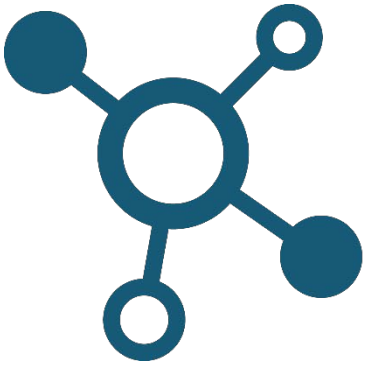

PAYA Gateway

PAYA Gateway – Payment Devices

Interface Document

PAYA Gateway – Payment Device Interface Specification

Contents

PAYA Gateway – Payment Device Interface Specification

Version Control:

Version	Date	Author	Comments
1.0	22/03/2023	Paul Reece	Initial draft document
2.0	23/03/2023	Paul Reece	Updated Following Review
3.0	26/06/2023	Sue Delanghe	Updated EMV data details to use TLV format
4.0	19/12/2023	Paul Reece	Updated with latest JSON interface
5.0	12/01/2024	Paul Reece	Updated expanded Terminal Attributes, commentary on connection security.
6.0	15/01/2024	Paul Reece	Addition of Header security & replacement of XML with JSON example.
6.1	17/01/2024	Paul Reece	Addition of JSON header into message section. 1st Release
6.2	14/02/2024	Paul Reece	Addition of JSON Reversals
6.3	15/03/2024	Paul Reece	Expansion of Reversal & Addition of Settlement Message for EV
6.4	11/04/2024	Paul Reece	Updated Examples. Addition of transaction type explanation Additional fields for Reversal messages to add 'Original Reference'
6.5	20/05/2024	Paul Reece	Minor changes to Terminal attributes and TLV descriptions
6.6	14/01/2025	Thomas Tilios	Updates PAY Message

1. Document Introduction

The purpose of this document is to aid the development of a connection to the PAYA Gateway for the processing of payments that have originated from either a remote card present environment where the terminal is not directly under the control of PAYA Gateway systems, or a terminal directly connected to the PAYA Gateway. The interface also includes functionality for split Authorisations and Settlement (Capture) for B2B environments and Pre-Auth, Incremental Auth and Partial Reversals for hospitality, car hire and the EV market. The Payrequest & Authrequest transaction types allow the use of full card details 'in the clear' during testing.

2. Considerations

This document is a specific JSON enabled Gateway designed for customer present devices and greatly simplifies the XML based Payment Gateway Authorization & Settlement guide. The reasoning behind this guide is that the PAYA Gateway can consume transactions of many types from very basic consumer transactions, through Chip & Pin, Airline to complex Level 3 purchasing cards. Therefore, Paya specifications carry many options dependant on transaction type, scheme, and country. For ease of implementation this document gives specific focus on the customer present implementation for the PAYA Gateway.

For security it is assumed that card details including EMV TLV strings will be encrypted in Dukpt SredData element when the solution is pushed to the live environment. The encryption of Dukpt data has a preference of AES as TDES is now considered unsecure.

2.1 Pay Request Security

POST /PaymentGatewayURL/Pay, Authorise, Settle, Reversal

For requests to be accepted and processed, the API endpoint requires the caller to include a signature in the sent request. This signature is crafted by salting the request body using a HMAC SHA256 algorithm. Please ensure that whitespaces and new lines are removed from the request body before salting the data. Once the salting has completed, the data needs to be base64 encoded and then can be concatenated to the api key in the format:

{apiKey}:{base64EncodedSignature}

The endpoint expects the above string to be passed in the header of the request in the Authorization field.

3. Transaction Types

The PAYA Gateway supports different transaction types to cover a number of scenarios. The table below give guidance on which options to use.

Transaction Type	Description	Options	URL Stub
PayRequest	Payment request that will both authorise and settle (capture) a transaction. No further activity is required on these transactions as the Paya Gateway will process them through to the acquirer.	Sale / Refund (Customer Present) Msale / Mrefund (Customer Not Present Moto) **Additional Options:** Full amount only	/Pay

AuthRequest	The request uses the same JSON structure as the Payrequest, but this only will authorise the transaction. This will reserve the funds on the customer card for a maximum of 7 days after which there is no guarantee that the transaction will clear.	Sale/Msale Verify/MVerify Account Verification **Additional options** Full Amount (Default) Pre-Authorised Amount Incremental Amount	/Authorise
SettleRequest	This type will settle (Capture) a transaction or set of transactions that have previously been authorised using the *AuthRequest*. The use of PreAuth & Incremental transaction types is restricted to certain MCC codes. Please check with Paya prior to implementing this functionality with a customer.	Full Amount Partial Amount 1. For Split Shipment 2. For PreAuth / Incremental	/Settle
ReversalRequest	The ReversalRequest enables the reversal or void of a transaction. The PAYA Gateway will allow a transaction to be reversed up until it is either set to 'settled with an acquirer' or 11pm UK time. After which time the transaction can only be refunded. The amount specified can be either the full or a partial amount to support Hospitality and MC5552 EV charging merchants.	Full Amount Partial Amount	/Reversal

