

PAY BUTTON

USER GUIDE

Version: 1.2

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1 About Pay Button

The *Pay Button* function gives the user the ability to create an HTML link that can be embedded into HTML content (e.g. a website or HTML email). When clicked, it will allow a payment to be taken via the hosted form that will be pre-populated with the data specified when creating the link.












The advantage of *Pay Button* is that it offers the functionality of Pay Global without having to complete a Hosted or Direct integration, meaning it can be included in basic HTML without the need for any scripting languages.

2 Using the Pay Button Creator

The *Pay Button* creation page can be accessed via the *Pay Button* menu item on the main menu in the MMS.

Pay Button

Below you can create a payment button which can be included on your website or in an e-mail. Once clicked, the user will be asked for their card details. You will also be asked for the URL of your "payment successful" page and an optional "Payment Failed" page. You can also be notified by email, if you enter an email address in the "Notification Email" box below.

| | | | |
|--|----------------|---|---|
| Merchant Account: | TEST (100001) | required |  |
| Currency: | GBP | required |  |
| Merchant's country: | United Kingdom | required |  |
| Amount: | | required |  |
| Order Reference: | | optional |  |
| Redirect URL: | | required //Example: https://www.mystore.com/payment-complete |  |
| Redirect URL on failure: | | optional //Example: https://www.mystore.com/payment-failure |  |
| Notification Email: | | optional |  |
| Customer Receipts Required: | Yes | Optional |  |
| Button Text: | Pay Now | required |  |
| Address Required: | Yes | Optional |  |
| <input type="button" value="Create Button"/> | | | |

2.1 Fields

| | | |
|--------------------------------|-----------------|---|
| Merchant Account | Required | This specifies the Merchant Account to receive the payments into. The list will show all your merchant accounts and a default test account. |
| Merchant Password | Required if set | This field is only presented if the account already has a merchant password setup via the preferences page. We advise using signatures instead which are handled automatically when the button is created if a signature key is set using the preferences page. |
| Currency | Required | This is the currency for the transactions. The list will show all the currencies that the selected Merchant Account can handle. |
| Country | Required | The country in which the merchant is based. |
| Amount | Required | The amount due for payment by the customer. NOTE: The value should be given without the currency symbol, e.g. 10.00. |
| Order Reference | Optional | This value will be logged with any transaction made using the link and will be shown in the MMS. It can be used for order tracking, etc. |
| Redirect URL | Required | The location to go to after the payment has taken place. This can be any URL you wish to direct the customer to after a payment or attempted payment has been made. NOTE: If a value for Redirect URL on Failure is supplied, the URL specified for Redirect URL will only be used when a payment has been successful. |
| Redirect URL on Failure | Optional | The location to go after a payment has failed. If no value is supplied the value from Redirect URL will be used. |

| | | |
|---------------------------|----------|---|
| Notification Email | Optional | If a payment is successful, a notification email will be sent to this address. If left blank, then the default notification email address set in the preferences page for the merchant account will be used. |
| Button Text | Required | This is the value to display as the link text. |
| Address Required | Optional | If set to 'Yes', the 'Address' and 'Postcode' sections on the hosted form are marked as required and cannot be omitted. If set to 'No', the 'Address' and 'Postcode' fields are optional. The default value for this field is 'No'. |

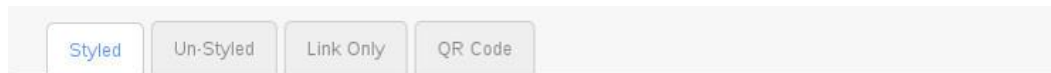
2.2 Inserting the Link/QR Code

Once 'Create Button' has been clicked, the link will be formatted and displayed on the next page.

There are 4 options presented: Styled, Un-Styled, Link only and QR Code which can be selected using the tabs on the page. Previews of all the styling options can be seen in the Preview window.

To insert the code into HTML content, click the Select Code button and then right click and copy the selected code. The code must be pasted into the code view of your HTML content, where you can view and edit the raw HTML and edit any inline CSS. The link will then be ready for use.

Styled



Copy the button code:

1. Click **Select Code**.
2. Right-click and copy the selected code.

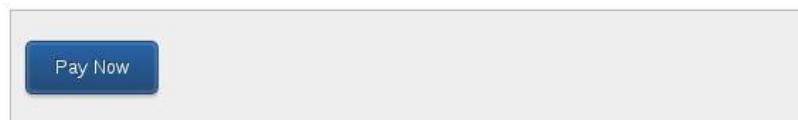
Paste the button code into your website editor:

The code must be pasted in the "code" view, where you can view and edit HTML.

```
<a
href='https://gateway. [redacted] /button/gpz0t9'
style='font-family: Arial,Helvetica,sans-serif;
width: auto; background: #2864A7; background: -moz-
linear-gradient(top, #2864A7 0%, #244B76 100%); /*
FF3.6+ */ background: -webkit-gradient(linear, left
top, left bottom, color-stop(0%,#2864A7), color-
stop(100%,#244B76)); /* Chrome,Safari4+ */
```

Select Code

Preview



The styled option makes the link look like a pre-formatted button. This is useful for displaying on websites to fit of the style/content of a web-page. It isn't always suitable to send across e-mail clients as the client may not support formatted CSS.

