY0100034	Currency code not enabled.
IPAY0100036	UDF Mismatched.
IPAY0100037	Payment id missing.
IPAY0100038	Unable to process the request.
IPAY0100039	Invalid payment id.
IPAY0100042	PaymentId Expired.
IPAY0100043	Transaction denied: IP Blocked.
IPAY0100044	Problem occurred while loading payment page.
IPAY0100045	DENIED BY RISK.
IPAY0100049	Transaction declined due to exceeding OTP attempts.
IPAY0100050	Invalid terminal key.
IPAY0100051	Missing terminal key.
IPAY0100052	Problem occurred during merchant response encryption.
IPAY0100053	Problem occurred while processing direct debit.
IPAY0100054	Payment details not available.
IPAY0100055	Invalid Payment Status.
IPAY0100056	Instrument not allowed in Terminal and Brand.
IPAY0100058	Transaction denied due to invalid instrument.
IPAY0100059	Transaction denied due to invalid currency code.
IPAY0100060	Transaction denied due to missing amount.
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.
IPAY0100071	Transaction denied due to missing CVD2.

IPAY0100072	Transaction denied due to invalid CVD2.
IPAY0100073	Transaction denied due to invalid CVV.
IPAY0100074	Missing Expiry Year.
IPAY0100075	Transaction denied due to invalid expiry year.
IPAY0100076	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.
IPAY0100084	AVS Check: Fail
IPAY0100085	Electronic Commerce Indicator is invalid.
IPAY0100086	Transaction denied due to missing CVV.
IPAY0100087	Card pin number is not present.
IPAY0100088	Empty mobile number.
IPAY0100089	Invalid mobile number.
IPAY0100090	Empty MMID.
IPAY0100091	Invalid MMID.
IPAY0100092	Empty OTP number.
IPAY0100093	Invalid OTP number.
IPAY0100094	Sorry, this instrument is not handled.
IPAY0100095	Terminal inactive.
IPAY0100096	IMPS for Institution Not Active for Transaction request, Institution:
IPAY0100097	IMPS for Terminal Not Active for Transaction request, Terminal:
IPAY0100100	Problem occurred while authorization.
IPAY0100101	Denied by risk : Risk Profile does not exist.
IPAY0100102	Denied by risk: Maximum Floor Limit Check.
IPAY0100103	Transaction denied due to Risk : Maximum transaction count.
IPAY0100106	Invalid Payment Instrument.
IPAY0100107	Instrument not enabled.
IPAY0100108	Perform risk check:Failed
IPAY0100109	Invalid subsequent transaction, payment id is null or empty.
IPAY0100110	Invalid subsequent transaction, Tran Ref id is null or empty.
IPAY0100111	Card decryption failed.

IPAY0100112	Problem occurred in method load original transaction data for invoice(card number, exp month/year).
IPAY0100113	Problem occurred in method loading original transaction data(card number, exp month / year) for orig_tran_id.
IPAY0100114	Duplicate Record.
IPAY0100115	Transaction denied due to missing original transaction id.
IPAY0100116	Transaction denied due to invalid original transaction id.
IPAY0100117	Transaction denied due to missing card number.
IPAY0100118	Transaction denied due to card number length error.
IPAY0100119	Transaction denied due to invalid card number.
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).
IPAY0100136	Transaction denied due to previous capture check failure (Validate Original Transaction).
IPAY0100139	Transaction denied due to void amount versus original amount check failure (Validate Original Transaction).
IPAY0100140	Transaction denied due to previous void check failure (Validate Original Transaction).
IPAY0100141	Transaction denied due to purchase already credited ( Validate Original Transaction ).
IPAY0100142	Problem occurred while validating original transaction.
IPAY0100144	ISO MSG is null. See log for more details!

IPAY0100145	Problem occurred while loading default messages in ISO Formatter.
IPAY0100146	Problem occurred while encrypting PIN.
IPAY0100147	Problem occurred while formatting purchase request in B24 ISO Message Formatter.
IPAY0100148	Problem occurred while hashing ecom pin.
IPAY0100149	Invalid PIN Type.
IPAY0100150	Problem occurred while formatting Reverse purchase request in B24 ISO Message Formatter.
IPAY0100151	Problem occurred while formatting Credit 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.
IPAY0100154	Problem occurred while formatting Reverse Credit 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.
IPAY0100157	Problem occurred while formatting vpas capture request in B24 ISO Message Formatter.
IPAY0100159	External message system error.
IPAY0100160	Unable to process the transaction.
IPAY0100162	Merchant is not allowed for encryption process.
IPAY0100163	Problem occurred during transaction.
IPAY0100164	Invalid ECI Value.
IPAY0100166	Transaction Not Processed due to Empty Authentication Status.
IPAY0100167	Invalid Authentication value.
IPAY0100169	Invalid enrollment value.
IPAY0100170	Invalid cavv value.
IPAY0100176	Decrypting transaction data failed.
IPAY0100178	Merchant encryption enabled.
IPAY0100179	IVR not enabled.
IPAY0100180	Authentication Not Available.
IPAY0100181	Card encryption failed.