4. JSON Pay Message

The Json Request object

Attribute name	Type	Required	Description
data	JasonRequestData	Y	
Attribute name	**Type**	**Required**	**Description**
Type	String	Y	Type of object sent in this request. For this endpoint this would be set to payRequest

Id	String	Y	A Guid to represent the request, Json. I.e. Unique number to identify this transaction
attributes	String	Y	Payrequest (Authorise & Settle) Authoriserequest (Authorise Only)

The PayRequest Object

Attribute name	Type	Required	Description
supplierID	string	Y	Paya ID to identify the Merchant details (MID)
password	string	Y	Required to secure the request and ensure no other parties can perform actions for your supplier without your consent
originatorName	string	Y	Static value 'WhiteLabel'
request	PayRequestData	Y	Object

The PayRequestData object

Attribute name	Type	Required	Description
dateTime	string	N	Date/Time of the transaction in the format YYYYMMDDHHMMSS. Mandatory for Terminal transaction as date time must match what is printed on the receipt. If not supplied the current server time will be used as per the supplier settings with ITS.
transactionUniqueNumber	string	N	Unique transaction number for the transaction The Gateway will automatically allocate the number once transaction has commenced. Should this field be populated in the initial Payrequest it will be used instead,

reference	string	Y	Must uniquely identify this transaction for this supplier. It is this reference which is the key for refunds and reversals
originalReference	string	N	For restricted Refunds & Reversals, contains the reference of the associated sale
userReference	string	N	Non-financial reference for the transaction for reporting purposes only
transactionType	string	Y	Type of the transaction. Must be one of the following values: - Sale - Refund - Msale (Moto Sale) - Mrefund (Moto Refund) - Verify (Account Verification) - Mverify (Moto Account Verification)
amount	long	Y	Transaction full amount in minor currency units
netAmount	int	N	Net Transaction Amount before Gratuity in minor currency unity.
gratuity	Int	N	Gratuity amount in Minor currency units
currencyCode	string	Y	3 Letter alpha currency code from ISO standard **Not Mandatory** if gateway configuration has default currency code pre-configured against supplierId
countryCode	string	Y	3 letter alpha country code from ISO standard **Not Mandatory** if gateway configuration has default country code pre-configured against supplierId
reversal	boolean	N	Indicates if transaction is marked as reversal
receiptNumber	string	N	Receipt Number (6 character) mandatory for Worldpay Acquired Transactions
Status	String	N	'F' Full Value, 'P' Pre-Auth / Partial, 'I' Incremental. If omitted Full is assumed

defAuth	boolean	N	Indicates if the transaction was offline deferred. Support with agreement of the Gateway by Project.
cardDetails	CardDetailsRequest	Y	The object that contains payment card details
addressVerification	AddressVerification	N	Object: UK address data associated with validating a transaction
emv	EMV	N	Object: ICC Contactless and contact card transaction details

The AddressVerification object

Attribute name	Type	Required	Description
Address	string	N	AVS address data (For MOTO Transactions)
Postcode	string	N	AVS postcode data (For MOTO Transactions)

The CardDetailsRequest object

Attribute name	Type	Required	Description
cardNumber	string	Y	Card number for transaction (card details only used for testing)
expiraryDate	string	Y	In format YYYYMM
startDate	string	Dependent on card scheme	In format YYYYMM
issueNumber	string	Dependent on card scheme	Issue number for the card. Requirements are card scheme dependent.
cvv	string	N	Card CV2 or CSC code Mandatory for Card not present Keyed
capture	string	Y	Card capture method. Values can be: K - Keyed Customer not Present CL - Contactless CMS - Contactless Magstripe ICC - Chip Card

The CardDetailsRequest object

Attribute name	Type	Required	Description

cardNumber	string	Y	Card number for transaction (card details only used for testing)
expiraryDate	string	Y	In format YYYYMM
startDate	string	Dependent on card scheme	In format YYYYMM
issueNumber	string	Dependent on card scheme	Issue number for the card. Requirements are card scheme dependent.
cvv	string	N	Card CV2 or CSC code Mandatory for Card not present Keyed
capture	string	Y	Card capture method. Values can be: K - Keyed Customer not Present CL - Contactless CMS - Contactless Magstripe ICC - Chip Card
track2	string	N	Track2 data from mag stripe
includesTlv	boolean	N	Indicator if Sred includes TLV data.
sredData	string	N	Encrypted Card details block
sredksn	string	N	DUKupt Key Serial number
magStripeData	string	N	Encrypted Card details block when card has been swiped
magStripeKsn	string	N	DUKupt Key Serial number

