

3DS Merchant Interface

Version 2.9

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1.0 REVISION HISTORY

Version	Description	Updated By	Date
1.0	First Release		
1.1	Added sample message	Hazel Ong	30/03/2020
1.2	Removed Card Encryption section	Goh Xin Ni	20/11/2020
1.3	Updated MPIKeyReq and MPIKeyRes field ID formats	Goh Xin Ni	20/11/2020
1.4	Added List of Response Code section	Hazel Ong	10/12/2020
1.7	Change MPIReq few columns to Conditional instead of Mandatory Add in cardholder name column	Ho Mun Jun	24/02/2021
1.8	Add in new fields in key exchange (/mkReq) for key	Ho Mun Jun	09/03/2021
1.0	exchange mac verification Add in new field (MPI_BIN) in MPI response	THO IVIGIT SUIT	03/03/2021
	Add in new neid (ivii 1_bilv) in ivii 11esponse		
	Add in new fields in MPI_MAC sequence (no 3, 4, 5, 33)		
	Add in new field in MPI response mac (no 6 MPI_BIN)		
1.9	Add in new step in Message Flow (no 6)	Ho Mun Jun	15/03/2021
	Add in new field MPI_RESPONSE_TYPE in merchant request MPIReq		
	Add in new column JSON field id in MPIRes		
2.0	Remove JSON field id in MPIRes	Ho Mun Jun	24/03/2021
	Add in new fields in MPIReq and MAC 4. MPI_CARD_HOLDER_NAME 35.MPI_RESPONSE_TYPE		
	Add in new fields in MPIRes and MAC 7. MPI_REFERRAL_CODE		
	Add in ENROLLMENT FILE FORMAT and LIST OF REFERRAL CODE section		
2.1	Updated field name in MPIReq from MPI_CARDHOLDER_NAME to MPI_CARD_HOLDER_NAME	Goh Xin Ni	31/03/2021
2.2	Update description and value of MPI_RESPONSE_TYPE in MPIReq	Ho Mun Jun	02/04/2021
2.3	Add in MPIReq need go thru an iframe(as EMVCo request) and remove the redirect using javascript	Lee Shu Yi	13/04/2021
2.4	Add in MPI_CARDHOLDER_INFO in MPIRes	Lee Shu Yi	22/04/2021
2.5	1. Add Payment Link, Online Banking Wallet (OBW) and QR feature under module 4.8 URLs Function. 2. Add Payment Link, Online Banking Wallet (OBW) and QR message specifications with sample message	Tam Yew Wah	18/10/2024

	3. Add Summary of the Message Format that support by URL list4. Revise the Message Specification to categories under JSON and HTML Form Post		
2.6	Add new field: MPI_QR_TYPE in MPIQrReq. Terminal able to get QR string/ QR image based on this field	Tam Yew Wah	20/11/2024
2.7	Add new field: MPI_QR_TXNNOTIF_TYPE in the MPIQrReq. To control the callback. Update field: MPI_PURCH_AMT in the MPIQrReq to conditional, will not require if generating Static QR	Horng Sen	23/2/2025
2.8	Added: - Section 8: Sample code for MAC generation	Horng Sen	8/4/2025
2.9	Added - Section 9 : FAQ - Section 4.9: List of UAT URL Updated - Section 8: Adding the sample source code from GitHub	Horng Sen	26/5/2025

2.0 PREFACE

This document describes implementation guide of the Cardzone 3DS Server. This implementation guide documents the online message interfaces requirements and processing flows expected by the Cardzone 3DS Server from acquiring bank selected e-commerce vendors.

3.0 SYSTEM INTRODUCTION

3.1 Purpose of the Document

On behalf of the acquiring bank, this document contains information relevant to online merchants who are interested in routing their online transactions to Cardzone 3DS Server for processing. Cardzone 3DS Server complies with EMVCo 3D-Secure v2.

3.2 Document Scope

This guide is designed to provide a detailed description of messages exchanged between e-commerce merchant and Cardzone 3DS Server.

3.3 System Objective

To establish the standard interface message format that will be used by Cardzone 3DS Server and e-commerce merchant.

3.4 Intended Audiences

The following are the target audience who should read this document

- Cardzone 3DS Server Technical Architect & developers for developing and implementing the solution
- System Integration Test Managers, User Acceptance Test Managers to develop test scripts
- Acquiring Bank IT team
- E-commerce vendors (if relevant)

4.0 TECHNICAL REQUIREMENT

4.1 Transport Security

The channel between cardholder and merchant server should be secured using HTTPS. The merchant web server has to have a valid SSL certificate signed by a certificate authority installed.

4.2 HTTPS Post

The Interaction between 3DS Server and Merchant server are through JSON or HTML form post.

The key exchange prepares field in MPIKey by merchant server, the message request sends in JSON format to 3DS Server.

The payment checkout form and inquiry form prepare field in MPIReq/MPIReqOBW, and in form post (thru iframe) to 3DS Server. The response of the transaction MPIRes is posted to a merchant server URL listener.

4.3 Cardholder Browser

Merchant must provide clear instruction at the checkout page to avoid cardholder close browser window/hit refresh button/hit back button while the transaction is processing.

If the cardholder close browser in the middle of 3DS authentication, the payment summary may not post to the merchant server.

Need using an HTML iframe (inline or lightbox) in the Cardholder browser when form post MPIReq to 3DS Server.

4.4 Response Time Frame

Time taken for 3DS authentication is variable. It depends on the network traffic, and response time from DS as well as ACS. Typically, 3DS authentication should complete within 20 sec.

4.5 Void Transaction

Approved transactions can be voided before they are settled. If transactions are already settled in 3DS Server, then merchants are required to do refund.

4.6 Refund Transaction

Approved transactions can be refund if transactions are already settled in 3DS Server.

4.7 Settlement

3DS Server will automatically settle all approved transactions daily at 12:00am by generating a settlement file for acquiring bank processing.

4.8 URLs Function

4.8.1 MPIKey - Request URL

E-commerce merchant server will be given an URL to send key exchange request using JSON message. This URL is given to merchant solely for key exchange request. Merchant should not disclose the URL to any unrelated third party.

4.8.2 MPIReq - Request URL

E-commerce merchant server will be given an URL to send online authentication transaction request. This URL is given to merchant solely for online transaction request. Merchant should not disclose the URL to any unrelated third party.

The given URL to be segregate into 2 based on merchant request as below:

- Hosted Payment Request URL Cardzone 3DSS to host the Payment Page and eligible
 the consumer to choose the payment type to proceed the authentication and
 authorization.
- 2. **Non-Hosted Payment Request URL** Merchant will host the payment page and sending the request to Cardzone 3DSS server to proceed authentication and authorization

4.8.3 MPIRes - Response URL

Merchant server needs to provide an URL for Cardzone 3DS Server to response the result of online transaction, Cardzone 3DS Server will response to same URL for all online transactions (different card brand) from the merchant.

4.8.4 Payment Link MPIKey - Request URL

E-commerce merchant server will be given a URL to send the key exchange request which purposely use for Payment Link function with using JSON message. This URL is given to merchant portal / merchant who are solely to use of payment link key exchange request. Merchant should not disclose the URL to any unrelated party.

4.8.5 Payment Link Generation - Request URL

E-commerce merchant server will be given an URL to send generate payment link request. Merchant should not disclose the URL request to any unrelated party. Upon request, E-commerce merchant server will be returning the payment link to URL and merchant eligible to share it to consumer to proceed further activity.

4.8.6 MPIQrReg - Request URL

E-commerce merchant server will be given an URL for the QR Transaction. Merchant should not disclose the URL to any unrelated third party

4.8.7 MPIReqOBW - Request URL

E-commerce merchant server will be given an URL to send online payment transaction request. This URL is given to merchant solely for online transaction request. Merchant should not disclose the URL to any unrelated third party.

The given URL to be segregate into 2 based on merchant request as below:

- 1. **Hosted Payment Request URL** Cardzone 3DSS to host the Payment Page and eligible the consumer to choose the payment type to proceed the authentication and authorization.
- 2. **Non-Hosted Payment Request URL** Merchant will host the payment page and sending the request to Cardzone 3DSS server to proceed payment transaction.

4.9 List of UAT URLs

- Key Exchange Page: https://3dsecureczuat.muamalat.com.my/3dss/mkReq
- Hosted Payment Page: https://3dsecureczuat.muamalat.com.my/3dss/mercReq
 ✓ Sales
- Non-Hosted Payment Page: https://3dsecureczuat.muamalat.com.my/3dss/mpReq
 - ✓ Sales
 - ✓ Inquiry
 - √ Void
 - ✓ Refund
- Payment Link Key Exchange Page: https://3dsecureczuat.muamalat.com.my/3dss /mkReqPymtLink
- Payment Link Generation Request Page: https://3dsecureczuat.muamalat.com.my/3dss/getPymtLink
 - ✓ Sales
- Merchant QR Request Page: https://3dsecureczuat.muamalat.com.my/3dss/mpQrReq
 - ✓ Generate QR
 - ✓ QR Transaction Inquiry
- Hosted Online Banking Wallet (OBW) Payment Page: https://3dsecureczuat.muamalat.com.my/3dss/obwMercReq
- Non-Hosted OBW Payment Page:

https://3dsecureczuat.muamalat.com.my/3dss/mpReqObw

- ✓ Bank List Request
- ✓ OBW Sales
- ✓ OBW Inquiry

✓ OBW Cancel Transaction

4.10 List of Production URLs

- Key Exchange Page: https://3dsecurecz.muamalat.com.my/3dss/mkReq
- Hosted Payment Page: https://3dsecurecz.muamalat.com.my/3dss/mercReq
 - ✓ Sales
- Non-Hosted Payment Page: https://3dsecurecz.muamalat.com.my/3dss/mpReq
 - ✓ Sales
 - ✓ Inquiry
 - ✓ Void
 - ✓ Refund
- Payment Link Key Exchange Page: https://3dsecurecz.muamalat.com.my/3dss /mkReqPymtLink
- Payment Link Generation Request Page: https://3dsecurecz.muamalat.com.my/3dss/getPymtLink
 - ✓ Sales
- Merchant QR Request Page: https://3dsecurecz.muamalat.com.my/3dss/mpQrReq
 - ✓ Generate QR
 - ✓ QR Transaction Inquiry
- Hosted Online Banking Wallet (OBW) Payment Page: https://3dsecurecz.muamalat.com.my/3dss/obwMercReq
- Non-Hosted OBW Payment Page:

https://3dsecurecz.muamalat.com.my/3dss/mpReqObw

- ✓ Bank List Request
- ✓ OBW Sales
- ✓ OBW Inquiry
- ✓ OBW Cancel Transaction

4.11 Summary of Message Format that supported by URL

List of the URL message format with support JSON format

- MPIKey Request URL: Key Exchange Page
- Payment Link MPIKey Request URL: Payment Link Key Exchange Page
- Merchant QR Request URL: Merchant QR Request Page
- Online Banking Wallet (OBW) MPIReq Request URL:

- Hosted Payment Page
- Non-Hosted Payment Page

List of the URL message format with support FORM POST format

- MPIReq Request URL:
 - Host Payment Page
 - Non-Hosted Payment Page
- Payment Link Generation Request URL: Payment Link Generation Request Page
- Merchant QR Request URL: Merchant QR Request Page
- Online Banking Wallet (OBW) MPIReq Request URL:
 - Hosted Payment Page
 - o Non-Hosted Payment Page

Cardzone Sdn Bhd

5.0 SYSTEM MESSAGE INTERFACE

5.1 Communication Details

The following table summarizes the communication details pertaining to Cardzone 3DS Server and E-commerce merchant

Protocol	HTTPS
Message Format	JSON/HTML Form Post

5.2 Messages Type

The following Message Type are used:

Message Type	Identifier Application
INQ	Inquiring
SALES	Sales / Purchase
VSALES	Void of Sales / Void of Purchase
REFUND	Refund

5.3 Message Validation

In the event of the message being corrupted or using invalid encryption algorithm or not packed according to the specification, the message would be declined by Cardzone 3DS Server with corresponding response code.

5.4 Message Flows

- 1. Cardholder selects to checkout at the merchant website, merchant server will prepare a checkout page within an iframe with all the fields required in **MPIReq**.
- 2. Merchant server generate RSA key pair, and form a **MPIKeyReq** JSON message send to 3DS Server to do a key exchange for this transaction.
- 3. 3DS Server received the **MPIKeyReq** and validates the message.
 - If invalid message, will response **MPIKeyRes** with error code.
 - If merchant is valid, generate another RSA key pair, response public key to merchant server by **MPIKeyRes** JSON message.
- 4. Merchant Server received the MPIKeyRes.
 - If key exchange failed, merchant server should retry from step 2.

• If key exchange success, merchant server let cardholder enter card information, and using an iframe form post **MPIReq** to 3DS Server.

- 5. 3DS Server received **MPIReq** and validates the transaction.
 - If invalid transaction, MPIRes will post to Merchant URL with error code.
 - If valid transaction, 3DS Server determine whether the card is enrolled for 3DS authentication from ACS. If the card is enrolled, perform 3DS authentication else perform normal authorization to Acquirer Host. After receive response from ACQuirer Host/result response from ACS, MPIRes will post to Merchant URL with error code
- 6. If transaction type of **MPIReq** is SALES, 3DS Server will fire additional status info to merchant enrolled URL for immediate transaction status update. If merchant didn't provide this URL, 3DS Server will ignore this action.
- 7. Merchant server received **MPIRes** then close the iframe, and should verify the MAC before response to cardholder browser, if verified failed then do inquiry. At last, merchant server must response to cardholder browser accordingly.

5.5 Transaction Timeout

All e-commerce merchant should perform inquiry before trigger new online transaction request when there is a time out i.e. not response from Cardzone 3DS Server. If previous transaction was approved but e-commerce merchant did not receive response due to whatever reason; and e-commerce merchant trigger another online transaction request it will be considered separate transaction request and may incur double charge to cardholder.

5.6 MAC Field Description

5.6.1 MAC (MPIKeyReg)

This field is for Cardzone 3DS server and E-commerce merchant to verify the request and response are from the genuine sender during key exchange message.

This field was sign using SHA256withRSA algorithm, and encoded in Base64Url.

Sign using own RSA private key, verify using sender RSA public key during merchant file based public key enrollment.

For MAC generated by E-commerce merchant in key exchange request, the encrypted values are expected in the order of:

- 1. merchantId
- 2. purchaseld
- 3. pubKey

5.6.2 MPI MAC (MPIReq)

This field is for Cardzone 3DS server and E-commerce merchant to verify the request and response are from the genuine sender.

This field was sign using SHA256withRSA algorithm, and encoded in Base64Url.

Sign using own RSA private key, verify using sender RSA public key, these keys have been exchanged with MPIKey message when transaction initial.

For MPI_MAC generated by E-commerce merchant in transaction request, the encrypted values are expected in the order of:

- 1. MPI TRANS TYPE
- 2. MPI MERC ID
- 3. MPI PAN
- 4. MPI_CARD_HOLDER_NAME
- 5. MPI_PAN_EXP
- 6. MPI_CVV2
- 7. MPI_TRXN_ID
- 8. MPI ORI TRXN ID
- 9. MPI_PURCH_DATE
- 10. MPI_PURCH_CURR
- 11. MPI PURCH AMT
- 12. MPI_ADDR_MATCH
- 13. MPI_BILL_ADDR_CITY
- 14. MPI_BILL_ADDR_STATE
- 15. MPI_BILL_ADDR_CNTRY
- 16. MPI_BILL_ADDR_POSTCODE
- 17. MPI_BILL_ADDR_LINE1
- 18. MPI_BILL_ADDR_LINE2
- 19. MPI_BILL_ADDR_LINE320. MPI_SHIP_ADDR_CITY
- 21. MPI_SHIP_ADDR_STATE

- 22. MPI_SHIP_ADDR_CNTRY
- 23. MPI_SHIP_ADDR_POSTCODE
- 24. MPI SHIP ADDR LINE1
- 25. MPI SHIP ADDR LINE2
- 26. MPI_SHIP_ADDR_LINE3
- 27. MPI_EMAIL
- 28. MPI_HOME_PHONE
- 29. MPI HOME PHONE CC
- 30. MPI_WORK_PHONE
- 31. MPI_WORK_PHONE_CC
- 32. MPI MOBILE PHONE
- 33. MPI MOBILE PHONE CC
- 34. MPI_LINE_ITEM (repeat subfields as necessary)
 - a. MPI_ITEM_ID;
 - b. MPI ITEM REMARK;
 - c. MPI_ITEM_QUANTITY;
 - d. MPI_ITEM_AMOUNT;
 - e. MPI_ITEM_CURRENC
- 35. MPI RESPONSE TYPE

For MPI_MAC generated by Cardzone 3DS Server in transaction response, the encrypted values are generated in the order of:

- 1. MPI MERC ID
- 2. MPI_TRXN_ID
- 3. MPI_ERROR_CODE
- 4. MPI_APPR_CODE
- 5. MPI RRN
- 6. MPI_BIN
- 7. MPI_REFERRAL_CODE
- 8. MPI CARDHOLDER INFO

5.7 General Specifications

1. Protocol

Communications Protocol: HTTPS

2. Message Format

- JSON
- HTML Form POST (thru iframe)

3. Character Set

ASCII

4. Data Attributes

Format Abbreviation	Meaning	Size
А	Alphabetic Characters	All left justified, with trailing spaces.
N	Numeric Digits	All right justified, with leading zeros.
AN	Alphabetic and Numeric Characters	All left justified, with trailing spaces.

5. Conventions Used for Denoting Field Presence

Code	Meaning
M	Field must be present.
ME	If field is present in request, the same value has to be echoed in the response.
0	Field is optional within the request. If present, the system will take certain action on it.
С	Field is conditional within the request.

6. Void

 Original Transaction Number (MPI_ORI_TRXN_ID) of the transaction to be void should be provided.

5.8 Message Specifications

5.8.1 JSON Format Method

5.8.1.1 MPIKeyReq – Request Form Fields

Field Id	Attribute	Mandatory	Remarks
merchantId	AN (15)	М	Merchant ID.
			The unique identity code assigned by acquirer bank to
			the merchant.
purchaseId	AN (20)	M	Transaction ID.
			The unique transaction number generated by merchant to identify the transaction. Each unique transaction number is treated as new transaction request. This field is being used pair with merchant ID to identify a transaction. Minimum 6 digits. If a transaction received with the transaction number exists pair with the merchant ID in system, the transaction is treated as duplicate and deemed invalid.
pubKey	AN (392)	М	RSA public key, key length 2048 generated by the merchant server. Encoded in Base64Url.
mac	ANS (344)	С	Key Exchange MAC.
			Refer to field description for details on encryption algorithm and verification.
			Mandatory only if merchant enroll key exchange mac verification.