IPAY0100182	Vpas merchant not enabled.
IPAY0100183	Error occurred Due to bytePReq is null.
IPAY0100184	Error occurred while Parsing PReq.
IPAY0100185	Problem occurred while authentication.
IPAY0100186	Encryption enabled.
IPAY0100187	Customer ID is missing for Faster Checkout.
IPAY0100188	Transaction Mode(FC) is missing for Faster Checkout.
IPAY0100189	Transaction denied due to brand directory unavailable.
IPAY0100190	Transaction denied due to Risk : Maximum floor limit transaction count.
IPAY0100191	Denied by risk: Negative Card check.
IPAY0100193	Invalid xid value.
IPAY0100194	Transaction denied due to Risk: Minimum Transaction Amount processing.
IPAY0100195	Transaction denied due to Risk : Maximum credit 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 credit check failure(Validate Original Transaction).
IPAY0100200	Denied by risk : Negative BIN check.
IPAY0100201	Denied by risk : Declined Card check.
IPAY0100202	Error occurred in Determine Payment Instrument.
IPAY0100203	Problem occurred while doing perform transaction.
IPAY0100204	Missing payment details.
IPAY0100205	Problem occurred while getting PARES details.
IPAY0100206	Problem occurred while getting currency minor digits.
IPAY0100207	Bin range not enabled.
IPAY0100208	Action not enabled.
IPAY0100209	Institution config not enabled.
IPAY0100210	Problem occurred during veres process.
IPAY0100211	Problem occurred during pareq process.
IPAY0100212	Problem occurred while getting veres.
IPAY0100213	Problem occurred while processing the hosted transaction request.

IPAY0100214	Problem occurred while verifying tranportal password.
IPAY0100216	Invalid data received.
IPAY0100217	Invalid payment detail.
IPAY0100218	Invalid brand id.
IPAY0100219	Missing Card Number.
IPAY0100220	Invalid Card Number.
IPAY0100221	Missing card holder name.
IPAY0100222	Invalid zip code.
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 Capture request in VISA ISO Message Formatter.
IPAY0100235	Problem occurred while formatting reverse authorization request in VISA ISO Message Formatter.
IPAY0100236	Problem occurred while formatting Reverse Credit request in VISA ISO Message Formatter.
IPAY0100237	Problem occurred while formatting Reverse purchase request in VISA ISO Message Formatter.
IPAY0100238	Problem occurred while formatting Capture request in VISA ISO Message Formatter.
IPAY0100239	Problem occurred while formatting authorization request in VISA ISO Message Formatter.
IPAY0100240	Problem occurred while formatting Credit request in VISA ISO Message Formatter.
IPAY0100241	Problem occurred while formatting purchase request in VISA ISO Message Formatter.
IPAY0100242	RC_UNAVAILABLE.

IPAY0100243	NOT SUPPORTED
IPAY0100244	Payment Instrument Not Configured.
IPAY0100245	Problem occurred while sending/receiving ISO message.
IPAY0100246	Problem occurred while doing ip risk check.
IPAY0100247	PARES message format is invalid.
IPAY0100248	Problem occurred while validating PARES message format.
IPAY0100249	Merchant response url is down.
IPAY0100250	Payment details verification failed.
IPAY0100251	Invalid payment data.
IPAY0100252	Missing veres.
IPAY0100253	Problem occurred while cancelling the transaction.
IPAY0100254	Merchant not enabled for performing transaction.
IPAY0100255	External connection not enabled.
IPAY0100256	Payment encryption failed.
IPAY0100257	Brand rules not enabled.
IPAY0100258	Certification verification failed.
IPAY0100259	Problem occurred during merchant hashing process.
IPAY0100260	Payment option(s) not enabled.
IPAY0100261	Payment hashing failed.
IPAY0100262	Problem occurred during VEREQ process.
IPAY0100263	Transaction not found.
IPAY0100264	Signature validation failed.
IPAY0100265	PARes status not successful.
IPAY0100266	Brand directory unavailable.
IPAY0100268	3d secure not enabled for the brand.
IPAY0100269	Invalid card check digit.
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.
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	Original Transaction ID should not be empty.
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.
IPAY0100296	Problem occurred while formatting purchase request in AMEX ISO Message Formatter.
IPAY0100297	Problem occurred while formatting Credit request in AMEX ISO Message Formatter.
IPAY0100298	Problem occurred while formatting Reversal request in AMEX ISO Message Formatter.
IPAY0100299	Problem occurred while inserting AAV details.
IPAY0100300	Transaction denied due to invalid ship-to first name.
IPAY0100301	Transaction denied due to invalid ship-to last name.
IPAY0100302	Transaction denied due to invalid ship-to address.
IPAY0100303	Transaction denied due to invalid ship-to Zip code.
IPAY0100304	Transaction denied due to invalid ship-to Mobile Number.
IPAY0100305	Transaction denied due to invalid customer email.
IPAY0100306	Transaction denied due to invalid country code.
IPAY0100307	Transaction denied due to invalid card first name.
IPAY0100308	Transaction denied due to invalid card last name.
IPAY0100310	Transaction denied due to invalid Zip code.

IPAY0100311	Transaction denied due to invalid Mobile Number.
IPAY0100312	Problem occurred while getting AMEX header details.
IPAY0100313	AMEX header details are not available.
IPAY0100314	Problem occurred while getting AAV details.
IPAY0100315	AAV details are not available.
IPAY0100316	Problem occurred while checking AAV details.
IPAY0100317	Problem occurred while updating AAV details.
IPAY0100318	Problem occurred while getting tranlog extn details.
IPAY0100319	Tranlog Extn details are not available.
IPAY0100320	Problem occurred while inserting Tranlog Extn details.
IPAY0100321	Card First Name and Last Name are missing.
IPAY0100322	Invalid CSC/CID length.
IPAY0100323	Invalid CSC/CID.
IPAY0100324	Missing CSC/CID.
IPAY0100325	Transaction denied due to missing CSC/CID.
IPAY0100326	Transaction denied due to invalid CSC/CID.
IPAY0100327	Invalid Buyer Email ID.
IPAY0100328	Invalid Buyer Mobile No.
IPAY0100329	Missing Buyer Name.
IPAY0100330	Invalid Minor digits length.
IPAY0100331	Invalid Expiry Date.
IPAY0100332	Invalid Invoice Id.
IPAY0100333	Invalid Item Description.
IPAY0100334	Invalid Udf1.
IPAY0100340	Problem occurred while adding AREQ details.
IPAY0100341	Problem occurred while getting EMV2LOG details.
IPAY0100342	Problem occurred while updating ARES details.
IPAY0100343	Problem occurred while updating RREQ details.
IPAY0100344	Problem occurred while updating RRES details.
IPAY0100345	Problem occurred while updating CRES details.
IPAY0100346	Problem occurred while deleting cardrange details.
IPAY0100347	Problem occurred while connecting webserver.
IPAY0100348	Problem occurred while doing Authentication.
IPAY0100349	Authentication Response validation failed.
IPAY0100350	Results Request Message validation failed.
IPAY0100351	Problem occurred while getting card range count details.