Un-Styled

Styled

Un-Styled

Link Only

QR Code

Copy the button code:

1. Click **Select Code**.
2. Right-click and copy the selected code.

Paste the button code into your website editor:

The code must be pasted in the "code" view, where you can view and edit HTML.

```
<a href='https://gateway. /button  
/u15rau'>Pay Now</a>
```

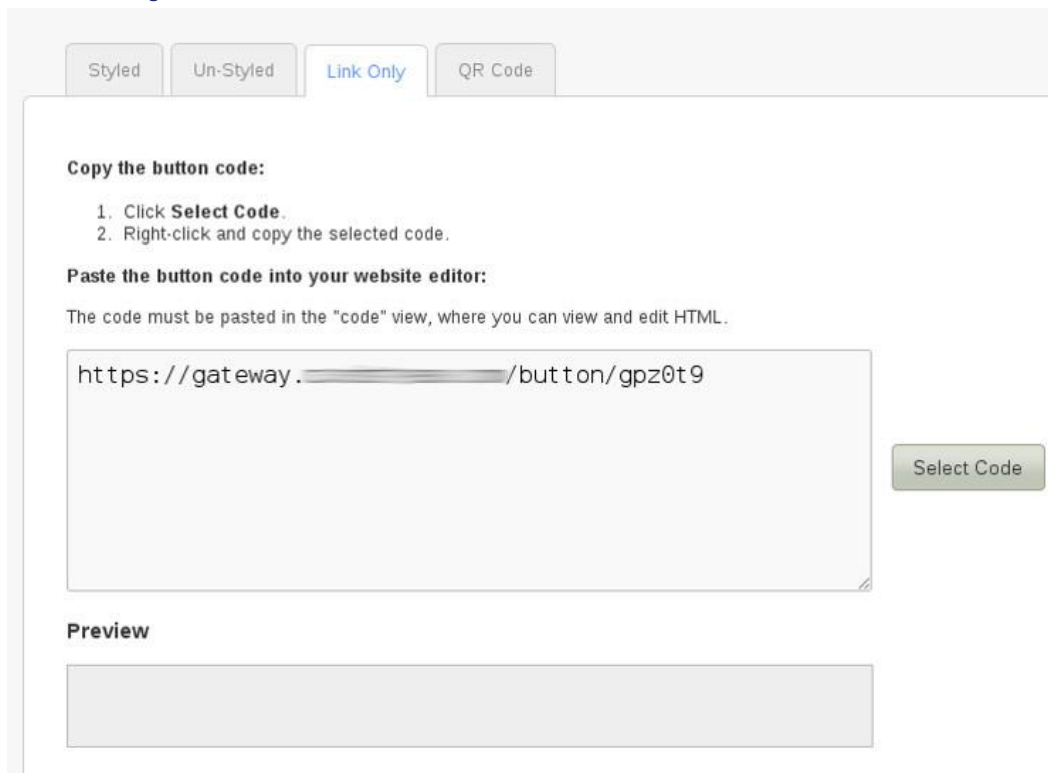
Select Code

Preview

[Pay Now](#)

The Un-Styled option creates a standard link that can be styled later using CSS or used as is. This is useful if you want a base to work from to create a button of your choice using CSS.

Link Only



Styled Un-Styled **Link Only** QR Code

Copy the button code:

1. Click **Select Code**.
2. Right-click and copy the selected code.

Paste the button code into your website editor:

The code must be pasted in the "code" view, where you can view and edit HTML.

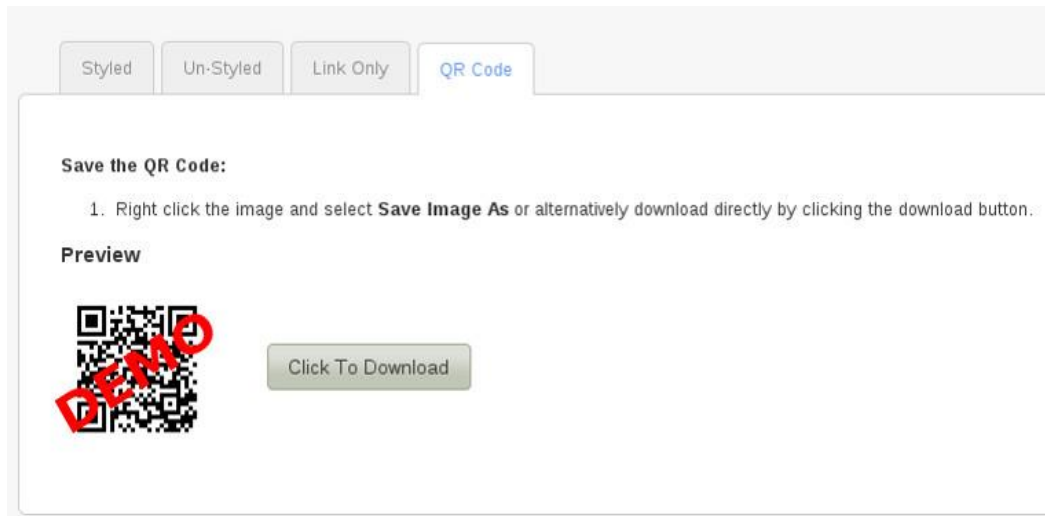
`https://gateway. /button/gpz0t9`

Select Code

Preview

The link only option provides the raw URL without embedding it in an HTML link. If you want a simple link to send to customers, this is the best option.

