secure//trading
A UC GROUP COMPANY

Payment Pages Guide

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About this Document

This document has been designed to provide the reader with a clear understanding of the STPP Payment Pages system.

Conventions

Terminology conventions on “merchant” and “customer”

The supplier-customer chain within Secure Trading’s systems has two levels of customer, Secure Trading therefore make a clear definition between the two:

- Merchant relates to a customer of Secure Trading that uses the system to process requests, such as those for online payments.
- Customer relates to a customer of the merchant.

Note on bulleting conventions

There are two forms of bulleting conventions included within this document.

- Notes with useful but not Mandatory information for your consideration, these are displayed using the following:

> **Please note** that…

- Notes that are requirements and need to be followed in order to prevent future issues with your code are indicated with an exclamation mark and are outlined in bold.

> **It is imperative that…**

System Time

Secure Trading’s System Time is in Greenwich Mean Time (GMT).

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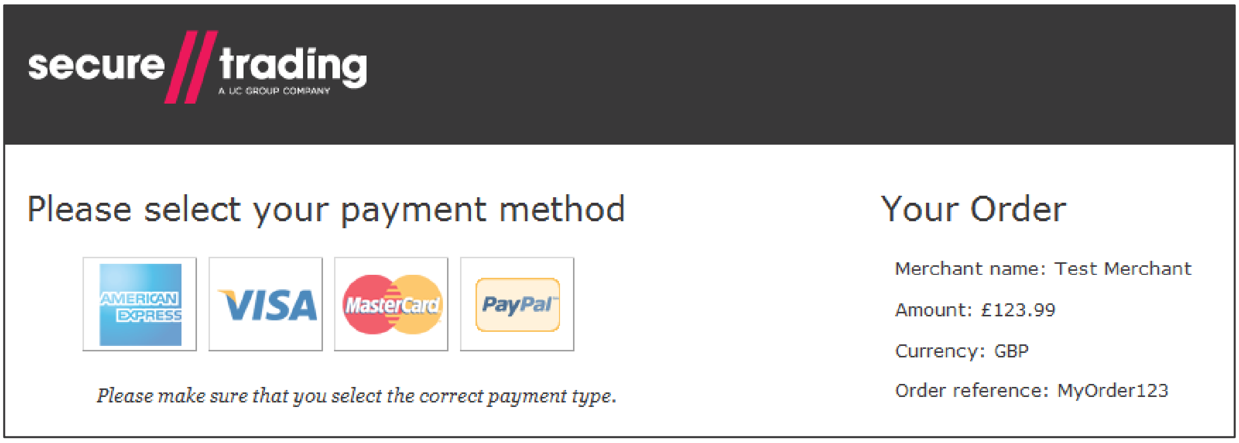
1 Introduction

1.1 What are Payment Pages?

Secure Trading Payment Pages are for merchants who want a simple and easily implemented way of adding e-payment capability to their online commerce systems. Secure Trading Payment Pages works with custom-designed ecommerce systems as well as with many commercially available shopping cart applications.

Using Secure Trading Payment Pages you can:

- Process payments on our own dedicated HTTPS servers (that use the SSL protocol) that allow you to process secure and reliable transactions.
- Process payments without storing credit card details on your server.
- Customise the Payment Pages with custom CSS to maintain the look and feel of your online store.
- Accept a large variety of currencies.
- Track all transactions using our online transaction management system, MyST.



Please select your payment method

Please make sure that you select the correct payment type.

Your Order

Merchant name: Test Merchant

Amount: £123.99

Currency: GBP

Order reference: MyOrder123

Figure 1 - Appearance of Payment Pages

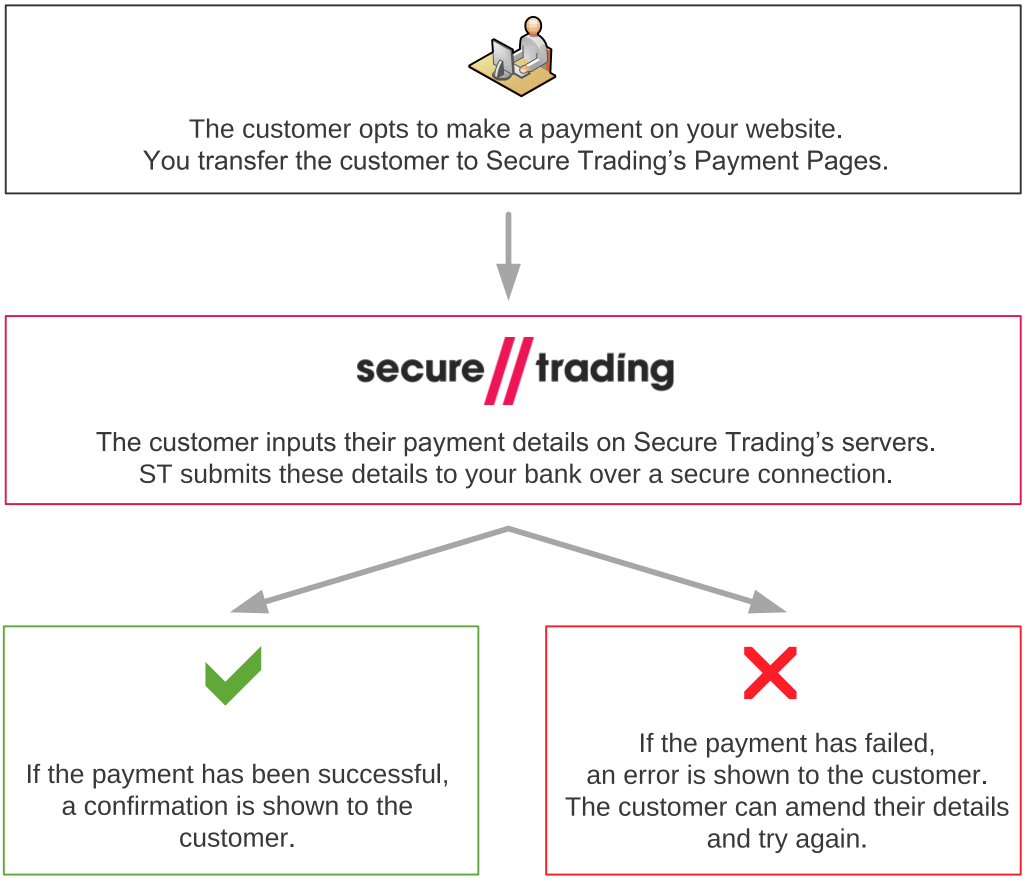
As a Payment Service Provider (PSP), Secure Trading is required to undergo Payment Card Industry Data Security Standards (PCI DSS) accreditation. If you were to process the customer's payment details on your own server, you would also be required to undergo this accreditation process. If you do not wish to undergo full PCI accreditation, using Payment Pages is the solution for your system.

⚠ **If you are processing Mail Order/Telephone Order payments, you still need to undergo accreditation, even when using Payment Pages.**

ⓘ For information on PCI accreditation, please contact your acquiring bank.

1.2 Payment Pages Summary

The following diagram outlines the steps involved in processing payments using Payment Pages:



The customer opts to make a payment on your website.
You transfer the customer to Secure Trading's Payment Pages.

The customer inputs their payment details on Secure Trading's servers.
ST submits these details to your bank over a secure connection.

If the payment has been successful, a confirmation is shown to the customer.

If the payment has failed, an error is shown to the customer. The customer can amend their details and try again.

1.3 Parties Participating

There are a number of different parties that are included when performing transactions through Secure Trading Payment Pages. These parties are detailed below:

- **The Customer** - The purchaser of goods or services. They will log on to the merchant's website and process an order. They will then process a payment using their own details, usually by using their credit or debit card.

- **The Merchant** – Seller of goods or services. They require their own website and will transfer the customer to Secure Trading's servers in order to complete payment. The merchant will be exchanging goods or services online for the customer to purchase using Payment Pages.

- **Secure Trading** – Facilitates the transaction. The customer will be transferred to Secure Trading's secure servers where they will input their payment details. Secure Trading validate these submitted details, and then connect securely to the acquiring bank in order to perform authorisation.

- **The Acquiring Bank** – Sends the transaction to the customer's card issuer for authorisation. They also send the address information to a separate supplier to check they match the address registered for the card.

- **The Customer's Card Issuer** – As mentioned above, the card issuer performs the authorisation by running checks, such as if the card inputted by the customer has not been reported stolen and that card has available funds. It is at this stage that the security code and address checks are also performed on the submitted information.

  If the transaction is performed using 3-D Secure, then the customer is transferred to their card issuer's server where they will enter their password for online transactions.

- **Additional 3rd Parties** – If enabled on the merchant's account, the process can include additional 3rd parties, such as PayPal. For transactions of this nature, Secure Trading performs all the integration with the 3rd Party. The merchant's part in the process will not alter. They transfer the customer to Secure Trading's secure servers as with any other transaction, and the remainder of the transaction will be handled between Secure Trading and the 3rd Party.

1.4 Account Configuration

There are a few steps you will need to have considered to begin processing payments through Secure Trading's Payment Pages.

1.4.1 Internet Merchant Account

An Internet Merchant Account is required if you would like to process online e-commerce transactions. Secure Trading have relationships in place with certain acquirers and will therefore be able to assist you. For contact details of our sales team, please refer to section **13.2 Secure Trading Sales** on **page 70**.

1.4.2 Secure Trading Account

In order to process transactions through Secure Trading's servers, you will need to have a Secure Trading account and a Secure Trading site reference. You are provided with a Secure Trading site reference when you sign up and this is used to uniquely identify your account when you send any data to Secure Trading. It should also be quoted with any correspondence with Secure Trading.

For more information on becoming a Secure Trading merchant, please contact our Sales team (see section **13.2 Secure Trading Sales** on **page 70**). If you believe you already have a Secure Trading account, but do not know your site reference, please contact our support team (see section **13.1 Secure Trading Support** on **page 70**).

After you have signed up, you will possess a "live" account and a "test" account. For the remainder of this document, we will assume that your test site reference is **test_site12345** and your live site reference is **site12346.**

1.4.3 Merchant's website

You will need your own website or web page in order to transfer the customer to Secure Trading's servers.

1.4.4 IP Ranges

You may need to open your firewall for Secure Trading's IP Ranges.
Current IP Ranges can be viewed at http://webapp.securetrading.net/ips.html

1.4.5 MyST

When you first sign up with Secure Trading you will be provided with a MyST username (email address) and password. MyST is a secure interface providing online real-time access to your payment history. The status of every transaction can be tracked, allowing your Secure Trading account to be managed more effectively. Secure Trading recommends regularly signing into MyST to ensure there are no issues with recent transactions processed on your account that require your attention.

You can sign in using the following URL: https://myst.securetrading.net/login

Alternatively, click the "**MYST LOGIN**" link, shown in the top right of the Secure Trading home page: http://www.securetrading.com

For information on how to use MyST, please refer to the **MyST User Guide**.

1.4.6 Notifications

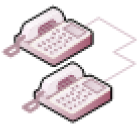
In addition to using MyST, Secure Trading recommends that all merchants using Secure Trading's Payment Pages solution configure notifications to be kept informed of transactions processed on their accounts. For more information, please refer to the Notifications documentation (see section **13.3 Useful Documents** on **page 70**).

2 Process Overview

2.1 Configure Your System to use Payment Pages

This section of the document provides a brief overview on setting up a payment page with Secure Trading. The stages described here are explained in more detail later on in the document.

2.1.1 Contact Secure Trading and Sign Up



The first step of the process is to contact Secure Trading and to sign up for a Secure Trading account. You will need to have a merchant account with an acquiring bank in order to process transactions online. Secure Trading can help with obtaining a merchant id if needed, as they have relationships in place with numerous acquirers.

To sign up with Secure Trading, contact our sales team (see section **13.2 Secure Trading Sales**).

2.1.2 Configure Your Website

Once you have set up an account with Secure Trading, you will be provided with two site references. A site reference for testing (e.g. “test_site12345”) and another for processing live transactions (e.g. “site12346”). The site references are used to uniquely identify your Secure Trading account in Secure Trading’s system.

In order to direct customers to your payment page, your webserver will need to submit a number of required fields in a HTTP POST to Secure Trading’s servers. Secure Trading recommend that you test your setup, prior to going live, by performing transactions using your test site reference.

For information on configuring your website, please refer to section **3 Posting Information**.

You can perform a test transaction using the test details provided in section **12 Testing**.

2.1.3 Going Live

Now you have successfully set up your website to perform a test transaction, and you are ready to begin processing live transactions, please send an email to support@securetrading.com to request to go live and you will receive a response when you can begin processing live payments.

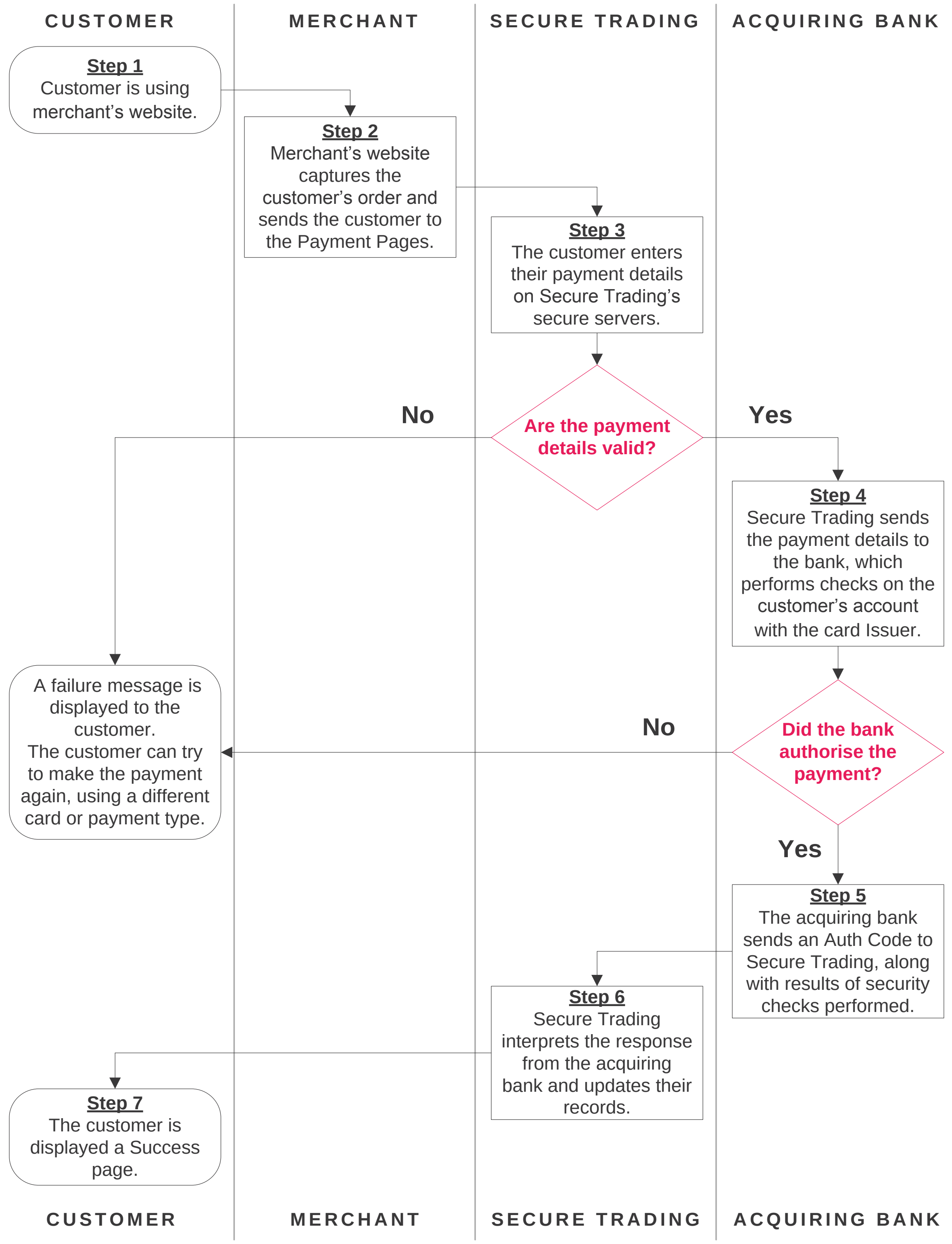
For transactions to your live site, you need to ensure requests are processed using the site reference of your live site in place of your test site reference.

For further information on switching to your live account, please refer to section **11 Going Live**.

If you require any assistance with going live, please contact Secure Trading support (see section **13.1 Secure Trading Support**).

2.2 Payment Pages Standard Authorisation

The purpose of the Payment Pages system is to accept a payment from a customer in a secure manner and to process it on your behalf. This section provides the reader with a detailed breakdown of the stages within a standard e-commerce authorisation using STPP Payment Pages.


CUSTOMER
MERCHANT
SECURE TRADING
ACQUIRING BANK
Step 1 Customer is using merchant's website.
Step 2 Merchant's website captures the customer's order and sends the customer to the Payment Pages.
Step 3 The customer enters their payment details on Secure Trading's secure servers.
Are the payment details valid?
No
Yes
Step 4 Secure Trading sends the payment details to the bank, which performs checks on the customer's account with the card Issuer.
A failure message is displayed to the customer. The customer can try to make the payment again, using a different card or payment type.
No
Did the bank authorise the payment?
Yes
Step 5 The acquiring bank sends an Auth Code to Secure Trading, along with results of security checks performed.
Step 6 Secure Trading interprets the response from the acquiring bank and updates their records.
Step 7 The customer is displayed a Success page.
CUSTOMER
MERCHANT
SECURE TRADING
ACQUIRING BANK

Steps 1-2: The merchant captures the customer's order

The first step of the process involves the customer logging on to the merchant's website. The website is designed to capture the customer's order, and has an option to pay via Secure Trading. At this point the merchant's website will need to submit details to Secure Trading's payment gateways via a HTTP/HTTPS POST. For information on the fields required, and optional fields that can also be submitted, please refer to section **4 Allowed Fields**.

Step 3: Customer enters their payment details on Secure Trading's servers

A payment page will be displayed, allowing the customer to enter their payment details on Secure Trading's servers. Once the customer has entered their payment details, Secure Trading will perform validation checks on the details supplied.

- If all validation checks pass, Secure Trading securely connects to the merchant's acquiring bank for authorisation.
- If the validation checks fail, the Payment Pages is redisplayed with an error message informing the customer their attempt failed. The customer can then amend their details and try again, or try a different payment method.

Step 4: Authorisation performed by acquiring bank and card issuer

The authorisation process is performed between the merchant's acquiring bank and the customer's card issuer. It is at this point that the AVS (Address Verification System), CVV2 (security code) checks and checks on availability of funds are performed.

> **Please note** that the nature of checks performed will depend on the payment types, card issuers, card issuer region and acquirers involved in the transaction.

Please refer to the **STPP AVS & CVV2** document for further information on address and security code checks.

Step 5: Result sent from acquiring bank to Secure Trading

The acquiring bank sends a response to Secure Trading indicating whether or not the transaction has been authorised. If the transaction has been authorised, then an authorisation code is returned to Secure Trading, along with the results of the address and security code checks.