Sample Request:

```
{
    "merchantId" : "60000000000001",
    "pubKey" :
    "MIIBIJANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAp1mHlp7EPnBY_lyO2d6Odwg98GxZozSIpMxg8r
    5SxmkRrzI_6ZH0WZlai3IyXA6BIgmH6QoFK6nNHz6kVtzhT_aPRzSo2eSstQFfYxcP2eFswO0uTDu41xlnC
    y77JI4GUv9joE37dA6wtru1QMiDmkG-
    Iyp62Piszx9ertMDb2JxcD1ieRngHp5v3GKiG5W7nWo0ge3xgJGcu6JjVxjRXN4bbxUqNbMBkxM993Yjy_w
    L11lBOM4xLWqMszuWMDrQiU-
    kJwbjKeR1ssCo2IhazGyEdrPr2C94QNmhVfYhK31Se2c7gXXaEBzElyN59viAm0WCYNuM038uha8MIqLxsQ
    IDAQAB",
    "purchaseId" : "6487047256"
}
```

5.8.1.2 MPIKeyRes – Response Form Fields

Field Id	Attribute	Mandatory	Remarks
merchantId	AN (15)	ME	Merchant Id.
			Echo value as per request. Cannot be blank.

purchaseld	AN (20)	ME	Transaction ID
			Echo value as per request. Cannot be blank.
pubKey	AN (392)	С	RSA public key, key length 2048 generated by the 3DS
			server. Encoded in Base64Url.
			Present if response code is 000. Else blank.
errorCode	AN (3)	М	Response Code.
errorDesc	AN (100)	0	Response Error Description.
			Present if response code is not 000. Else blank.

Sample Response:

```
{
"errorCode" : "000",
"merchantId" : "60000000000001",
"pubKey" :
"MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCGKCAQEAuJpVG9wgfjRIkwmy0o0yT9_iHnrQvafiOY1el7
1MAvK4cporhW97Yx6YdPNntAncHNYbZB822Je-ZF_vMV80v0dlu-
H3YkWF2dNLA3BYe2ulRb76WeHLhgNMmCNuVV719OYJLXtoburxPboo7RY4Nox9A4AkWfpRuw9waoHqXE1oW
Z3LnZZzt5uTKuAstye2atvn4VIaw6hSpvjlXIFK01IQqlY9bBtFREIyLxgrwOwwfFEJy5B00-
LjLhg932oeSfBuP089zxhsYVtRZm_o9rcikaav1y4oR03Nm3A1UIkS2RXF_GrIc4xwSoREPB2XeSKRGAiCH
tnjP_38efih6wIDAQAB",
"purchaseId" : "6487047256"
}
```

5.8.1.3 Payment Link MPIKeyReg – Request Form Fields

Field Id	Attribute	Mandatory	Remarks
merchantId	AN (15)	М	Merchant ID.
			The unique identity code assigned by acquirer bank to
			the merchant.
purchaseld	AN (20)	M	Transaction ID.
			The unique transaction number generated by merchant
			to identify the transaction. Each unique transaction
			number is treated as new transaction request.
			This field is being used pair with merchant ID to identify
			a transaction. Minimum 6 digits.
			If a transaction received with the transaction number
			exists pair with the merchant ID in system, the
			transaction is treated as duplicate and deemed invalid.
pubKey	AN (392)	M	RSA public key, key length 2048 generated by the
			merchant server. Encoded in Base64Url.
mac	ANS (344)	С	Key Exchange MAC.
			Refer to field description for details on encryption algorithm and verification.

	Nandatory only if merchant enroll key exchange mac erification.
--	-----------------------------------------------------------------

Sample Request:

```
{
"merchantId" : "10000000000008",
"pubKey" :
"MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAqNxrKZsPUoBHLX6D2Y0aCx802Ykh2pLo2eD6NB
R1NMZMXCxZmQa26eQC84mSmWdzoHfz6YgPh-0baeoFQI6Gvmz4hb-
H0nhPG10vIwV9_Iw_z_pjWLGhF0AAV_I_0_jeqA_5PSkudOpdc2vyLvbBLOvRHybGVBsa7auzSbXqtqXBK3
SdQQxqM2icpOnazrcf-rL16c5vW59Jtwhvt1VaFHecpCGg4fhkWYpn_X1I1YFJJupaPN1Rkb9Diw-
PBqR6h4kji3Yz9B5HrWymkL60Nttv2jKb_-
OXKtkoYxwY58TlEBmihMEW9Bq8UMcuI0Gptml3T09JENnLrMDkFQTGawIDAQAB",
"purchaseId" : "858018791"
}
```

5.8.1.4 Payment Link MPIKeyRes – Request Form Fields

Field Id	Attribute	Mandatory	Remarks
merchantId	AN (15)	ME	Merchant Id.
			Echo value as per request. Cannot be blank.
purchaseId	AN (20)	ME	Transaction ID
			Echo value as per request. Cannot be blank.
pubKey	AN (392)	С	RSA public key, key length 2048 generated by the 3DS
			server. Encoded in Base64Url.
			Present if response code is 000. Else blank.
errorCode	AN (3)	M	Response Code.
errorDesc	AN (100)	0	Response Error Description.
	(200)		
			Present if response code is not 000. Else blank.

Sample Response:

```
{
"errorCode" : "000",
"merchantId" : "100000000000008",
"pubKey" :
"MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAqR5SaRBsqoR1ckQ8W0BIMYiWwN0HMgald6knxS
04QVeV-JvrBVSkQz-XjrKH4DLVvX15tE0eZ0UjtjPwc7zqjRSn4dyMIrSL_Mi0eNdtIAX6Aw-
iyZ9tatMV0e9MgeOFFQocyPyfn_c_SGIITUGoL2Owp2chj4tQ110_A-w7wdj-
YyL6NiNEqNhxk0SpM0_dizFxhhv5juANRScW7SP7anDrLIZFMk5V70i78cn_daI8L_8y31Lb0FmMXPKygir
9ytML4sy2NHXwx3Q8RAgmB0k923haFT171n8QD51h5m6SL8YZG7Ta-
0qbhuLemDWsVtJCvtePOXBWuYfnQJYXIQIDAQAB",
"purchaseId" : "858018791"
}
```

5.8.1.5 MPIQrReq – Request Form Fields

Field Id	Attribute	Mandatory	Remarks
MPI_TRANS_TYPE	AN (10)	M	Transaction Type.
			QRINQ : QR Transaction Inquiry QRTXN : Request for Merchant QR
MPI_MERC_ID	N (15)	M	Merchant ID.
			The unique identity code assigned by
MADI TERMA ID	AN (O)	0.4	acquirer bank to the merchant. Terminal ID.
MPI_TERM_ID	AN (8)	M	lerminal ID.
			The unique identity code of terminal
			assigned by acquirer bank to the merchant.
MPI_PURCH_AMT	N (12)	С	Transaction Amount.
			Maximum 48 digits without decimal point
			appears in this field. The minor unit is
			implied, based on the transaction currency.
			For example:
			USD 100.23 = 10023
			JPY 12345 = 12345
			Not required if generating static QR
MPI_PURCH_CURR	N (3)	М	Transaction currency.
			5
			Format: ISO 4217 3-digits currency code Example: MYR = 458
MPI MAC	AN (100)	M	Merchant Transaction MAC.
	(===)		
			Cannot be blank.
			Sequence: MPI MERC ID I MPI TERM ID I
			Sequence: MPI_MERC_ID + MPI_TERM_ID + MPI_TRXN_ID + MPI_PURCH_CURR +
			MPI_PURCH_AMT
MPI_TRXN_ID	N (20)	М	Transaction ID.
			Company NADIKar Day Company ha
			Same value as per MPIKeyReq. Cannot be blank.
MPI_QR_TYPE	AN(6)	0	QR type.
			STRING : return QR content
			If the field not provided, or set as "STRING", it will return QR as a PNG Image
MPI_QR_TXNNOTIF_TYPE	AN(10)	0	QR Transaction Callback Type.
			MQTT: callback to MQTT after QR
			transaction success
			This field applicable for the ODTVN artists
			This field applicable for the QRTXN only. If field is not provided or set, there will be no
			callback notify for the QR.

Cardzone 3DS server support 2 type of request format for merchant present dynamic QR products, which as form post format and JSON format.

Sample JSON Request:

```
{
"MPI_PURCH_AMT" : "150",
"MPI_PURCH_CURR" : "458",
"MPI_MAC" : "CjcaKrOrlCOojT-CY1aFPpv-Fbbvc3dDsTt68oIMYdek879GFmMPsYA1q-
i6mCunEo07KdCTjbfxjJycQMJk8d7gzY7FM94bHsYym8of6UY7bUmdVcE9MV3RMlvysspXWddYt4KaFxQGP
0R2ej4x3wRvq_zSv0IcR5Ri_5AeA7EmsuX1l16v-
h5HIepkBhxHVj2zrZMi1T8NfnD6cQ4XdHD3CSAmL4fsqq-
bgWzAV4wcFJNjs3Y1PP6p8sdqWw_1EHfkoWTfAu5Q0VPY951lqANFN3B20MRHisW9Ooh1CZWu7BoQI5WIv5
te9L2yAxU33gbL0FgRZHXWsNllrvD6eQ",
"MPI_MERC_ID" : "100000000000068",
"MPI_TRXN_ID" : "1199548329",
"MPI_TERM_ID" : "00909125",
"MPI_TRANS_TYPE" : "QRTXN"
}
```

5.8.1.6 MPIQrRes – Response Form Fields

Field Id	Attribute	Mandatory	Remarks
MPI_MERC_ID	AN (15)	ME	Merchant Id.
			Taka wali sa aa wax waxwaxta Cawaxta ka kilanii.
			Echo value as per request. Cannot be blank.
MPI_TRXN_ID	AN (20)	ME	Transaction ID.
			Echo value as per request. Cannot be blank.
MPI_MAC	AN (100)	М	Merchant Transaction MAC.
			Cannot be blank.
			Sequence: MPI_MERC_ID + MPI_TRXN_ID +
			MPI_PURCH_CURR + MPI_PURCH_AMT +
			MPI_ERROR_CODE + MPI_APPR_CODE
MPI_ERROR_CODE	AN (3)	М	Response Code.
			For INQ transaction:
			000 Inquiry transaction successful
			001 Inquiry transaction failed
			002 Inquiry transaction cancelled
			003 Inquiry transaction timeout
			004 Inquiry transaction in processing
			Other error code is inquiry message error. Unable
			to do inquiry.
MPI_ERROR_DESC	AN (100)	С	Response Error Description.
			Present if response code is not 000. Else blank.
MPI_APPR_CODE	AN (6)	С	Approval Code.
			Present if response code is 000. Else blank.
MPI_RRN	AN (12)	С	Retrieval Reference Number.
_	, ,		

			Present if response code is 000. Else blank.
MPI_REFERRAL_CODE	N (2)	0	Only applicable if response code = 512-Invalid Transaction
			Refer RESPONSE CODE section below for details
MPI_QR_CODE	AN (2000)	0	Present in Base64 format if is Json response format
			and MPI_TRANS_TYPE = QRTXN

For the merchant present QR code generation response result, Cardzone 3DS server support method form post method and JSON format method. In form post method, Cardzone 3DS server will generate the QR code with image.