IPAY0100352	Authentication failed.
IPAY0100353	Card Number not found in a participating Card Range.
IPAY0100354	Invalid or Bad POST.
IPAY0100355	Missing Callback URL.
IPAY0100356	Signature mismatch.
IPAY0100357	NOT AUTHENTICATED
IPAY0100358	Shopify authorization failed.
IPAY0100359	Shopify Reference ID Missing.
IPAY0100360	Shopify Test Path is Not Enabled.
IPAY0100361	Shopify Base24 Connectivity is Not Enabled.
IPAY0100362	Invalid payout data.
IPAY0100363	Invalid payout amount.
IPAY0100364	Payout Amount Mismatched.
IPAY0100365	Problem occurred while inserting payout details.
IPAY0100366	Problem occurred while getting payout details.
IPAY0100367	Invalid bank identification code.
IPAY0100368	Iban number is empty.
IPAY0100369	Bank identification code is empty.
IPAY0100370	Invalid value date.
IPAY0100371	Value date is empty.
IPAY0100372	Problem occurred while validating payout details.
IPAY0100373	Invalid Benificiary name.
IPAY0100374	Benificiary name is empty.
IPAY0100375	Problem occurred while updating payout details.
IPAY0100376	Loyalty Transaction is not enabled.
IPAY0100377	Problem occuerd while performing Loayalty Transaction.
IPAY0100378	Problem occuerd while performing Cybersource Transaction.
IPAY0100379	Bin value should be numeric.
IPAY0100380	Bin number should be of 6 digits.
IPAY0100381	Problem Occurred during BIN API check.
IPAY0100382	Technical Problem Occurred during BIN API check.
IPAY0100383	Missing Card On File Token.
IPAY0100384	Card On File Token should be numeric.
IPAY0100385	Problem occurred while getting Card On File details.
IPAY0100386	Problem occurred while inserting Card On File details.
IPAY0100387	Card details not found for given Token and Masked card number.

IPAY0100388	Expiry date is less than current date.
IPAY0100389	Problem occurred while validating card details.
IPAY0100390	Missing masked card number.
IPAY0100391	Bill reference info is invalid.
IPAY0100392	Problem occurred during card on file registration.
IPAY0100393	Invalid Card On File Token.
IPAY0100394	Card number already registered.
IPAY0100395	Agency code is empty.
IPAY0100396	Agency code is invalid.
IPAY0100397	Agency code length is invalid.
IPAY0100398	Problem occurred while getting cybersource configuration details.
IPAY0100399	Signature mismatched.
IPAY0100400	Signature empty.
IPAY0100401	Problem occurred while inserting agency details in mof.
IPAY0100402	Amount mismatched.
IPAY0100427	Invalid Payload Received.
IPAY0100403	Mada reversal not supported.
IPAY0100404	Transaction Type is invalid.
IPAY0100405	Transaction Type length is invalid.
IPAY0100406	Transaction Type is empty.
IPAY0100407	Biller ID is invalid.
IPAY0100408	Biller ID length is invalid.
IPAY0100409	Biller ID is empty.
IPAY0100410	Invalid Billpay details.
IPAY0100411	Bill Amount is empty.
IPAY0100412	Bill Amount is invalid.
IPAY0100413	Bill Type is invalid.
IPAY0100414	Bill Type length is invalid.
IPAY0100415	Bill Type is empty.
IPAY0100416	Problem occurred while inserting Billpay details.
IPAY0100417	Bill Description length is invalid.
IPAY0100418	Bill Number is invalid.
IPAY0100419	Bill Number length is invalid.
IPAY0100420	Bill Number is empty.
IPAY0100421	Bill Name is invalid.
IPAY0100422	ID Type is invalid.

IPAY0100423	ID Number length is invalid.
IPAY0100424	ID Number is empty.
IPAY0100425	Problem occurred while performing Reverse Redemtion transaction.
IPAY0100426	Time exceeded, transaction cannot be reversed.
IPAY0100502	Missing Buyer Email ID.
IPAY0100504	Problem occurred while framing credit instalment request.
IPAY0100505	VISA payment option is not enabled for this merchant.
IPAY0100506	MASTER payment option is not enabled for this merchant.
IPAY0100507	MADA payment option is not enabled for this merchant.
IPAY0100508	UDF5 length should not be greater than 255.
IPAY0100509	UDF6 length should not be greater than 255
IPAY0100511	UDF8 length should not be greater than 255.
IPAY0100512	UDF9 length should not be greater than 255.
IPAY0100513	UDF10 length should not be greater than 255.
IPAY0100514	UDF4 length should not be greater than 255.
IPAY0100515	UDF3 length should not be greater than 255.
IPAY0100516	UDF2 length should not be greater than 255.
IPAY0100517	UDF1 length should not be greater than 255.
IPAY0100518	Problem occurred during card on file deregistration.
IPAY0100519	Invalid cvd2.
IPAY0100521	Missing Bin Number.
IPAY0100522	Issuer Agency Id is empty.
IPAY0100523	Problem occurred while framing Request for webhook.
IPAY0100524	Missing Buyer Mobile No.
IPAY0100525	Invalid card holder First name length.
IPAY0100526	Invalid card holder Last name length.
IPAY0100527	Invalid card holder Last name.
IPAY0100528	Invalid card holder name.
IPAY0100529	Invalid card holder First name.
IPAY0100530	Issuer Agency Id is invalid.
IPAY0100531	Issuer Agency Id length is invalid.
IPAY0100532	Billing Account Id is empty.
IPAY0100533	Billing Account Id is invalid.
IPAY0100534	Billing Account Id length is invalid.
IPAY0100535	Billing Cycle is invalid.
IPAY0100536	Billing Cycle length is invalid.