> **Please note** that although a transaction has been authorised, it does not necessarily mean that the funds will have been transferred to your bank account immediately. For the majority of card issuers, the funds are reserved against the customer's account until the settlement procedure is performed. For more information on the settlement process, please refer to section **2.3 Settlement**.

Step 6: Secure Trading interprets response

Secure Trading interprets the response from the Acquiring Bank and updates their records with the result of the transaction.

Step 7: Customer is displayed a success page

Outcome of the payment is displayed to the customer on Secure Trading's server (default)

The response page that is displayed to the customer is dependent on whether the transaction is authorised or not:

- If the transaction is authorised, a success page hosted by Secure Trading is displayed.
- If the card issuer declines the transaction, the Payment Page is redisplayed to the customer with an error message. The customer can then amend their details and try again, or try a different payment method.

Redirect to Merchant's Website (optional)

As an alternative to displaying the success/failure pages on Secure Trading's servers, the merchant has the ability to perform redirect (HTTP 302) back to their site upon the completion of a customer's order.

The customer's browser is redirected to a URL on the merchant's server, which can include fields supported by Secure Trading from the processed transaction.

> **Please note** that when using the redirect, if the URL the customer is being returned to is not on HTTPS, the customer will receive a "You are about to leave a secure connection" message, after inputting their card details.

In order to set up a redirect, please see section titled **Payment Pages Redirects** within the MyST User Guide which provides detailed instructions on configuring redirects within MyST.

2.3 Settlement

> **Please note** that the procedure outlined in the section of the document applies to card-based payment methods. For further information on other payment types, please refer to additional Secure Trading documentation on our website, or contact your acquiring bank / payment provider.

Once a transaction has been authorised the funds are then reserved against the customer's account for up to seven days while awaiting settlement. The instruction to transfer the funds is scheduled daily when Secure Trading submits a batch of all transactions that are pending settlement to the merchant's bank. This process is called settlement and is outlined below.

> **Please note** that settlement can be deferred for certain transactions. You can request this (see section **4.6 Settlement Deferral**), or transactions may be deferred by Secure Trading's internal fraud system. You should therefore sign in to MyST on a regular basis, to check the status of your transactions. Please refer to the MyST User Guide for further information.

Step 1: Secure Trading submit settlement file to the Acquiring Bank

The initial phase of the settlement process occurs when Secure Trading submits a file to the merchant's acquiring bank. The file contains all transactions that are in status 'pending settlement', and this occurs daily.

Step 2: The funds are transferred to the Merchant's bank account

When the merchant's acquiring bank has received the settlement file from Secure Trading, the bank commences the process of physically settling the money into the merchant's nominated bank account. The time frame of this payment differs between banks, and is beyond Secure Trading's control.

> **The authorised funds are only reserved for up to seven days, after which if not claimed in the settlement process, they are released back onto the customer's card. If a transaction has been authorised, it is not guaranteed you will receive the funds. Therefore, it is important that you regularly log in to MyST to check the status of your payments on the Secure Trading System. Please refer to the MyST User Guide for further information.**

3 Posting Information

In order to transfer your customers to Secure Trading's Payment Pages, you will need to perform an HTTP or HTTPS POST request. Based on the information posted, the system will then interpret this information and display the appropriate page to the customer.

3.1 Configuring the HTTP POST

Once you have a Secure Trading account set up and are ready to begin testing, you will need to establish a way of transferring a customer from your site to Secure Trading. Two methods are outlined within this section.

Please note that for both examples outlined in this section, please submit your test site reference (e.g. **test_site12345**). When you go live, you will need to use your live site reference.

3.1.1 Method 1: Perform a POST (recommended)

It is possible to set up a POST to the Payment Page. This can be achieved by creating a form on your webserver that will submit the information. If you copy the below to an HTML file, and open that page in your web browser, you will be displayed a button that will POST the information to Secure Trading's servers when clicked.

```
<html>
<head>
</head>
<body>
<!--YOUR HTML-->
<form method="POST"
action="https://payments.securetrading.net/process/payments/choice">
<input type="hidden" name="sitereference" value="test_site12345">
<input type="hidden" name="currencyiso3a" value="USD">
<input type="hidden" name="mainamount" value="100.00">
<input type="hidden" name="version" value="1">
<input type="hidden" name="orderreference" value="myorder12345">
<input type="submit" value="Pay">
</form>
</body>
</html>
```

The above example includes the required fields that need to be included in the POST (highlighted above in **bold**). The optional field `orderreference` has also been included. All optional fields can be submitted in this way. For more information on these fields or the additional fields that can be included, please refer to section **4 Allowed Fields** on page **25**.

Please note that you can download **orderpage.html** from Secure Trading's website (http://www.securetrading.com/support/downloads-stpp.html), which is a form page you can use to perform a POST to Secure Trading.

Please note that the method above describes how to process an Authorisation Request through the Payment Pages. It is possible to perform additional request types, as described in section **6 Additional Request Types**.

3.1.2 Method 2: Link to Secure Trading

Alternatively, it is possible to link directly to your payment page from your website, by hosting a link which resembles the following:

> **You must <u>not</u> use this method when processing payments on your LIVE account, if submitting sensitive billing information (e.g. customer's billing address), as this could be intercepted by a third party.**
>
> **Secure Trading recommends using Method 1, outlined in section 3.1.1.**

```
https://payments.securetrading.net/process/payments/choice?sitereference=test_site12345&currencyiso3a=GBP&mainamount=100.00&version=1
```

The above example includes the required fields that need to be included in the link. For more information on these fields or the additional fields that can be included, please refer to section **4 Allowed Fields** on **page 25**.

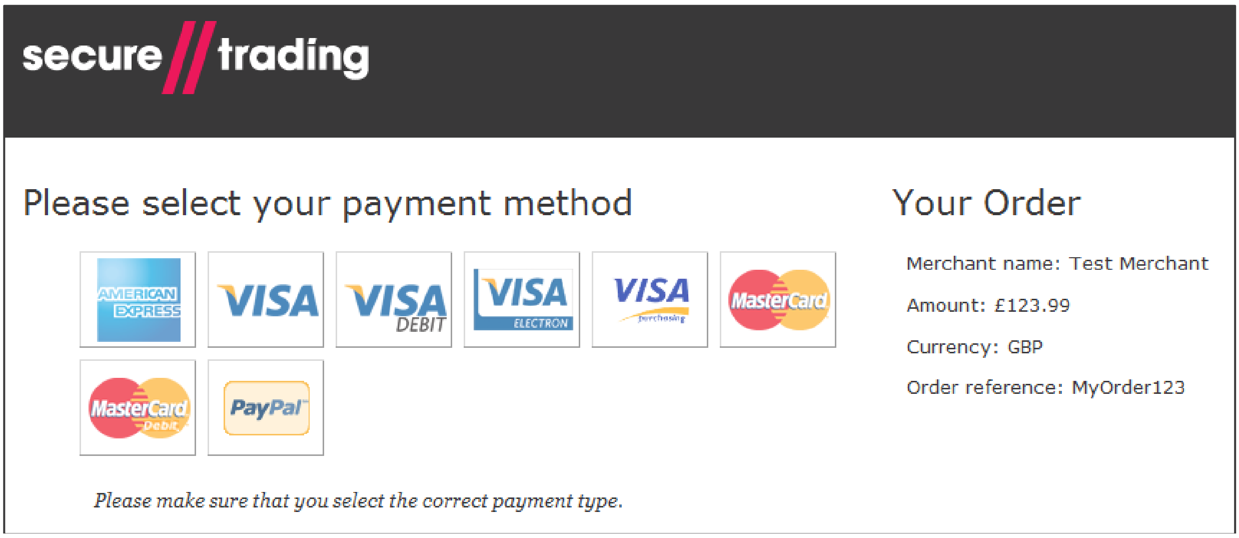
You may find this method easier for testing your implementation, as you can easily change the fields submitted by modifying the URL in the address bar of your browser. As an example of including additional fields, if you would also like to submit the **`orderreference`** within your URL, then you would include the following additional data (marked in **bold**) in your URL:

```
https://payments.securetrading.net/process/payments/choice?sitereference=test_site12345&currencyiso3a=GBP&mainamount=100.00&version=1&orderreference=myorder12345
```

The **`orderreference`** field is added to the end of the link with an ampersand ("&"), the field name, an equals sign ("=") and then the value (in this case "myorder12345"). This is how any permitted additional fields are added to a URL.

3.2 The result of the POST

Once you have successfully completed the setup of the POST, then either the link or the button when pressed should return a page similar to **Figure 2**.



Please select your payment method

Please make sure that you select the correct payment type.

Your Order

Merchant name: Test Merchant

Amount: £123.99

Currency: GBP

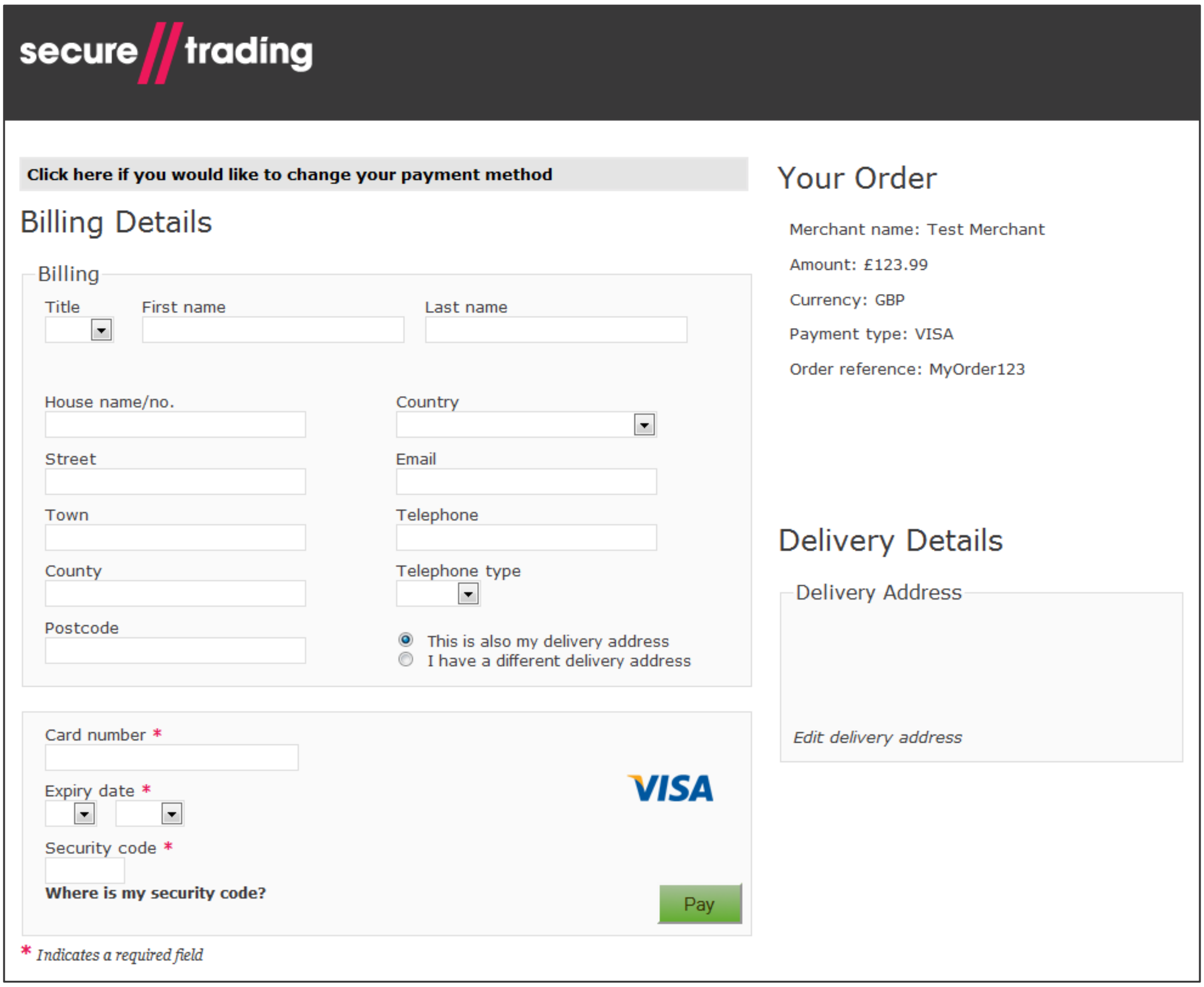
Order reference: MyOrder123

Figure 2 - Default payment choice page

Figure 2 is a screenshot of the default payment choice page with default styling. On this page, the customer will choose the payment type with which they would like to make the payment.

If the customer wishes to process a credit/debit card transaction, they will be redirected to a page similar in appearance to that shown in **Figure 3**.

> **Please note** the appearance of the billing details page will vary depending on payment type chosen. The billing details page for most major cards will have the layout shown in **Figure 3**.



Click here if you would like to change your payment method

Billing Details

Billing

Title

First name

Last name

House name/no.

Street

Town

County

Postcode

Country

Email

Telephone

Telephone type

● This is also my delivery address

○ I have a different delivery address

Card number *

Expiry date *

Security code *

Where is my security code?

* *Indicates a required field*

Your Order

Merchant name: Test Merchant

Amount: £123.99

Currency: GBP

Payment type: VISA

Order reference: MyOrder123

Delivery Details

Delivery Address

Edit delivery address

Figure 3 - Billing details page for a card

3.3 Verify Card Type

It is possible to configure the customer's ability to pay in a different payment types, after they have chosen their preferred payment type on the payment choice page (**Figure 2**).

Secure Trading offers three configurations to handle customers who select a card type on the payment choice page (**Figure 2**), but enter the details of a different card type on the details page (**Figure 3**). These configurations are outlined in detail, below. To change the verify card type solution to be used on your site, please contact Secure Trading support (see section **13.1 Secure Trading Support** on **page 70**).

Please note that by default, new sites are configured to use the "Auto Correct" configuration.

Although Secure Trading correctly identifies the majority of cards submitted to the Payment Pages, we may not always correctly assign the card type when our Bank Identification Number (BIN) records differ from the records maintained by our supported acquirers.

3.3.1 Auto Correct (Default) – Configuration "0"

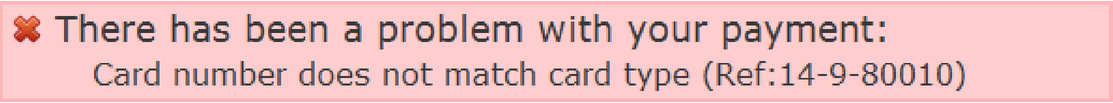
The payment is processed in the correct payment type, but the customer is not informed beforehand if the card details they have entered did not match the card type they selected on the payment choice page.

The customer can change to a different payment type after they have selected one from the payment choice screen by selecting a new payment type from the Change Payment Options at the top of the billing details page (see section **3.4 Change Payment Options** on **page 20**).

3.3.2 Fail if PAN doesn't match – Configuration "1"

This configuration prevents a customer from changing the payment type they are paying with after they have reached the billing details page. This is designed for merchants who have implemented their own hosted payment choice page, allowing customers to select a payment type before inputting their payment details on Secure Trading's hosted billing details page (as shown in **Figure 3**).

If the customer enters card details that do not match the card type, and attempt to process a payment, the payment will not be processed and a red warning message is shown at the top of the page (**Figure 4**). They cannot proceed with the payment until they enter payment details for the pre-specified payment type.



✖ There has been a problem with your payment:
Card number does not match card type (Ref:14-9-80010)

Figure 4 - Payment details entered does not match pre-specified payment type (Error)

3.3.2.1 Posting directly to the billing details page

When using verify card type, you may wish to bypass the payment choice page by redirecting the user directly to the billing details page with a pre-defined payment type. This section outlines how to perform this operation.

To post directly to Secure Trading's hosted billing details page (as shown in **Figure 3**), follow the steps outlined in section **3.1 Configuring the HTTP POST** on **page 13**, substituting the URL with "https://payments.securetrading.net/process/payments/details", and including the additional field **`paymenttypedescription`**, which has the payment type the customer is using to make the payment. Examples can be found, below.

> Using verify card type configuration "1" ensures the customer will not be able to pay in any other payment type other than the one specified in the POST.

Example HTML to perform a POST to Secure Trading billing details page

Differences from the POST to Secure Trading's hosted payment choice page are highlighted in **bold**:

```
<html>
<head>
</head>
<body>
<!--YOUR HTML-->
<form method="POST"
action="https://payments.securetrading.net/process/payments/details">
<input type="hidden" name="sitereference" value="test_site12345">
<input type="hidden" name="currencyiso3a" value="USD">
<input type="hidden" name="mainamount" value="100.00">
<input type="hidden" name="version" value="1">
<input type="hidden" name="paymenttypedescription" value="VISA">
<input type="submit" value="Pay">
</form>
</body>
</html>
```

Example of link to Secure Trading billing details page

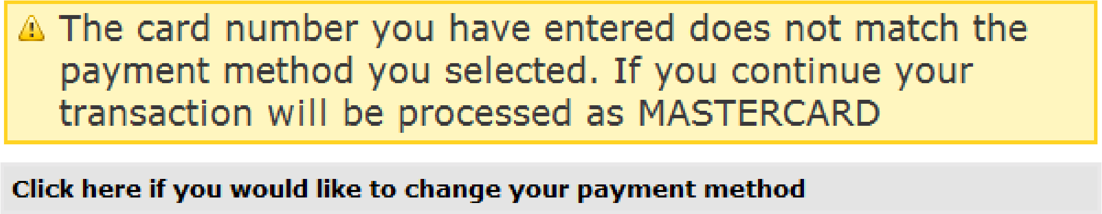
Differences from the URL to Secure Trading's hosted payment choice page are highlighted in **bold**:

```
https://payments.securetrading.net/process/payments/details?sitereference=test_site12345&currencyiso3a=USD&mainamount=100.00&version=1&paymenttypedescription=VISA
```

3.3.3 Payment Pages redisplay choice if PAN doesn’t match – Configuration “2”

The customer is shown a yellow warning at the top of the page (**Figure 5**), if the card details they have entered did not match the card type they selected on the payment choice page.

The customer needs to click “Pay” again in order to make the payment with the card type associated with the previously submitted details. They can amend their address and billing details before paying, or opt to pay using a different payment type by choosing an alternative from the Change Payment Options at the top of the page (see section **3.4 Change Payment Options** on **page 20**).