Sample JSON Response Message

```
"MPI ERROR CODE" : "000",
"MPI MAC" :
"hSVJ3286VkIVhudbGBDCfrHzOcDF4Qy XGtGqCusHrnbWxgWclNumOxQOckYsLcfxhEY81AE8naLyEd xL
1Rh51By-NhAAJHI-
F1foiiCv8hsUMXwSRTaFfPMxQFCpLp2q7vhUNW91peN6rAV4RU4YX8F08NBe7mcHyPS6DYd4ESrm8Cvg3MX
frQnj6EfP3QHUDZOtoEEJ2B6fxctkmgUDM950poMZaf4e7 xZbAfG -
MYMWjjXtz0wmM76sY1dmx15c4Jv6yj-YUmBSq9-
zGqB4wRBVva8 OWyL3R3jbGDukSvARUQWmz6jz3kTzKuTJOorV756fL2HeOon23pl w",
"MPI MERC ID" : "10000000000068",
"MPI QR CODE" :
"iVBORwOKGgoAAAANSUhEUgAAAMgAAADIAQAAAACFI5MzAAACXUlEQVR42u2XMc6kMAyFHaWggwtEyjXScS
W4AAwXqCul4xqRcqHoKBDeZ0Yr8Y+00q7+S0ZTDPMVAfv5+UH8rw895CEP+R9CVKSW/VHnhfwayaiI59nz5
ky0E/M086oizsx7U9qj5IP8NFOrJdQFHtiu0Q6/QHaz7USuisloCWqAK9cybpz5ozpfE/THtfPf70fnvib4
pC7kqf0w5/VDVV8Tkj5v/CLq6r0JeVIRlDOVIfVnf1Z2vYpQQ3ZFf2pXFnmKmVUkNSERZTTnRXndklERi25
TQDmpio4o9SpC/SYa7IJdivyqnZI0xMspn5J4DHlVEVcGyzGPAWaAGuxGRaTJR4FCUqnt0N6rCDVBJuNADc
jyT+3cIP3ME/6Y/VhIDVhF7BhSSXkJPBYo51U7N4hr4FIMr4J2xLF6FYGDwqjQFo+jMHOVisA7sStEO9WWV
/mtIXhuu4qAYahwLGdUxL/ItRumTbRD5FlFcIqfazlnjf4orrq+OZKJXrpUZ5mS2O46Um2inOlKxPV2mZI7
BN65o9sdJfqoTLpVkb2pqaklpIhXXSf4DnF9xAmuCXaKsjcmFbFjDYPBvSOeMMdr524Q+EHC6u4wx3Uetp/
u8jXBbco2Q4A6LVBJWLIhSO0qxJPtUoM7RPy4KUQ7LyS7LbUq4odIFc5BpiAYs9Ord07Emc6oCLLY26twyz
zMllUEFsXLmcVYspqzKuLO3Irt/d6NF6+6SbC64XkZ2oEfVFriT1OhasarSWYVwaPbUZKOP0hWrlER9IcQE
vsZwycNr1TkeXN9yEN+mfwBnQb5gzjb8VIAAAAASUVORK5CYII=",
"MPI TRXN ID" : "1199548329"
```

5.8.1.7 MPIReqOBW – Request Form Fields

Field Id	Attribute	Mandatory	Remarks
MPI TRANS TYPE	AN (10)	M	Transaction Type.
	(==)		OBWBANKLIST - OBW Bank List Request OBWTXN - Do OBW Transaction
			OBWINQ - OBW Transaction Inquiry OBWCNCLTXN – OBW Transaction Cancel
			Cancel transaction only can perform before customer complete the payment

MPI_CHANNEL_CODE	A(2)	М	Channel code to differentiate browser and app
			BA - Mobile Application
MPI_MERC_ID	N (15)	М	BW - Web Browser Merchant ID.
			The unique identity code assigned by acquirer bank to the merchant.
MPI_PURCH_AMT	N (12)	С	Transaction Amount.
			Maximum 48 digits without decimal point appears in this field. The minor unit is implied, based on the transaction currency. For example: USD 100.23 = 10023 JPY 12345 = 12345 Required if MPI_TRANS_TYPE is OBWTXN
MPI PURCH CURR	N (3)	С	Transaction currency.
			Format: ISO 4217 3-digits currency code Example: MYR = 458
MPI_MAC	AN (100)	M	Required if MPI_TRANS_TYPE is OBWTXN Merchant Transaction MAC.
			Cannot be blank. Sequence: MPI_MERC_ID + MPI_TRXN_ID + MPI_PURCH_CURR + MPI_PURCH_AMT+ MPI_CUST_NAME+ MPI_CUST_BANK_TYPE+ MPI_MER_NAME+ MPI_RCP_REF+ MPI_PYMT_DESC+ MPI_PURCH_DATE+ MPI_MER_GPS+ MPI_MER_IP
MPI_TRXN_ID	N (20)	М	Transaction ID.
			Same value as per MPIKeyReq. Cannot be blank.
MPI_CUST_NAME	AN(140)	С	Customer Name
			Required if MPI_TRANS_TYPE is OBWTXN
MPI_CUST_BANK_TYPE	A(3)	С	Customer Bank Type
			Bank Type format RET - Retail COR – Corporate Not required for hosted payment page
MPI_MER_NAME	AN(140)	С	Merchant Name
			Described SEARCH TRANS. TVDS :- ODVACTVAL
MPI_RCP_REF	AN(140)	С	Required if MPI_TRANS_TYPE is OBWTXN Recipient Reference

			Required if MPI_TRANS_TYPE is OBWTXN
MPI_PYMT_DESC	AN(140)	С	Payment Description
			Required if MPI_TRANS_TYPE is OBWTXN
MPI_PURCH_DATE	N (14)	С	Transaction Timestamp.
			Timestamp when merchant send the transaction.
			Format: yyyyMMddHHmmss (24hr format). E.g. 20031010131522
			Required if MPI_TRANS_TYPE is OBWTXN
MPI_SELECTED_BANK	AN(8)	С	Bank Code
			Example: BMMBMYKL
			Required if MPI_TRANS_TYPE is OBWTXN
MPI_MER_GPS	AN(21)	0	Location access
			Get consumer location by using browser location access
			Example: 10.1234560,13.8765440
			Not required if MPI_TRANS_TYPE is not OBWTXN
MPI_MER_IP	AN(15)	0	Ip address
			Get consumer Ip address by using browser ip access
			Example: 100.100.100.100
			Not required if MPI_TRANS_TYPE is not OBWTXN

Cardzone 3DS server support 2 type of request format for Online Banking Wallet (OBW) products, which as form post format and JSON format. Bank List request is only eligible to support with JSON format only

Sample Request for Bank Listing:

```
{
"MPI_CHANNEL_CODE" : "BW",
"MPI_MAC" : "bRQhFM3fgstQNk3H3goObTiDHk6-OXPfvayGNQcyBZ1kPvoXhIGG35g-
tL0rs7AGfY8jPZZ63hm24D1kfZsvBQvCbwPUKsLh3LZbXW3J8PSyjIkNaKoMWfjjcIqqpQuSVPCKX-
57eW8RRF95M15NsNtSnK3PSUHS1ELFjdPgvmvnDMEgy5hwLgH20r9LEbanK_ZQ2ZpPRH1GZ7j6e4TCGmG9t
IBgliFJAnaQUIDMZkzsOE_e1eQfP2GSVyJub5_TcpZiEQO9WbbKkg37kiMnqPFBfywX0dSkxTqD_ZfzM9GH
HNPhq7QbvSoXOU1QaDlCoWuyQ_pgVGD-ndLjPAhbVQ",
"MPI_MERC_ID" : "10000000000068",
"MPI_TRXN_ID" : "7108409818",
"MPI_TRANS_TYPE" : "OBWBANKLIST"
}
```

Sample Request for Payment Transaction:

```
"MPI PURCH AMT" : "150",
"MPI CHANNEL CODE" : "BW",
"MPI PURCH CURR" : "458",
"MPI SELECTED_BANK" : "ACFBMYK1",
"MPI CUST BANK TYPE" : "RET",
"MPI CUST NAME" : "wakaka",
"MPI MAC": "fu2A3anCNMZWsHirvdSieXLHB-
aErCXUQ3JnjEcOAMWqqq3KGtjZE9esA9JQoBANGuZh8hWVrsISRiDPOJlS2vfjfhkXKoD6AsVpkR1uiuClB
PcRL2LAUSQZpkfm6zDTUMVNwfXn5DJ1E 7XbgEeahtTweOZI6T5fL9cv3BbSEkPF7iyX3BYdAKd6zY1Pjys
WlpOUcSMP7wUHehjxkAcp0hcjATkRGRHUIRJ QlYLmsv0UBTmfCAPsy4tZ99ftBPgEsfuW5i9Ew91bdeOdr
01IHdc-UCSAgOq1dtMYPv3M0di 75gn pCXxrPzfUDkTFaaP4xzSz88v-yNAPKV5LLg",
"MPI MER GPS" : "3.1109988,101.665815",
"MPI MER IP" : "175.136.243.117",
"MPI MER NAME" : "M0000221",
"MPI_MERC_ID" : "10000000000068",
"MPI PURCH DATE" : "20241010175613",
"MPI_TRXN_ID" : "7108409818",
"MPI_PYMT_DESC" : "wakaka",
"MPI_RCP_REF" : "wakaka",
"MPI TRANS TYPE" : "OBWTXN"
```