IPAY0100537	Due amount is empty.
IPAY0100538	Due amount is invalid.
IPAY0100539	Paid amount is empty.
IPAY0100540	Paid amount is invalid.
IPAY0100541	Bill reference info length is invalid.
IPAY0100542	Problem occurred while getting mof details.
IPAY0100543	Problem occurred while framing mof info for webhook.
IPAY0100544	Problem occurred while updating Faster Checkout details
IPAY0100545	ID Type length is invalid.
IPAY0100546	Transaction denied due to missing PIN.
IPAY0100547	Invalid Buyer Name.
IPAY0100548	Problem occurred in method tranlog insert for invoice.
IPAY0100550	ID Type is empty.
IPAY0100551	Challenge Response Message validation failed.
IPAY0100552	Invalid Callback url.
IPAY0100553	Problem occurred while updating Acquire Ticket details.
IPAY0100554	Problem occurred while updating Credit Instalment details.
IPAY0100555	Transaction Declined Due To Exceeding OTP Resend Attempts.
IPAY0100556	Transaction denied due to authorization already captured (Validate Original Transaction).
IPAY0100557	Problem occurred while inserting Webhook details.
IPAY0100558	Invalid iban number.
IPAY0100559	Bank identification code Length should be between 8 and 12.
IPAY0100560	Iban number Length should be between 24 and 35.
IPAY0100561	Beneficiary name should be less than length of 100.
IPAY0100562	Invalid ECI Value in request.
IPAY0100563	Missing CurrencyCode.
IPAY0100565	ID Number is invalid.
IPAY0100566	Card Range not exists.
IPAY0100567	Problem occurred while processing the applePay transaction.
IPAY0100568	Problem occurred while getting mada key.
IPAY0100569	Rupay Initiate Failure.
IPAY0100570	Transaction denied due to session data mismatch.
IPAY0100571	Invalid Expiration Date.
IPAY0100572	Problem occurred while updating payment details.
IPAY0100573	Problem occurred while validating MOF details.

IPAY0100574	Problem occurred while adding transaction log details.
IPAY0100575	Invalid Amount length.
IPAY0100576	Missing Transaction Amount.
IPAY0100577	Missing Currency Code.
IPAY0100578	Problem occurred while getting bin range details.
IPAY0100579	Invalid input data received.
IPAY0100580	Problem occurred while getting merchant session.
IPAY0100581	Transaction details not available.
IPAY0100582	Transaction denied due to missing expiry month.
IPAY0100583	Transaction denied due to missing expiry year.
IPAY0100584	Processing Direct Debit request.
IPAY0100586	Missing card holder Last name.
IPAY0100587	Invalid user defined field6.
IPAY0100588	Invalid user defined field7.
IPAY0100589	Invalid user defined field8.
IPAY0100590	Invalid user defined field9.
IPAY0100591	Invalid user defined field10.
IPAY0100592	Invalid zip code length.
IPAY0100593	Missing email id.
IPAY0100595	Missing address.
IPAY0100596	Invalid mobile number length.
IPAY0100597	Missing card holder First name.
IPAY0100598	Missing Cardholder's Name.
IPAY0100599	Missing mobile number.
IPAY0100601	Invalid email id.
IPAY0100602	Invalid address length.
IPAY0100603	Invalid address.
IPAY0100604	Invalid email id length.
IPAY0100605	Missing zip code.
IPAY0200002	Problem occurred while getting institution details.
IPAY0200003	Problem occurred while getting merchant details.
IPAY0200004	Problem occurred while getting password security rules.
IPAY0200005	Problem occurred while updating terminal details.
IPAY0200007	Problem occurred while validating payment details.
IPAY0200008	Problem occurred while verifying payment details.
IPAY0200009	Problem occurred while getting payment details.

IPAY0200010	Problem occurred while updating the details in payment log.
IPAY0200011	Problem occurred while getting ipblock details.
IPAY0200012	Problem occurred while updating payment log ip details.
IPAY0200013	Problem occurred while updating description details in payment log.
IPAY0200014	Problem occurred during merchant response.
IPAY0200015	Problem occurred while getting terminal.
IPAY0200016	Problem occurred while getting payment instrument.
IPAY0200017	Problem occurred while getting payment instrument list.
IPAY0200018	Problem occurred while getting transaction details.
IPAY0200019	Problem occurred while getting risk profile details.
IPAY0200020	Problem occurred while performing transaction risk check.
IPAY0200021	Problem occurred while performing risk check.
IPAY0200023	Problem occurred while determining payment instrument.
IPAY0200024	Problem occurred while getting brand rules details.
IPAY0200025	Problem occurred while getting terminal details.
IPAY0200026	Problem occurred while getting transaction log details.
IPAY0200027	Missing encrypted card number.
IPAY0200028	Problem occurred while loading default institution configuration (Validate Original Transaction).
IPAY0200029	Problem occurred while getting external connection details.
IPAY0200030	No external connection details for extr conn id:
IPAY0200031	Alternate external connection details not found for the alt extr conn id:
IPAY0200032	Problem occurred while getting external connection details for extr conn id:
IPAY0200033	Problem occurred while getting vpas log details.
IPAY0200034	Problem occurred while getting details from VPASLOG table for payment id: null
IPAY0200037	Error occurred while getting Merchant ID.
IPAY0200038	Problem occurred while getting vpas merchant details.
IPAY0200039	Problem occurred while getting Faster Checkout details.
IPAY0200040	Problem occurred while performing card risk check.
IPAY0200041	Problem occurred while getting institution configuration.
IPAY0200042	Problem occurred while getting brand.
IPAY0200043	Problem occurred while getting mada brand details.
IPAY0200044	Mada Keys not enabled.