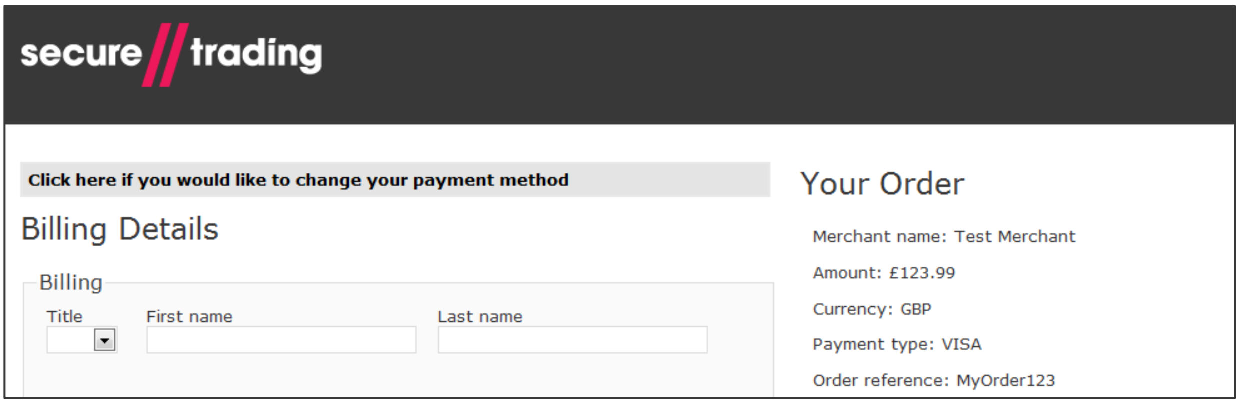
⚠ The card number you have entered does not match the payment method you selected. If you continue your transaction will be processed as MASTERCARD

Figure 5 - Payment details entered does not match pre-specified payment type (Warning)

3.4 Change Payment Options

For sites configured to use verify card type configurations “0” and “2” (see sections **3.3.1** and **3.3.3**, respectively), customers will always be shown Change Payment Options along the top of the billing details page (as shown in **Figure 6**).

Please note if your site is only configured to accept payments in one payment type, the Change Payment Options will not be shown.



Click here if you would like to change your payment method

Billing Details

Billing

Title | First name | Last name

Your Order

Merchant name: Test Merchant

Amount: £123.99

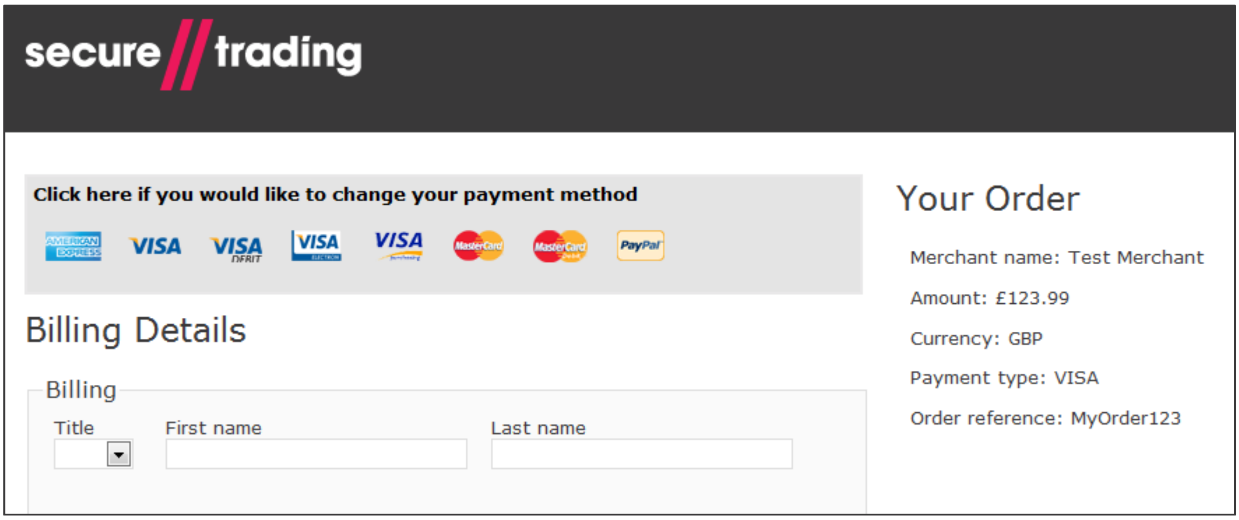
Currency: GBP

Payment type: VISA

Order reference: MyOrder123

Figure 6 – Change Payment Options as seen on billing details page

When the customer clicks this grey bar, they are shown all payment types configured on your account for the submitted currency (as shown in **Figure 7**), from which a new payment type can be chosen to process the payment.



Click here if you would like to change your payment method

Billing Details

Billing

Title | First name | Last name

Your Order

Merchant name: Test Merchant

Amount: £123.99

Currency: GBP

Payment type: VISA

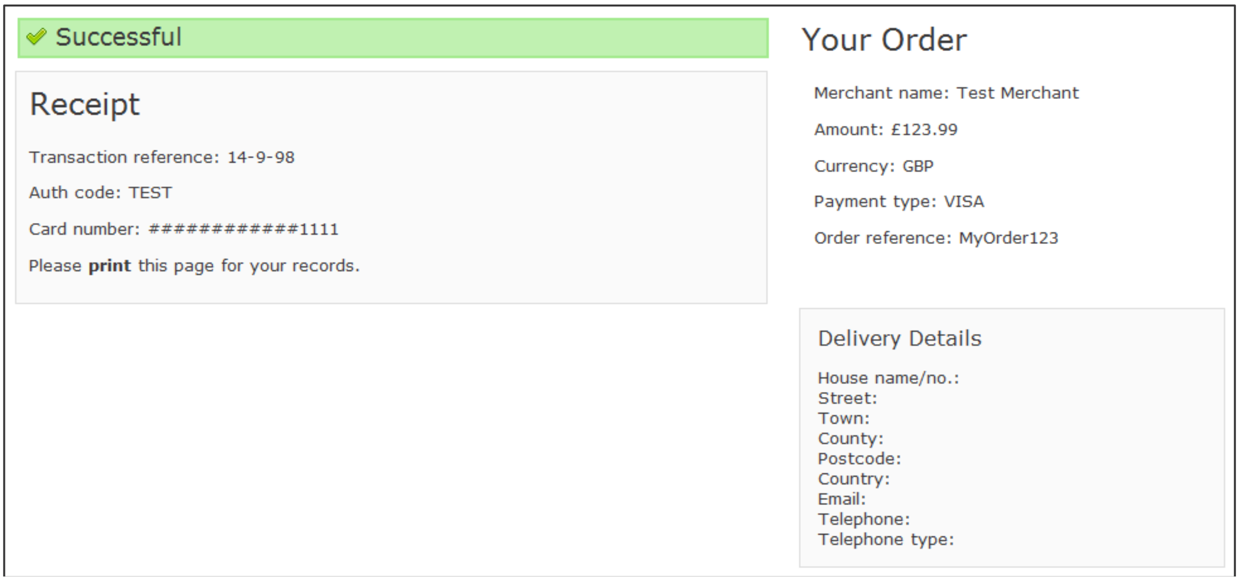
Order reference: MyOrder123

Figure 7 – Change Payment Options after they are clicked

Please note that sites using verify card type configuration “1” will **never** show the Change Payment Options, even if the customer enters invalid payment details, or the payment is otherwise unsuccessful. This means that once the customer is viewing the billing details page, they cannot change the payment type they are paying in.

3.5 Success Page

Following a successful authorisation, the customer will be shown a success page (as shown in **Figure 8**). This page contains information about the processed authorisation that is useful for the customer to take note of for future reference.



✓ Successful

Receipt

Transaction reference: 14-9-98

Auth code: TEST

Card number: ############1111

Please **print** this page for your records.

Your Order

Merchant name: Test Merchant

Amount: £123.99

Currency: GBP

Payment type: VISA

Order reference: MyOrder123

Delivery Details

House name/no.:
Street:
Town:
County:
Postcode:
Country:
Email:
Telephone:
Telephone type:

Figure 8 - Success page for a card

Secure Trading recommends emailing these details to the customer following authorisation. Information on configuring email notifications for your account can be found in the Notifications section of the **STPP MyST User Guide** (please refer to section **13.1 Secure Trading** Support on **page 70**).

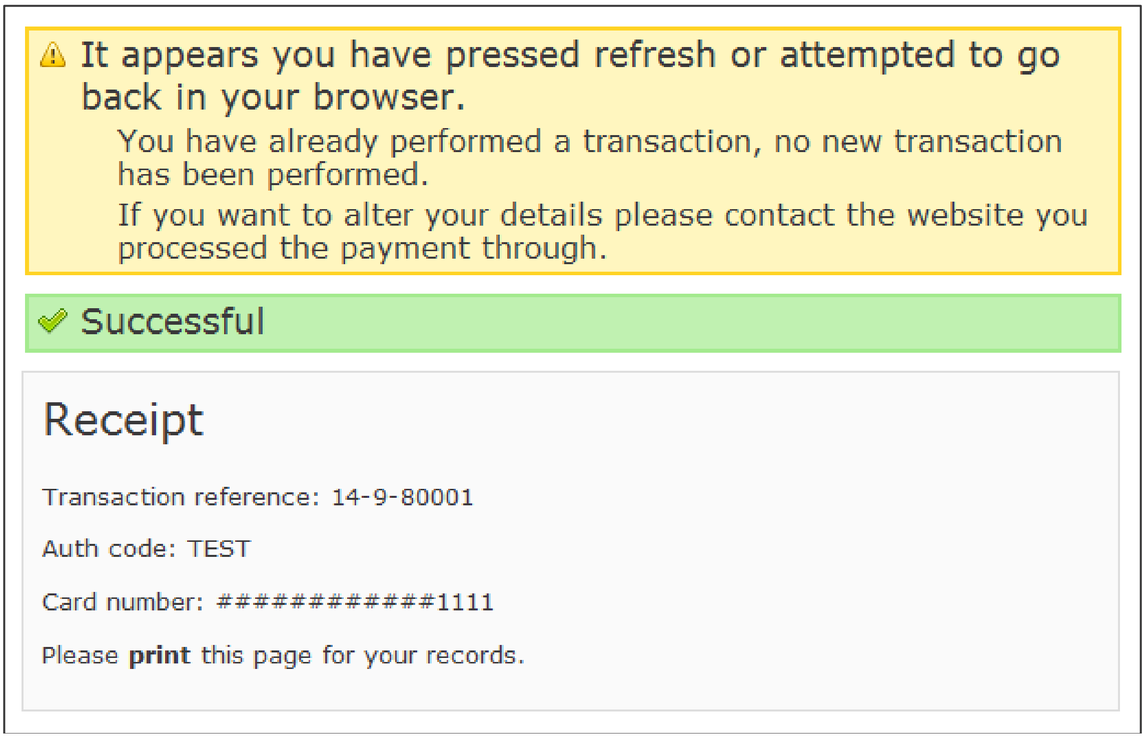
3.5.1 Refresh warning

After a successful authorisation request, by default the customer is shown a success page with a unique reference number for the request.

If the customer navigates back to the billing details or payment choice pages using the navigation buttons in their browser and attempts to make another payment, they will be redirected to the same success page (with the same reference number as before).

A warning will be displayed at the top of the page (as shown in **Figure 9**) to remind the customer a payment has already been processed.

This is to assist in preventing duplicate authorisation requests from being processed accidentally.



⚠ It appears you have pressed refresh or attempted to go back in your browser.

You have already performed a transaction, no new transaction has been performed.

If you want to alter your details please contact the website you processed the payment through.

✓ Successful

Receipt

Transaction reference: 14-9-80001

Auth code: TEST

Card number: ############1111

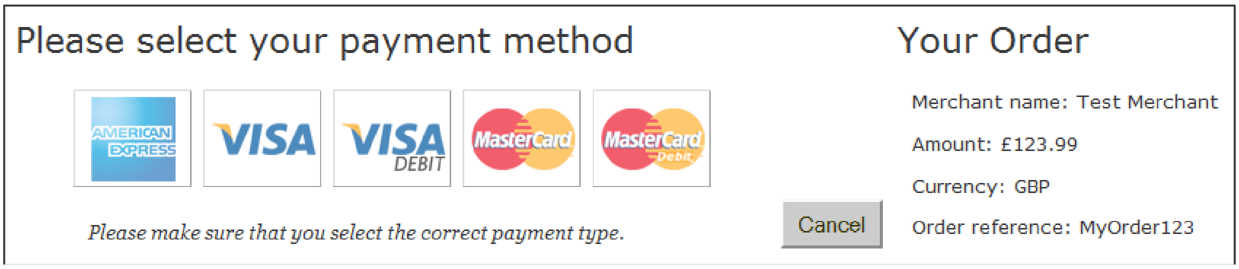
Please **print** this page for your records.

Figure 9 - Refresh warning on success page

3.6 “Cancel” and “Continue shopping” buttons

3.6.1 “Cancel” buttons

Secure Trading Payment Pages can be configured to show “**Cancel**” buttons on the payment choice page and/or the billing details page. When clicked, the customer is redirected to a URL of your choosing.



Please select your payment method

Please make sure that you select the correct payment type.

Your Order

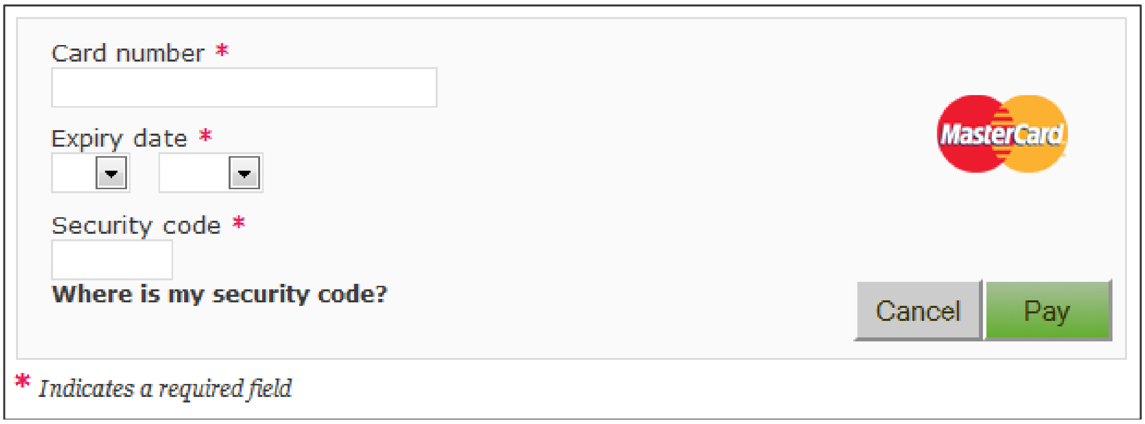
Merchant name: Test Merchant

Amount: £123.99

Currency: GBP

Order reference: MyOrder123

Figure 10 - Payment choice page configured to show “Cancel” button



Card number *

Expiry date *

Security code *

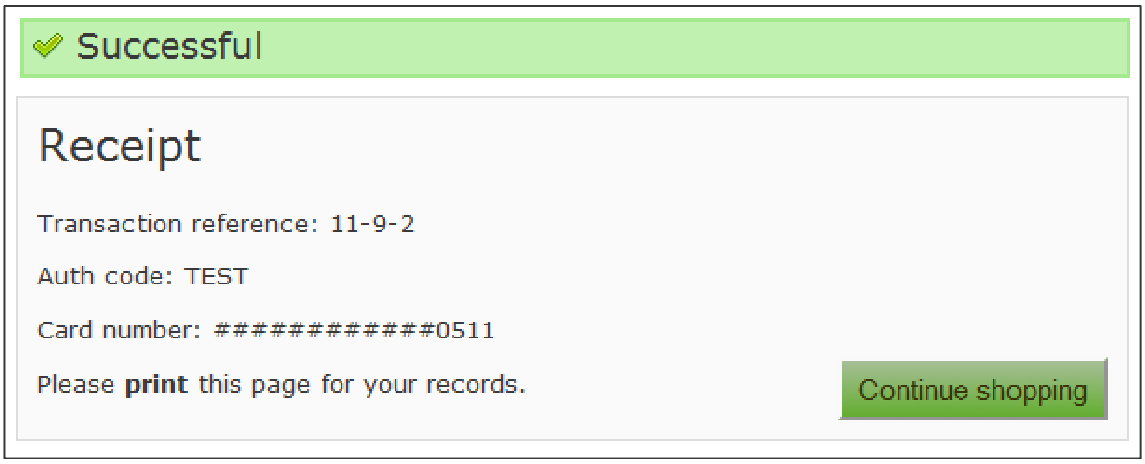
Where is my security code?

** Indicates a required field*

Figure 11 - Billing details page configured to show “Cancel” button

3.6.2 “Continue shopping” button

Secure Trading Payment Pages can be configured to show a “**Continue shopping**” button on the success page, following a successful authorisation request. When clicked, the customer is redirected to a URL of your choosing.



✓ Successful

Receipt

Transaction reference: 11-9-2

Auth code: TEST

Card number: ############0511

Please **print** this page for your records.

Figure 12 - Success page configured to show "Continue shopping" button

3.6.3 Configuration

To set up these buttons on Payment Pages, please contact Secure Trading support (refer to section **13.1 Secure Trading Support** on **page 70**). Please inform support of the required URL(s) and buttons required for your solution.

3.7 Testing

You can test the different payment configurations through your Payment Pages using the testing details found in section **12 Testing** on **page 67** of this document. Secure Trading recommends that you test your system thoroughly before processing real transactions through your live account.

4 Allowed Fields

The examples provided in previous sections of the document focus on the fields required by Secure Trading. Secure Trading recommends that you submit as much information as possible with your transactions, as this can help you gain more information about a customer that can be used to tackle fraud. This section of the document lists both the required and the additional field names that can be included within the POST submitted from your website to Secure Trading, and the benefits of including this information.

⚠ **It is important that the field names you post match those within the following tables, as only these fields are recognised by Secure Trading's servers. The field names are case sensitive.**

ⓘ **Please note** that the system does not support multiple fields with the same name, unless explicitly stated.

4.1 Required Fields

The table below includes the required field names that need to be passed through to Secure Trading in order to display your payment page.

Field name	Details
`sitereference`	The unique Secure Trading site reference that you receive when you sign up.
`currencyiso3a`	The currency that the transaction will be processed in. There is a list of available currencies on our website: http://webapp.securetrading.net/currencycodes.html
`mainamount`	The amount of the transaction should be in main units, with no commas, so £1000 would be 1000.00 Currencies such as Japanese Yen which do not require a decimal place can be submitted without. So 1000 Yen would be 1000.
`version`	This value will be set to 1.

4.1.1 VISA Additional Authorisation Data Merchant Category Code (MCC) 6012

VISA UK has mandated that UK merchants with a Merchant Category Code (MCC) of 6012 are required to send the customer's date of birth, account type, account / card number, last name and postcode, as outlined below. The data must be provided where available.

Field name	Details
customerdob	The account holder's date of birth. Must be in the format YYYY-MM-DD.
customeraccountnumbertype	Either "CARD" or "ACCOUNT".
customeraccountnumber	If account number type is "ACCOUNT", the account holder's account number. (e.g. "12345ABCDZ") If account number type is "CARD", the account holder's card number. (e.g. "4111111111111111")
customerlastname	The account holder's last name.
customerpostcode	The customer's postcode.
customercountryiso2a	The Country for the Customer's additional/delivery address. This will need to be in ISO2A format. For a list of Country Codes, please see: http://webapp.securetrading.net/countrycodes.html

Your Merchant Category Code (MCC) is a four-digit number assigned to you by your acquirer. It is used to classify the business by the type of products or services it provides. If you are unsure of the value of your merchant category code, please contact Secure Trading Support (section **13.1**).