5.8.1.8 MPIResOBW – Response Form Fields

Field Id	Attribute	Mandatory	Remarks
MPI_MERC_ID	AN (15)	ME	Merchant Id.
			Echo value as per request. Cannot be blank.
MPI_TRXN_ID	AN (20)	ME	Transaction ID.
			Echo value as per request. Cannot be blank.
MPI_MAC	AN (100)	M	Merchant Transaction MAC.
			Cannot be blank.
			Converses MDI MEDC ID I MDI TOVALID I
			Sequence: MPI_MERC_ID + MPI_TRXN_ID + MPI_PURCH_CURR + MPI_PURCH_AMT +
			MPI_PORCH_CORR + MPI_PORCH_AIM1 + MPI_ERROR_CODE + MPI_APPR_CODE+
			MPI_BANK_CODE+ MPI_APPK_CODE+
			WIFI_BANK_CODE+ WIFI_BANK_NAIVIE
			All bank code and bank name included if
			MPI TRANS TYPE is OBWBANKLIST
MPI ERROR CODE	AN (3)	M	Response Code.
WIT I_EMMON_CODE	7.17 (3)		nesponse code.
			For INQ transaction:
			000 Inquiry transaction successful
			001 Inquiry transaction failed
			002 Inquiry transaction cancelled
			003 Inquiry transaction timeout
			004 Inquiry transaction in processing
			Other error code is inquiry message error. Unable
			to do inquiry.

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MPI_ERROR_DESC	AN (100)	С	Response Error Description.
			Present if response code is not 000. Else blank.
MPI_APPR_CODE	AN (6)	С	Approval Code.
			Present if response code is 000. Else blank.
MPI_RRN	AN (12)	С	Retrieval Reference Number.
			Present if response code is 000. Else blank.
MPI_BANK_LIST	List of Object	С	Bank list included Bank code and Bank Name.
			Return if MPI_TRANS_TYPE is OBWBANKLIST Example: "MPI_BANK_LIST" : [{ "MPI_BANK_CODE": "BMMBMYKL", "MPI_BANK_NAME":" Bank Muamalat Malaysia Berhad" }, { "MPI_BANK_CODE": "BSNAMYK1", "MPI_BANK_NAME":" Bank Simpanan Nasional" }]

Sample Response for Bank Listing:

```
"MPI BANK LIST" : [
   "MPI BANK CODE" : "ACFBMYK1",
   "MPI BANK NAME" : "ACF Bank"
   },
   "MPI_BANK_CODE" : "PHBMMYKL",
   "MPI BANK CODE" : "AFFIN BANK BERHAD"
   },
   "MPI_BANK_CODE" : "AGRO01",
   "MPI_BANK_CODE" : "Agro Bank"
   },
],
"MPI ERROR CODE" : "000",
"MPI MAC": "AR2u5yKNpgSrJ3gJCWCg6kcP0 bsGbLWT ck9nKIMpAVwSXjsg9PsnvE72Y-
xDC72IHw9q48d8kDrueIsKqn_-
mEJRI19Y5eI0bJ1j11W3cO12eIqdlk52O5GM5Kz8_8GiWrqqUK0ETVuDqpQEDl-
\verb|pgfUGvjnpjGp7oOIvrUuk5mKMq2woAew3SOYuO3WE37px1XwNthjJdumxmYJrnodTO5r77otk1Nc74bHW4g| \\
VdkGvNl1mPNxJLVxEx-gvtLYy2TUA",
"MPI MERC ID" : "100000000000068",
"MPI TRXN ID" : "7108409818"
```

Sample Response for Payment Transaction:

```
{
"MPI_APPR_CODE" : "20241010M00352718610BW52344261",
"MPI_ERROR_CODE" : "301",
"MPI_ERROR_DESC" : "Transaction ID received is not valid for the receiving component.",
"MPI_MAC" : "nk-
ZHOYZ4cPzTqCFRmt0eUIs64n6K1Tz84Q5t0Ygp5JScnB0mEToKNmxXpiB5yIosRADRoFpJr_4JXp5JxUcyf bghXeInQz1MYLj9K_fWjyOCqtdrzVi4y0DmXgfrPRfIcgI6pTtqAj-
qrDpzEx0E8JJBYDlunE194AcdhJLYhcjoslgF8KK7bN7bi8joUrHJvuD9qJ5T1ewbfH4NbZnve7cweuQsjD qZYNViJCUa6fr-x61YPnpfyTLK-r8HakCLKVWZUsUQ9Y_yEKSbXFr-
QvXIfakqttEkdsYyw5hQK1U6CnSJTHwICW4NN-E3sQvfiU3Fr0qZ-LZjfZ_9NdBzA",
"MPI_MERC_ID" : "100000000000068",
"MPI_TRXN_ID" : "7108409818",
"MPI_RRN" : "20241010M00352718610BW52344261"
}
```

5.8.2 HTML Form POST method

5.8.2.1 MPIReg – Request Form Fields

Field Id	Attribute	Mandatory	Remarks
MPI_TRANS_TYPE	AN (10)	M	Transaction Type.
			INQ : Inquiry
			SALES : Sales / Purchase
			VSALES : Void Sales
			REFUND : Refund
MADI MAEDO ID	NI /45\	D.4	
MPI_MERC_ID	N (15)	M	Merchant ID.
			The unique identity code assigned by
			acquirer bank to the merchant.
MPI PAN	N(19)	С	Card Number
_	, ,		
			Not required for Hosted Payment Page
			Not required if MPI_ORI_TRXN_ID provided
MPI_PAN_EXP	N(4)	С	in INQ, REFUND, VSALES Card Expiry Date
WIT_TAN_EXT	14(4)		Card Expiry Date
			Format: YYMM
			Not Required for Hosted Payment Page
			Not required if MPI_ORI_TRXN_ID provided
			in INQ, REFUND, VSALES
MPI_CVV2	N(3)	С	Card CVV2
			Not Poquired for Hosted Payment Page
			Not Required for Hosted Payment Page
			Not required if MPI_ORI_TRXN_ID provided
			in INQ, REFUND, VSALES

MPI_CARD_HOLDER_NAME	A(45)	С	Cardholder Name.
			Not Required for Hosted Payment Page
			Not required if MPI_ORI_TRXN_ID provided in INQ, REFUND, VSALES
MPI_PURCH_AMT	N (12)	М	Transaction Amount.
			Maximum 48 digits without decimal point appears in this field. The minor unit is implied, based on the transaction currency. For example: USD 100.23 = 10023 JPY 12345 = 12345
MPI_PURCH_CURR	N (3)	М	Transaction currency.
			Format: ISO 4217 3-digits currency code Example: MYR = 458
MPI_TRXN_ID	N (20)	M	Transaction ID.
			Same value as per MPIKeyReq. Cannot be blank.
MPI_ORI_TRXN_ID	N (20)	С	Original Transaction ID.
			Mandatory for below transaction types: VSALES: Void Sales INQ: Inquiry REFUND: Refund
MPI_PURCH_DATE	N (14)	М	Transaction Timestamp.
			Timestamp when merchant send the transaction. Format: yyyyMMddHHmmss (24hr format). E.g. 20031010131522
MPI_ADDR_MATCH	A(1)	0	Indicates whether the Cardholder cardholder shipping address and Cardholder cardholder billing address are the same.
			Format: Y = Match N = Not match
MPI_BILL_ADDR_CITY	AN(50)	С	City of the cardholder billing address if any.
MPI_BILL_ADDR_STATE	AN(3)	С	State or province of the cardholder billing address if any.
			Format: Country subdivision code defined in ISO 3166-2
MPI_BILL_ADDR_CNTRY	N(3)	С	Country of the cardholder billing address if any.
MPI_BILL_ADDR_POSTCODE	N(16)	С	Format: ISO 3166-1 3-digit country code ZIP or other postal code of the cardholder
			billing address if any.
MPI_BILL_ADDR_LINE1	AN(50)	С	First line of the cardholder billing address if any.

MPI_BILL_ADDR_LINE2	AN(50)	С	Second line of the cardholder billing address if any.
MPI_BILL_ADDR_LINE3	AN(50)	С	Third line of the cardholder billing address if any.
MPI_SHIP_ADDR_CITY	AN(50)	0	City of the cardholder shipping address.
MPI_SHIP_ADDR_STATE	AN(3)	0	State or province of the cardholder shipping address.
MPI_SHIP_ADDR_CNTRY	AN(3)	0	Country of the cardholder shipping address.
			Format: ISO 3166-1 3-digit country code
MPI_SHIP_ADDR_POSTCODE	AN(16)	0	The ZIP or other postal code of the cardholder shipping address requested by the Cardholder.
MPI_SHIP_ADDR_LINE1	AN(50)	0	First line of the cardholder shipping address.
MPI_SHIP_ADDR_LINE2	AN(50)	0	Second line of the cardholder shipping address.
MPI_SHIP_ADDR_LINE3	AN(50)	0	Third line of the cardholder shipping address.
MPI_EMAIL	AN(254)	С	Email address provided by the Cardholder if any.
MPI_HOME_PHONE_CC	N(3)	0	The home phone number provided by the
MPI_HOME_PHONE	AN(15)	0	Cardholder.
			Refer to ITU-E.164 for additional information on format and length.
MPI_MOBILE_PHONE_CC	N(3)	0	The mobile phone number provided by the
MPI_MOBILE_PHONE	AN(15)	0	Cardholder.
			Refer to ITU-E.164 for additional information on format and length.
MPI_WORK_PHONE_CC	N(3)	0	The work phone number provided by the
MPI_WORK_PHONE	AN(15)	0	Cardholder.
			Refer to ITU-E.164 for additional information on format and length.
MPI_MAC	AN (344)	М	Merchant Transaction MAC.
			Refer to field description for details on encryption algorithm and verification.
MPI_LINE_ITEM	List	0	List of line items and details. Refer to table ARRAY: MPI_LINE_ITEM for list of subfields.