The EMV Object

Attribute name	Type	Required	Description
tlvData	string	Y	Base 64 encoded ICC data. TLV should be included in SredData encrypted block for Live use, unless otherwise agreed. See Appendix for acquirer specific data requirements
transactionSequence	int	Y	Transaction sequence counter maintained by the terminal that is incremented by 1 for each transaction.
terminalSerialNumber	string	Y	Unique terminal Id IMEI / Hardware Serial Number Must be supplied if device can retrieve it
terminalId	string	Y	Card acceptor terminal Id (TID)
terminalIP	string	Y	Network Address of the terminal (if available)
ModelNumber	String	Y	Identifies the model of the terminal used.
terminalAttributes	String	Y	Defines usage attributes of device + defines if

			Mpos or POS
terminalAttributesUsed	String	Y	Defines usage attributes used in this transaction
pinEntry	boolean	Y	Terminal has PIN entry capability
pinVerified	boolean	Y	PIN verified offline
onlinePINBlock	string	N	Encrypted PIN block for online PIN only
onlinePINKsn	string	N	PIN Ksn for online PIN only

5. Transaction Reversals / Voids

For the Gateway to process a reversal, it must be sent on the same day as the original transaction before 23:00 if the transaction was a 'PayRequest' as after this time the transaction will have been processed to the acquirer and if a cancellation is required then a refund transaction will be required.

Note: The reversal process also supports the partial reversal of the original transaction amount, if however, an amount is not specified in the request the full amount will be assumed. Partial reversals are implemented for PreAuth and PreAuth + Incremental transaction chains where the final settlement amount is not known.

Where this is the case the 'unspent' part of the transaction **must** be reversed first before the transaction is settled.

Where reversing an Incremental part of a chain of transactions, the OriginalReference **must** refer to the reference of the Incremental transaction and not the parent transaction.

The Json Request object

Attribute name	Type	Required	Description
data	JasonRequestData	Y	

The Json Request object

Attribute name	Type	Required	Description
Type	String	Y	The type of object sent in this request. For this endpoint, this would be set to ReversalRequest
Id	String	Y	The unique number to identify the transaction
attributes	String	Y	Reversalrequest (Reverse / Void)

The ReversalRequestData object

Attribute name	Type	Required	Description
supplierID	string	Y	Paya ID to identify the Merchant details (MID)
password	string	Y	Required to secure the request and ensure no other parties can perform actions for you without your consent

			supplier without your consent
originatorName	string	Y	Static value ‘WhiteLabel’
request	ReversalRequestData	Y	Object

The ReversalRequest Data obect

Attribute name	Type	Required	Description
dateTime	string	N	Date/Time of the transaction in the format YYYYMMDDHHMMSS. Mandatory for Terminal transaction as date time must match what is printed on the receipt. If not supplied the current server time will be used as per the supplier page.
originalReference	string	Y	Must uniquely identify the transaction to be reversed.
amount	long	N	Transaction amount in minor currency units to be settled. If omitted full transaction amount assumed.

6. Transaction Settlement

This transaction type enables the Settlement (Capture) of a previously Authorised transaction via the ‘AuthRequest’ method.

Note 1: Transactions that used the ‘PayRequest’ do not need to be settled as the ‘PayRequest’ will automatically settle the transaction on completion.

This transaction type will also support the settlement of a chain of Pre-Auth & incremental transactions in a single settlement request as long as the original transaction Reference from the **First** Authorisation (PreAuth) request in the chain (the PreAuth) is used to settle against. Incremental Authorisations cannot be individually settled.

Note 2: PreAuth & Incremental functionality is restricted to specific MCC codes by Visa & Mastercard.

The Json Request object

Attribute name	Type	Required	Description
data	JasonRequestData	Y	

The Json Request object

Attribute name	Type	Required	Description
Type	String	Y	Type of object sent in this request. For this endpoint this would be set to Settlement.
Id	String	Y	The unique transaction ID to settle
attributes	String	Y	SettleRequest (Settlement of a transaction)

The Settle Request object

Attribute name	Type	Required	Description
SupplierID	string	Y	Paya ID to identify the Merchant details (MID)
password	string	Y	Required to secure the request and ensure no other parties can perform actions for your supplier without your consent
originatorName	string	Y	Static value 'White Label' agreed with Paya
request	SettleRequestData	Y	Object

The Settle RequestData object

Attribute name	Type	Required	Description
dateTime	string	N	Date/Time of the transaction in the format YYYYMMDDHHMMSS. Mandatory for Terminal transaction as date time must match what is printed on the receipt. If not supplied the current server time will be used asper the supplier settings.
transactionUniqueNumber	string	N	PAYA Gateway Unique transaction number of the transaction to be settled.
reference	string	Y	Must uniquely identify this transaction for this supplier and must be the same as the original transaction.