4.2 Address Verification System (AVS)

The Address Verification System provides a further level of security to a transaction as it allows you to carry out checks regarding the validity of the address information supplied by the customer in relation to the card used.

4.2.1 What is Address Verification?

A customer's billing address is checked against the address that the card issuer holds for that card. Your bank will indicate whether there is a match between the entered address and the card address on record.

When obtaining an authorisation for a transaction, Secure Trading will pass the customer's address (if provided) to the acquiring bank along with the details required for authorisation.

4.2.2 Availability

The availability of the Address Verification System is dependent on the acquiring bank and card issuer, although it should be noted that most cards support this functionality.

The ability to conduct address checks is dependent on the location of your acquiring bank in relation to the location of the issuing bank of the card being presented. Most acquirers do support the process but only on locally issued cards. All UK cards and a number of US cards are address checked by all UK acquirers. Please contact Secure Trading for further information on the supported acquirers and card types (see section **13.1 Secure Trading Support** on **page 70**). Please refer to the **STPP AVS & CVV2** document (see section **13.3 Useful Documents** on **page 70**) for further information on AVS.

4.2.3 Address Field Names

In order to perform Address Verification on a card, you will need to include the address details within your POST.

Please note that in order for the AVS checks to be performed, it is the **billing** address details that need to be included.

The table below includes the various field names that you can pass to Secure Trading's system in order for the address details to be checked.

Field name	Details
`billingpremise`	The house number or first line of the Customer's Billing Address.
`billingstreet`	The street entered for the Customer's Billing Address
`billingtown`	The town entered for the Customer's Billing Address.
`billingcounty`	The county entered for the Customer's Billing Address.
`billingpostcode`	The postcode entered for the Customer's Billing Address.

4.3 Billing Fields

You may also submit the following billing fields through Secure Trading's systems.

Field name	Details
`billingprefixname`	This will be the Customer's prefix. The options available are Mr, Mrs, Miss, Dr, Ms, Prof and Rev.
`billingfirstname`	The Customer's first name.
`billinglastname`	The Customer's last name.
`billingcountryiso2a`	The Customer's country for their billing address. This will need to be in iso2a format. For a list of countries, please see: http://webapp.securetrading.net/countrycodes.html
`billingemail`	The Customer's e-mail address. This can then be used for correspondence with the customer.
`billingtelephone`	The Customer's telephone number. Requires `billingtelephonetype` to be specified.

`billingtelephonetype`	The type of telephone number inputted. The options available are:
	H = Home
	M = Mobile
	W = Work
	Required if `billingtelephone` is entered.

4.4 Customer Fields

You may also submit details with regards to an additional address for the customer. This usually relates to the delivery address. These fields are included below.

Field name	Details
customerpremise	The house number or first line of the Customer's additional/delivery address.
customerstreet	The street entered for the Customer's additional/delivery address
customertown	The town entered for the Customer's additional/delivery address.
customercounty	The county entered for the Customer's additional/delivery address.
customerpostcode	The postcode entered for the Customer's additional/delivery address.
customertelephone	The Customer's telephone number associated with their additional/delivery address. Requires customertelephonetype if entered.

customertelephonetype	The type of telephone number entered. The options available are:
	// H = Home
	// M = Mobile
	// W = Work
	Only required if customertelephone is entered.

customercountryiso2a	The Country for the Customer's additional/delivery address. This will need to be in ISO2A format. For a list of Country Codes, please see: http://webapp.securetrading.net/countrycodes.html
customeremail	The Customer's e-mail address associated with their additional/delivery details. This can then be used for correspondence with the Customer.

4.5 Locale

For customers from the United States, Secure Trading provides an option to use US English for names of fields displayed on the Payment Pages (this does not affect the name of fields processed by STPP):

Field name	Details

locale	By default, Payment Pages will use UK English, unless otherwise specified, using the values below:
	// en_US = US English for field names. (e.g. postcode becomes zipcode and county becomes state).
	// en_GB = UK English for field names (as default).

4.6 Settlement Deferral

It is possible to defer settlement on transactions by submitting **settleduedate** through the Payment Pages system. This field is detailed below (for more information on settlement, please see section **2.3**):

Field name	Details
settleduedate	The date the Merchant wishes for the transaction to settle. This needs to be in the format YYYY-MM-DD.

ℹ **Please note** that the due date can be up to a maximum of 7 days after the authorisation date.

4.7 Settlement Status

You can set the status of a transaction by submitting the **settlestatus** field to Secure Trading's system:

Field name	Details
settlestatus	This value relates to the status of the transaction. The possible vales are: 0 – Pending Settlement. 1 – Pending Settlement, manually overridden. 2 – Suspended. 100 – Settled (This is only currently available for certain acquirers. For more information, contact Secure Trading Support; please see section **13.1 Secure Trading** Support on **page 70**). The default value is 0.

4.8 Order Reference

You can pass your own reference for a transaction, to be stored in the database.

Field name	Details
orderreference	Your own reference for the transaction. This can be useful when matching transactions to orders within your system.

4.9 Charset

In order for data to be transmitted, the customer's browser encodes it using a character encoding. Secure Trading's servers need to know this encoding (or charset) in order to correctly decode the data. Many browsers do not provide this information, in which case Secure Trading will assume the character encoding is ISO-8859-1. This is compatible with all browsers but can result in some characters (in particular non-western characters) being interpreted incorrectly.

You can tell the browser to specify the correct charset by including a hidden field "**`_charset_`**" within your HTML form. Browsers will automatically fill the value of this field with the charset they are using, so there is no need to specify a value for this field, for example:

```
<INPUT TYPE=hidden NAME="_charset_" />
```

Please note that you can find more information on charset, by referring to http://en.wikipedia.org/wiki/Character_encoding

4.10 Custom Fields

Secure Trading allows you to pass custom fields through their system.

The field names do not need to be a specific case and will not be saved in the database.

You can include these custom fields within the HTTP POST to Secure Trading's Payment Pages. No customisation is required of the Payment Pages system.

The maximum allowed length of custom fields submitted to STPP is 100 characters. Any custom fields exceeding this limit will be truncated or cause an error.

Please note that the field names should **not** be the same as the Secure Trading field names outlined above, or end with "_html".

Please note that if you would like to receive any custom fields back in a POST from Secure Trading's servers, please refer to the MyST User Guide for more information on configuring notifications (see section **13.3 Useful Documents** on **page 70**).

4.11 Postcode validation

If included within the request, validation is performed on the `postcode`.

Please note that postcode validation is dependent on the `country` supplied. If no `country` is supplied, then no additional validation is performed.

The following table outlines the format the postcode needs to be in when it is submitted to Secure Trading.

T represents Text (A-Z or a-z) and N represents Number (0-9):

Country	Validation
United States (US)	Needs to be a 5 or 9 digit zip code. // **NNNNN** // **NNNNNNNNN**
Great Britain (GB)	Needs to be between 6 and 8 characters long, including spaces. Can be one of the following formats: // **TN NTT** // **TNT NTT** // **TNN NTT** // **TTN NTT** // **TTNN NTT** // **TTNT NTT**
Canada (CA)	Needs to be 6 or 7 characters long, including spaces. Can be one of the following formats: // **TNT NTN** // **TNTNTN**
Other	The format of postcodes for other countries is not validated by Secure Trading.

4.12 County validation

If the `country` is entered and is United States (US), the `county` field needs to be a valid two-digit state code (e.g. “NY” for New York). For a list of US state codes, see: http://webapp.securetrading.net/usstatecodes.html

5 Security

To ensure the request to Secure Trading has not been modified by a malicious user, a field called **sitesecurity** can be included in the POST to the Payment Pages. This field contains a cryptographic hash of a predefined set of field values. Follow the steps below to use this security feature.

Step 1: Field Selection

You will need to notify Secure Trading Support (see section **13.1 Secure Trading Support** on **page 70**) of the fields to include in the hash.

The default fields are **currencyiso3a**, **mainamount**, **sitereference**, **settlestatus** and **settleduedate**.

Secure Trading recommends including as many unique fields when creating the hash as possible. Including only the **merchant** and **currency** fields will end up creating the same hash even though the amount field may have been compromised. To prevent anyone from changing the amount, we recommend including the **mainamount** field.

Please note that although the fields **settlestatus** and **settleduedate** are optional, they can affect when a transaction settles. Even if these fields are not submitted to Secure Trading, we recommend including them when you set up the fields with support. The way the hash is generated will not change, but it will mean that a malicious user will not be able to affect the settlement of a transaction through your account.

Once the fields have been chosen, you will need to provide Secure Trading with a password that is appended to the end of the hash. If you would like to change the password or add/remove fields from the hash you must notify Secure Trading support.

Secure Trading will never ask for your Site Security password after first-time configuration. Never share your Site Security password with third parties. Do not store hard copies of this password.

Please note that any fields that are included in the hash, which can be edited by the customer within the payment pages, can change the security hash. Therefore it is advised that only fields that are not expected to change should be included. It is important to consider this if you intend to use the MyST Payment Email.

Step 2: Hash Generation

You will need to set up your system to build the hash. When generating the hash, only the field **values** are used.

Please note that the order of the fields within the hash must be correct. If the correct details are not supplied, the transaction will be stopped.

There are three different algorithm types currently supported:

- md5
- sha1
- sha256

The recommended default algorithm type is **sha256** (included in the examples, below). If your preferred algorithm is not listed, please contact support (see section **13.1 Secure Trading Support** on **page 70**). For the examples, the values supplied are:

Field Name	Field Value	Position
currencyiso3a	USD	1st
mainamount	100.00	2nd
sitereference	test_site12345	3rd
settlestatus		4th
settleduedate		5th
password	PASSWORD	6th

Please note that the **password** must be appended to the end of the string **before** generating the hash.

Please note that the examples demonstrate where the optional field **settlestatus** and **settleduedate** are not included in the POST to Secure Trading, but have been set as default values for the hash.

Python Example

```
import hashlib
securityHashObj = hashlib.new("sha256")
securityHashObj.update("USD100.00test_site12345PASSWORD")
securityHash=securityHashObj.hexdigest()
return securityHash
```

PHP Example

```
<?php
echo hash('sha256', 'USD100.00test_site12345PASSWORD');;
?>
```

Java Example

```
import java.math.*;
import java.lang.*;
import java.security.*;
public class mysha256 {
    public static void main(String args[]) throws Exception{
String stringToHash="USD100.00test_site12345PASSWORD";
MessageDigest mDigest=MessageDigest.getInstance("SHA-256");
mDigest.update(stringToHash.getBytes());
String merchantHash=(""+new
BigInteger(1,mDigest.digest()).toString(16));
System.out.println(merchantHash);
    }
}
```

Perl Example

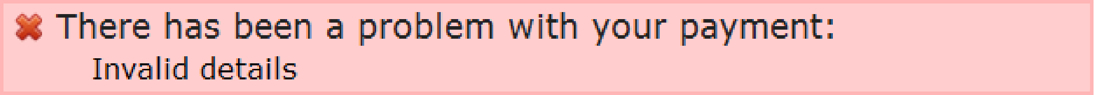
```
#!/usr/bin/perl

use Digest::SHA qw(sha256 sha256_hex);
$merchantFieldData = 'USD100.00test_site12345PASSWORD';
$merchantHash = sha256_hex($merchantFieldData);
print $merchantHash;
```

Step 3: Submitting the Hash

The field **`sitesecurity`** must be included in the post to the Payment Pages. The value of **`sitesecurity`** needs to be the hash generated. To ensure the latest version of the site security feature is used, the hash must be prefixed with a “**`g`**” before submitting to Secure Trading. For more information, see **3.1 Configuring the HTTP POST** on **page 13**.

Please note that it is important that the generated hash is prefixed with a “**`g`**”. Failure to do so could invalidate the hash and stop legitimate transactions.

For any payment that is attempted with an incorrect hash, the customer will be presented with an error (such as shown in **Figure 13**) and no payment will be processed.



✖ There has been a problem with your payment:
Invalid details

Figure 13 - Security Hash mismatch error

Example of URL with Security Hash

Using the same values from the steps, above, here is an example of a Payment Pages URL with the **`sitesecurity`** field appended (using the **sha256** algorithm type):

```
https://payments.securetrading.net/process/payments/choice?sitereferen
ce=test_site12345&currencyiso3a=USD&mainamount=100.00&version=1&sitese
curity=g0e6f21313833b21d2693a8d113b56a2bede3648e84c4c2a6f61f107f46c1f1
71
```

This ensures that if the customer modifies any of the fields used to create the hash that are passed in the URL, Secure Trading will not process the payment (as when the hash is re-generated on Secure Trading’s systems, the values will differ).

6 Additional Request Types

This section describes the additional request types that can be processed along with a payment processed through Payment Pages. To enable these request types on your site please contact Secure Trading support. For more information, see section **6.5 How to configure Additional Request Types** on **page 41**.

6.1 Risk Decision

The purpose of Risk Decision requests is to minimise fraud by analysing customer details and highlighting possible fraudulent activity by using Secure Trading's Fraud Control system. This is to assist you in making a decision of whether or not to process a customer's transaction, based on the perceived level of risk.

This is achieved by checking the industry's largest negative database and also searching for suspicious patterns in user activity. The system uses neural-based fraud assessments that can be configured specifically for your account and is constantly updating the fraud checks used to combat new risks.

Based on the decision returned by the Fraud Control system a customer that is deemed as suspicious can be prevented from processing a payment.

To enable Fraud Control on your account, please contact Secure Trading Support (see section **13.1 Secure Trading Support** on **page 70**).

6.1.1 Process

Once the customer submits their details to the Payment Pages a Risk Decision assessment is processed by the Fraud Control system, where the billing, delivery and payment details are analysed by a rule-based system and includes:

- The industry's largest negative database.
- Neural-based fraud assessments.
- Tumbling or swapping, where there is an unusual usage pattern in the card number, expiration date or customer details associated with a transaction.

Please note dependent on your Fraud Control profile, the rules can be configured specifically for your account. For more information, contact Secure Trading Support (see section **13.1 Secure Trading** Support on **page 70**).

The Fraud Control system will analyse these details and respond with one of the following results:

- **ACCEPT** - The details are not deemed suspicious.
- **DENY-** The details are suspicious and a transaction should not be performed.
- **CHALLENGE** - Further investigation is recommended.

6.1.2 Performing Authorisations automatically based on Risk Decision responses

Based on the result of the Risk Decision, you can decide whether to automatically proceed with the Authorisation or not. By default, the Payment Pages have the following process flow:

1. If the Risk Decision returns an Accept, then continue with the authorisation.
2. If the Risk Decision returns a Challenge or Deny, then process the authorisation, but suspend the transaction allowing for further investigation.

Please note the default process flow can be customised. For example, you could choose not to process the authorisation if the Risk Decision returns a Deny.
For more information, contact Secure Trading Support (see section **13.1 Secure Trading** Support on **page 70**).

Please note the test details to use with the Secure Trading test Fraud Control system can be found in section **12.3 Testing Fraud Control** on **page 69**.

6.1.3 Additional fields

The following optional fields can be posted to the payment pages to improve the Fraud Control risk decision process:

Field Name	Details
`billingdob`	The Customer’s Date of Birth. Must be in the format YYYY-MM-DD.
`customershippingmethod`	The shipping method. Can be one of the following values: **C** = Low Cost **D** = Designated by Customer **I** = International **M** = Military **N** = Next Day/Overnight **O** = Other **P** = Store Pickup **T** = 2 day Service **W** = 3 day Service

Secure Trading recommends submitting as much data as possible to assist the Fraud Control risk decision process.

6.2 Account Check

An Account Check is an optional request to help minimise fraud. It allows payment details to be validated, and checks that the details entered by the customer matches those on the card issuer’s records. No funds will be reserved or transferred by the Account Check request.

Please note that Account Checks are only available for certain Acquiring Banks. Please contact the Secure Trading support team for more information (see section **13.1 Secure Trading Support**).

The checks performed by an Account Check Request consist of the following:

- Use of the Address Verification System (AVS) to check if the provided first line of the billing address for the customer matches that on the card issuer's records.
- Checks to see if the billing postcode provided by the customer matches that on record for their card.
- Checks to see if the security code (CVV2) provided by the customer matches that on record for their card.

> **Please note** that the checks performed on an Account Check Request are the same as those carried out on a regular e-commerce Authorisation (AUTH) Request.
>
> Please refer to the **STPP AVS & CVV2** document (see section **13.3 Useful Documents** on **page 70**) for further information on address and security code checks.
>
> No funds will be reserved as part of an Account Check.

The results of these checks are returned in the security response of the Account Check. The security response consists of three different fields, each containing the result of an individual check. The names of the fields are listed, below:

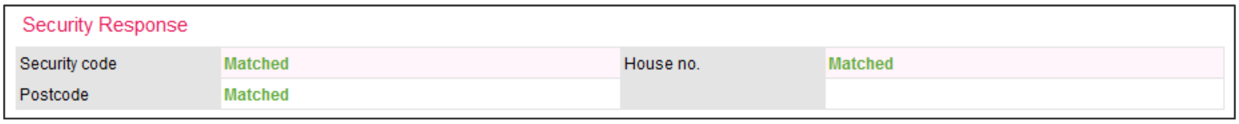
Field name	Comment
`securityresponseaddress`	The results of the checks performed by the AVS on the first line of the billing address.
`securityresponsepostcode`	The results of the checks on the billing postcode.
`securityresponsesecuritycode`	The results of the security code checks.

An Account Check Request will analyse the details provided by the customer and respond with the following results for each check performed:

Security response value	Description	Comment
0	**"Not Given"**	Your bank was not provided with the information required to perform this check.
1	**"Not Checked"**	Your bank was unable to perform checks on the information provided.
2	**"Matched"**	The information provided by the customer matches that on the card issuer's records.
4	**"Not Matched"**	The information provided by the customer does NOT match that on the card issuer's records.

For example, if the **`securityresponseaddress`** and **`securityresponsepostcode`** have a value of 2, but the **`securityresponsesecuritycode`** has a value of 4, this indicates that the first line of the address and the postcode match those on the card issuer's records, but the security code (CVV2) entered by the customer does not match the code found on the back of their card.

Alternatively, you can view security responses in the Single Transaction View for the Account Check transaction in MyST (see **Figure 14**). Please refer to the MyST User Guide (see section **13.3 Useful Documents**) for more information.



Security Response

Security code	Matched	House no.	Matched
Postcode	Matched		

Figure 14 - Security Response in MyST

If an amount is submitted in an Account Check Request, it is only stored for the purpose of inheritance by future requests (such as performing a later Authorisation request), which refers to this parent Account Check transaction. The amount sent in an Account Request is not reserved, as Account Checks never reserve funds.

Please note that the **`settlestatus`** submitted with an Account Check will be inherited by any subsequent requests that refer to it as a parent.

Account Check requests can be processed for all payment types, which are supported by your acquirer that can process Account Checks through Secure Trading.

To enable Account Check on your account, please contact Secure Trading Support (**13.1 Secure Trading Support** on **page 70**).