IPAY0200045	Problem occurred while updating VPASLOG table.
IPAY0200046	Unable to update VPASLOG table, payment id is null.
IPAY0200047	Problem occurred while getting details from VPASLOG table for payment id.
IPAY0200048	Problem occurred while getting details from VPASLOG table.
IPAY0200049	Card number is null. Unable to update risk factors in negative card table & declined card table.
IPAY0200050	Problem occurred while updating risk in negative card details.
IPAY0200051	Problem occurred while updating risk in declined card table.
IPAY0200052	Problem occurred while updating risk factor.
IPAY0200053	Problem occurred while updating payment log currency details.
IPAY0200054	Problem occurred while inserting currency conversion currency details.
IPAY0200055	Problem occurred while updating currency conversion currency details.
IPAY0200056	Problem occurred while getting brand details.
IPAY0200057	Problem occurred while getting external connection details.
IPAY0200058	Problem occurred while updating message log 2fa details.
IPAY0200059	Problem occurred while updating vpas details.
IPAY0200060	Problem occurred while adding vpas details.
IPAY0200061	Problem occurred during batch 2fa process.
IPAY0200062	Problem occurred while getting brand rules details.
IPAY0200063	Problem occurred while updating payment log process code details.
IPAY0200064	Problem occurred while updating payment log process code and ip details.
IPAY0200065	Problem occurred while updating payment log description details.
IPAY0200066	Problem occurred while updating payment log instrument details.
IPAY0200067	Problem occurred while updating payment log udf Fields.
IPAY0200068	Problem occurred while validating IP address blocking.
IPAY0200069	Problem occurred while updating payment log card details.
IPAY0200070	Problem occurred while updating ipblock details.
IPAY0200071	Probelm occurred during authentication.
IPAY0200072	Rupay Auth log details not available.
IPAY0200073	Only Purchase and and Auth transaction allowed in Pre Auth Transaction.
IPAY0200074	Only Purchase Action Allowed for Diners Card.

IPAY0200075	Aggregator is down.
IPAY0200076	Transaction ip details not found.
IPAY0200077	Payment details missing.
IPAY0200078	Host is down.
IPAY0200079	Problem occurred while updating payment log browser information.
IPAY0200080	Invalid keystore.
IPAY0200081	Unknown IMPS Tran Action Code encountered.
IPAY0200082	Missing cvd2.
IPAY0200083	Invalid vereq.
IPAY0200085	Checkbin Failure.
IPAY0200092	Payment log details not available.
IPAY0200102	Error while processing the Order List Transactions.
IPAY0200103	Exception in OTP process.
IPAY0200104	Exception in parsing Action Code.
IPAY0200105	Error in ECI Validation.
IPAY0200106	Exception in validation Parameters.
IPAY0200107	Unable to process currency conversion
IPAY0200108	MultiCurrency Refunding is not allowed.
IPAY0200109	Formatter instance creation failed.
IPAY0200110	Unable to process request, unsupported visa vpas action code.
IPAY0200111	Unable to process request, unsupported master vpas action code.
IPAY0200112	Visa
IPAY0200113	Master
IPAY0200114	Unable to process request, unsupported VISA credit action code.
IPAY0200115	Unable to process request, unsupported MASTER credit action code.
IPAY0200116	Unable to process request, unsupported debit action code.
IPAY0200117	Netbanking not allowed.
IPAY0200121	FSSConnect Destination is down.
IPAY0200200	SMS Server communication failure.
IPAY0200201	OTP Email Sending failed.
IPAY0200202	FAILED
IPAY0200203	Transaction denied while getting Ip Risk details.
IPAY0200204	Transaction denied while getting card risk details.
IPAY0200205	Transaction denied while getting transaction risk details.
IPAY0200206	Exception in PreAuth Transaction Process.

IPAY0200207	Transaction Failed due to in mastero validation failed for the terminal.
IPAY0200208	Transaction timed out during VPAS transaction
IPAY0200209	Unable to connect webserver for 3D secure enrollment.
IPAY0200210	Transaction denied due to error in IVR password encryption.
IPAY0200211	Error occurred while getting Institution ID.
IPAY0200213	Error occurred while getting Brand ID.
IPAY0200214	Error occurred while getting External Connection ID.
IPAY0200215	Error occurred Due to XMLPReq is null.
IPAY0200216	Transaction detail is invalid.
IPAY0200300	Missing transaction details.
IPAY0200301	Invalid transaction details.
IPAY0300001	Action not supported.
IPAY0300002	Invalid pre authentication status.
IPAY0300003	Invalid Card Number data.
IPAY0300004	Card Number Not Numeric.
IPAY0300005	Invalid Subsequent Transaction.
IPAY0300006	Invalid Transaction Attempt.
IPAY0300007	Transaction denied due to invalid UDF6:
IPAY0300008	Transaction denied due to invalid UDF7:
IPAY0300009	Transaction denied due to invalid UDF8:
IPAY0300010	Transaction denied due to invalid UDF9:
IPAY0300011	Transaction denied due to invalid UDF10:
IPAY0300012	Transaction denied due to invalid UDF11:
IPAY0300013	Transaction denied due to invalid UDF12:
IPAY0300014	Problem occurred while fetching the Payzapp Response Code.
IPAY0300015	Payzapp Response Code not available.
IPAY0300016	Problem occurred while fetching the Payzapp Configuration.
IPAY0300017	Payzapp not configured.
IPAY0300018	Transaction denied due to invalid UDF13:
IPAY0300019	Transaction denied due to invalid UDF14:
IPAY0300020	Transaction denied due to invalid UDF15:
IPAY0300021	Problem occurred in Payzapp Refund Response.
IPAY0300023	No such terminals for this batch transaction.
IPAY0300024	Failed credit greater than debit check.
IPAY0300025	Failed capture greater than auth check.