QR Code



The QR Code option adds the ability for a QR Code to be downloaded. It is automatically generated and is displayed on the page for testing/preview purposes. Click the download button to save it in a file which can then be uploaded or placed wherever you wish. Alternatively, you can right click the preview image and save it from your browser.

A QR Code scanner has to be used to 'read' the code, which will then send the link of the payment form to the device.

3 Advanced Integration

3.1 Advanced Integration

3.1.1 About This Guide

The Pay Global Pay Button Advanced Integration method requires the merchant (or the merchant's web developer) to have knowledge of server side scripting languages (e.g. PHP, ASP etc.), although less so than the Direct method. Unlike the Direct method, the merchant's website does not need to have a SSL Certificate, and PCI compliance becomes more straightforward.

If you wish to take card details on your own website, or style the payment pages of your website, you either need to use the Direct integration method or request a Custom Hosted Form for your business.

3.1.2 New Customers Testing

New customers who have not yet received their merchant ID can still perform a test integration. Simply enter **TEST** as your merchant ID and use one of the Pay Global test cards.

This guide provides the information required to integrate with Pay Global, and gives a very basic example of code for doing so. It is expected that the Merchant, or the Merchant's developers, have some experience in server side scripting with languages such as PHP or ASP, or that an off-the-shelf software package is being used that has in-built Pay Global integration support.

If you do require programming assistance, please contact Pay Global on 0203 504 2443 or via email to support@payglobal.org.

3.1.3 Pre-Requisites

You will need the following information to integrate with Pay Global Hosted Forms via a Pay Button.

| | |
|-------------------------------|--|
| Pay Global Merchant ID | <p>Your Merchant user ID enables you to access and communicate with the Pay Global payment gateway. Please note that these details will differ to the login supplied to access the administration panel. You should have received these details when your account was set up.</p> <p>You may also use test account IDs (if you have been issued with a test ID) and swap these for your live account details when you receive them.</p> <p>NB: You can also enter “TEST” as the Merchant ID to test the system. This allows prospective customers to test the integration prior to signing up for an account.</p> |
| Integration URL | https://gateway.payglobal.org/button/{YOUR_LINK} |

3.1.4 3D Secure

If your merchant account is enrolled with 3D Secure, the hosted form method will automatically attempt to perform 3D Secure transactions. If the customer's card is not participating in 3D Secure then the transaction will be processed as normal, otherwise it will take the customer through the 3D Secure authentication process.

You can choose how to deal with 3D Secure transactions that fail authentication – either declining the transaction or continuing without 3D Secure protection. These preferences are set in the Merchant Management System.

3.1.5 Test Cards

To download the latest copy of the Pay Global test cards, for both 3D Secure and non 3D Secure transactions, please contact Pay Global for our Integration Guides/Test Cards.

3.2 Gateway Request

To create the button the details should be URL encoded Name=Value fields separated by '&' characters (refer to [RFC 1738](#) and the application/x-www-form-urlencoded media type). This is then base64 encoded with all padding characters (=) stripped and the following characters +, / replaced with – and _ respectively. This string is then appended to the gateway URL to give the final link.

Please note that the field names are cAsE sEnSiTiVe.

3.2.1 General Fields

| Field Name | Mandatory? | Description |
|-------------------|------------|---|
| merchantID | Yes | Your Pay Global Merchant user ID, or "TEST" if you are just testing. |
| amount | Yes | <p>The amount of the transaction in minor currency. For the UK, this is pence, so £10.99 should be sent as 1099.</p> <p>Numeric values only – no decimal points or currency symbols.</p> |
| action | Yes | <p>The transaction action.</p> <p>Possible values are: PREAMTH</p> <p>This will reserve an amount from the customer's card but not collect them. For a period of up to 5 days (depending on the card issuing bank) after the transaction is placed, you can place a subsequent transaction with an action of SALE and the xref value returned from the first transaction in order to collect the previously reserved funds. This subsequent transaction is usually preformed using a direct integration.</p> <p>If the period of time between the first and second transactions is greater than the card issuing bank reserves the funds for, then new, unreserved funds will be taken from the cardholders account.</p> |

| | | |
|--------------------------|-----|--|
| | | SALE This will collect an amount from the customer's card. |
| type | Yes | The type of transaction. Possible values are: 1 - Cardholder Not Present: Ecommerce. 2 - Cardholder Not Present: Mail Order. 3 - Point of Sale: Card Keyed. 4 - Point of Sale: Card Swiped. 5 - Point of Sale: Card Chip & Pin. |
| countryCode | Yes | ISO standard country code for the merchant's location. |
| currencyCode | Yes | ISO standard currency code for this transaction. You may only use currencies that are enabled for your merchant account. |
| transactionUnique | No | A unique identifier for this transaction. This should be set by your website or shopping cart. This is an added security feature to combat transaction spoofing. |
| orderRef | No | This text field allows you to describe the order or provide an invoice number/reference number for the merchant's records. |

3.2.2 Redirection and Verification Fields

The Hosted Form, after completion, will redirect the customer to the **redirectURL** or **redirectURLFail**, which will be called with POST data attached. Since this POST could conceivably be forged by a malicious user, it is a good idea to also supply a **callbackURL**. If supplied, the Hosted Form will POST the same transaction result data to the Callback URL in the background. This background page should be used to update your database.