userReference	string	N	Non-financial reference for the transaction for reporting purposes only. Type of transaction. Must be one of the following values: - Sale - Refund - MSale (MOTO Sale) - MRefund (MOTO Refund)
amount	long	Y	Transaction amount in minor currency units to be settled.
receiptNumber	string	N	Receipt Number (6 character) mandatory for Worldpay Acquired Transactions.
status	string	N	'F' Full Value, 'P' Partial. If omitted Full is assumed

7. JSON Gateway Responses

7.1 PayRequest Response

Json ResponseData

Attribute name	Type	Description
json	string	Includes information about the server implementation
id	string	ID matching the Transaction ID
Data	string	Primary response data

The Pay Response object

Attribute name	Type	Description
supplierId	string	Unique Id supplied by PAYA Gateway
originatorName	string	Gateway Internal Reference
requestType	string	Request type sent in the incoming request
identifier	Identifier	Object contains attributes to identify this request
status	Status	The status of the incoming request
response	PayResponseData	Contains response data from pay request

The Identifier object

Attribute name	Type	Description
transactionUniqueNumber	string	Unique number generated for this request by the PAYA Gateway

The Status object

Attribute name	Type	Description
code	string	Status code for overall request 0 - Success 1. Gateway Error 2 - Acquirer Error
severity	string	Ex: Info, Error

description	string	Ex: “Success”, “Fail”

The PayResponseData object

Attribute name	Type	Description
reference	string	Unique transaction reference
resultCode	string	Gateway generated result of the authorisation attempt
reasonCode	string	Gateway generated reason of the authorisation attempt
resultDescription	string	Description of the value in resultCode and reasonCode
authResultCode	string	Acquirer authorisation result code
authResultDescription	string	Description for authorisation result code and reason code
authReasonCode	string	Authorisation reason code
settlementResultCode	string	Result code if settlement happens
settlementResultDescription	string	Result description if settlement happens
addendumType	string	The type of addendum that will be expected to accompany the subsequent settlement request
authCode	string	The acquiring bank/issuer authorisation code
hostResponseCode	string	The response code from the acquirer or issuer host if present
hostResponseMessage	string	The response message from the authorisation host
voiceReferralNumber	string	Voice referral telephone number
schemeReferenceData	string	Populated with data received from the card scheme
acquirerReferenceData	string	Populated with data received from the card merchants’ acquirer
cV2AVSResult	string	Populated on receipt of authorisation host data
cV2Result	string	The result of the CV2 check
avsAddressResult	string	Result of the AVSaddress check
avsPostcodeResult	string	Result of the AVS postcode check
caReturnCode	string	Result of the card alias operation
caReturnDescription	string	Description of the value in caReturnCode
settleAmount	long	The sale amount in minor currency units

cardDetails	CardDetailsResponse	The PAN field is subject to both the PCI and DSS standard PAN masking
receptData	ReceiptData	Receipt data of the authorisation request
par	string	Payment Account Reference

The CardDetailsResponse object

Attribute name	Type	Description
aliasName	string	
cardNumber	string	Masked Personal Account Number
expiaryDate	string	
startDate	string	
issueNumber	string	
schemeName	string	Identifier used by the Gateway for the Card Scheme as per the Bin range of the card
iccData	string	ICC response data

The ReceiptData object

Attribute name	Type	Description
dateTime	string	Date and time of authorisation in format YYYYMMDDHHMMSS
terminalId	string	Terminal Id used during authorisation
merchantId	string	Merchant number used for this transaction

7.2 Reversal Request Response

Json ResponseData

Attribute name	Type	Description
jsonapi	string	Includes information about the server implementation
id	string	ID matching the Transaction ID
data	ReversalResponse	Primary response data

The PayResponse object

Attribute name	Type	Description
supplierId	string	Unique Id supplied by PAYA Gateway
originatorName	string	Gateway Internal Reference
requestType	string	Request type sent in the incoming request
identifier	Identifier	Object contains attributes to identify this request
status	Status	The status of the incoming request
response	ReversalResponseData	Contains response data from a reversal request

The Identifier object

Attribute name	Type	Description
transactionUniqueNumber	string	Unique number generated for this request by the PAYA Gateway

The Status object

Attribute name	Type	Description
code	string	Status Code for overall request 0 – Success 1 – Gateway Error 2- Acquirer Error
severity	string	Ex: Info, Error
description	string	Ex: “Success,” “Fail”

