NAB TRANSACT

Hosted Payment Page Integration Guide

Contents

1. Introduction

1.1 About this Guide

This guide provides technical information about integrating and testing the NAB Transact Hosted Payments Page with your web site or shopping cart.

It is recommended that someone with HTML programming experience reads this guide and implements the NAB Transact Hosted Payment Page. You should talk to your web developer if you require technical assistance with HTML programming.

This guide covers the process of building an HTML form with your web site in order to integrate the Hosted Payments Page, plus explanations and examples of the system's features. An understanding of HTML programming is required.

1.2 Card Types Accepted

The NAB Transact Hosted Payments Page accepts the following card types by default;
- Visa
- MasterCard

You may also accept American Express, Diners Club and JCB. However, you will need to apply directly with these Card Schemes before you can accept these cards. Contacts details are shown below:

American Express/JCB   1300 363 614
Diners Club   1300 360 500

1.3 Fraud Protection and 3D Secure

The NAB Transact Hosted Payments Page may be enabled with optional anti-fraud features including 3D Secure. If the 3D Secure option is enabled, no extra implementation effort is required.

Verified by Visa and MasterCard SecureCode, collectively referred to as "3D Secure", allows your customer to be authenticated through Visa and Mastercard International by entering a password during the payment process.

1.4 Prerequisites
1.4.1 Merchant Services
- A NAB Merchant ID and an Electronic Banking (EB) number for accepting Visa and MasterCard credit card transactions over the Internet.
- An agreement with American Express, Diners and/or JCB if you wish to accept these cards.

1.4.2 NAB Transact Service
- A NAB Transact Client ID (E.g. NAB0010). This number is generated by the NAB Transact Service Centre and is provided to you upon the service activation.
- A website or website test environment.
- A prior knowledge of HTML is required. It is beyond the scope of this document to explain all features and functionality of building a web page.

- An HTML editor such as Notepad to create the order form.
- The ability to update your web site. This is typically performed by a File Transfer Program (FTP).

1.5 Website Review and Service Activation

Your new NAB Transact service is in test mode until you have implemented and successfully tested the integration service.

When you want to process live transactions after completing your testing, you will need to contact the NAB Transact Service Centre. The Service Centre will review your website and to ensure it complies with NAB's eCommerce processing requirements.

To assist the Service Centre in reviewing your site, please ensure you provide the following as a minimum:
- URL or IP-address to visit
- Any test login data required to access the payment service
- Any test purchase data required to perform a test transaction

Common mistakes that slow down account activation:
- Missing privacy policy
- No refund policy provided under the documented URL on the payment page
- Missing shipping policy
- Missing security policy

NOTE: If you do not allow refunds, this must be clearly indicated on your Refund Policy page.

1.6 How is NAB Transact Hosted Payments Page Implemented?

1.6.1 Overview

The NAB Transact Hosted Payments Page is a security enhanced online credit card payment system that integrates into a web site via an HTML order form.

The order form collects information about an order and upon submission by a customer; calls the NAB Transact Payment Gateway which in turn enables secure processing of the customer's credit card for the invoice total (see Figure 1).

Merchant Website		**Customer's Browser**	
Home Page	Order Form Product 1 Product 2 Name, Address Submit Order	Secure Payment Page Product 1 Product 2 Amount Credit or charge card Authorise Payment	Receipt Page Bank Response Auth-Code Invoice Number

SSL
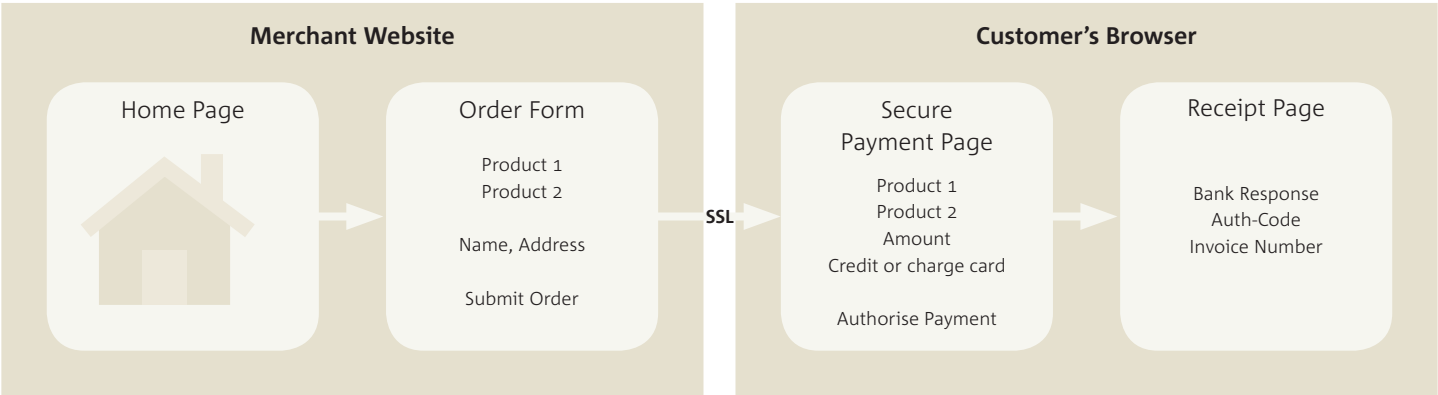
Figure 1
Overview of the NAB Hosted Payments Page Process