6.2.1 Account Check Rules

Rules can be assigned on your account by the Secure Trading support team, which will use the results of the Account Check to decide whether or not to process an associated Authorisation transaction. The recommended process flow is as follows:

1. If the Account Check returns a **‘Matched**’ Response, then process the Authorisation.
2. If the Account Check returns a **‘Not Checked**’ Response, then process the Authorisation, but suspend the transaction allowing for manual investigation to take place.
3. If the Account Check returns a **‘Not Matched**’ Response, then do **NOT** process an Authorisation.

Please note the default process flow can be customised. For example, you could choose to process the Authorisation if the Account Check returns **‘Not Matched’**. For more information, contact Secure Trading Support (see section **13.1 Secure Trading Support** on **page 70**).

6.2.2 ACH Account Checks

Automated Clearing House (ACH) Account Check Requests perform different checks to standard Account Check Requests. These are as following:

6.2.2.1 Account Verification Check

Your bank will perform checks to verify that the customer's account is valid and in good standing. The response returned following these checks indicates the level of risk associated with processing transactions using the account details provided by the customer. Transactions that do not receive a definitive response may be checked against the negative database (see section **6.2.2.2 Negative Database Check**).

> **Please note** that the availability of the Negative Database check will depend on the configuration of your account by your acquirer. Please contact your acquirer for further information.

6.2.2.2 Negative Database Check

Your bank may also search a large National database for negative reports against the payment details submitted in your request. This database contains information on over 150 million accounts. This information can be used to determine if the account details are low risk or high risk (these are the only responses possible during this check).

6.2.2.3 Security Response for ACH Account Checks

After performing an ACH Account Check, you are returned a security response from the acquiring bank, in the form of a number, which indicates the result of the checks performed on the customer's bank account details. The **`securityresponsesecuritycode`** field within the security response provides the result of the checks performed by your acquiring bank on the customer's payment details.

The table below lists all of the possible security responses that can be returned in the **`securityresponsesecuritycode`** field:

Security response value	Comment	MyST description
1	**Undetermined risk:** The acquiring bank was unable to complete checks on the information you provided in the request.	**"Not Checked"**
2	**Low risk:** The information you provided in the request is deemed low or medium risk by the acquiring bank and is therefore considered acceptable for further transactions.	**"Matched"**
4	**High risk:** The information you provided in the request is deemed high risk by the acquiring bank and is therefore considered inappropriate for further transactions.	**"Not Matched"**

> **Secure Trading recommends against proceeding with further transactions using payment details that return a high risk (4 – "Not Matched") response.**

> When performing combined ACH Account Check and Authorisation Requests, it is recommended that you set up rules, which use the results of the Account Check carried out by the acquiring bank to either allow or prevent future authorisations. See section **6.2.2.4 ACH Account Check Rules**.

6.2.2.4 ACH Account Check Rules

Rules can be assigned on your account by the Secure Trading support team, which will use the results of the Account Check to decide whether or not to process an associated Authorisation transaction. The recommended process flow is as follows:

- If the Account Check returns a low risk (2 – "**Matched**") or undetermined risk (1 – "**Not Checked**") response, then process the Authorisation.
- If the Account Check returns a high risk (4 – "**Not Matched**") response, then do **NOT** process an Authorisation.

> **Please note** the default process flow can be customised. For more information, contact Secure Trading Support (see section **13.1 Secure Trading Support** on **page 70**).

6.3 3-D Secure

3-D Secure is a protocol designed to reduce fraud and Chargebacks during e-commerce Internet transactions. Cardholders are asked to identify themselves at the point of sale before the purchase can be completed. This usually means entering a PIN or other password after entering their credit card details.

In the event of a dispute with the transaction at a later date, the card issuer will usually take responsibility of the Chargeback instead of the merchant. The liability issues involved with 3-D Secure transactions are out of the scope of this document. For a detailed indication of the liabilities involved, contact your bank.

3-D Secure transactions may be processed to reduce the likelihood of fraudulent transactions on your account. It may take several weeks to enable 3-D Secure depending on your acquirer. Please contact Secure Trading support for more information (**13.1 Secure Trading Support** on **page 70**).

> **Please note** that only certain payment types support 3-D Secure.

6.3.1 Process

A THREEDQUERY request is used to determine whether the customer's card is enrolled in the 3-D Secure scheme. The THREEDQUERY request submits information to a directory server hosted by a card issuer (e.g. Visa). If the card is in the 3-D Secure scheme, then after the customer has entered their payment details, they will be redirected to a log-in screen that enables them to validate their identity through an Access Control Server (ACS), hosted by their card issuer.

6.4 Subscription

Subscription payments allow transactions to be automatically re-processed without the need for the customer to re-enter their payment details e.g. payments can be scheduled to be processed on the first of each month for £10.00.

6.4.1 Process

Processing a Subscription payment is the same as processing a standard Authorisation using the Payment Pages, with additional fields included to schedule the subscription. The additional fields define how many Subscription payments are to be processed and the gap between these payments.

Once the initial transaction is processed, the subsequent Subscription payments are scheduled to be processed by the Secure Trading Subscription Engine.

For more information, refer to the **STPP Subscriptions and Payment Pages** (see section **13.3 Useful Documents** on **page 70**).

6.5 Currency Rate

Currency Rate Requests are used when performing Dynamic Currency Conversion (DCC) transactions. The CURRENCYRATE Request contains the currency information required for the currency conversion provider to return a conversion rate based on the current rates. By enabling CURRENCYRATE Requests on your Payment Pages, the customer is able to choose an alternative currency in which to perform the payment, provided their card supports the currency conversion.

> **Please note** that in order to perform DCC, you will need to have a merchant number that allows this functionality. For more information, please contact your acquiring bank.
>
> In addition, an account with a currency rate provider is required. To set up a currency rate provider on your Secure Trading account, please contact Secure Trading Sales (see section **13.2 Secure Trading Sales** on **page 70**).

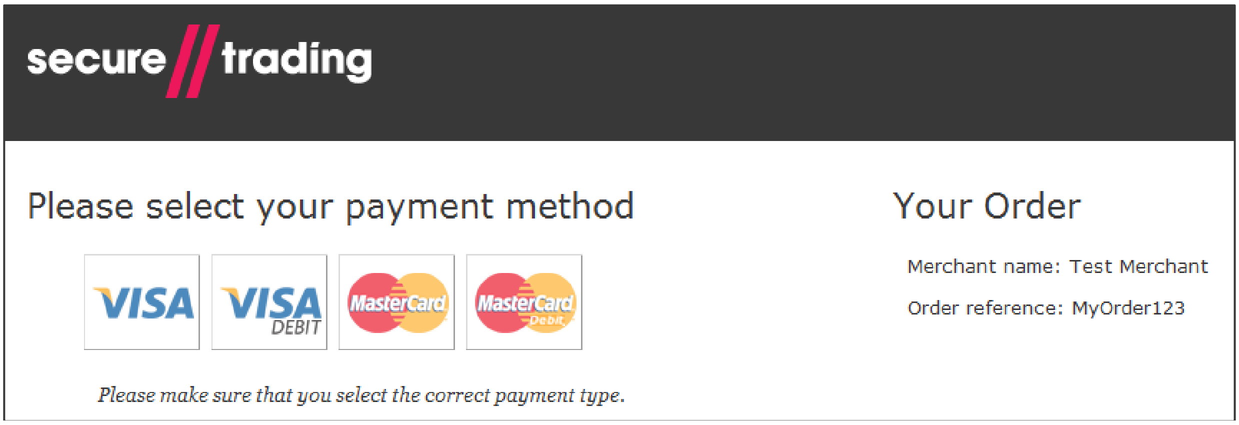
6.5.1 Process

The steps to process a payment with a CURRENCYRATE request are the same as processing a standard authorisation using the Payment Pages (see section **3 Posting Information**), with additional DCC fields included in the request. A DCC payment consists of two parts:

1. A CURRENCYRATE Request – Requests an up-to-date conversion rate from a DCC provider.
2. An AUTH Request – Requests the acquiring bank to authorise the payment in the customer's preferred currency.

Please note that in certain configurations, these additional fields are not required. Please see section **6.5.4 Configuration**, for more information.

The customer is initially shown a choice page, where they can select the payment type that they wish to use. This is the same as the normal payment type choice page, except the amount is initially hidden (**Figure 15**). This is because the currencies and respective amounts to be offered to the customer have yet to be established.



Please select your payment method

Your Order

Merchant name: Test Merchant

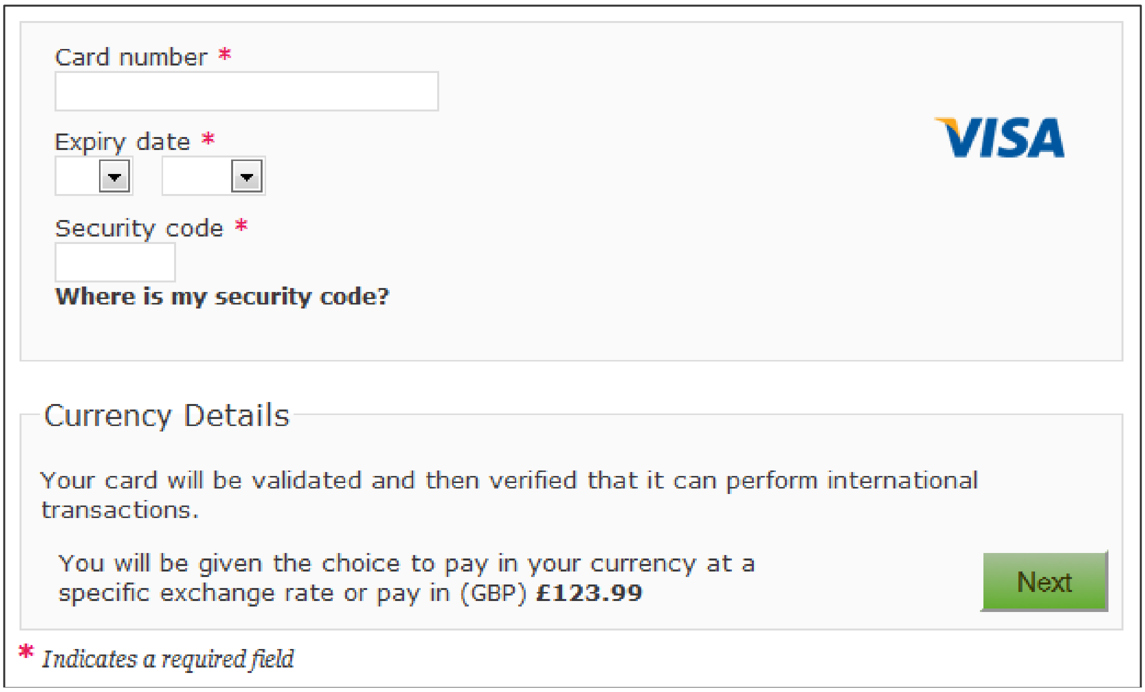
Order reference: MyOrder123

Please make sure that you select the correct payment type.

Figure 15 - DCC Payment Pages: Payment type choice page

If the customer chooses a payment type that supports DCC, they are informed that they are able to pay in an alternative currency to the merchant currency submitted, as shown in **Figure 16**. Here they will be able to see the amount in the merchant currency.

Secure Trading's implementation of DCC is currently only supported by MasterCard and Visa branded cards.


Card number *

Expiry date *

Security code *

Where is my security code?

Currency Details

Your card will be validated and then verified that it can perform international transactions.

You will be given the choice to pay in your currency at a specific exchange rate or pay in (GBP) **£123.99**

Indicates a required field

Figure 16 - DCC Payment Pages: DCC first page

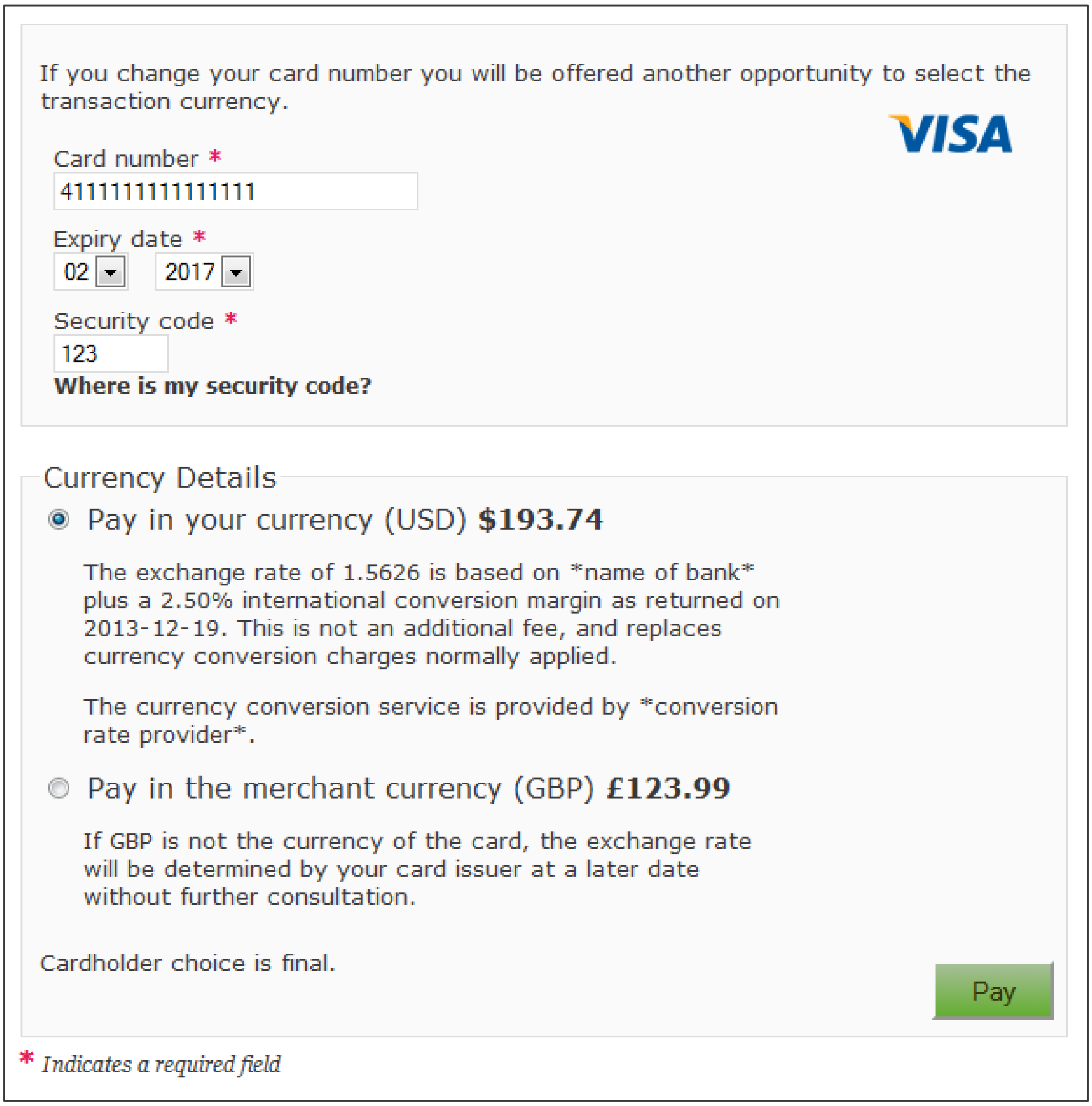
Secure Trading will use the card number (PAN) entered by the customer to establish their local currency, by submitting the information in a CURRENCYRATE Request. The conversion rate partner will supply a conversion rate that is used to convert the amount in the merchant currency to an amount in the customer's local currency, rounded upward to the next base unit (using a ceiling function):

- £1.021 would go to £1.03
- £1.026 would also go to £1.03

Please note that if the cardholder's local currency is the same as the currency you submitted, the customer will not be shown a conversion rate and instead will make the payment in your account's currency.

Please note that amounts paid in the customer's currency have a small fee added to them to cover the cost of the conversion by the third-party conversion rate provider. This fee is determined by calculating a percentage of the amount in the customer's currency and adding this to the total amount. For more information, please contact your conversion rate provider.

The amounts in both currencies are displayed on the payment page. The customer will be able to choose between paying in either currency (**Figure 17**).



If you change your card number you will be offered another opportunity to select the transaction currency.

Card number *
4111111111111111

Expiry date *
02 2017

Security code *
123

Where is my security code?

Currency Details

● Pay in your currency (USD) **$193.74**

The exchange rate of 1.5626 is based on *name of bank* plus a 2.50% international conversion margin as returned on 2013-12-19. This is not an additional fee, and replaces currency conversion charges normally applied.

The currency conversion service is provided by *conversion rate provider*.

○ Pay in the merchant currency (GBP) **£123.99**

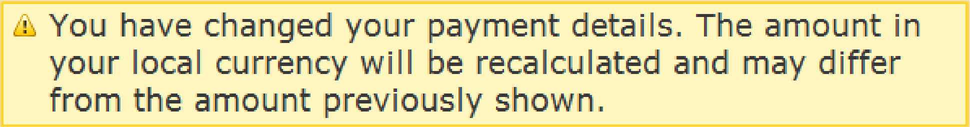
If GBP is not the currency of the card, the exchange rate will be determined by your card issuer at a later date without further consultation.

Cardholder choice is final.