Sample Request:

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```
"key": "MPI MERC ID",
"value": "100000000000068",
"type": "text"
},
"key": "MPI PAN",
"value": "510000*****0107",
"type": "text"
"key": "MPI PAN EXP",
"value": "2508",
"type": "text"
},
"key": "MPI_CARD_HOLDER_NAME",
"value": "Test Card",
"type": "text"
},
"key": "MPI_PURCH_AMT",
"value": "15000",
"type": "text"
},
"key": "MPI PURCH CURR",
"value": "458",
"type": "text"
},
"key": "MPI TRXN ID",
"value": "7395640234",
"type": "text"
{
"key": "MPI PURCH DATE",
"value": "20241010085743",
"type": "text"
},
"key": "MPI ADDR MATCH",
"value": "Y",
"type": "text"
},
"key": "MPI_BILL_ADDR_CITY",
"value": "KUL",
"type": "text"
"key": "MPI_BILL_ADDR_POSTCODE",
"value": "59200",
"type": "text"
},
"key": "MPI BILL ADDR LINE1",
"value": "ADR LINE 1",
"type": "text"
"key": "MPI_BILL_ADDR_LINE2",
"value": "ADR LINE 2",
```

```
"type": "text"
      },
      "key": "MPI BILL ADDR LINE3",
      "value": "ADR LINE 3",
       "type": "text"
      },
      "key": "MPI_SHIP_ADDR_CITY",
      "value": "KUL",
       "type": "text"
      },
       {
      "key": "MPI SHIP ADDR STATE",
       "value": "14",
       "type": "text"
      },
      "key": "MPI SHIP ADDR CNTRY",
       "value": "458",
       "type": "text"
      "key": "MPI EMAIL",
      "value": "xxx@xxx.xxx",
      "type": "text"
      },
      "key": "MPI MOBILE PHONE CC",
      "value": "60",
      "type": "text"
      },
      "key": "MPI MOBILE PHONE",
      "value": "121234567",
      "type": "text"
      },
      "key": "MPI MAC",
      "value": "pk39X-0 lJhH4VmjXfA22 lUsl-
5FtjGZrjyR1wt31Xemop8MwiLeau4mpQ5Xmo3nq8AsRO-muqN2QHixpBqwOgxlE6zXbKKSix24Fa2Q7-
GfwBxpukueI-bEESVAYuGn6olXWESixYqwC5jwLEnSPotDMUenM3lCo1alBn z31y-qkhq7-
060Z2nZM2o5BX ckwZNHEIFXmCgpJKSZ8s0wAyrxYpTxzAnIkdEQZjva1st5blJybdEG83Wq8dhRYNVuOC
Goj0JRJVxb6TewJwralSPSN8YhP1wjCpvUlbusCwGDX I-YOSY8mpdzfS48ZyHk0OwBqagsxwV-XdUA",
      "type": "text"
```

ARRAY: MPI_LINE_ITEM				
Field Id	Attribute	Mandatory	Remarks	
MPI_ITEM_ID	AN (10)	М	Item ID.	
Detail Separator Field	N(1)	М	<i>u,n</i> ,	
MPI_ITEM_REMARK	AN(50)	0	Item description	

Detail Separator Field	N(1)	М	<i>u.</i> " ,
MPI_ITEM_QUANTITY	N (10)	М	Total quantity of this line item. No decimal place is expected.
Detail Separator Field	N(1)	М	<i>u,</i> ,,
MPI_ITEM_AMOUNT	N (12)	M	Item Amount.
			Maximum 12 digits without decimal point appears in this field. The minor unit is implied, based on the transaction currency. For example: USD 100.23 = 10023 JPY 12345 = 12345
Detail Separator Field	N(1)	M	<i>u,</i> "
MPI_ITEM_CURRENCY	N (3)	М	Transaction currency.
			Format : ISO 4217 3-digit currency code

Sample Message:

MPI_TTL_QUANTITY: 3
MPI_LINE_ITEM: 1; store A; 1; 50; 458
MPI_LINE_ITEM: 2; store B; 1; 20; 458
MPI_LINE_ITEM: 3; store C; 1; 30; 458

5.8.2.2 MPIRes – Response Form Fields

Field Id	Attribute	Mandatory	Remarks
MPI_MERC_ID	AN (15)	ME	Merchant Id.
			Echo value as per request. Cannot be blank.
MPI_TRXN_ID	AN (20)	ME	Transaction ID.
			Echo value as per request. Cannot be blank.
MPI_MAC	AN (100)	M	Merchant Transaction MAC.
			Refer to field description for details on encryption
			algorithm and verification. Cannot be blank.
MPI_ERROR_CODE	AN (3)	M	Response Code.
			For INQ transaction:
			000 Inquiry transaction successful
			001 Inquiry transaction failed
			002 Inquiry transaction cancelled
			003 Inquiry transaction timeout
			004 Inquiry transaction in processing
			Other error code is inquiry message error. Unable to
			do inquiry.

MPI_ERROR_DESC	AN (100)	С	Response Error Description.
			Present if response code is not 000. Else blank.
MPI_APPR_CODE	AN (6)	С	Approval Code.
			Present if response code is 000. Else blank.
MPI_RRN	AN (12)	С	Retrieval Reference Number.
			Present if response code is 000. Else blank.
MPI_BIN	N (8)	0	First 8 digits of card number used in this transaction
MPI_REFERRAL_CODE	N (2)	0	Only applicable if response code = 512-Invalid
			Transaction
			Refer RESPONSE CODE section below for details
MPI_CARDHOLDER_INFO	AN(300)	С	Cardholder Information Text
			If field is populated this information is required to
			be conveyed to the cardholder by the merchant.

Sample Response content:

MPI_APPR_CODE=370264&MPI_RRN=600606945408&MPI_BIN=&MPI_ERROR_CODE=000&MPI_ERROR_DES
C=&MPI_MERC_ID=100000000000068&MPI_TRXN_ID=9369618512&MPI_MAC=LXO7ugBXG2VwHTmwLv7Ng
RDjmxinKQUeR9JvhYPUNrXAaMak7qJV8ieUoUNzyBbKKLAftY_OBalOF787BivxNQtj_dZI-JZybUdT3mxE81reSNHEWV2Z4tgYwpPPVKoUwL4DUF14M_3g8RI1EoKSCGmH2XomnNSw55ob4z1Yen8pFA8QGjjv77CL
X00hZn6YadNrfhz7wWrgUOre1JkbjbA3vhvDH-

rQvkIifB051RZw8uOUqRHbUyJ2hAHn9Nv8CkKUCtSXjkIlccV96IYQ4oFujIvVOZQ47j3r6UE9Wr5FUU5wD7yjEqDcKITnclHH4gPm0b8-XvSN6EDiN5V8A&MPI REFERRAL CODE=

5.8.2.3 Payment Link Generation Request – Request Form Fields

Field Id	Attribute	Mandatory	Remarks
MPI_MERC_ID	N (15)	M	Merchant ID.
	, ,		
			The unique identity code assigned by acquirer bank to the merchant.
MPI_PURCH_AMT	N (12)	M	Transaction Amount.
			Maximum 48 digits without decimal point appears in this field. The minor unit is implied, based on the transaction currency. For example: USD 100.23 = 10023 JPY 12345 = 12345
MPI_PURCH_CURR	N (3)	M	Transaction currency.
			Format: ISO 4217 3-digits currency code Example: MYR = 458
MPI_TRXN_ID	N (20)	М	Transaction ID.
			Same value as per MPIKeyReq. Cannot be blank.

MPI_PYMT_PURPOSE	AN (300)	M	Payment Purpose.
			Remarks
MPI_MAC	AN (344)	М	Merchant Transaction MAC.
			Sequence: MPI_MERC_ID + MPI_TRXN_ID + MPI_PURCH_CURR + MPI_PURCH_AMT + MPI_PYMT_PURPOSE

Sample Request:

```
"mode": "urlencoded",
"urlencoded": [
      "key": "MPI MAC",
      "value": "eoynPjezlQWY3-
tU13ErzFQTbyM015BZF8MQ7DArMr8854z4Lb079m9AFo7hdIjbNpj95hlJ6hzcFgO9HsfFERuuS9wcAr064
1n4i9fxmNsHEGeGPmYMYfN hbAn2P5g2mKOwwNkyh83SS4vHDj57KsDdv6NAbqZfSlM4S951MCUpePSn83v
lcNAbRAVwWaon2MH53yWE-WilrnOOSdXZz5NOxjhtttEZkeJhE7ks1Jx7SAu-
Ij3BgaQHR01SWc_Saq2d47Tpd-
1ROWMORO3SXKk44S1t2kGUpbFJTbfFlylw49tsFdLCMd0mmRQgLkIBdlyUMRSS-8CyErRgCZOMQ",
       "type": "text"
      },
      {
      "key": "MPI MERC ID",
      "value": "100000000000068",
      "type": "text"
      },
      "key": "MPI PURCH AMT",
      "value": "15000",
      "type": "text"
      },
      "key": "MPI PURCH CURR",
      "value": "458",
      "type": "text"
      },
      "key": "MPI_TRXN_ID",
      "value": "858018791",
      "type": "text"
      "key": "MPI_PYMT_PURPOSE",
      "value": "testing",
      "type": "text"
1
```

Sample Response result:

5.8.2.4 MPIQrReq – Request Form Fields

Field Id	Attribute	Mandatory	Remarks
MPI_TRANS_TYPE	AN (10)	M	Transaction Type.
			ODING OD Torres diam la suria.
			QRINQ : QR Transaction Inquiry QRTXN : Request for Merchant QR
MPI_MERC_ID	N (15)	М	Merchant ID.
			The unique identity code assigned by
			acquirer bank to the merchant.
MPI_TERM_ID	AN (8)	М	Terminal ID.
			The unique identity code of terminal
			assigned by acquirer bank to the merchant.
MPI_PURCH_AMT	N (12)	С	Transaction Amount.
			Maximum 48 digits without decimal point
			appears in this field. The minor unit is
			implied, based on the transaction currency.
			For example:
			USD 100.23 = 10023
			JPY 12345 = 12345
			Not required if generating static QR
MPI_PURCH_CURR	N (3)	M	Transaction currency.
			Format: ISO 4217 3-digits currency code
			Example: MYR = 458
MPI_MAC	AN (100)	М	Merchant Transaction MAC.
			Cannot be blank.
			Sequence: MPI_MERC_ID + MPI_TERM_ID +
			MPI_TRXN_ID + MPI_PURCH_CURR +
			MPI_PURCH_AMT
MPI_TRXN_ID	N (20)	M	Transaction ID.
			Same value as per MPIKeyReq. Cannot be
			blank.
MPI_QR_TYPE	AN(6)	0	QR type.
			STRING: return QR content
			If this field not provided or set to STRING, it will return QR as a PNG Image.
MPI_QR_TXNNOTIF_TYPE	AN(10)	0	QR Transaction Callback Type.
	'(20)		MQTT: callback to MQTT after QR
			transaction success
			This field applicable for the QRTXN only. If
			field is not provided or set, there will be no
			callback notify for the QR.

Cardzone 3DS server support 2 type of request format for merchant present dynamic QR products, which as form post format and JSON format.

Sample FORM POST Request Message:

```
"urlencoded": [
"mode": "urlencoded",
      "key": "MPI PURCH AMT",
      "value": "150",
      "type": "text"
      "key": "MPI PURCH CURR",
      "value": "458",
      "type": "text"
      },
      "key": "MPI MAC",
      "value": "CjcaKrOr1C0ojT-CY1aFPpv-Fbbvc3dDsTt68oIMYdek879GFmMPsYA1q-
i6mCunEo07KdCTjbfxjJYcQMJk8d7gzY7FM94bHsYym8of6UY7bUmdVcE9MV3RMlvysspXWddYt4KaFxQGP
OR2ej4x3wRvq zSv0IcR5Ri 5AeA7EmsuX116v-
h5HIepkBhxHVj2zrZMi1T8NfnD6cQ4XdHD3CSAmL4fsqq-
bgWzAV4wcFJNjs3Y1PP6p8sdqWw_1EHfkoWTfAu5Q0VPY9511qANFN3B20MRHisW9Ooh1CZWu7BoQI5WIv5
te9L2yAxU33gbL0FgRZHXWsNllrvD6eQ",
       "type": "text"
      },
      {
      "key": "MPI MERC ID",
      "value": "100000000000068",
      "type": "text"
      },
      "key": "MPI TRXN ID",
      "value": "1199548329",
      "type": "text"
      },
      "key": "MPI TERM ID",
      "value": "00909125",
      "type": "text"
      },
      "key": "MPI TRANS TYPE",
      "value": "QRTXN",
      "type": "text"
      }
]
```

With using form post method, Cardzone 3DS server will be generate the QR code with image and return the display to channels.

5.8.2.5 MPIRegOBW – Request Form Fields

Field Id	Attribute	Mandatory	Remarks

MPI_TRANS_TYPE	AN (10)	М	Transaction Type.
			OBWBANKLIST - OBW Bank List Request OBWTXN - Do OBW Transaction OBWINQ - OBW Transaction Inquiry
			OBWCNCLTXN – OBW Transaction Cancel
			Cancel transaction only can perform before customer complete the payment
MPI_CHANNEL_CODE	A(2)	М	Channel code to differentiate browser and app
			BA - Mobile Application BW - Web Browser
MPI_MERC_ID	N (15)	М	Merchant ID.
			The unique identity code assigned by acquirer bank to the merchant.
MPI_PURCH_AMT	N (12)	С	Transaction Amount.
			Maximum 48 digits without decimal point appears in this field. The minor unit is implied, based on the transaction currency. For example: USD 100.23 = 10023
			JPY 12345 = 12345
			Required if MPI_TRANS_TYPE is OBWTXN
MPI_PURCH_CURR	N (3)	С	Transaction currency.
			Format: ISO 4217 3-digits currency code Example: MYR = 458
MPI_MAC	AN (100)	M	Required if MPI_TRANS_TYPE is OBWTXN Merchant Transaction MAC.
WIT_WAC	AN (100)	141	Cannot be blank.
			Sequence: MPI_MERC_ID + MPI_TRXN_ID + MPI_PURCH_CURR + MPI_PURCH_AMT+ MPI_CUST_NAME+ MPI_CUST_BANK_TYPE+ MPI_MER_NAME+ MPI_RCP_REF+ MPI_PYMT_DESC+ MPI_PURCH_DATE+ MPI_MER_GPS+ MPI_MER_IP
MPI_TRXN_ID	N (20)	М	Transaction ID.
			Same value as per MPIKeyReq. Cannot be blank.
MPI_CUST_NAME	AN(140)	С	Customer Name
MPI_CUST_BANK_TYPE	A(3)	С	Required if MPI_TRANS_TYPE is OBWTXN Customer Bank Type
			Bank Type format

			RET - Retail
			COR – Corporate
			Con corporate
			Not required for hosted payment page
MPI_MER_NAME	AN(140)	С	Merchant Name
			Required if MPI_TRANS_TYPE is OBWTXN
MPI_RCP_REF	AN(140)	С	Recipient Reference
			Required if MPI_TRANS_TYPE is OBWTXN
MPI_PYMT_DESC	AN(140)	С	Payment Description
	21 (4.4)		Required if MPI_TRANS_TYPE is OBWTXN
MPI_PURCH_DATE	N (14)	С	Transaction Timestamp.
			Timestamp when merchant send the
			transaction.
			Format: yyyyMMddHHmmss (24hr format).
			E.g. 20031010131522
			Required if MPI_TRANS_TYPE is OBWTXN
MPI_SELECTED_BANK	AN(8)	С	Bank Code
			Example: BMMBMYKL
			Required if MPI_TRANS_TYPE is OBWTXN
MPI_MER_GPS	AN(21)	0	Location access
INFI_INICK_GF3	AN(ZI)	U	Location access
			Get consumer location by using browser
			location access
			Example: 10.1234560,13.8765440
			Not required if MPI_TRANS_TYPE is not
145, 145, 15	481/45)		OBWTXN
MPI_MER_IP	AN(15)	0	Ip address
			Get consumer Ip address by using browser
			ip access
			·
			Example: 100.100.100
			Not required if MPI_TRANS_TYPE is not
			OBWTXN

Cardzone 3DS server support 2 type of request format for Online Banking Wallet (OBW) products, which as form post format and JSON format.

Sample Message in FORM POST:

```
"mode": "urlencoded",
"urlencoded": [
```

```
"key": "MPI PURCH AMT",
                   "value": "150",
                   "type": "text"
                   },
                   "key": "MPI CHANNEL CODE",
                   "value": "BW",
                   "type": "text"
                   "key": "MPI PURCH CURR",
                   "value": "458",
                   "type": "text"
                   },
                   {
                   "key": "MPI SELECTED BANK",
                   "value": "ACFBMYK1",
                   "type": "text"
                   },
                   "key": "MPI CUST BANK TYPE",
                   "value": "RET",
                   "type": "text"
                   },
                   "key": "MPI_CUST_NAME",
                   "value": "wakaka",
                   "type": "text"
                   },
                   {
                   "key": "MPI MAC",
                   "value": fu2A3anCNMZWsHirvdSieXLHB-
aErCXUQ3JnjEcOAMWqqq3KGtjZE9esA9JQoBANGuZh8hWVrsISRiDPOJlS2vfjfhkXKoD6AsVpkR1uiuClB
{\tt PcRL2LAUSQZpkfm6zDTUMVNwfXn5DJ1E\_7XbgEeahtTweOZI6T5fL9cv3BbSEkPF7iyX3BYdAKd6zY1Pjys}
\verb|WlpOUcSMP7wUHehjxkAcp0hcjATkRGRHUIRJ_Q1YLmsv0UBTmfCAPsy4tZ99ftBPgEsfuW5i9Ew91bdeOdright and the state of 
01IHdc-UCSAgOq1dtMYPv3M0di_75gn_pCXxrPzfUDkTFaaP4xzSz88v-yNAPKV5LLg",
                   "type": "text"
                   },
                   "key": "MPI MER GPS",
                   "value": "3.1109988,101.665815",
                   "type": "text"
                   "key": "MPI MER IP",
                   "value": "175.136.243.117",
                                     "type": "text"
                   },
                   "key": "MPI MER NAME",
                   "value": "M0000221",
                   "type": "text"
                   },
                   "key": "MPI MERC ID",
                   "value": "100000000000068",
                   "type": "text"
                   },
                   "key": "MPI PURCH DATE",
                   "value": "20241010175613",
                   "type": "text"
```