IPAY0300026	Problem occurred while getting other payment details.
IPAY0300027	Problem occurred while getting card range details.
IPAY0300028	Problem occurred while sending response to merchant.
IPAY0300029	Problem occurred while Getting Transaction details.
IPAY0300030	Problem occurred while Inserting Transaction Details.
IPAY0300031	Problem occurred while processing Payzapp transaction.
IPAY0300032	Missing ENROLLED_STATUS.
IPAY0300033	Missing AUTH_STATUS
IPAY0300034	Missing User Defined Field 1.
IPAY0300035	Missing User Defined Field 2.
IPAY0300036	Missing User Defined Field 3.
IPAY0300037	Missing User Defined Field 4.
IPAY0300038	Missing User Defined Field 5.
IPAY0300039	Missing xid
IPAY0300040	Missing cavv.
IPAY0300041	Missing eci
IPAY0300042	Missing pan in PARES message format.
IPAY0300043	Pan mismatch in PARES message format.
IPAY0300044	Problem occurred while doing process transaction.
IPAY0300046	Missing Action Code.
IPAY0300047	Problem occurred while getting negative bin details.
IPAY0300048	Problem occurred while getting negative card details.
IPAY0300049	Problem occurred while updating negative card details.
IPAY0300050	Problem occurred while getting declined card details.
IPAY0300051	Problem occurred while getting saf details.
IPAY0300052	Problem occurred while updating connection status in external connection.
IPAY0300053	Currency not enabled.
IPAY0300054	Problem occurred while adding declined card details.
IPAY0300055	Problem occurred while updating declined card details.
IPAY0300056	Problem occurred while getting card risk details.
IPAY0300057	Problem occurred while getting transaction risk details.
IPAY0300058	Problem occurred while getting m24 station status from connection status.
IPAY0300059	Problem occurred while doing perform action code reference id.
IPAY0300060	Problem occurred while getting transaction ip details.

IPAY0300061	Card Number Should be Numeric.
IPAY0300062	Missing Tranportal Password.
IPAY0300063	Missing Input Data.
IPAY0300064	ECI is empty or null or length is not equal to 2.
IPAY0300066	Problem occurred while updating PreAuth table.
IPAY0300067	Unable to update PreAuthLOG table, payment id is null.
IPAY0300068	Problem occurred while getting connection status from extr connection.
IPAY0300069	Transaction in progress in another tab/window.
IPAY0300071	Problem occurred while inserting Faster Checkout details.
IPAY0300072	Problem occurred while updating PreAuthLog status.
IPAY0300073	Problem occurred while inserting record in PreAuthLog.
IPAY0300074	Problem occurred while validating IMPS transaction.
IPAY0300075	Problem occurred while updating risk factors in Negative card and Declined card
IPAY0300076	Problem occurred while processing original transaction details.
IPAY0300077	Negative bin details not found.
IPAY0300078	Negative card details not found.
IPAY0300079	Not original transaction.
IPAY0300080	Institution id mismatch.
IPAY0300081	Merchant id mismatch.
IPAY0300082	Terminal id mismatch.
IPAY0300083	Invalid captcha.
IPAY0300084	Missing debit card number.
IPAY0300085	Invalid card number length.
IPAY0300086	Missing pin.
IPAY0300087	Invalid pin.
IPAY0300088	Missing expiry month and year.
IPAY0300089	Invalid expiry month and year.
IPAY0300090	Problem occurred while adding payment log details.
IPAY0300092	Problem occurred while validating IMPS.
IPAY0300093	Problem occurred while getting common instrument list.
IPAY0300094	Problem occurred while converting batch data into transaction data.
IPAY0300095	Problem occurred while converting maestro batch data into transaction data.
IPAY0300096	Invalid Common Payment Instrument List.

IPAY0300097	Problem occurred while common payment instrument.
IPAY0300098	Problem occurred during VPAS transaction.
IPAY0300099	Transaction denied due to invalid action Codes
IPAY0300100	Problem occurred while encrypting card details.
IPAY0300101	Problem occurred while generating ISO for transaction data.
IPAY0300102	Problem occurred while generating VISA ISO for transaction data.
IPAY0300103	Problem occurred while generating ISO for VPAS transaction.
IPAY0300104	Problem occurred while generating MASTER ISO for transaction data.
IPAY0300105	Problem occurred while generating VISA ISO for debit transaction.
IPAY0300106	Problem occurred while generating MASTER ISO for debit transaction.
IPAY0300107	Problem occurred while generating ISO for debit transaction.
IPAY0300108	Problem occurred while generating ISO for prepaid transaction.
IPAY0300109	I-Frame Flag is not enabled
IPAY0300110	Rupay transaction not enabled for Terminal.
IPAY0300111	Message got rejected by SM.
IPAY0300112	Unable to process the message.
IPAY0300113	Invalid input.
IPAY0300114	Duplicate message.
IPAY0300115	Request come with GET method so transaction declined.
IPAY0300116	Transaction initiated with invalid source.
IPAY0300117	Invalid Unique id.
IPAY0300118	IP is blocked.
IPAY0300119	IP is not configured to process the message.
IPAY0300120	Remote IP Profile is not configured to process the message.
IPAY0300121	Invalid input format.
IPAY0300122	Connection Read Timeout.
IPAY0300123	Search result greater than maximum number of records allowed.Increase search granularity and re-submit.
IPAY0300124	Problem occurred while verifying tranportal id.
IPAY0300125	Missing required data.
IPAY0300126	Missing data type.
IPAY0300127	Transaction declined due to payment log not updated.
IPAY0300128	Duplicate transaction request.
IPAY0300130	Problem occurred while checking IP range.