* *Indicates a required field*

Figure 17 - DCC Payment Pages: "DCC" currency choice page for VISA

If the customer changes their card number (PAN) at this stage, before clicking "Pay", Secure Trading will need to perform a new CURRENCYRATE Request to re-establish the customer's local currency using the new card. The customer will be redisplayed the billing details page (**Figure 16**) along with the following warning that the new amounts calculated may differ from the amounts previously shown:

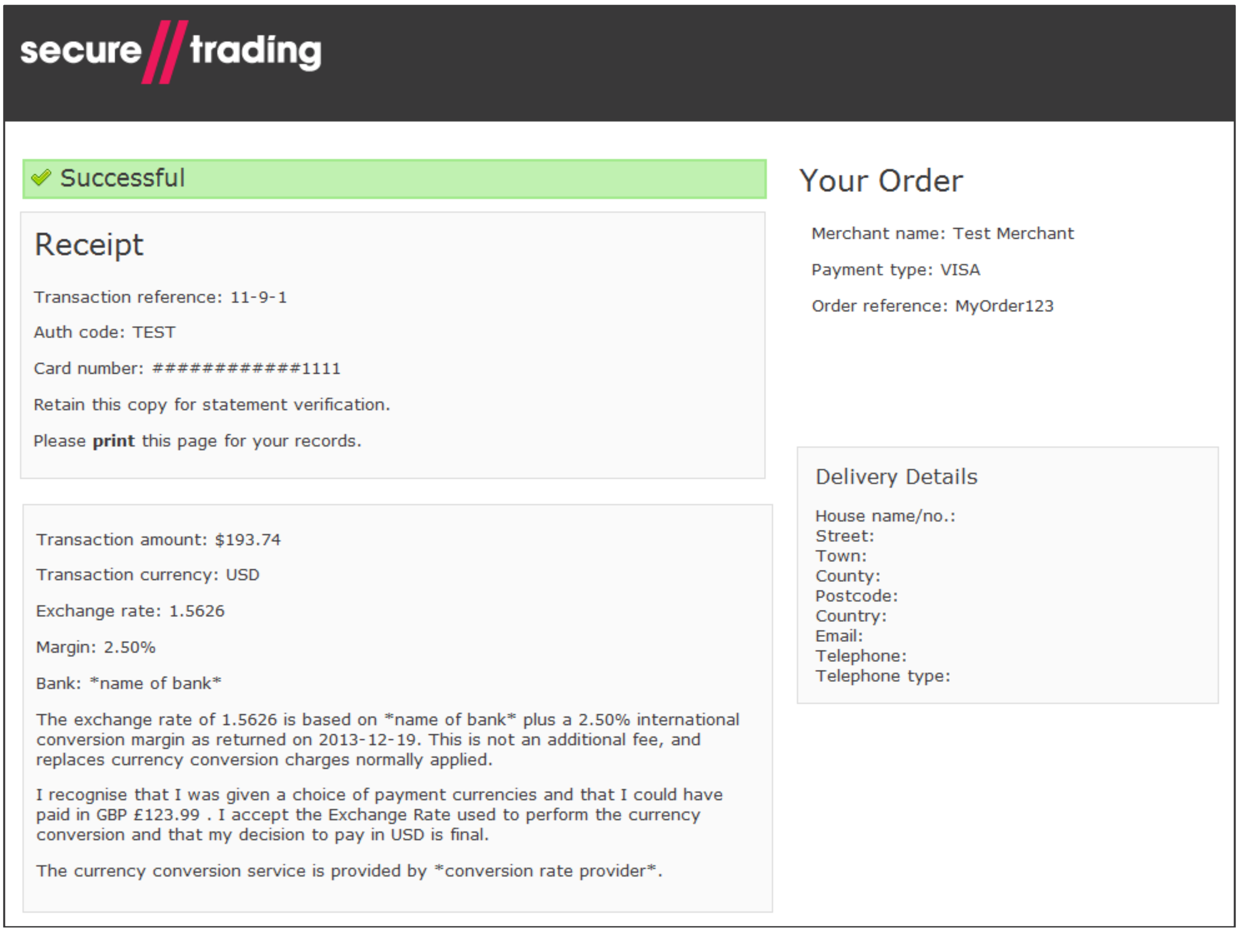


⚠ You have changed your payment details. The amount in your local currency will be recalculated and may differ from the amount previously shown.

Once the payment currency has been selected, a subsequent AUTH Request is performed by Secure Trading to your acquiring bank. This uses the currency and respective amount chosen by the customer on the Payment Pages.

6.5.2 Success Page

Following a successful DCC payment, the customer is shown a success page with details of the transaction processed (**Figure 18**). This includes information on the currency conversion performed on the transaction.



✓ Successful

Receipt

Transaction reference: 11-9-1

Auth code: TEST

Card number: ############1111

Retain this copy for statement verification.

Please **print** this page for your records.

Transaction amount: $193.74

Transaction currency: USD

Exchange rate: 1.5626

Margin: 2.50%

Bank: *name of bank*

The exchange rate of 1.5626 is based on *name of bank* plus a 2.50% international conversion margin as returned on 2013-12-19. This is not an additional fee, and replaces currency conversion charges normally applied.

I recognise that I was given a choice of payment currencies and that I could have paid in GBP £123.99 . I accept the Exchange Rate used to perform the currency conversion and that my decision to pay in USD is final.

The currency conversion service is provided by *conversion rate provider*.

Your Order

Merchant name: Test Merchant

Payment type: VISA

Order reference: MyOrder123

Delivery Details

House name/no.:
Street:
Town:
County:
Postcode:
Country:
Email:
Telephone:
Telephone type:

Figure 18 - Success page following a DCC transaction

6.5.3 Required DCC Disclaimer Text

Secure Trading actively ensures that the text shown in the default Payment Pages for DCC payments complies with rules specified by the relevant card schemes and third parties. For this reason, we strongly recommend against modifying any of the text shown relating to the currency conversion performed and the exchange rates provided, both on the billing details and receipt pages.

⚠ **If you customise your site's Payment Pages, it is your responsibility to ensure your solution is still compliant with all rules specified by relevant card schemes and third parties.**

6.5.4 Configuration

To set up DCC on your Secure Trading account, please contact the support team (see section **13.1 Secure Trading Support** on **page 70**). There are two ways that DCC can be enabled on your account.

1. The support team can configure your live site in such a way that all requests, where the customer's payment type supports DCC, are processed as DCC. The request you make to the payment pages remains unchanged from a standard Authorisation.
2. Appending "**dcctype=DCC**" to your POST (see section **3.1 Configuring the HTTP POST** on **page 13**) will result in DCC being performed on a request, if the customer's payment type supports it. Not including these fields in your POST will result in normal Authorisation Requests without the customer being able to choose an alternative currency.

⚠ **For DCC requests, it is imperative that you submit a currency that is supported by your account. This is to ensure the correct currencies are used when performing currency conversion.**

6.5.5 DCC Fields

Following CURRENCYRATE Requests, Secure Trading returns additional DCC fields for future reference, as listed in the table, below.

These fields are displayed in the "**Single Transaction View**" for the CURRENCYRATE and AUTH Requests in MyST (please refer to the **MyST User Guide** in section **13.3 Useful Documents** on **page 70**, for more information).

Please note that a CURRENCYRATE Request is only shown as a parent (in the Related Transactions tab) to the child DCC AUTH Request when the customer has opted to pay in an alternative currency (when **offered** is '1').

It is possible to view CURRENCYRATE Requests associated with any DCC AUTH Request in MyST submitting the **orderreference** on the transaction search page. The **orderreference** for the CURRENCYRATE is the same as the AUTH.

The fields can be returned in a URL or email notification on completion of a transaction. For more information, please refer to the **Notifications** documentation (see section **13.3 Useful Documents** on **page 70**). When adding a destination, please select the fields shown below in order to include DCC information:

Field name	Comment
dccbaseamount	The base amount the customer has paid in the submitted currency (£10.50 is 1050).
dcccurrencyiso3a	The currency you submitted in the POST to Payment Pages.
dccenabled	Whether or not DCC is enabled on your account. 1 - Your Secure Trading account is enabled for DCC. 0 - Your Secure Trading account is not enabled for DCC.
dccconversionrate	The conversion rate used to convert the amount in the submitted currency to the amount in the customer’s currency.
dccconversionratesource	The source of the conversion rate provided by the DCC provider.
dccmainamount	The main amount the customer has paid in the submitted currency (£10.50 is 10.50).
dccmarginratepercentage	The percentage used to calculate the currency conversion fee, applied to the amount in the customer’s currency.
dccoffered	This value represents whether the customer has chosen to pay in the submitted currency or their local currency. 1 - Customer has chosen to pay in their local currency. 2 - An error has occurred, which has prevented the customer from paying in their local currency, so they are paying in the submitted currency, instead. 3 - The customer has chosen to pay in the submitted currency.
dccprovider	The institution that provides the conversion rate.
dcctype	“DCC”

6.5.6 Updating DCC Authorisations

It is possible to perform transaction updates to DCC Authorisations, by using MyST (please refer to the **MyST User Guide** in section **13.3 Useful Documents** on **page 70**, for more information). It is **NOT** possible to change the currency of the payment after it has been authorised by the acquiring bank. When updating the settle amount, it is in the amount in the currency chosen by the customer to make the payment that will be changed.

⚠ **Deferred settlement is NOT supported for DCC transactions.**

6.5.7 Refunding settled DCC transactions

STPP supports the refunding of DCC transactions. Please consider the two options available:

6.5.7.1 Option 1 – Perform a refund using MyST

A new CURRENCYRATE transaction is performed when performing a refund through the MyST, in order to refund the customer in their chosen currency using an up-to-date conversion rate.

Instructions on how to perform refunds using MyST can be found in the **MyST User Guide**
All Secure Trading documents can be found on our website.

6.5.7.2 Option 2 – Submit an XML Refund Request using STAPI / Web Services

You can choose to use the same currency conversion rate as the original transaction or perform a new CURRENCYRATE transaction in order to obtain an up-to-date currency conversion rate.

For information on performing refunds for DCC transactions using STAPI / Web Services, please consult the following documentation:

- **XML Specification document**
- **Web Services User Guide**
- **DCC XML Specification**

All Secure Trading documents can be found on our website.

6.5.8 Subscriptions with DCC Payments

Secure Trading does not support the use of DCC payments with Subscriptions.

6.6 How to configure Additional Request Types

Once enabled, Additional Request Types are automatically processed with every payment made through your payment page, without any additional configuration on your system. To enable any of the request types outlined in this section on your Secure Trading Payment Pages account, please contact Secure Trading support (see section **13.1 Secure Trading Support**).

Please note that Subscriptions require additional fields to be submitted in order to be scheduled in the Secure Trading Subscription Engine. For further information, please refer to the **STPP Subscriptions and Payment Pages** document.

Please note that Currency Rate Requests may require additional fields to be submitted in order to process currency conversions. Please see section **6.5.4 Configuration**, for further information.

For advanced functionality, Secure Trading offer an Enhanced Post feature, which allows you to specify which request types are processed for individual transactions through the Payment Pages. For further information, see section **8 Enhanced Post**.

7 Customisation - CSS

Secure Trading allows you to define the appearance of your payment page using your own CSS (Cascading Style Sheets).

> **Please note** that you need to upload the CSS files to Secure Trading using the MyST File Manager. Please refer to the **STPP MyST User Guide** (see section **13.3 Useful Documents**) for more information.

When the customer is transferred to Secure Trading's servers to make a payment, the Parent CSS is called to specify the styling of your payment page. The Child CSS is then called, which can override all or part of the Parent CSS before displaying the page to the customer.

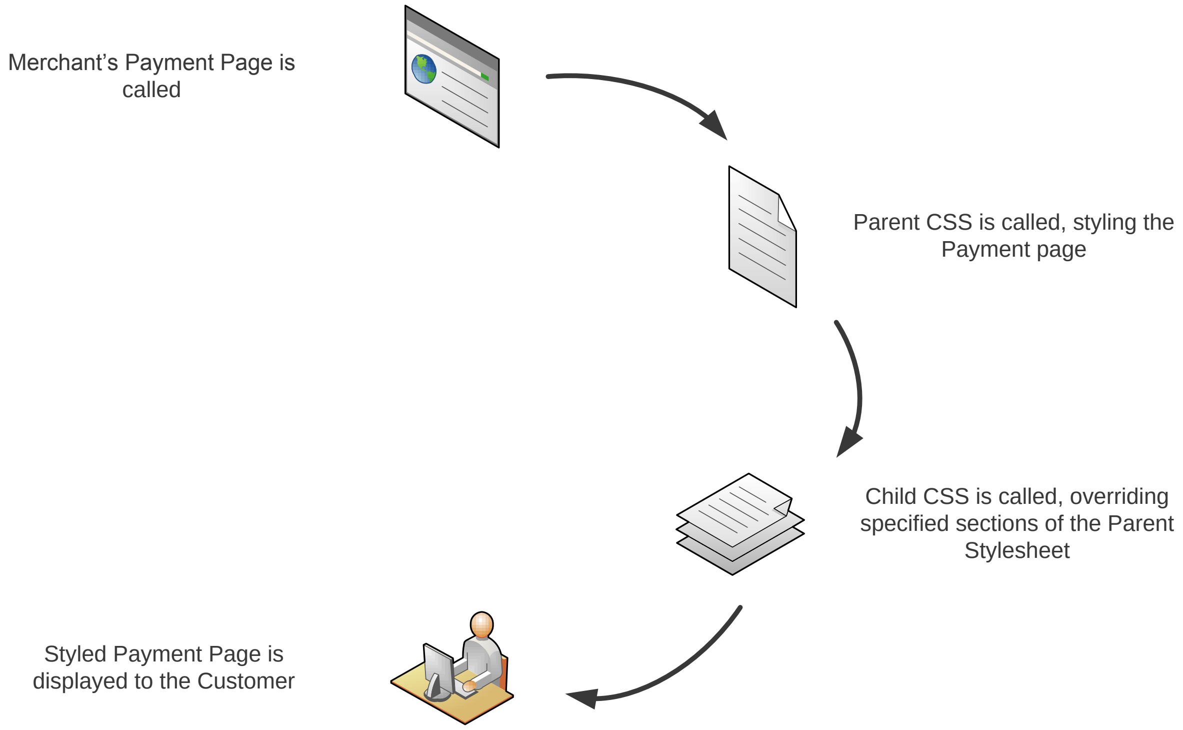
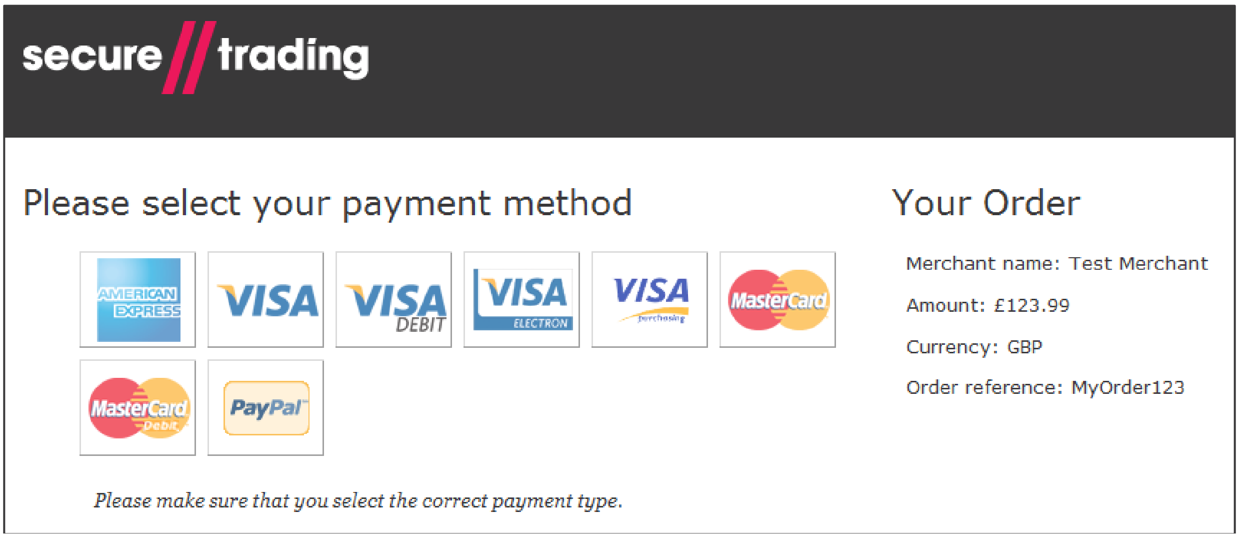

Merchant’s Payment Page is called
Parent CSS is called, styling the Payment page
Child CSS is called, overriding specified sections of the Parent Stylesheet
Styled Payment Page is displayed to the Customer

Figure 19 - Parent and Child CSS Overview

Multiple Parent and Child CSS files can be uploaded to Secure Trading. The CSS file that is used is specified in the POST (**7.3 CSS Specification** on **page 52**).

7.1 Parent CSS

The Parent CSS defines the entire styling of your payment page. By default, if no CSS is specified, the Parent CSS will be Secure Trading’s Default Payment Pages CSS as seen in **Figure 20**.



Please select your payment method

Your Order

Merchant name: Test Merchant

Amount: £123.99

Currency: GBP

Order reference: MyOrder123

Please make sure that you select the correct payment type.

Figure 20 - Default Secure Trading Payment Pages CSS

This Parent CSS is a good base for the styling of the Payment Page. The Child CSS can then be used to override certain parts of the styling.

You can use your own Parent CSS or one of the CSS files uploaded on Secure Trading's servers. The files can be viewed on Secure Trading's website (http://www.securetrading.com/support/downloads-stpp.html).

7.2 Child CSS

The Child CSS allows you to override all or part of the Parent CSS. Below are some examples.

7.2.1 Child CSS – Including a Company Logo

By default, the block where the logo is displayed is hidden. In order to display a company logo on the page, you will need to show the block, position it and define its dimensions, as well as setting the image to display.

The following example would need to be included for a company logo named **logo.gif** that was 200 pixels by 100pixels within the Merchant's Child CSS file:

```
#head #branding_logo{
        background-image:url('logo.gif');
        background-repeat:no-repeat;
        width:200px;
        height:100px;
        padding:0px;
        display: block;
        position: absolute;
        right: 0px;
        top: 0px;
}
```

Please note that you will need to upload your image files to Secure Trading using the MyST File Manager. Please refer to the **STPP MyST User Guide** (see section **13.3 Useful Documents**) for more information.

Please note that the image dimensions specified need to be correct, otherwise the logo may appear cut off (or not at all).

7.2.2 Child CSS – Background Colour

The background colour can be set by including the correct colour code in the Child CSS file.

The line below would set the background colour on the page to red:

```
#content { background-color: #ff0000; }
```

You can also set the background colour of the header or footers:

```
#head, #footer { background-color: red; }
```

Or:

```
#head, #footer { background-color: transparent; }
```

7.2.3 Child CSS – Font

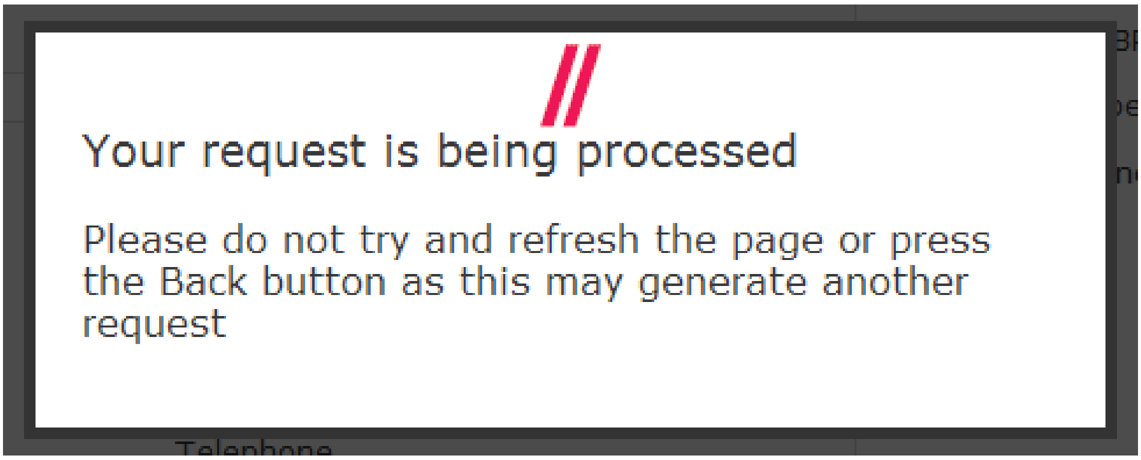
By setting the font in the body tag, all other elements will inherit it (unless the font is specified):

```
body {  font-family: Georgia, "Times New Roman", Times, serif; }
```

You can also set the font to individual elements:

```
#footer { font-family: Arial, Helvetica, sans-serif; }
```

7.2.4 Child CSS – Resizing the processing payment box



Your request is being processed

Please do not try and refresh the page or press the Back button as this may generate another request

Figure 21 - Processing payment box that is shown to customers

The size of the processing payment box (as shown in **Figure 21**) can be set by including the following code in the Child CSS. This is useful if you are using an iFrame to display the Payment Pages to customers on your website.

```
#processingpayment .details {
          width:200px;
          top:100px;
}
```

7.2.5 Child CSS - Troubleshooting

If any of the above isn’t working, it might be that the priority has not been set. Adding “**!important**” to the Child CSS should solve this problem:

```
#head, #footer { background-color: red!important; }
```

7.3 CSS Specification

The Parent and/or Child CSS that will be used is specified in the POST to Secure Trading:

- **parentcss** – The name of the Parent CSS file. If this field is not included then the default Secure Trading Parent CSS will be used.
- **childcss** – The name of the Child CSS file.