```
},
{
    "key": "MPI_TRXN_ID",
    "value": "7108409818",
    "type": "text"
},
{
    "key": "MPI_PYMT_DESC",
    "value": "wakaka",
    "type": "text"
},
{
    "key": "MPI_RCP_REF",
    "value": "wakaka",
    "type": "text"
},
{
    "key": "MPI_TRANS_TYPE",
    "value": "OBWTXN",
    "type": "text"
}
]
```

5.8.2.6 MPIResOBW – Response Form Fields

Field Id	Attribute	Mandatory	Remarks
MPI_MERC_ID	AN (15)	ME	Merchant Id.
			Echo value as per request. Cannot be blank.
MPI_TRXN_ID	AN (20)	ME	Transaction ID.
			Echo value as per request. Cannot be blank.
MPI_MAC	AN (100)	М	Merchant Transaction MAC.
			Cannot be blank.
			Sequence: MPI MERC ID + MPI TRXN ID +
			MPI PURCH CURR + MPI PURCH AMT +
			MPI_ERROR_CODE + MPI_APPR_CODE+
			MPI_BANK_CODE+ MPI_BANK_NAME
			All bank code and bank name included if
MADI EDDOD CODE	ANI (2)		MPI_TRANS_TYPE is OBWBANKLIST
MPI_ERROR_CODE	AN (3)	М	Response Code.
			For INQ transaction:
			000 Inquiry transaction successful
			001 Inquiry transaction failed
			002 Inquiry transaction cancelled
			003 Inquiry transaction timeout
			004 Inquiry transaction in processing
			Other error code is inquiry message error. Unable
			to do inquiry.

MPI_ERROR_DESC	AN (100)	С	Response Error Description.
			Present if response code is not 000. Else blank.
MPI_APPR_CODE	AN (6)	С	Approval Code.
			Present if response code is 000. Else blank.
MPI_RRN	AN (12)	С	Retrieval Reference Number.
			Present if response code is 000. Else blank.
MPI_BANK_LIST	List of Object	С	Bank list included Bank code and Bank Name.
			Return if MPI_TRANS_TYPE is OBWBANKLIST Example: "MPI_BANK_LIST" : [{ "MPI_BANK_CODE": "BMMBMYKL", "MPI_BANK_NAME":" Bank Muamalat Malaysia Berhad" }, { "MPI_BANK_CODE": "BSNAMYK1", "MPI_BANK_NAME":" Bank Simpanan Nasional" }]

Sample Payment transaction Response:

```
"mode": "urlencoded",
"urlencoded": [
      "key": "MPI APPR CODE",
      "value": "20241010M00352718610BW52344261",
      "type": "text"
      },
      "key": "MPI_ERROR_CODE",
      "value": "301",
      "type": "text"
      },
      "key": "MPI ERROR DESC",
      "value": "Transaction ID received is not valid for the receiving
component.",
      "type": "text"
      },
      "key": "MPI MAC",
      "value": nk-
{\tt ZHOyZ4cPzTqCFRmt0eUIs64n6K1Tz84Q5t0Ygp5JScnB0mEToKNmxXpiB5yIosRADRoFpJr\_4JXp5JxUcyf}
\verb|bghXeInQz1MYLj9K_fWjyOCqtdrzVi4y0DmXgfrPRfIcgI6pTtqAj-|\\
qZYNViJCUa6fr-x6lYPnpfyTLK-r8HakCLKVWZUsUQ9Y_yEKSbXFr-
QvXIfakqttEkdsYyw5hQK1U6CnSJTHwICW4NN-E3sQvfiU3Fr0qZ-LZjfZ 9NdBzA",
      "type": "text"
      },
```

```
{
    "key": "MPI_MERC_ID",
    "value": "10000000000008",
    "type": "text"
    },
    {
        "key": "MPI_TRXN_ID",
        "value": "7108409818",
        "type": "text"
    },
    {
        "key": "MPI_RRN",
        "value": "20241010M00352718610BW52344261",
        "type": "text"
    }
}
```

6.0 RESPONSE CODES

6.1 LIST OF RESPONSE CODES

Response Code	Description		
000	Success Transaction		
001	Transaction failed		
002	Transaction have been void/reversal		
003	Transaction timeout		
004	Transaction in processing		
101	Message not recognised./ Message is not AReq, ARes, CReq, CRes, PReq, PRes, RReq, or RRes.		
102	Message Version Number received is not valid for the receiving component.		
103	Exceeded maximum number of PReq messages sent to the DS.		
201	A message element required as defined in Table A.1 is missing from the message."		
202	Critical message extension not recognised.		
203	Data element not in the required format or value is invalid as defined in Table A.1.		
204	Valid data element presents more than once in the message		
301	Transaction ID received is not valid for the receiving component		
302	Data could not be decrypted by the receiving system due to technical or other reason		
303	Access denied, invalid endpoint		
304	ISO code not valid per ISO tables (for either country or currency), or code is one of the excluded values listed in Table A.5		
305	Cardholder Account Number is not in a range belonging to Issuer		
306	Merchant Category Code (MCC) not valid for Payment System		
307	Serial Number not valid		
402	Transaction timed-out		
403	Transient system failure		
404	Permanent system failure		
405	System connection failure		
501	Reject by Issuer		
503	Invalid Merchant		
512	Invalid Transaction		
554	Expired Pan Expiry Entered		
557	Trxn Not Permitted To Card		
579	Acquirer Host Declined		
589	No Active Terminal		
596	System malfunction		
5A0	MAC verification failed		
5A4	Acquirer Timeout		
999	Challenge Failed		

6.2 LIST OF REFERRAL CODE FOR RESPONSE CODE 512

Response Code	Description		
01	Transaction not exist		
02	Failed transaction		
03	Transaction had been voided		
04	Transaction had been reversed		
05	Transaction had been settled		
06	Transaction not allow to do void		

7.0 ENROLLMENT FILE FORMAT

In order to enrol genuine public key to MPI for mkReq verification, merchant required to submit enrolment file with following format:

Unique merchant ID	Fixed separator	Base64 url safe encoded public key string			
(max 15 length)	(max 1 length)	(max 392 length)			
		For url safe:			
		- replace + to –			
		- replace / to _			
		- omit =			

Sample:

00000000001 | MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAw5o9nSN2BDeraeeXxpTx4c5 kMj2kGgQsaGiBVNsZsPR5qYZywX34nOWVLnMLT_rlCDdcdNlq7ubvNyJTfFw2lhMja3pI6loBOQgcDH-ic3J7SEEJUh4rRxBwk3UVXVQQo-N77k_Fm8NeqrSE-krCybZ7rzWm87kBwjbOK-8BK6TmcDkk8gOvZRWapqI002YC6tXljkvvbjFecoiIXYeNTbaRISRVuBMBBuYvfQEP7LT0AQsIl1Oar9rCcWsuZk7yXCeGRwrQ8R5Y-gOIiw1TlSf4Pd ulWk7LN5sZxHosv5gbSDRYJPgGGwfzK7iuXOE54yy xJLPiBRtilNwrwhBwIDAQAB

8.0 Sample code for MAC Generation

Refer to the Merchant Request Coding Guide documentation.

For JAVA: Merchant Request Coding Guide_JAVA.pdf

GitHub (Sample JAVA application for MAC Sign and Verify):

https://github.com/horngsen97/sample mac integration/blob/main/sampleMac.java

For PHP: Merchant Request Coding Guide_PHP.pdf

9.0 FAQ

1. While doing key exchange request, we are getting errorCode: "503" – Invalid Merchant in the response.

```
POST: https://3dsecurecz.muamalat.com.my/3dss/mkReq
Request:
{
     "merchantId": "00000006060606060",
     "purchaseld": "55667788997654",
     "pubKey":
     "TUIJQklqQU5CZ2txaGtpRzl3MEJBUUVGQUFPQ0FROEFNSUICQ2dLQ0FRRUF2
     MFJNYk9BOEFkNThLQVZveE5qMkRJL2l0eFJyR280WIRUM2ZpYXFzaUorQkZQL3
     BTV29Fa2tyZDh1emY0Mk5rL0N3SWNZUnVPeFVFUSsvUE8zN3hZWEZpVENGMT
     JIVm83YXdVZUptZUpRUk10VUxERkZaemdxWWZTdWVwSjdYcTN5a3l3WXllcWNI
     bWh2ZTVra1F1KzhKYjlPV0VIYVFic3diSVV4d0grOUlwa25LbUxWTjVWRDcyR0pUd
     VU1QnBDOStoZWVDcFkwaGJXUUEwaDkxSndHVGpZQWNaVDVnY0g2MWx0M3I
     2ZGhRbWVoK1FxR3ZWekZiK2VHSERYM0lzZFd6RndUaXQzY0tLbFl1b0xBRm9pe
     VhDbUJXbnZJSFMxVVq1eVRNMzRuV1UxM0QwbnhyWktFQTBsU1IHOUIYL0VvMV
     Y3VIV0bWUyZ1B3ZzVWUlhnN1FJREFRQUI"
Response:
     "merchantId": "00000006060606060",
     "purchaseld": "55667788997654",
     "errorCode": "503",
     "errorDescription": "Invalid Merchant"
```

Answer:

- Check the URL, ensure pointing to the correct environment. (eg. UAT merchant to UAT URL)
- Check with bank on the merchant configuration (MPI Enrolment, Sub Product Enroll), ensure merchant id are valid e-commerce merchant, and enrolled the product required.
- 2. Do we need to enrol for genuine public key for both testing and production? Is there any difference to the transaction request flow for this enrolment?

Answer:

Not required to enroll, merchant will only require to send the public key on the key exchange flow.

3. For testing purposes how we will set webhook/https post URL for payment notification.

Answer:

Please provide the merchant's webhook URL to the bank to configure on the portal.

4. Is MQTT mandatory for QR transaction callback? (MPI_QR_TXNNOTIF_TYPE)

Answer:

Nope, currently this is support for the soundbox only.

5. Is OBW payment notification uses http webhook or MQTT protocol?

Answer:

OBW support the Webhook method only.

6. Can we choose the QR different type of QR code response?

Answer:

Yes, refer to the MPI_QR_TYPE field.

When MPI_QR_TYPE = 'STRING', it will return QR in the QR String.

When MPI_QR_TYPE is blank, it will return QR in the base64 image.

Cardzone Sdn Bhd