NOTE: The card details cannot be submitted in the Order Form component of the Merchants Website. The NAB Transact Hosted Payments Page is the entry point for card details.

In addition to the above process, you and your customer will receive an email receipt of the payment so that you may fulfil the order. You can also log into the online NAB Transact administration and reporting tool and view the transaction details.

1.6.2 Examples of Payment Pages and Emails
Merchant Order Form

This form represents a typical order form with products and customer information.

It is part of your web site, and is completed by your customer.

The order form you submit or send to the NAB Transact Hosted Payments Page contains the relevant information which is required to build an invoice and accept the payment securely.

NOTE: This is only an example. Your own order form will itemise your own products and define the customer information you need to collect in order to fulfil the order.

The code from this example is available in Appendix 1.

Product	Quantity	Price (AUD$)
Product 1	1	$10.00
Product 2	0	$12.00
Product 3	2	$14.00
Product 4	0	$16.00
Product 5	0	$18.00

Name	John Smith
Street/P.O. Box	2 Main Street
City	Sydney
State	NSW
Post Code	2000
Email	john@email.com.au
Telephone	02 9999 8888

Reset Form   Submit Form

Payment Page

The SSL protected payment page is an invoice built from the information submitted from your order form and is hosted by the secure NAB Transact Payment Gateway.

The first section of the form displays information about your business, should the customer need to contact you.

The "Order Information" area displays information about your customer and their product selections, received from configurable inputs in your order form.

The "Credit Card Details" area is the only form that captures any card information.

Make a Credit Card Payment

Pay To:	NAB Transact Demonstration ACN: 987 654 321 ABN: 21 987 654 321 1 Main Street Sydney NSW 2000 Australia Phone: 02 9876 5432 Fax: 02 9898 7676
Contact:	John Citizen
Email:	john@domain.com.au

Order Information

Name:	John Smith
Street/PO Box:	2 Main Street
City:	Sydney
State:	NSW
Post Code:	2000
E-Mail:	john@email.com.au
Telephone:	02 9999 8888

Product	Qty	Unit Price	Price (AUD$)
Product 1	1	10.00	10.00
Product 3	2	14.00	28.00
		Total:	AUD$38.00

Credit Card Details

VISA MasterCard

Card Number:	4444333322221111 (eg. 4000123456781234)
CVV Number:	123 (What is this?)
Card Type:	Visa Expiry: 02 / 08
Name on Card:	John Smith
Email Address (optional):	john@email.com.au

Authorise Payment   Clear Form

Customers please note: While your request is being processed, please be patient and do **NOT** try to resubmit the request. Processing can take up to 150 seconds.

Receipt Page

The receipt page is the printable result of an approved transaction.

It contains the order information from the payment page and adds information about the transaction result including the auto-generated invoice number and bank authorisation code.

Receipt	
Payment Reference:	TEST Payment Only - DO NOT CHARGE
Invoice Number:	100000
Bank Authorisation:	023807
Date:	Wednesday, 19 December 2007, 11:23 EST
Amount Received:	AUD$38.00
Received by:	NAB Transact Demonstration
	ACN: 987 654 321
	ABN: 21 987 654 321
	1 Main Street
	Sydney NSW 2000
	Australia
	Phone: 02 9876 5432
	Fax: 02 9898 7676
Contact:	John Citizen
Email:	john@domain.com.au

Order Information

Name:	John Smith
Street/PO Box:	2 Main Street
City:	Sydney
State:	NSW
Post Code:	2000
E-Mail:	john@email.com.au
Telephone:	02 9999 8888

Product	Qty	Unit Price	Price (AUD$)
Product 1	1	10.00	AUD$10.00
Product 3	2	14.00	AUD$28.00
		Total:	**AUD$38.00**

(This page may be printed as a record of the transaction)

Merchant Email

This is an example of the email that you will receive once an order has been processed and an approved transaction response has been received from the card issuing bank

These emails allow you to fulfil your customer orders.