Please note that when submitting the CSS filename in the POST, you should NOT include the file extension “.css”.

Please note that it is not compulsory to include both fields.

Below are examples of a link and a POST that pass through custom CSS to the Payment Pages (fields of interest highlighted in **bold**). They reference **testparent.css** as the Parent CSS and **testchild.css** as the Child CSS.

Link to Payment Page including custom CSS

```
https://payments.securetrading.net/process/payments/choice?sitereferen
ce=test_site12345&currencyiso3a=USD&mainamount=100.00&version=1&parent
css=testparent&childcss=testchild
```

POST to Payment Page including custom CSS

```
<html>
<head>
</head>
<body>
<form method="POST"
action="https://payments.securetrading.net/process/payments/details">
<input type="hidden" name="sitereference" value="test_site12345">
<input type="hidden" name="currencyiso3a" value="USD">
<input type="hidden" name="mainamount" value="100.00">
<input type="hidden" name="version" value="1">
<input type="hidden" name="parentcss" value="testparent">
<input type="hidden" name="childcss" value="testchild">
<input type="submit" value="Pay">
</form>
</body>
</html>
```

7.4 Further Customisation

You can upload your own Parent CSS files. This allows you to completely customise how you would like your payment page to be displayed.

Secure Trading only recommends this to merchants who have a good understanding of CSS.

You can download a sample CSS file from Secure Trading's website (http://www.securetrading.com/support/downloads-stpp.html) to follow as you build your custom CSS files.

> ℹ Please ensure any customisations you have made to the CSS used by Payment Pages do not obscure any text that is required to be shown for your configuration by your acquiring bank (for example, the text on the Success page following Dynamic Currency Conversion, as outlined in section **6.5.3 Required DCC Disclaimer Text**).

7.5 Ukash

When customising the CSS for Payment Pages that offer Ukash as a payment type, please be aware that Ukash transactions have two different types of Success pages:

- **Success Page Type 1**

  The customer has remaining funds on their voucher, and is displayed a new voucher number, remaining amount and expiry date.

  > ⚠ **It is imperative that the new voucher details are displayed to the customer, as this information is needed in order for the customer to spend the remaining balance of their voucher**.

  To test this scenario, process a transaction for £10,
  with a voucher number of 6002349752638446279,
  and a voucher amount of £20.

- **Success Page Type 2**

  The customer has used all funds on their voucher. No voucher details are displayed.

  To test this scenario, process a transaction for £20,
  with a voucher number of 6002349752638446279,
  and a voucher amount of £20.

8 Enhanced Post

Secure Trading allows for customisation of processed request types that are posted through the Payment Pages. A standard Payment Pages transaction consists of an Authorisation (AUTH) Request, which can be accompanied by any of the additional request types described in section **6 Additional Request Types**. However, with Enhanced Post enabled on your account, you are able to choose to process combinations of specific request types by specifying the fields passed through in each HTTP Post.

Please note that to ONLY process a RISKDEC or ACCOUNTCHECK Request through the Payment Pages, without an associated AUTH, you must use the Enhanced Post feature.

8.1 Getting Started

Secure Trading recommends that you read section **3 Posting Information** on **page 13**, before reading this section as it contains additional information which is relevant to this section.

To perform an Enhanced Post, you must first contact Secure Trading support (see section **13.1 Secure Trading Support** on **page 70**) to enable this functionality, and to specify all the request types you would like your site to be able to process. You can choose from the following:

Request Type	Description
AUTH	An Authorisation Request for a payment from a customer.
RISKDEC	A Risk Decision Request, to check for suspicious activity relating to the customer's account (see section **6.1 Risk Decision**).
ACCOUNTCHECK	An Account Check Request, to check the status of the customer's account (see section **6.2 Account Check**).
THREEDQUERY**	A 3-D Query Request, to perform 3-D Secure on the customer's account, if they are enrolled (see section **6.3 3-D Secure**).
SUBSCRIPTION**	A Subscription Request, where payments will be processed automatically at pre-specified intervals (see section **6.4 Subscription**).
CURRENCYRATE**	A Currency Rate Request, to perform currency conversion between two different currencies (see section **6.5 Currency Rate**).

** THREEDQUERY, SUBSCRIPTION and CURRENCYRATE Requests must be submitted with an accompanying AUTH Request.

8.2 HTTP Post

Once Secure Trading has enabled Enhanced Post and any combination of the aforementioned request types on your site, you can use Enhanced Post on a payment page by passing a standard HTTP Post to the Payment Pages, with the required fields (included in the examples that follow and detailed in section **4.1 Required Fields**), and the Enhanced Post field(s), called "**`requesttypedescriptions`**".

> **Please note** that the Enhanced Post fields are not mandatory but when they are not submitted an AUTH Request will **always** occur, amongst all other request types enabled for your site, as the default behaviour.

8.2.1 URL Link

When directing the customer to perform an Enhanced Post using a URL, you need to include a field(s) called "**`requesttypedescriptions`**", along with the request types you would like to be processed. When processing multiple request types, each must have its own corresponding "**`requesttypedescriptions`**" field separated by ampersands ("&"). You can submit the fields in any order, as the processing order is defined by the Secure Trading Gateway.

8.2.1.1 URL Example of sending an AUTH with Enhanced Post

The following URL example would take the customer to a payment page that would allow them to enter their payment details to only process an AUTH Request.
The **`requesttypedescriptions`** field is highlighted in **bold**.

```
https://payments.securetrading.net/process/payments/choice?sitereference=test_site12345&currencyiso3a=USD&mainamount=100.00&version=1&requesttypedescriptions=AUTH
```

8.2.1.2 URL Example of sending an ACCOUNTCHECK with Enhanced Post

The following URL example would take the customer to a payment page that would allow them to enter their payment details to only process an ACCOUNTCHECK Request.
The **`requesttypedescriptions`** field is highlighted in **bold**.

```
https://payments.securetrading.net/process/payments/choice?sitereference=test_site12345&currencyiso3a=USD&mainamount=100.00&version=1&requesttypedescriptions=ACCOUNTCHECK
```

8.2.1.3 URL Example of sending an AUTH and ACCOUNTCHECK with Enhanced Post

The following URL example would take the customer to a payment page that would allow them to enter their payment details to process an Account Check followed by an AUTH Request. The **`requesttypedescriptions`** fields are highlighted in **bold**.

```
https://payments.securetrading.net/process/payments/choice?sitereference=test_site12345&currencyiso3a=USD&mainamount=100.00&version=1&requesttypedescriptions=AUTH&requesttypedescriptions=ACCOUNTCHECK
```

> **Please note** that when using Enhanced Post, you must submit more than one **`requesttypedescriptions`** field if you want to pass through multiple request types, as shown in the above example.

8.2.2 POST

To setup a POST to the Payment Page, create a form on your webserver that will submit the required fields, along with fields called "**`requesttypedescriptions`**" and the values of the request types you would like to be processed for the customer.

8.2.2.1 POST Example of sending an AUTH with Enhanced Post

The following HTML example will render a webpage with a button that will direct the customer to your site's payment page and process only an AUTH Request with their payment details. The **`requesttypedescriptions`** field is highlighted in **bold**.

```
<html>
<head>
</head>
<body>
<form method="POST"
action="https://payments.securetrading.net/process/payments/choice">
<input type="hidden" name="sitereference" value="test_site12345">
<input type="hidden" name="currencyiso3a" value="USD">
<input type="hidden" name="mainamount" value="100.00">
<input type="hidden" name="version" value="1">
<input type="hidden" name="requesttypedescriptions" value="AUTH">
<input type="submit" value="Pay">
</form>
</body>
</html>
```

8.2.2.2 POST Example of sending an ACCOUNTCHECK with Enhanced Post

The following HTML example will render a webpage with a button that will direct the customer to your site's payment page and process only an ACCOUNTCHECK Request with their payment details. The **`requesttypedescriptions`** field is highlighted in **bold**.

```
<html>
<head>
</head>
<body>
<form method="POST"
action="https://payments.securetrading.net/process/payments/choice">
<input type="hidden" name="sitereference" value="test_site12345">
<input type="hidden" name="currencyiso3a" value="USD">
<input type="hidden" name="mainamount" value="100.00">
<input type="hidden" name="version" value="1">
<input type="hidden" name="requesttypedescriptions"
value="ACCOUNTCHECK">
<input type="submit" value="Pay">
</form>
</body>
</html>
```

8.2.2.3 POST Example of sending an AUTH and ACCOUNTCHECK with Enhanced Post

The following HTML example will render a webpage with a button that will direct the customer to your site's payment page and process an ACCOUNTCHECK **and** an AUTH Request with their payment details. The `requesttypedescriptions` field is highlighted in **bold**.

```
<html>
<head>
</head>
<body>
<form method="POST"
action="https://payments.securetrading.net/process/payments/choice">
<input type="hidden" name="sitereference" value="test_site12345">
<input type="hidden" name="currencyiso3a" value="USD">
<input type="hidden" name="mainamount" value="100.00">
<input type="hidden" name="version" value="1">
<input type="hidden" name="requesttypedescriptions" value="AUTH">
<input type="hidden" name="requesttypedescriptions"
value="ACCOUNTCHECK">
<input type="submit" value="Pay">
</form>
</body>
</html>
```

8.2.3 The result of the POST

The page displayed to customers following an HTTP Post for an Enhanced Post is the same as for a regular Payment Pages transaction. Please refer to section **3.2 The result of the POST** for more information.

8.2.4 Request Sequence

If multiple request types are sent in a single Enhanced Post request, they are always processed in a specific order defined by Secure Trading; regardless of the order the request types are submitted.

This order is as follows:

Order (starting from 1)	Request Type
1	CURRENCYRATE
2	RISKDEC
3	ACCOUNTCHECK
4	THREEDQUERY
5	AUTH
6	SUBSCRIPTION

8.2.5 Request Priority

With the enhanced POST feature, there are priorities that are assigned to certain request types.

Request types are classed as High-Priority if they are able to transfer funds and Low-Priority if they are **NOT** able to transfer funds, as shown in the table, below:

Request Type(s)	Priority
AUTH SUBSCRIPTIONS	HIGH
ACCOUNTCHECK CURRENCYRATE RISKDEC THREEDQUERY	LOW

If a SINGLE (e.g. AUTH) High-Priority request type is sent, then the payment methods shown are ones that are able to process the high priority request.

If MULTIPLE (e.g. AUTH and SUBSCRIPTION) High-Priority request types are sent in a single request, then the payment methods shown will be those that can perform both request types (e.g. Maestro which cannot perform SUBSCRIPTIONS will not be shown)

If a High-Priority (e.g. AUTH) request type is sent along with a Low-Priority (e.g. ACCOUNTCHECK) request type in a single request, then the High-Priority request takes precedence over the Low-Priority. Only the payment types that are able to process the High-Priority request will be shown to the customer(s) (even though they may not be able to process the Low-Priority request).

If a SINGLE Low-Priority (e.g. ACCOUNTCHECK) request type is sent on its own, this behaves the same as a High-Priority request, and displays all payment types that are able to process that request type.

If MULTIPLE Low-Priority (e.g. ACCOUNTCHECK and RISKDEC) request types are sent in a single request, then the payment methods shown will be those that can perform both request types.

8.3 Subscriptions and Enhanced Post

To process Subscriptions through the Payment Pages, you must always provide the Subscription-specific fields outlined in the **STPP Subscriptions and Payment Pages document** (see section **13.3 Useful Documents**). When using Subscriptions with Enhanced Post you must also include **`requesttypedescriptions`** for an AUTH and SUBSCRIPTION in the HTTP Post, as shown in the following example:

```
<html>
<head>
</head>
<body>
<form method="POST"
action="https://payments.securetrading.net/process/payments/choice">
<input type="hidden" name="sitereference" value="test_site12345">
<input type="hidden" name="currencyiso3a" value="USD">
<input type="hidden" name="mainamount" value="100.00">
<input type="hidden" name="version" value="1">
<input type="hidden" name="requesttypedescriptions" value="AUTH">

<input type="hidden" name="subscriptionunit" value="DAY">
<input type="hidden" name="subscriptionfrequency" value="1">
<input type="hidden" name="subscriptionfinalnumber" value="5">
<input type="hidden" name="subscriptiontype" value="RECURRING">
<input type="hidden" name="subscriptionbegindate"
value="2013-04-30">
<input type="hidden" name="requesttypedescriptions"
value="SUBSCRIPTION">

<input type="submit" value="Pay">
</form>
</body>
</html>
```

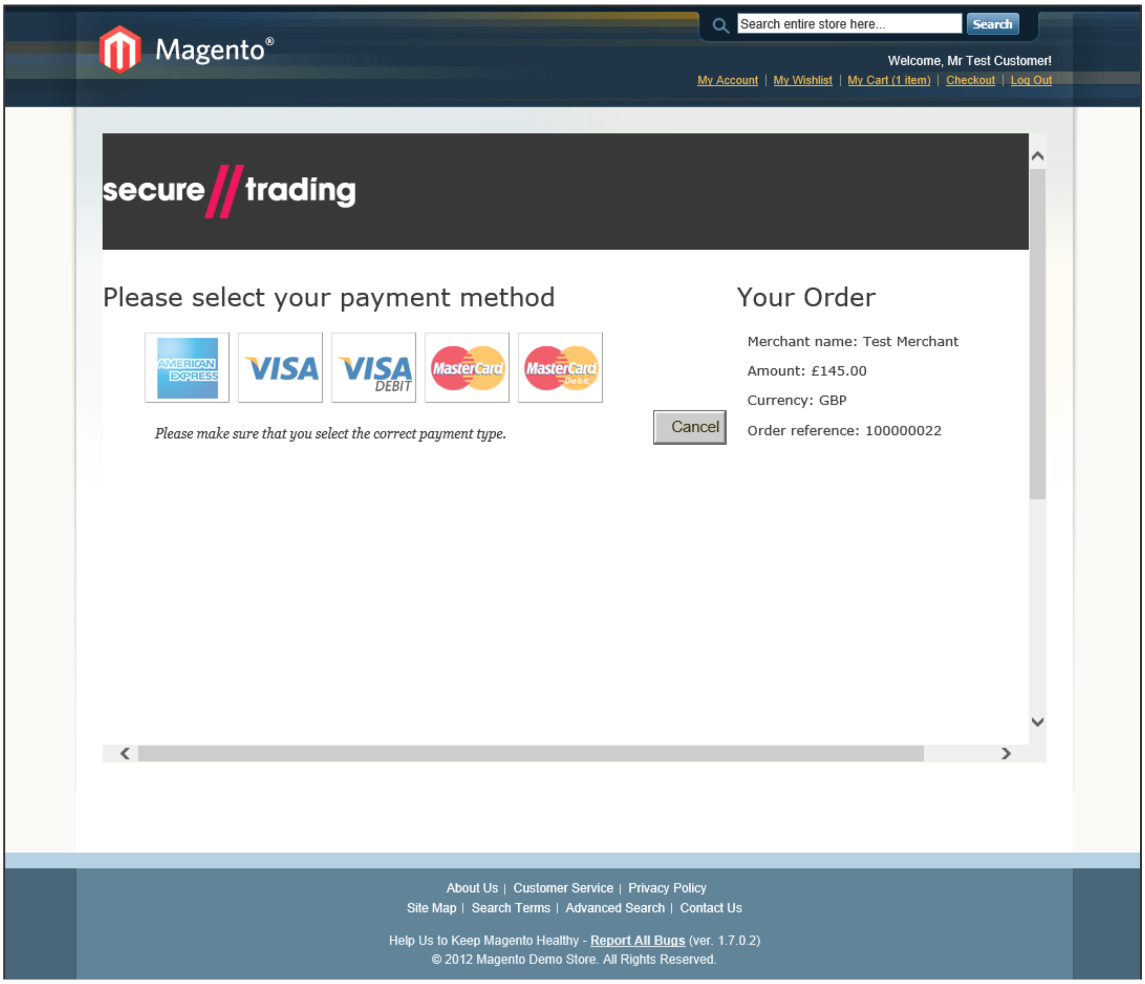
Please note that Subscriptions require the additional Subscription fields (shown above) to be submitted in order to be scheduled in the Secure Trading Subscription Engine. For more information, please refer to the **STPP Subscriptions and Payment Pages** (see section **13.3 Useful Documents** on **page 70**).

9 iframe

Secure Trading allows you to display your payment page within an iframe. This enables you to display the payment page within the layout of your website.

This section of the document outlines how you could set up your payment page within an iframe. The screenshot below is an example of how the iframe would look.

It is imperative that all web pages on your site are encrypted using Secure Socket Layer (SSL) to ensure correct functionality of iframes across all browsers.



Please select your payment method

Please make sure that you select the correct payment type.

Your Order

Merchant name: Test Merchant

Amount: £145.00

Currency: GBP

Order reference: 100000022

Magento
Search entire store here...
Search
Welcome, Mr Test Customer!
My Account | My Wishlist | My Cart (1 item) | Checkout | Log Out
secure // trading
AMERICAN EXPRESS
VISA
VISA DEBIT
MasterCard
MasterCard Debit
Cancel
About Us | Customer Service | Privacy Policy
Site Map | Search Terms | Advanced Search | Contact Us
Help Us to Keep Magento Healthy - Report All Bugs (ver. 1.7.0.2)
© 2012 Magento Demo Store. All Rights Reserved.

Figure 22 - Payment Page in iframe

Please note that iframes may not be rendered correctly in certain web browsers (e.g. certain mobile web browsers).

Please note that PayPal cannot currently be integrated within an iframe.