| Field Name | Mandatory? | Description |
|------------------------|---------------------|--|
| redirectURL | Yes | The URL to which the customer will be redirected and the transaction result will be POSTed. |
| redirectURLFail | No | The URL to which the customer will be redirected and the transaction result will be POSTed if the transaction fails. If left blank, the redirectURL will be used. |
| callbackURL | No (Recommended) | A non-public URL which will receive a copy of the transaction result by POST. |
| notifyEmail | No | An RFC 2822 compliant email address or list to which the merchant will receive a confirmation email on a successful transaction. |

3.2.3 Customer Details Fields

Customer details are optional by default, however if the merchant has chosen to require AVS checking in their preferences, then **customerAddress** and **customerPostCode** become mandatory. Usually the customer will enter this data into the hosted form, however if it is previously known it can be included in the button code to pre-populate the fields. All data is stored and accessible within the administration panel.

| Field Name | Mandatory? | Description |
|---------------------------------|---------------------|---|
| customerName | No | The customer or cardholder's name. |
| customerAddress | Yes, if AVS enabled | The customer or cardholder's address. For AVS checking this must be the registered billing address of the card. |
| customerPostCode | Yes, if AVS enabled | The customer or cardholder's post code. For AVS checking this must be the registered billing post code of the card. |
| customerEmail | No | The customer's email address. |
| customerPhone | No | The customer's telephone number. |
| customerAddressMandatory | No | If set to 'Y' makes the customerAddress & customerPostCode fields mandatory on the hosted form. |

3.2.4 American Express and Diners Card Fields

American Express or Diners Card cards require additional information about the customer's purchase to be posted to the hosted form. Only one order line needs to be entered. For other card types all items are optional and will be stored for reference purpose only.

| Field Name | Mandatory? | Description |
|-------------------------|------------------|--|
| item1Description | Yes [†] | A short text description of the item. |
| item1Quantity | Yes [†] | The quantity of the item purchased. |
| item1GrossValue | Yes [†] | The gross, or tax inclusive, value of this order line. |
| item2Description | No | A short text description of the item. |
| item2Quantity | No | The quantity of the item purchased. |
| item2GrossValue | No | The gross, or tax inclusive, value of this order line. |
| item3Description | No | A short text description of the item. |
| item3Quantity | No | The quantity of the item purchased. |
| item3GrossValue | No | The gross, or tax inclusive, value of this order line. |
| item4Description | No | A short text description of the item. |
| item4Quantity | No | The quantity of the item purchased. |
| item4GrossValue | No | The gross, or tax inclusive, value of this order line. |
| item5Description | No | A short text description of the item. |
| item5Quantity | No | The quantity of the item purchased. |
| item5GrossValue | No | The gross, or tax inclusive, value of this order line. |

[†]These fields are only mandatory if an American Express or Diners Card is used for payment.

With American Express or Diners Cards you may also provide tax **or** discount information. Once again for other cards types any values provided will be stored for reference purposes only.

| Field Name | Mandatory? | Description |
|-------------------------------|------------|--|
| taxValue | No | The total amount of tax for this order. |
| taxDiscountDescription | No | A text field to describe the tax applied (e.g. "VAT at 20%") |

OR

| Field Name | Mandatory? | Description |
|-------------------------------|------------|---|
| discountValue | No | The total amount of discount applied to this order. |
| taxDiscountDescription | No | A text field to describe the discount applied. |

3.2.5 Merchant Data Field

The merchant may send arbitrary data with the request by appending extra fields which will be returned in the response unmodified. These extra fields are merely 'echoed' back and not stored by Pay Global.

However the Merchant can put extra information that should be stored into a **merchantData** field. Associative data can be serialised using the notation **merchantData[name]=value**.

Data sent in this field can be viewed in the Merchant Management System.

| Field Name | Mandatory? | Description |
|---------------------|------------|--|
| merchantData | No | Arbitrary data to be stored along with this transaction. |

3.3 Gateway Response

The Pay Global Hosted Form method returns data to the Redirect URL (and Callback URL, if supplied) via an HTTP POST request. The details are sent URL encoded Name=Value fields separated by '&' characters (refer to [RFC 1738](#) and the application/x-www-form-urlencoded media type).

The fields initially sent to the integration URL are returned and in addition the following fields may be returned.

Please note that the field names are cAsE sEnSiTiVe.

3.3.1 Response Fields

| Field Name | Returned? | Description |
|--------------------------|-------------|---|
| responseCode | Always | <p>A numeric code providing the outcome of the transaction.</p> <p>Possible values are:</p> <p>0 - Successful / authorised transaction. 2 - Card referred. 4 - Card declined – keep card 5 - Card declined.</p> <p>Check responseMessage for more detail or any error that occurred.</p> <p>For a full list of error codes please refer to the table in Appendix A.</p> |
| responseMessage | Always | The message received from the acquiring bank, or any error message. |
| xref | Always | The merchant may store the cross reference for repeat transactions and refunds. |
| transactionUnique | If supplied | The value supplied in the initial request, if any. |
| amountReceived | On success | The amount of the transaction. This field used in conjunction with transactionUnique can help provide a measure of security. |