You should retain these emails as a historical record of the orders that you have processed through NAB Transact service.

Tax Invoice

This secure online payment was provided by NAB Transact on Wednesday, 19 December 2007, 12:01 EST and has been added to your NAB Transact account.

Click REPLY to send an email to the customer

Account Name:	nabuat
Trading Name:	NAB Transact Demonstration
Invoice Number:	100001
Payment Amount:	AUD$38.00
Card Holder's Name:	John Smith
Card Type:	TEST
* Bank Authorisation:	026095
Payment Reference:	TEST Payment Only - DO NOT CHARGE

Order Details:

Description	Quantity	AUD$Price
Product 1	1	AUD$10.00
Product 3	2	AUD$28.00
Total:		**AUD$38.00**

Customer Information:

Name:	John Smith
Street/PO Box:	2 Main Street
City:	Sydney
State:	NSW
Post Code:	2000
E-Mail:	john@email.com.au
Telephone:	02 9999 8888

Customer Email

This is an example of the email received by a customer when a credit card transaction is approved and if they have completed their email address on the payment page.

NOTE: If your customer has elected not to receive an email during the payment process, you have a responsibility to provide the customer a receipt copy with shipment of the product or on completion of services.

Tax Invoice

This secure online payment was provided by NAB Transact on Wednesday, 19 December 2007, 12:01 EST for NAB Transact Demonstration.

Invoice Number:	100001
Payment Amount:	AUD$38.00
Card Holder's Name:	John Smith
Bank Authorisation:	026095
Payment Reference:	TEST Payment Only

Order Information

Name:	John Smith
Street/PO Box:	2 Main Street
City:	Sydney
State:	NSW
Post Code:	2000
E-Mail:	john@email.com.au
Telephone:	02 9999 8888

Description	Quantity	AUD$Price
Product 1	1	AUD$10.00
Product 3	2	AUD$28.00
Total:		**AUD$38.00**

Merchant Details:

Pay to:	NAB Transact Demonstration
	ACN: 987 654 321
	ABN: 21 987 654 321
	1 Main Street
	Sydney NSW 2000
Customer Enquiries:	John Citizen
	Phone: 02 9876 5432
	Fax: 02 9898 7676
	john@domain.com.au

2. Implementation

2.1 Minimum Requirements

2.1.1 Form Tags

The following "form" tags are used to encapsulate the NAB Transact Hosted Payments Page inputs in your HTML order form:

```
<form method="post" action="https://...">
...
</form>
```

All Input fields must occur between the "form" tags for correct submission of information to the NAB Transact Live and Test servers.

Ensure that the "method" attribute is set to "post".

You may also add the "name" attribute or any other form functionality that you require.

2.1.2 Test and Live Payment URL's

Form action for test payments:

```
<form method="post"
action="https://transact.nab.com.au/test/hpp/payment">
```

Form action for live payments:

```
<form method="post"
action="https://transact.nab.com.au/live/hpp/payment">
```

The live payments server is connected to your NAB Transact service ready to take real-time card payments.

2.1.3 Acceptable Form Input Tags

Any HTML form tags may be used to submit information to the NAB Transact Payment Gateway.

This document deals predominantly with the "input" tag, however, you may use any form tag to create the necessary name/value data pairs that form the information interpreted by NAB Transact Payment Gateway.

For example, you may choose to use a "textarea" tag to capture a paragraph of text from your customer.

2.1.4 Refund and Privacy Policies

You must provide clear refund, return and privacy policies on your web site.

These will be linked from within the NAB Transact web pages and emails according to the URL's you specify in the appropriate input fields or via the NAB Transact administration, reporting and search tool.

Values passed through as input fields take precedence over values stored in the administration, reporting and search tool.

```
Example: Set the refund policy URL

<input type="hidden" name="refund_policy"
value="http://myserver.com/my_refund_policy.htm">
Example: Set the privacy policy URL

<input type="hidden" name="privacy_policy" value="http://myserver.com/my_privacy_policy.htm">
```

2.2 How to Test

As you build your order form, you can test its functionality as many times as you like by submitting it to the "test payment URL" listed in section "0 2.1.2 Test and Live Payment URL's". You can then complete the transaction by entering the card details listed in section 0.