9.1 Configuring your Website

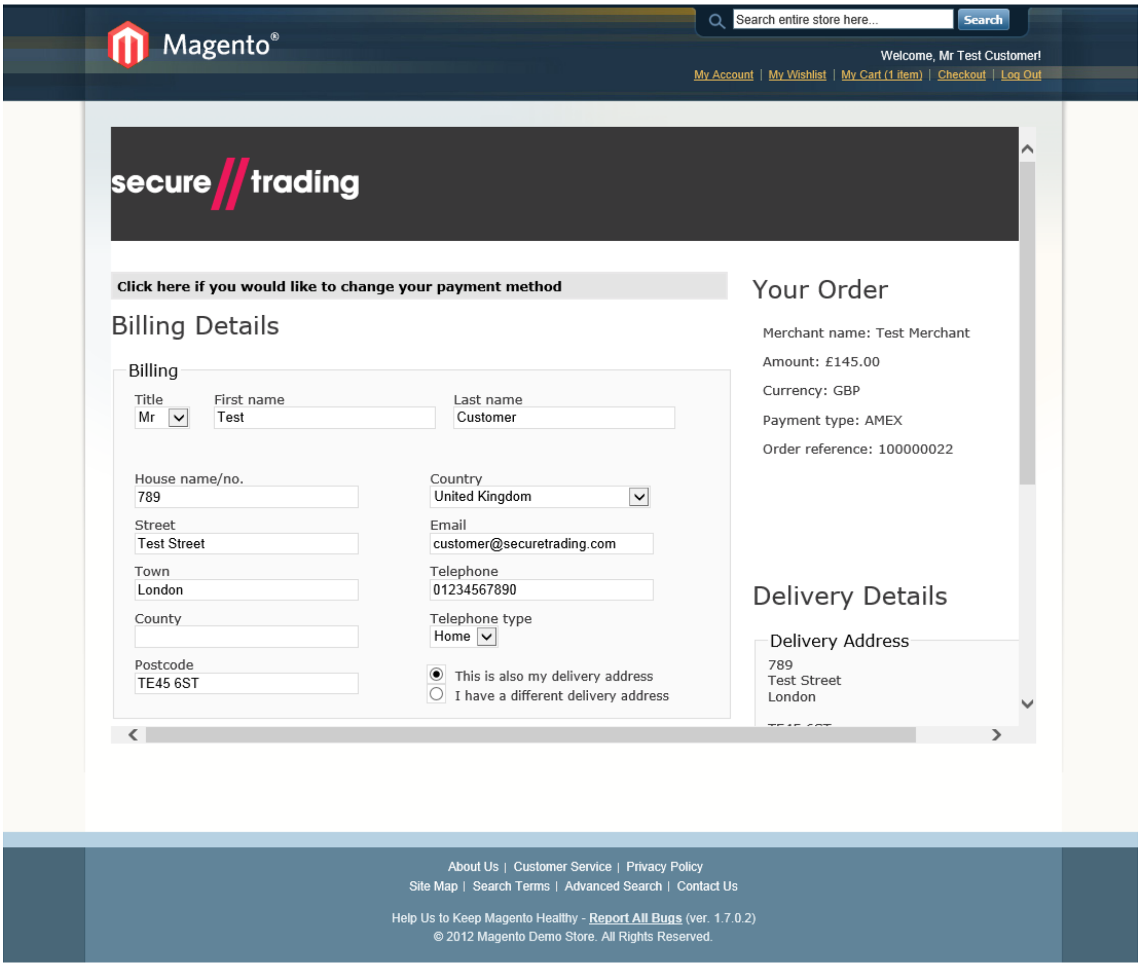
In order to include the iframe within your website, you need to include a line similar to the example below within the HTML on your page:

```
<iframe src="https://payments.securetrading.net
/process/payments/choice?sitereference=
test_site12345&mainamount=10.00&currencyiso3a=GBP&version=1"
width="100%" height="600" scrolling="auto"
style="border:0px;"></iframe>
```

The example above includes the minimum required fields needed in the link (highlighted in **bold**). For more information on these fields, or additional fields that can be included, please refer to section **4 Allowed Fields** on page **25**.

9.2 Changing the appearance of the iframe

By following the instructions outlined in section **9.1**, the standard payment page is included within your webpage. You can format the payment page to be displayed in a more iframe-friendly way, by modifying the CSS (see section **7 Customisation - CSS** on **page 49**).


Magento®
Search entire store here...
Search
Welcome, Mr Test Customer!
My Account | My Wishlist | My Cart (1 item) | Checkout | Log Out
secure // trading
Click here if you would like to change your payment method
About Us | Customer Service | Privacy Policy
Site Map | Search Terms | Advanced Search | Contact Us
Help Us to Keep Magento Healthy - Report All Bugs (ver. 1.7.0.2)
© 2012 Magento Demo Store. All Rights Reserved.

Billing Details

Billing

Title: Mr
First name: Test
Last name: Customer
House name/no.: 789
Country: United Kingdom
Street: Test Street
Email: customer@securetrading.com
Town: London
Telephone: 01234567890
County:
Telephone type: Home
Postcode: TE45 6ST

● This is also my delivery address
○ I have a different delivery address

Your Order

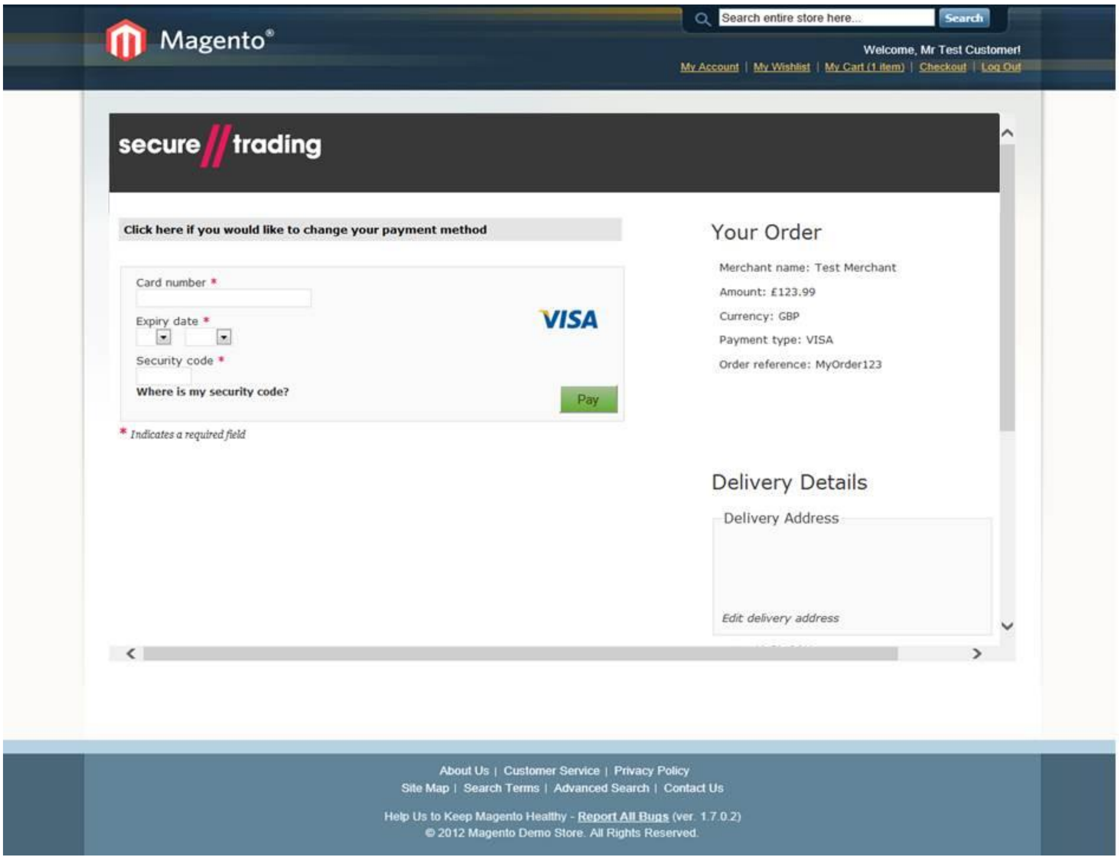
Merchant name: Test Merchant
Amount: £145.00
Currency: GBP
Payment type: AMEX
Order reference: 100000022

Delivery Details

Delivery Address
789
Test Street
London

Figure 23 – Billing details in iframe

It is possible to use CSS to customise which fields are shown within the iFrame. As can be seen below, the delivery and Customer fields have been hidden, in order to ensure the payment details are visible within the iframe. The information from the omitted fields is still passed through the system if they were submitted from the merchant's website.



Magento®
Search entire store here...
Search
Welcome, Mr Test Customer!
My Account | My Wishlist | My Cart (1 item) | Checkout | Log Out
secure//trading
Click here if you would like to change your payment method
Card number *
Expiry date *
Security code *
Where is my security code?
VISA
Pay
* Indicates a required field
Your Order
Merchant name: Test Merchant
Amount: £123.99
Currency: GBP
Payment type: VISA
Order reference: MyOrder123
Delivery Details
Delivery Address
Edit delivery address
About Us | Customer Service | Privacy Policy
Site Map | Search Terms | Advanced Search | Contact Us
Help Us to Keep Magento Healthy - Report All Bugs (ver. 1.7.0.2)
© 2012 Magento Demo Store. All Rights Reserved.

Figure 24 – Payment details in iframe, using CSS

10 Google Analytics

Google Analytics allow you to track users and monitor activity on your site.

10.1 Using Google Analytics Tracking Code

Google Analytics can be used with STPP Payment Pages by using a custom JavaScript. Follow the example below to use this feature.

Step 1: Creating the JavaScript

Upload a file using the MyST File Manager called **`analytics.js`** containing the following code:

```
// Adding Google Analytics to SecureTrading Payment Pages.
var _gaq = _gaq || [];
  _gaq.push(['_setAccount', 'UA-XXXXX-X']);
  _gaq.push(['_trackPageview']);

  (function() {
    var ga = document.createElement('script'); ga.type =
'text/javascript'; ga.async = true;
    ga.src = ('https:' == document.location.protocol ? 'https://ssl' :
'http://www') + '.google-analytics.com/ga.js';
    var s = document.getElementsByTagName('script')[0];
s.parentNode.insertBefore(ga, s);
  })();
```

Figure 25 JavaScript for Google Analytics

Replace the text marked in **bold**, "**`UA-XXXXX-X`**" to be your Google Analytics web property ID.

Please note for more information on the MyST File Manager, please refer to the **STPP MyST User Guide** (see section **13.3 Useful Documents**) for more information.

Step 2: Reference the JavaScript

In your request to the Payment Pages, add the parameter **`childjs`** with the value "**`analytics`**".

The below example references the **analytics.js** file uploaded above.

```
https://payments.securetrading.net/process/payments/choice?sitereference=test_site12345&currencyiso3a=USD&mainamount=100.00&version=1&childjs=analytics
```

Please note that when submitting the JavaScript filename, the file extension ".js" should not be included.

Please note that Google Analytics will set cookies on the customer's browser. For more information on Google Analytics, visit http://www.google.com/analytics/index.html.

10.2 Google Analytics and Ecommerce Tracking

You can use Google Analytics and Ecommerce Tracking to link a specific referral source to payments made through your STPP Payment Pages.

As the Ecommerce Tracking feature needs a completed transaction, the code should be added to your redirect pages (see **Redirect To Merchant's Website** in section **2.2 Payment Pages Standard Authorisation**), not the payment page itself.

For more information on Google Analytics and Ecommerce tracking, visit https://developers.google.com/analytics/devguides/collection/gajs/gaTrackingEcommerce

11 Going Live

11.1 Notifications and Redirects for Live Site Reference

When you are ready to switch your account live, you will need to consider any notifications and redirects that may have been configured on your test site reference, as these will need to be re-configured on your live site reference to ensure they update your system as expected.

11.2 Contact Secure Trading

Once you have tested your system and you are ready to go live, please send an email to support@securetrading.com with your site reference and request to go live. You will receive a response when your live site is ready to begin processing payments.

11.3 Change your website

The POST will need to be updated to use your live site reference. This is done by modifying the **`sitereference`** field submitted to Secure Trading. For both methods outlined in section **3.1 Configuring the HTTP POST**, the change is outlined below.

11.3.1 Method 1: Perform a POST (Recommended)

If you perform HTTP POSTs, the **`sitereference`** field needs to be changed to the live site reference, as shown in the following example (please note the data changed is marked in **bold**):

```
<html>
<head>
</head>
<body>
<form method="POST"
action="https://payments.securetrading.net/process/payments/choice">
<input type="hidden" name="sitereference" value="site12346">
<input type="hidden" name="currencyiso3a" value="GBP">
<input type="hidden" name="mainamount" value="100.00">
<input type="hidden" name="version" value="1">
<input type="submit" value="Pay">
</form>
</body>
</html>
```

The appearance of the button on the page or the page the customer is transferred to would be exactly the same as on your test site, but now that the live site reference has been used, the account will process transactions to your acquiring bank.

11.3.2 Method 2: Link to Secure Trading

⚠ **Please do not use this method when submitting sensitive billing information (e.g. customer’s billing address), as this could be intercepted by a third party.**

Secure Trading recommends using Method 1, outlined in sections 3.1.1 and 11.3.1.

If you have set up a link directly to the payment page, the value of **`sitereference`** will need to be modified to use your live site reference, as shown in the following example (please note the field changed is marked in **bold**):

```
https://payments.securetrading.net/process/payments/choice?sitereferen
ce=site12346&currencyiso3a=GBP&mainamount=100.00&version=1
```

11.4 Live testing

Once you have switched to your live account, Secure Trading recommend that you perform a test transaction using a live card to ensure the transaction is processed as expected. You can sign in to MyST to manage your transactions. Therefore you can cancel transactions processed on live cards.

ⓘ **Please note** that you should not use the same live card too many times, as the requests will still be authorised, and could cause the issuer to suspect fraud or the cardholder could exceed their limit.

12 Testing

12.1 Testing Authorisation

During integration testing, the following test card details can be used.

> It should be noted that these are TEST card details, and will not return the expected responses in a LIVE environment.

Name of payment type	Payment type field	Authorisation	Decline
American Express	`AMEX`	340000000000611	340000000000512
Diners	`DINERS`	3000000000000111	3000000000000012
Discover	`DISCOVER`	6011000000000301	6011000000000202
JCB	`JCB`	3528000000000411	3528000000000312
Maestro	`MAESTRO`	5000000000000611	5000000000000512
MasterCard	`MASTERCARD`	5100000000000511	5100000000000412
MasterCard Debit	`MASTERCARDDEBIT`	5124990000000101	5124990000000002
V PAY	`VPAY`	4370000000000061	4370000000000012
Visa	`VISA`	4111110000000211	4111110000000112
Visa Debit	`DELTA`	4310720000000091	4310720000000042
Visa Electron	`ELECTRON`	4245190000000311	4245190000000212
Visa Purchasing	`PURCHASING`	4484000000000411	4484000000000312

For these cards, when performing tests, the tester needs to input an expiry date that is in the future in order for the transactions to be authorised by Secure Trading's fake bank.

> A main amount of 700.00 will always return a declined response for a test account.
> A main amount of 600.10 will always return a bank system error for a test account.

12.2 Address Verification (AVS) and Security Code Checks

The following tables list test details that can be submitted to obtain different responses from the address verification (AVS) and security code checks. This information can be used with any of the card numbers included in section **12.1 Testing Authorisation**, above.

Please note that only the billing premise, billing postcode and security code fields dictate the outcome of the AVS and CVV2 checks performed. As such, entering any details into the other address fields will not affect the outcome of the AVS and CVV2 checks.

12.2.1 Premise

Billing Premise	Security Response	Security Response Caption
No 789	2	**Matched**
No 123	4	**Not Matched**
No 333	1	**Not Checked**
Leave blank	0	**Not Given**

12.2.2 Postcode / ZIP Code

UK Billing Postcode	US Billing Postcode	Security Response	Security Response Caption
TE45 6ST	55555	2	**Matched**
TE12 3ST	12345	4	**Not Matched**
TE33 3ST	33333	1	**Not Checked**
Leave blank	Leave blank	0	**Not Given**

12.2.3 Security code

Security Code	AMEX Security Code	Security Response	Security Response Caption
123	1234	2	**Matched**
214	2144	4	**Not Matched**
333	3333	1	**Not Checked**
Leave blank	Leave blank	0	**Not Given**

12.3 Testing Fraud Control

The following main amounts can be submitted to the Payment Pages request to test the different Fraud Control – Risk Decision responses:

Risk Decision Response	Main Amount
ACCEPT	11.11
DENY	11.22
CHALLENGE	11.33

12.4 Testing Account Check

If you wish to test an Account Check request, then you can use any of the card numbers included in section **12.1 Testing Authorisation**.

You can also test the Security Code and Address Verification System by using the Security Code, Address and Postcode details supplied in section **Address Verification (AVS) and Security Code Checks** on **page 67**.

ℹ This is only available for some Acquiring Banks. Please contact Secure Trading Support (see section **13.1 Secure Trading Support**).

12.5 Testing Currency Rate

During your integration, you can use the following international test card details in order to test your system for successful DCC transactions.

Currency	VISA	MasterCard	Maestro
GBP	4300 0000 0000 2211	5311 1100 0000 1511	6759 0000 0000 0711
EUR	4500 0000 0000 0007	5500 0000 0000 0004	
USD	4111 1111 1111 1111	5400 0000 0000 1011	
JPY		5100 0000 0000 2111	5000 0000 0000 0611
CHF	4600 0000 0000 0006		5600 0000 0000 0001
HKD	4130 0000 0000 1011		

12.5.1 Testing DCC

The card numbers above are associated with specific local currencies. When performing DCC (as described in section **6.5** on **page 41**) and using a card with a currency that is different to the merchant's currency, the amount in both the customer's local currency and the merchant's currency are returned to the customer. These are shown as two options to choose between before processing the test Authorisation Request.

13 Further Information and Support

This section provides useful information with regards to documentation and support for the Merchant's Secure Trading solution.

13.1 Secure Trading Support

If you have any questions regarding integration or maintenance of the system, please contact our support team using one of the following methods.

Method	Details
Telephone	+44 (0) 1248 672 050
Fax	+44 (0) 1248 672 099
Email	support@securetrading.com
Website	http://www.securetrading.com/support/support.html

13.2 Secure Trading Sales

If you do not have an account with Secure Trading, please contact our Sales team and they will inform you of the benefits of a Secure Trading account.

Method	Details
Telephone	0800 028 9151
Telephone (Int'l)	+44 (0) 1248 672 070
Fax	+44 (0) 1248 672 079
Email	sales@securetrading.com
Website	http://www.securetrading.com

13.3 Useful Documents

The documents listed below should be read in conjunction with this document:

- STTP MyST User Guide – This document outlines how to use MyST to monitor your transactions and manage your account.
- STPP XML Specification – This defines the XML that is submitted in requests to Secure Trading via STAPI and Web Services, for AUTH, ACCOUNTCHECK and REFUND Requests.
- XML Reference 3-D Secure – This document outlines how to process a 3-D Secure transaction.
- STPP Subscriptions and Payment Pages – This document outlines how to process Subscriptions through the Payment Pages.
- STPP AVS & CVV2 – This document describes the checks performed on the address and security code submitted by the customer.
- STPP Notifications – This document outlines how to configure notifications for events that occur on your Secure Trading account.

Any other document regarding the STPP system can be found on Secure Trading's website (http://www.securetrading.com). Alternatively, please contact our support team as outlined above.

13.4 Frequently Asked Questions

Please visit the FAQ section on our website (http://www.securetrading.com/support/faq).