IPAY0300131	Problem occurred while checking negative bin range.
IPAY0400001	Problem occurred while getting merchant acknowledgement & transaction reversed.
IPAY0400002	Problem occurred while parsing merchant request.
IPAY0400004	Missing Action.
IPAY0400005	Missing Password.
IPAY0400006	Missing TrackID.
IPAY0400007	Missing Payment Id or Tranportal Id.
IPAY0400008	Missing UDF5.
IPAY0400009	Missing TransID.
IPAY0400010	Missing Card Type.
IPAY0400011	Blank Request.
IPAY0500002	paymentData not enabled.
IPAY0500003	paymentMethod not enabled.
IPAY0500004	Header not enabled.
IPAY0500005	Problem occurred while getting paymentData details.
IPAY0500006	Problem occurred while getting paymentToken details.
IPAY0500007	Problem occurred while getting header details.
IPAY0500008	Problem occurred while getting paymentMethod details.
IPAY0500009	Problem occurred while getting Token details.
IPAY0500010	Asymmetric keys do not match.
IPAY0500011	Problem occurred while processing the CreditInstalment Request.
IPAY0500012	Problem occurred while validating applePay signature.
IPAY0500013	Problem occurred while getting applePay brand details.
IPAY0500014	Problem occurred while processing the applePay tranportal transaction.
IPAY0500015	3d secure not enabled for the terminal.
IPAY0500016	signature certificates count missed.
IPAY0500017	leaf certificate missing.
IPAY0500018	intermediate certificate missing.
IPAY0500019	Failed to verify apple pay signature.
IPAY0500020	Failed to extract sign time from apple pay signature.
IPAY0500021	Apple pay signature is too old.
IPAY0500022	Problem occurred while validating applePay signature time.
IPAY0500023	Failed to verify apple pay certificate.
IPAY0500024	Problem occurred while validating rootCA.

IPAY0500025	Exception while initializing Code Signer Certs.
IPAY0500026	Problem occur while framing signedData.
IPAY0500027	Apple pay currency code and transaction currency code not matched.
IPAY0500028	Apple pay amount and transaction amount not matched.
IPAY0500029	Apple pay transaction ID not matched.
IPAY0500030	Problem occurred while inserting record in Applepay Tranlog.
IPAY0500031	Applepay transaction not enabled for Terminal.
IPAY0500032	Applepay merchant not enabled.
IPAY0500033	Problem occurred while getting Applepay merchant details.
IPAY0500034	Payment Data missing.
IPAY0500035	Payment Method missing.
IPAY0500036	Payment Transaction Identifier missing.
IPAY0500037	Problem occurred while getting merchant session.
IPAY0500038	MADA Applepay transaction is not supported.
IPAY0600001	Missing SI data.
IPAY0660001	Unable to frame the card request due to invalid Serial Number.
IPAY0660002	Unable to frame the card request due to invalid Profile Number.
IPAY0660003	Unable to frame the card request due to invalid User ID.
IPAY0660004	Unable to frame the card request due to invalid Operating system type.
IPAY0660005	Unable to frame the card request due to invalid IP Address.
IPAY0660006	Unable to frame the card request due to invalid card Type.
IPAY0660007	Problem occurred while framing the card fetch request.
IPAY0660008	Problem occurred while fetching the card details for saved card.
IPAY0660009	Problem occurred while fetching the connection details for card list.
IPAY0660010	Card List details are invalid to get the card details.
IPAY0660011	Pan mismatch in Market Place Card List Response message.
IPAY0700001	Credit Instalment flag not enabled.
IPAY0700002	Credit Instalment is not applicable for this bin.
IPAY0700003	Unable to frame credit instalment request.
IPAY0700004	Problem occurred while framing Acquire Ticket request.
IPAY0700005	Credit instalment response is empty.
IPAY0700006	Raw instalment plan data is empty.
IPAY0700007	Failure Result Code Received from Prime.
IPAY0700008	Problem occurred while inserting record in CreditInstalmetLog.

IPAY0800001	Apple Pay Payment Details is invalid.
IPAY0800002	Apple Pay Network Indicator is invalid.
IPAY0800003	Apple Pay onlinePaymentCryptogram is invalid.
IPAY0800004	Apple Pay transactionIdentifier is invalid.
IPAY0800005	Apple Pay type is invalid.
IPAY0800006	Apple Pay eci Indicator is invalid.
IPAY0800007	Apple Pay deviceManufacturerIdentifier is invalid.
IPAY0800008	Apple Pay device pan is invalid.
IPAY0800009	Apple Pay device pan expiry details is invalid.
IPAY0800010	Apple Pay currency code is invalid.
IPAY0800011	Apple Pay PSP Flag not enabled for this Merchant.
IPAY0800012	Absher data is invalid.
IPAY0800013	Sector ID is invalid in Absher Payment data.
IPAY0800014	Service code is invalid in Absher Payment data.
IPAY0800015	Beneficiary ID is invalid in Absher Payment data.
IPAY0800016	Beneficiary ID type is invalid in Absher Payment data.
IPAY0800017	Sector ID length is invalid in Absher Payment data.
IPAY0800019	Beneficiary Name is invalid in Absher Payment data.
IPAY0800020	Beneficiary Name length is invalid in Absher Payment data.
IPAY0800021	Branch Code is invalid in Absher Payment data.
IPAY0800022	Branch Code length is invalid in Absher Payment data.
IPAY0800023	Violation details is invalid in Absher Payment data.
IPAY0800024	Violation count is invalid in Absher Payment data.
IPAY0800025	Violation count should be numeric in Absher Payment data.
IPAY0800026	Violation count should be valid length in Absher Payment data.
IPAY0800027	Violation list is invalid in Absher Payment data.
IPAY0800028	Violation list size is invalid in Absher Payment data.
IPAY0800029	Violation id is invalid in Absher Payment data.
IPAY0800030	Violation amount is invalid in Absher Payment data.
IPAY0800031	Sentence details is invalid in Absher Payment data.
IPAY0800033	Number of sentences should be numeric in Absher Payment data.
IPAY0800034	Sentence count should be valid length in Absher Payment data.
IPAY0800035	Sentence list is invalid in Absher Payment data.
IPAY0800036	Sentence list size is invalid in Absher Payment data.
IPAY0800037	Sentence number is invalid in Absher Payment data.
IPAY0800038	Sentence amount is invalid in Absher Payment data.