| | | |
|------------------------------|-------------|---|
| transactionID | Always | The ID of the transaction on the Pay Global system – can be used to easily reconcile transactions in the administration panel. |
| orderRef | If supplied | The value supplied in the initial request, if any. |
| avscv2ResponseCode | Optional | The result of the AVS/CV2 check. Please see Appendix 33 for a full list of possible responses. |
| avscv2ResponseMessage | Optional | The message received from the acquiring bank, or any error message with regards to the AVS/CV2 check. Please see Appendix 33 for a full list of possible responses. |
| cv2Check | Optional | Textual description of the AVS/CV2 CV2 check as described in Appendix 33. Possible values are: 'not known', 'not checked', 'matched', 'not matched', 'partially matched' |
| addressCheck | Optional | Textual description of the AVS/CV2 address check as described in Appendix 33. Possible values are: 'not known', 'not checked', 'matched', 'not matched', 'partially matched' |
| postcodeCheck | Optional | Textual description of the AVS/CV2 postcode check as described in Appendix 33. Possible values are: 'not known', 'not checked', 'matched', 'not matched', 'partially matched' |
| avscv2AuthEntity | Optional | Textual description of the AVS/CV2 authorizing entity. Possible values are: 'not known', 'merchant host', 'acquirer host', 'card scheme', 'issuer' |

| | | |
|-----------------------|--------|--|
| cardNumberMask | Always | Card number masked so only the last 4 digits are visible - for example: *****1234 |
| cardTypeCode | Always | The code of card used. See appendix 30 for a full list. |
| cardType | Always | The description of the card used. See Appendix 30 for a full list. |

3.3.2 3D Secure Fields

When a 3D Secure transaction is processed then the following additional fields may be returned.

| Field Name | Returned? | Description |
|-----------------------------|-----------|---|
| threeDSEnabled | Yes | The 3D Secure status of the merchant account. Possible values are: N – the merchant is not 3DS enabled Y – the merchant is 3DS enabled |
| threeDSEnrolled | Yes | The 3D Secure enrolment status for the credit card. Possible values are: Y - Enrolled. N - Not Enrolled. U - Unable To Verify E - Error Verifying Enrolment. Refer to Appendix 33 for further information. |
| threeDSAuthenticated | No | The 3D Secure authentication status for the credit card. Possible values are: Y - Authentication Successful. N - Not Authenticated. U - Unable To Authenticate. A - Attempted Authentication. E - Error Checking Authentication. |

| | | |
|-----------------------------|----|--|
| | | Refer to Appendix 33 for further information. |
| threeDSPaReq | No | Payer Authentication Request (PaReq) that is sent to the Access Control Server (ACS) in order to verify the 3D Secure status of the credit card. |
| threeDSPaRes | No | Payer Authentication Response (PaRes) that is returned from the Access Control Server (ACS) determining the 3D Secure status of the credit card. |
| threeDSACSURL | No | The URL of the Access Control Server (ACS) to which the Payer Authentication Request (PaReq) should be sent. |
| threeDSECI | No | <p>This contains a two digit Electronic Commerce Indicator (ECI) value, which is to be submitted in a credit card authorization message.</p> <p>This value indicates to the processor that the customer data in the authorization message has been authenticated.</p> <p>The data contained within this property is only valid if the threeDSAuthenticated value is Y or A.</p> |
| threeDSCAVV | No | <p>This contains a 28-byte Base-64 encoded Cardholder Authentication Verification Value (CAVV).</p> <p>The data contained within this property is only valid if the threeDSAuthenticated value is Y or A.</p> |
| threeDSCAVVAlgorithm | No | This contains the one digit value which indicates the algorithm used by the Access Control Server (ACS) to generate the CAVV. |

| | | |
|--------------------------------|----|---|
| | | <p>Valid algorithms include (amongst others):</p> <ul style="list-style-type: none"> 0 - HMAC 1 - CVV 2 - CVV with ATN <p>The data contained within this property is only valid if the threeDSAuthenticated value is Y or A.</p> |
| threeDSXID | No | A unique identifier for the transaction as used in the 3D Secure process. This is normally a 20 character string. |
| threeDSErrorCode | No | Any error response code returned by the 3D Secure Access Control Server (ACS) should there be an error in determining the cards 3D Secure status. |
| threeDSErrorDescription | No | Any error response description returned by the 3D Secure Access Control Server (ACS) should there be an error in determining the cards 3D Secure status. |
| threeDSMerchantPref | No | Any merchant 3D Secure preference used to block or allow this transaction should the card not be authorized. These preferences can be set in the merchant control panel. |
| threeDSVETimestamp | No | The time the card was checked for 3D Secure enrolment. |
| threeDSCATimestamp | No | The time the card was checked for 3D Secure authentication. |

A-1 Response Codes

The gateway will always issue a **responseCode** to report the status of the transaction. These codes should be used rather than the **responseMessage** field to determine the outcome of a transaction.

A zero response code always indicates a successful outcome.