The PayResponseData object

Attribute name	Type	Description
reference	string	Unique transaction reference
resultCode	string	Gateway generated result of the authorisation attempt

reasonCode	string	Gateway generated reason of the authorisation attempt
resultDescription	string	Description of the value in resultCode and reasonCode
authResultCode	string	Acquirer authorisation result code
authResultDescription	string	Description for authorisation result code and reason code
authReasonCode	string	Authorisation reason code
settlementResultCode	string	Result code if settlement happens
settlementResultDescription	string	Result description if settlement happens
addendumType	string	The type of addendum that will be expected to accompany the subsequent settlement request
authCode	string	The acquiring bank/issuer authorisation code
hostResponseCode	string	The response code from the acquirer or issuer host if present

7.3 Refund Request Response

Json ResponseData

Attribute name	Type	Description
jsonapi	string	Includes information about the server implementation
id	string	ID matching the Transaction ID
data	PayResponse	Primary response data

The Pay Response Object

Attribute name	Type	Description
supplierId	string	Unique Id supplied by PAYA Gateway
originatorName	string	Gateway Internal Reference
requestType	string	Request type sent in the incoming request
identifier	Identifier	Object contains attributes to identify this request
status	Status	The status of the incoming request
response	PayResponseData	Contains response data from pay request

The Identifier object

Attribute name	Type	Description
transactionUniqueNumber	string	Unique number generated for this request by the PAYA Gateway

The Status object

Attribute name	Type	Description
code	string	Status Code for overall request 0 – Success 1 – Gateway Error 2- Acquirer Error
severity	string	Ex: Info, Error

description	string	Ex: “Success,” “Fail”

The PayResponseData object

Attribute name	Type	Description
reference	string	Unique transaction reference
resultCode	string	Gateway generated result of the authorisation attempt
reasonCode	string	Gateway generated reason of the authorisation attempt
resultDescription	string	Description of the value in resultCode and reasonCode
authResultCode	string	Acquirer authorisation result code
authResultDescription	string	Description for authorisation result code and reason code
authReasonCode	string	Authorisation reason code
settlementResultCode	string	Result code if settlement happens
settlementResultDescription	string	Result description if settlement happens
addendumType	string	The type of addendum that will be expected to accompany the subsequent settlement request
authCode	string	The acquiring bank/issuer authorisation code
hostResponseCode	string	The response code from the acquirer or issuer host if present

7.4 Settlement Request Response

Json ResponseData

Attribute name	Type	Description
jsonapi	string	Includes information about the server implementation
id	string	ID matching the Transaction ID
data	PayResponse	Primary response data

The Pay Response object

Attribute name	Type	Description
supplierId	string	Unique Id supplied by PAYA Gateway
originatorName	string	Gateway Internal Reference
requestType	string	Request type sent in the incoming request
identifier	Identifier	Object contains attributes to identify this request
status	Status	The status of the incoming request
response	PayResponseData	Contains response data from pay request

The Identifier object

Attribute name	Type	Description
transactionUniqueNumber	string	Unique number generated for this request by the PAYA Gateway

The Status Object

code	string	Status Code for overall request 0 – Success 1 – Gateway Error 2- Acquirer Error
severity	string	Ex: Info, Error
description	string	Ex: “Success,” “Fail”

Attribute name	Type	Description
reference	string	Unique transaction reference
resultCode	string	Gateway generated result of the authorisation attempt
reasonCode	string	Gateway generated reason of the authorisation attempt
resultDescription	string	Description of the value in resultCode and reasonCode
authResultCode	string	Acquirer authorisation result code
authResultDescription	string	Description for authorisation result code and reason code
authReasonCode	string	Authorisation reason code
settlementResultCode	string	Result code if settlement happens
settlementResultDescription	string	Result description if settlement happens
addendumType	string	The type of addendum that will be expected to accompany the subsequent settlement request
authCode	string	The acquiring bank/issuer authorisation code
hostResponseCode	string	The response code from the acquirer or issuer host if present

8. Terminal Attributes Tables

The table that the White Label below is the full version the Terminal Attributes capability. As the Payment Gateway will be in control of a number of these elements the settings will be agreed on a project basis. However, the control of position 3 will be in control of the terminal as it will know the CMV and CVMR values.

		Value			
	Feature	**8**	**4**	**2**	**1**
First Position: Read Capabilities	Contactless Reader magstripe format				X
	Contactless reader EMV format			X	
	QR code Reader		X		
	Reserved For Future Use	X			
Second Position: Response Message Capabilities Note: American Express currently only supports Transaction Identifiers (TID) and Payment Account Reference (PAR) (Additional payment account information supported).	Partial / Alternative Amount approval responses supported				X
	Transaction Identifiers Supported			X	
	Alternate card numbers supported		X		
	Additional account information Supported	X			
Third Position: Contactless CDCVM	Contactless Signature				X
	Contactless CDCVM			X	