IPAY0800039	Sentence installment number is invalid in Absher Payment data.
IPAY0800040	Sentence number should be numeric in Absher Payment data.
IPAY0800041	Sentence installment number should be numeric in Absher Payment data.
IPAY0800042	Sentence number should be valid length in Absher Payment data.
IPAY0800043	Sentence installment number should be valid length in Absher Payment data.
IPAY0800044	Missing Sector id.
IPAY0800045	Invalid Sector id.
IPAY0800046	Invalid IP Address.
IPAY0800047	Violation ID length is invalid in Absher Payment data.
IPAY0800048	Payment Inquiry Type is invalid in Absher Payment data.
IPAY0800049	Payment Inquiry Type should be alphanumeric in Absher Payment data.
IPAY0800050	Payment Inquiry Type length is invalid in Absher Payment data.
IPAY0800051	Problem occurred while validating Absher Payment data.
IPAY0800052	Transaction declined due to action type not supported.
IPAY0800053	Invalid Merchant Country Code.
IPAY0800054	Card Not Supported!
IPAY0800055	Mod 10 failed for the card number.
IPAY0800057	Problem occurred while updating Faster Checkout Customer details.
IPAY0800058	Faster Checkout card number already registered.
IPAY0800059	Problem occurred while adding vpas cres details.
IPAY0800060	Problem occurred while getting details from saf dump using ReversalKey.
IPAY0860001	Problem occurred while loading default messages in MADA ISO Formatter.
IPAY0860002	Problem occurred while loading default mesages for Supporting in MADA ISO Formatter.
IPAY0860003	Problem occurred while formatting purchase request in MADA ISO Message Formatter.
IPAY0860004	Problem occurred while formatting Credit request in MADA ISO Message Formatter.
IPAY0860005	Problem occurred while formatting Reverse purchase request in MADA ISO Message Formatter.

IPAY0860006	Problem occurred while formatting authorization request in MADA ISO Message Formatter.
IPAY0860007	Problem occurred while formatting Reverse authorization request in MADA ISO Message Formatter.
IPAY0860008	Problem occurred while formatting Authorization extension in MADA ISO Message Formatter.
IPAY0860009	Problem occurred while formatting Capture request in MADA ISO Message Formatter.
IPAY0860010	Problem occurred while formatting Account verification request in MADA ISO Message Formatter.
IPAY0860011	Problem occurred while formatting Administrative Notification request in MADA ISO Message Formatter.
IPAY0860012	Problem occurred while formatting the secure data in MADA ISO Message Formatter.
IPAY0860013	Problem occurred while formatting the request for Supporting transactions in MADA ISO Message Formatter.
IPAY0860014	Problem occurred while formatting the request Authorization supporting transactions in MADA ISO Message Formatter.
IPAY0860015	Problem occurred while formatting the Original transaction data in MADA ISO Message Formatter.
IPAY0860016	Problem occurred while formatting the Original transaction data for Merchant Initiated transactions in MADA ISO Message Formatter.
IPAY0860017	Problem occurred while validating the Recurring Transaction data in MADA ISO Formatter.
IPAY0860018	Problem in getting the key exchange values for MAC generation.
IPAY0860019	Problem occurred while generating the MAC values.
IPAY0860020	MAC key is empty not able to generate MAC values.
IPAY0880001	URPay Transaction is not enabled.
IPAY0880002	Token generation missing data.
IPAY0880003	Token generation response is empty.
IPAY0880004	Problem occurred while generating Token.
IPAY0880005	Problem occurred while inserting URPay API details table.
IPAY0880006	Problem occurred while selecting URPay otp auth table.
IPAY0880007	Problem occurred while performing URPay Transaction.
IPAY0880008	OTP token data is not available.
IPAY0880009	Token is empty.

IPAY0880010	OTP validation response is empty.
IPAY0880011	Problem occurred while validating URPay otp.
IPAY0880012	Problem occurred while updating URPay API details table.
IPAY0880013	Problem occurred while updating URPay details.
IPAY0880016	OTP Reverse redemption response is empty.
IPAY0880017	Problem occurred while inserting URPay log details.
IPAY0880018	Problem occurred while deleting vpas pares details.
IPAY0880019	Problem occuerd while generating Otp.
IPAY0880020	Problem occuerd while proccesing resend Otp.
IPAY0880021	Problem occuerd while validating Otp.
IPAY0800061	Please try after sometime.
IPAY0100335	Duplicate Invoice ID

## Handling Final Response from Payment Gateway

### Handling Transaction Response:

- By decrypting “**trandata**” Merchant can able to get the JSON Response. JSON response contains 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**” not null.  
 By decrypting the trandata Merchant can able to get the failure transaction description by extracting the key “**result**”.  
 If “**result**” is null then merchant needs to use the key “**errorText**” 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.

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