Response codes are grouped as follows, the groupings are for informational purposes only and not all codes in a group are used;

| Acquirer (FI) Error codes: 1-99 | |
|---------------------------------|--|
| Code | Description |
| 0 | Successful / authorised transaction. Any code other than 0 indicates an unsuccessful transaction |
| 2 | Card referred |
| 4 | Card declined – keep card |
| 5 | Card declined |
| 30 | An error occurred. Check responseMessage for more detail |

| General Error Codes: 65536 - 65791 | |
|------------------------------------|--|
| Code | Description |
| 65536 | Transaction in progress. Refer to Pay Global if this error occurs |
| 64437 | Reserved for future use. Refer to Pay Global if this error occurs |
| 65538 | Reserved for future use. Refer to Pay Global if this error occurs |
| 65539 | Invalid Credentials: merchantID is unknown |
| 65540 | Permission denied: caused by sending a request from an unauthorized IP address |
| 65541 | Reserved for future use. Refer to Pay Global if this error occurs |

| | |
|--------------|--|
| 65542 | Request Mismatch: fields sent while completing a request do not match initially requested values. Usually due to sending different card details when completing a 3D Secure transaction to those used to authorise the transaction |
| 65543 | Request Ambiguous: request could be misinterpreted due to inclusion of mutually exclusive fields |
| 65544 | Request Malformed: couldn't parse the request data |
| 65545 | Suspended Merchant account |
| 65546 | Currency not supported by Merchant |
| 65547 | Request Ambiguous, both taxValue and discountValue provided when should be one only |
| 65548 | Database error |
| 65549 | Payment processor communications error |
| 65550 | Payment processor error |
| 65551 | Internal communications error |
| 65552 | Internal error |

3D Secure Error Codes: 65792 - 66047

| Code | Description |
|--------------|---|
| 65792 | 3D Secure transaction in progress. Refer to Pay Global if this error occurs |
| 65793 | Unknown 3D Secure Error |
| 65794 | 3D Secure processing is unavailable. Merchant account doesn't support 3D Secure |
| 65795 | 3D Secure processing is not required for the given card |
| 65796 | 3D Secure processing is required for the given card |
| 65797 | Error occurred during 3D Secure enrolment check |

| | |
|--------------|---|
| 65798 | Reserved for future use. Refer to Pay Global if this error occurs |
| 65799 | Reserved for future use. Refer to Pay Global if this error occurs |
| 65800 | Error occurred during 3D Secure authentication check |
| 65801 | Reserved for future use. Refer to Pay Global if this error occurs |
| 65802 | 3D Secure authentication is required for this card |
| 65803 | 3D Secure enrolment or authentication failure and Merchant 3DS preferences are to STOP processing |

| Missing Request Field Error Codes: 66048 - 66303 | |
|--|---|
| Code | Description |
| 66048 | Missing request. No data posted to integration URL |
| 66049 | Missing merchantID field |
| 66050 | Reserved for future use. Refer to Pay Global if this error occurs. |
| 66051 | Reserved for internal use. Refer to Pay Global if this error occurs |
| 66052 | Reserved for internal use. Refer to Pay Global if this error occurs |
| 66053 | Reserved for internal use. Refer to Pay Global if this error occurs |
| 66054 | Reserved for internal use. Refer to Pay Global if this error occurs |
| 66055 | Missing action field |
| 66056 | Missing amount field |
| 66057 | Missing currencyCode field |
| 66058 | Missing cardNumber field |
| 66059 | Missing cardExpiryMonth field |
| 66060 | Missing cardExpiryYear field |
| 66061 | Missing cardStartMonth field (reserved for future use) |

| | |
|--------------|---|
| 66062 | Missing cardStartYear field (reserved for future use) |
| 66063 | Missing cardIssueNumber field (reserved for future use) |
| 66064 | Missing cardCVV field |
| 66065 | Missing customerName field |
| 66066 | Missing customerAddress field |
| 66067 | Missing customerPostCode field |
| 66068 | Missing customerEmail field |
| 66069 | Missing customerPhone field (reserved for future use) |
| 66070 | Missing countyCode field |
| 66071 | Missing transactionUnique field (reserved for future use) |
| 66072 | Missing orderRef field (reserved for future use) |
| 66073 | Missing remoteAddress field (reserved for future use) |
| 66074 | Missing redirectURL field |
| 66075 | Missing callbackURL field (reserved for future use) |
| 66076 | Missing merchantData field (reserved for future use) |
| 66077 | Missing origin field (reserved for future use) |
| 66078 | Missing duplicateDelay field (reserved for future use) |
| 66079 | Missing itemQuantity field (reserved for future use) |
| 66080 | Missing itemDescription field (reserved for future use) |
| 66081 | Missing itemGrossValue field (reserved for future use) |
| 66082 | Missing taxValue field (reserved for future use) |
| 66083 | Missing discountValue field (reserved for future use) |
| 66084 | Missing taxDiscountDescription field (reserved for future use) |
| 66085 | Missing xref field (reserved for future use) |

| | |
|--------------|--|
| 66086 | Missing type field (reserved for future use) |
| 66087 | Reserved for future use |
| 66088 | Reserved for future use |
| 66089 | Missing transactionID field (reserved for future use) |
| 66090 | Missing threeDSRequired field (reserved for future use) |
| 66091 | Missing threeDSMD field (reserved for future use) |
| 66092 | Missing threeDSPaRes field |
| 66093 | Missing threeDSECI field |
| 66094 | Missing threeDSCAVV field |
| 66095 | Missing threeDSXID field |