Fourth Position: Mobile Point of Sale See Note 1	mPos with integrated card reader				X
	mPos with separate card reader			X	
	mPos off the shelf mobile device		X		
	mPos with software-based PIN entry capability	X			
Fifth Position: Message Additional Response Capabilities	Token data supported				X
	Pay-by-instalment offer data supported			X	
	Additional receipt data supported		X		
	Supplementary response data supported	X			
Sixth Position:	Reserved For Future Use				X
	Reserved For Future Use			X	
	Reserved For Future Use		X		
	Reserved For Future Use	X			

	Online Pin single Tap (See Note (2)		X		
	Reserved For Future Use	X			

Note 1: When set in the Terminal Attributes data element, this bit indicates to the acquirer that the terminal can prompt for PIN entry, if requested by the issuer, without requiring the cardholder to tap again in a contactless transaction. When set in the Terminal Attributes Used data element, this bit indicates to the acquirer that PIN entry was performed without asking the cardholder to tap again. The card issuer can then determine that the Application Transaction Counter (ATC) is being intentionally resent as part of the same set of IC Data as the authorisation request that was SCA required declined with a request to enter PIN.

9. Appendix A - EMV TLV data

Multiple Tags are sent, within the request and/or response with no space or separator.

Each Tag should be sent with the format:

[Tag ID] [Length] [Value]

The Tag ID per the table below, can be one or two bytes (e.g. 91 or 5F2A)

The Length of the Value in hexadecimal notation, can be one byte (e.g. 0A or 02)

The Value contains the actual hex-encoded request/response value per the Tag description.

Example Tag 91: 910A01020304050607080 90A

Example TLV Data request field:
82027C0095058040040000 9A031304249C01005F2A020978 9F02060000000010009F10070601 0A03A0A8109F
1A020470 9F26085D5380576508A318 9F27018 09F3303604020 9F3403010203 9F36020 3C8 9F3704BE83C70
0

Tag ID	Max	Required	Description
71	255	Response	Issuer script template 1
72	255	Response	Issuer script template 2
82	2	Mandatory	Application interchange profile

84	16	Optional	Dedicated file name
8A	2	Response	Authorisation response code
91	16	Response	Issuer response data
95	5	Mandatory	Terminal verification results Should be filled with zeros in the case of [b9] (card entry mode) = '07'
9A	3	Mandatory	Transaction date (YYMMDD)
9C	1	Mandatory	Transaction type
5F2A	2	Mandatory	Transaction currency code
9F02	6	Mandatory	Amount authorised
9F03	6	Optional	Cash-back amount
9F09	2	Optional	Terminal application version number
9F10	32	Conditional	Issuer application data (Mandatory if provided by the card to the terminal)
9F1A	2	Mandatory	Terminal country code
9F1E	16	Optional	Interface device serial number
9F26	8	Conditional	Application cryptogram Authorisation request cryptomgram (ARQC) should be sent for operations [1] or [2] The authorisation response cryptogram (ARPC) is returned in the response The transaction certificate (TC) should be sent for operation [3]
9F27	1	Conditional	Cryptogram information data

			(Mandatory for MasterCard, Optional for VISA)
9F33	3	Mandatory	Terminal capabilities
9F34	3	Conditional	Cardholder verification method results (Mandatory for MasterCard, Optional for VISA)
9F35	1	Optional	EMV terminal type
9F36	2	Mandatory	Application transfer counter
9F37	4	Mandatory	Unpredictable number
9F53	1	Optional	Transactions category code (Mastercard)
9F5B	20	Response	Issuer script result (VISA)
9F6E	32	Conditional	Device type field value Mandatory when available

10. Payment Gateway Raw Data Examples

10.1 Gateway JSON PayRequest Using Unencrypted Card Details

The example below describes an example where the transaction is sent to the Gateway with Card & TLV data 'in the clear' for test purposes prior to using the encrypted fields.

{"**data**":

{"id":" 98c58d0f-1202-46b2-bd61-c286341a2cd1",

"**type**":"payrequest",

"**attributes**":{"srvcMajorVersionNumber":"1","srvcMinorVersionNumber":"1.0",

"**request**":

{"**dateTime**":"20240329110743",

"**transactionUniqueNumber**":"446850bc-3c3e-4946-b12a-7d2d4d1314bd",

"**reference**":"446850bc-3c3e-4946-b12a-7d2d4d1314bd",

"**transactionType**":"Sale",

"**amount**":200,

"**currencyCode**":"GBP",

"**countryCode**":"GBR",

"**reversal**":false,

"**cardDetails**":

{"**cardNumbe**r":"4761739001010119",

"**expiryDate**":"202412",

"**issueNumber**":"01",

"**capture**":"CL",

"**track2**":"4761739001010119=241220117589472"},

"**emv**":