| Invalid Request Field Error Codes: 66304 - 66559 | |
|--|---|
| Code | Description |
| 66304 | Invalid request |
| 66305 | Invalid merchantID field |
| 66306 | Reserved for future use. Refer to Pay Global if this error occurs |
| 66307 | Reserved for internal use. Refer to Pay Global if this error occurs |
| 66308 | Reserved for internal use. Refer to Pay Global if this error occurs |
| 66309 | Reserved for internal use. Refer to Pay Global if this error occurs |
| 66310 | Reserved for internal use. Refer to Pay Global if this error occurs |
| 66311 | Invalid action field |
| 66312 | Invalid amount field |
| 66313 | Invalid currencyCode field |
| 66314 | Invalid cardNumber field |

| | |
|--------------|--|
| 66315 | Invalid cardExpiryMonth field |
| 66316 | Invalid cardExpiryYear field |
| 66317 | Invalid cardStartMonth field |
| 66318 | Invalid cardStartYear field |
| 66319 | Invalid cardIssueNumber field |
| 66320 | Invalid cardCVV field |
| 66321 | Invalid customerName field |
| 66322 | Invalid customerAddress field |
| 66323 | Invalid customerPostCode field |
| 66324 | Invalid customerEmail field |
| 66325 | Invalid customerPhone field |
| 66326 | Invalid countyCode field |
| 66327 | Invalid transactionUnique field (reserved for future use) |
| 66328 | Invalid orderRef field (reserved for future use) |
| 66329 | Invalid remoteAddress field |
| 66330 | Invalid redirectURL field |
| 66331 | Invalid callbackURL field (reserved for future use) |
| 66332 | Invalid merchantData field (reserved for future use) |
| 66333 | Invalid origin field (reserved for future use) |
| 66334 | Invalid duplicateDelay field (reserved for future use) |
| 66335 | Invalid itemQuantity field |
| 66336 | Invalid itemDescription field |
| 66337 | Invalid itemGrossValue field |

| | |
|--------------|--|
| 66338 | Invalid taxValue field |
| 66339 | Invalid discountValue field |
| 66340 | Invalid taxDiscountDescription field (reserved for future use) |
| 66341 | Invalid xref field |
| 66342 | Invalid type field |
| 66343 | Reserved for future use |
| 66344 | Reserved for future use |
| 66345 | Invalid transactionID field |
| 66356 | Invalid threeDSRequired field |
| 66347 | Invalid threeDSMD field |
| 66348 | Invalid threeDSPaRes field |
| 66349 | Invalid threeDSECI field |
| 66350 | Invalid threeDSCAVV field |
| 66351 | Invalid threeDSXID field |
| 66416 | Invalid card expiry date. Must be a date sometime in the next 10 years |
| 66417 | Invalid card start date. Must be a date sometime in the last 10 years |
| 66418 | Invalid item count. Tried to supply more than 6 line item details |
| 66419 | Invalid item sequence. Out of sequence line item details |

A-2 Types of Card

The following is a list of card types which may be returned by the gateway.

| Card Code | Card Type |
|------------------|------------------------------------|
| AM | American Express |
| CF | Clydesdale Financial Services |
| DI | Diners Club |
| EL | Electron |
| JC | JCB |
| MA | International Maestro |
| MC | Mastercard |
| SO | Solo |
| ST | Style |
| SW | Domestic Maestro (Formerly Switch) |
| VC | Visa Credit |
| VD | Visa Debt |
| VP | Visa Purchasing |

A-3 AVS / CV2 Check Response

The AVS/CV2 Check Response Message field **avscv2ResponseMessage** is sent back in the raw form that is received from the acquiring bank and can contain the following values:

| Response | Description |
|--------------------------------------|--------------------------------------|
| ALL MATCH | AVS and CV2 match. |
| SECURITY CODE MATCH ONLY | CV2 match only. |
| ADDRESS MATCH ONLY | AVS match only. |
| NO DATA MATCHES | No matches for AVS and CV2. |
| DATA NOT CHECKED | Supplied data not checked. |
| SECURITY CHECKS NOT SUPPORTED | Card scheme does not support checks. |

The AVS/CV2 Response Code **avscv2ResponseCode** is made up of six characters and is sent back in the raw form that is received from the acquiring bank. The first 4 characters can be decoded as below, the remaining 2 characters are currently reserved for future use:

| Position 1 Value | Description |
|------------------|--------------------------------------|
| 0 | No additional information available. |
| 1 | CV2 not checked. |
| 2 | CV2 matched. |
| 4 | CV2 not matched. |
| 8 | Reserved. |

| Position 2 Value | Description |
|------------------|--------------------------------------|
| 0 | No additional information available. |
| 1 | Postcode not checked. |
| 2 | Postcode matched. |
| 4 | Postcode not matched. |
| 8 | Postcode partially matched. |

| Position 3 Value | Description |
|------------------|------------------------------------|
| 0 | No additional Information. |
| 1 | Address numeric not checked. |
| 2 | Address numeric matched. |
| 4 | Address numeric not matched. |
| 8 | Address numeric partially matched. |

| Position 4 Value | Description |
|------------------|-------------------------------------|
| 0 | Authorising entity not known. |
| 1 | Authorising entity – merchant host. |
| 2 | Authorising entity – acquirer host. |
| 4 | Authorising entity – card scheme. |
| 8 | Authorising entity – issuer. |

A-4 3D Secure Enrolment/Authentication Codes

The 3D Secure enrolment check field **threeDSEnrolled** can return the following values:

Y - Enrolled: The card is enrolled in the 3D Secure program and the payer is eligible for authentication processing.

N - Not Enrolled: The checked card is eligible for the 3D Secure (it is within the card association's range of accepted cards) but the card issuing bank does not participate in the 3D Secure program. If the cardholder later disputes the purchase, the issuer may not submit a chargeback to the merchant.

U - Unable To Verify Enrolment: The card associations were unable to verify if the cardholder is registered. As the card is ineligible for 3D Secure, merchants can choose to accept the card nonetheless and precede the purchase as non-authenticated and submits authorization with ECI 7. The Acquirer/Merchant retains liability if the cardholder later disputes making the purchase.

E - Error Verify Enrolment: The Pay Global system encountered an error. This card is flagged as 3D Secure ineligible. The card can be accepted for payment, yet the merchant may not claim a liability shift on this transaction in case of a dispute with the cardholder.

The 3D Secure authentication check field **threeDSAAuthenticated** can return the following values:

Y - Authentication Successful: The Issuer has authenticated the cardholder by verifying the identity information or password. A CAVV and an ECI of 5 is returned. The card is accepted for payment.

N - Not Authenticated: The cardholder did not complete authentication and the card should not be accepted for payment.

U - Unable To Authenticate: The authentication was not completed due to technical issues or another problem. A transmission error prevented authentication from completing. The card should be accepted for payment but no authentication data will be passed on to authorization processing and no liability shift will occur.

A - Attempted Authentication: A proof of authentication attempt was generated. The cardholder is not participating, but the attempt to authenticate was recorded. The card should be accepted for payment and authentication information passed to authorization processing.

E - Error Checking Authentication: The Pay Global system encountered an error. The card should be accepted for payment but no authentication information will be passed to authorization processing and no liability shift will occur.

A-5 Example Code

The following example shows how to generate a button URL and format it as an HTML link:

```
<?php

function createSignature(array $data, $key, $algo = null) {

    if ($algo === null) {
        $algo = 'SHA512';
    }

    ksort($data);

    // Create the URL encoded signature string
    $ret = http_build_query($data, '', '&');

    // Normalise all line endings (CRNL|NL|CR) to just NL
    $ret = preg_replace('/%0D%0A|%0A%0D|%0A%0D/i', '%0A',
    $ret);

    // Hash the signature string and the key together
    $ret = hash($algo, $ret . $key);

    // Prefix the algorithm if not the default
    if ($algo !== 'SHA512') {
        $ret = '{' . $algo . '}' . $ret;
    }

    return $ret;
}

$gateway_url = 'https://gateway.payglobal.org/button/';
$signature_key = 'Drawn34Salmon43Speed';

$fields = array(
    'merchantID'      => 101661,
    'amount'          => 101,
    'action'           => 'SALE',
    'type'             => 1,
    'countryCode'      => 826,
    'currencyCode'     => 826,
    'transactionUnique' => uniqid(),
    'orderRef'         => 'Button Test',
    'redirectURL'      => ($_SERVER['HTTPS'] == 'on' ? 'https' :
'http') . '://' . $_SERVER['HTTP_HOST'] . $_SERVER['REQUEST_URI'],
    'merchantData'     => 'CS-PayByLink',
```

```
);

$fields['signature'] = createSignature($fields, $signature_key);

//Convert array to Query String
$link = http_build_query($fields);

//Optionally compress the string to make the link smaller
$link = gzdeflate($link, 9);

//Base64 encode the string and remove any padding or invalid
//URL characters including =,+/,
$link = strtr(trim(base64_encode($link), '='), '+/', '-_');

$link = $gateway_url . $link;

echo "<p><a href='{ $link }'>Pay Now</a></p>";
```

When the user clicks the 'Pay Now' button they will be taken to the Pay Global integration page via the button URL that has been created. Here, the user will be given the option to enter their card details and billing address. If additional customer or transaction information is supplied in the button creation process, then the values sent will be used to populate the initial values of the controls on the Pay Global hosted form. When the customer submits this hosted form, the transaction will be attempted and the results will be sent as a HTTP POST request to the specified **redirectURL**. An example is given below:

/myshop/ordercomplete.php:

```
if( $_POST['responseCode'] === "0" ) {

    echo "<p>Thank you for your payment</p>";

}else{

    echo "<p>Failed to take payment: " .
    htmlentities($_POST['responseMessage']) . "</p>";

}
```

A-6 Signing Your Request

A message can be signed by hashing the whole URL encoded Name=Value request string with a secret passphrase appended. This security passphrase can be configured on a per merchant account basis in the Merchant Management System (MMS).

Care must be taken to normalise any embedded line endings to just use a single New Line character (ascii character 10).

Various hashing algorithms are supported allowing you to choose the one most suitable for your integration language - SHA512 is the default and preferred. If you are using an algorithm other than SHA512 then the algorithm name should be pre-pended to the hash enclosed in braces.

The following algorithms are supported (ordered from most secure to least secure): SHA512, SHA256, SHA1, MD5, CRC32.

The hash must be sent in the signature field. This field must not be included in the message that is used to generate the hash.

Note: When a secret is configured for the merchant account then every message must be signed – failure to sign a message will cause it to be rejected due to a missing signature. The gateway will also sign any response and any details POSTed to any Callback URL using the same signature allowing the merchant to verify that any response has not been tampered with.