{"**terminalAttributes**":"226900",

"**terminalAttributesUsed**":"222100",
"**tlvData**":"OWYxYTAyMDgyNjlmMzYwMjAwMDE1ZjM0MDEwMTlmMzc
wNDlmODJlMmNmOWY
zNTAxMjE5ZjEwMDcwNjAxMGEwM2EwMDAwMDlmMzMwMzAwNDgw
ODVmMmEwMjA4MjY1MDBiNT
Y0OTUzNDEyMDQzNTI0NTQ0NDk1NDk1MDUwMDAwMDAwMDAwO
WEwMzI0MDMyOTlmMjcwMTgw
OWMwMTAwOWYwMzA2MDAwMDAwMDAwMDAwOWYyNjA4M2RkNWU3ZDA1ZTgzNTgwMzlmMDkw
MjAwOGQ5ZjAyMDYwMDAwMDAwMDAyMDA4MjAyMDAwMDlmMWUwODI4MjczMTcyMzgxNzI4NzM4
NDA3YTAwMDAwMDAwMzEwMTA5ZjZlMDQyMDcwMDA4MA==",

"**transactionSequence**":89,

"**terminalSerialNumber**":"259e109a-7881-431b-a418-b261640c0bca",

"**terminalId**":"90011263",

"**terminalIp**":"192.168.126.125",

"**modelNumber**":"BDYP-368",

"**pinEntry**":false,

"**pinVerified**":false,

"**merchantId**":"6652036"}},

"**password**":"**********",

"**supplierId**":"CustomerTest1",

"**originatorName**":"Whitelabel"}}}

11. Gateway JSON Response Example

{"**jsonapi**":{"version":"1.1"}, "**data**":

{"**id**":"240329080801446",

"**type**":"payresponse", "**attributes**":

{"**supplierId**":"CustomerTest1",

"**originatorName**":"Whitelabel",

"**requestType**":"Pay", "**identifier**":

{"**TransactionUniqueNumber**":"240329080801446"}, "**status**":

{"**code**":"0",

"**severity**":"Info", "**description**":"Success"}, "**response**":

{"**reference**":"446850bc-3c3e-4946-b12a-7d2d4d1314bd",

"**resultCode**":"1004",

"**reasonCode**":"0",

"**resultDescription**":"Online Approved",

"**authResultCode**":"1004",

"**authResultDescription**":"Online Approved",

"**authReasonCode**":"0",

"**settlementResultCode**":"0",

"**settlementResultDescription**":"OK",

"**addendumType**":"NONE",

"**authCode**":"306353",

"**hostResponseCode**":"00",

"**hostResponseMessage**":"AUTH CODE:306353",

"**voiceReferralNumber**":"",

"**schemeReferenceData**":"000000000306073",

"**acquirerReferenceData**":"00000000004403291107000061 94POS5BWRD90011263240329",

"**cv2AVSResults**":"000800",

"**cv2Result**":"?",

"**avsAddressResult**":"?",

"**avsPostCodeResult"**:"?",

"**caReturnCode**":"",

"**caReturnDescription**":"",

"**settleAmount**":200, "**cardDetails**":

{"**cardNumber**":"476173******0119",

"**expiryDate"**:"202412",

"**startDate**":"",

"**issueNumber**":"01", "**schemeName"**:"VisaCredit"},

"**receiptData**":

{"dateTime":"**20240329110743**",

"terminalId":"**90011263**",

"**merchantId**":"**6652036**"}, "**emv**":

{"**responseData**":"910A635FB4FD008000003030"}}}},

12. Sale / Refund Transaction Pair

12.1 Sale Transaction

{"**data**":

{"**id**":" 98c58d0f-1202-46b2-bd61-c286341a2cd1",

"**type**":"payrequest",

"**attributes**":{"srvcMajorVersionNumber":"1",

"srvcMinorVersionNumber":"1.0", "**request**":

{"**dateTime**":"20240329103557",

"**transactionUniqueNumber**":"77c58d0f-0002-46b2-ac51-b086341b0f25",

"**reference**":"**77c58d0f-0002-46b2-ac51-b086341b0f25**",

"**transactionType**":"Sale",

"**amount**":200,

"**currencyCode**":"GBP",

"**countryCode**":"GBR",

"**reversal**":false,

"**cardDetails**":

{"**cardNumber**":"4761739001010119",

"**expiryDate**":"202412",

"**issueNumber**":"01",

"**capture**":"CL",

"**track2**":"4761739001010119=241220117589472"}, "**emv**":

{"**terminalAttributes**":"226900",

"**terminalAttributesUsed**":"222100",

"**tlvData**":"OWYxYTAyMDgyNjlmMzYwMjAwMDE1ZjM0MDEwMTlmMzcwNDlm
ODJlMmNmOWYzNTAxMjE5ZjEwMDcwNjAxMGEwM2EwMDAwMDlmMzMwMz
AwNDgwODVmMmEwMjA4MjY1MDBiNTY0OTUzNDEyMDQzNTI0NTQ0NDk1N
Dk1MDUwMDAwMDAwMDAwOWEwMzI0MDMyOTlmMjcwMTgwOWMwMTAw
OWYwMzA2MDAwMDAwMDAwMDAwOWYyNjA4M2RkNWU3ZDA1ZTgzNTgw
MzlmMDkwMjAwOGQ5ZjAyMDYwMDAwMDAwMDAyMDA4MjAyMDAwMDlmM
WUwODI4MjczMTcyMzgxNzI4NzM4NDA3YTAwMDAwMDAwMzEwMTA5ZjZlM
DQyMDcwMDA4MA==",

"**transactionSequence**":87,

"**terminalSerialNumber**":"259e109a-7881-431b-a418-b261640c0bca",

"**terminalId**":"90011263",

"**terminalIp**":"192.168.126.125",

"**modelNumber**":"BDYP-368",

"**pinEntry**":false,

"**pinVerified**":false,

"**merchantId**":"6652036"}},

"**password**":"*********","**supplierId**":"Customertest1",

"**originatorName**":"Whitelabel"}}}

12.2 Refund

{"data":{"id":" 98c58d0f-1202-46b2-bd61-c286341a2cd1",

"**type**":"**payrequest**", "**attributes**":

{"srvcMajorVersionNumber":"1",

"srvcMinorVersionNumber":"1.0", "**request**":

{"**dateTime**":"20240329111636",

"**transactionUniqueNumber**":"11da65f2-e816-472e-a0da-9e7127d795de",
"**reference**":"11da65f2-e816-472e-a0da-9e7127d795de",

"**originalReference**":"77c58d0f-0002-46b2-ac51-b086341b0f25",

"**transactionType**":"**Refund**",

"**amount**":200,

"**currencyCode**":"GBP",

"**countryCode**":"GBR",

"**reversal**":false, "**cardDetails**":

{"**cardNumber**":"4761739001010119",

"**expiryDate**":"202412"

,"**issueNumber**":"01",

"**capture**":"CL",

"**track2**":"4761739001010119=24122011758947 2"}, "**emv**":

{"**terminalAttributes**":"226900",

"**terminalAttributesUsed**":"222100",

"**tlvData**":"OWYxYTAyMDgyNjlmMzYwMjAwMDE1ZjM0MDEwMTlmMzcwNDlmODJlMm
NmOWYzNTAxMjE5ZjEwMDcwNjAxMGEwM2EwMDAwMDlmMzMwMzAwNDgwODVm
MmEwMjA4MjY1MDBiNTY0OTUzNDEyMDQzNTI0NTQ0NDk1NDk1MDUwMDAwMDA
wMDAwOWEwMzI0MDMyOTlmMjcwMTgwOWMwMTAwOWYwMzA2MDAwMDAwMDA
wMDAwOWYyNjA4M2RkNWU3ZDA1ZTgzNTgwMzlmMDkwMjAwOGQ5ZjAyMDYwMD
AwMDAwMDAyMDA4MjAyMDAwMDlmMWUwODI4MjczMTcyMzgxNzI4NzM4NDA3YT
AwMDAwMDAwMzEwMTA5ZjZlMDQyMDcwMDA4MA==",

"**transactionSequence**":93,

"**terminalSerialNumber**":"259e109a-7881-431b-a418-b261640c0bca",

"**terminalId**":"90011263","**terminalIp**":"192.168.126.125",

"modelNumber":"BDYP-368",

"**pinEntry**":false,

"**pinVerified**":false,

"**merchantId**":"6652036"}},

"**password**":"********* ",

"**supplierId**":"CustomerTest1","**originatorName**":"Whitelabel"}}}

PAYA Gateway – Payment Device Interface Specification

13. Reversal / Void

13.1 Reversal (Full Amount)

The following is a reversal request which will reverse the whole transaction whose transaction Reference = Original Reference field.

{**"data"**:

{"id":" 98c58d0f-1202-46b2-bd61-c286341a2cd1",

"**type**":"**reversalrequest**",

"**attributes**":

{"password":"********",

"**supplierId**":"CustomerTest1",

"**originatorName**":"Whitelabel"} "**request**":

{"**dateTime**":"20240329111636",

"**originalReference**":"77c58d0f-0002-46b2-ac51-b086341b0f25",}}

13.2 Reversal (Partial Amount)

The following is a reversal request which will reverse part of the transaction whose transaction Reference = Original Reference field.

{**"data"**:

{"id":" 98c58d0f-1202-46b2-bd61-c286341a2cd1",

"**type**":"**reversalrequest**",

"**attributes**":

{"password":"********",

"**supplierId**":"CustomerTest1",

"**originatorName**":"Whitelabel"} "**request**":

{"**dateTime**":"20240329111636",

"**originalReference**":"77c58d0f-0002-46b2-ac51-b086341b0f25", "**amount**":20}}

PAYA Gateway – Payment Device Interface Specification

End Of Document