2.2.1 Test Card Number, Type and Expiry

Use the following information when testing your order form:

Card Number: 4444333322221111
Card Type: VISA
Card CVV: 123
Card Expiry: 08 / 12 (or any date greater then today)

2.2.2 Simulating Approved and Declined Transactions

For testing purposes only, you can simulate approved and declined transactions by submitting alternative invoice totals. This is the final total that is on the bottom of the secure NAB Transact payment page.

If the order total ends in 00, 08, 11 or 16, the transaction will be approved once the credit card details are submitted. All other options will cause a declined transaction.

Order totals to simulate approved transactions:

$1.00
$1.08
$105.00
$105.08
(or any total ending in 00, 08, 11 or 16)

Order totals to simulate declined transactions:

$1.51
$1.05
$105.51
$105.05
(or any total not ending in 00, 08, 11 or 16)

NOTE: When using the live payments URL for processing live payments, the card issuing bank determines the transaction response independent of the invoice total.

2.3 Building Your Order Form

2.3.1 Types of Information Submitted

NAB Transact accepts INPUT fields from an HTML form on your web site and uses the information received from the submission of this form to securely process the credit card transaction and redirect to your receipt page.
There are four types of information that NAB Transact can receive and decode from the form INPUT fields:
• Mandatory Fields – Merchant ID and merchant payment notification email address.
• Products
• Customer Information
• Page Formatting

2.3.2 Case Sensitive INPUT fields

All INPUT fields with the "name" and "value" attributes in the form should be treated as case sensitive.

This includes:
• All NAB Transact reserved inputs (E.g. "colour_page")
• All product field names and values
• All customer information field names and values

2.3.3 Merchant ID Input (Mandatory)

The Merchant ID INPUT field "vendor_name" is a mandatory form field.

It tells NAB Transact service through which service you want to process the payment.

Your Client ID will be supplied when your service is activated. It will be in the format "ABC01", where ABC is your organisation's unique three letter code. It is used for logging into the NAB Transact administration, reporting and search tool.

NOTE: This should not be confused with your eight-digit National Australia Bank Merchant Number (Eg. 22123456).

```
Example: Form tags with vendor_name INPUT field
<form method="post" action="https://...">
<input type="hidden" name="vendor_name" value="NAB0010">
...
</form>
```

2.3.4 Merchant Notification Email (Mandatory)

If you have not set up an email address in the administration, reporting and search tool to receive payment notifications, provide the email address in the INPUT field "payment_alert" that you want to receive an email when an order is processed by the NAB Transact Payment Page.

NOTE: Emails are only sent if a transaction has been approved and you may specify more than one email address by separating them with commas.

```
Example: Set the Merchant Email notification address

Scenario: John, the merchant, wants all order emails to come to him.

<input type="hidden" name="payment_alert" value="john@myserver.com.au">
```

2.3.5 Products Inputs

Product fields are used to describe your products on the Hosted Payments page and receipt emails. NAB Transact builds an invoice and calculates the invoice total from the product input field values.

Any INPUT fields that are not specifically tagged as "information_fields" (see "0 2.3.6 Customer Information Inputs"), or classed as NAB Transact reserved fields (See "4.2 Appendix 2: Accepted Input Field Names" – E.g. "4.2.3.1 colour_page"), are assumed by NAB Transact to be product fields.

Product INPUT fields can be broken down to "Product Name", "Quantity" and "Unit Price".

2.3.5.1   Name, Quantity and Unit Price

The "name" attribute of the INPUT field defines the product's name, while the "value" attribute defines the quantity and price.

In the following example, the product name is "Red Socks", with a quantity of 5 and a price of $10.95.

```
Example: Product name, quantity and unit price

<input type="hidden" name="Red Socks" value="5,10.95">
```

2.3.5.2   Name and Price Only

If, for example, a single value is given for the product field, the quantity is assumed to be one.

```
Example: Product name and price only

Scenario: You will always sell one pair or Red Socks with the price $10.95. Therefore you only require a product input field with the price and no option to select quantity:

<input type="hidden" name="Red Socks" value="10.95">
```

The number of products being ordered is assumed to be one (1) by the system. Therefore the Payment Page will list Red Socks with a quantity of one and a price of $10.95.

2.3.5.3   Name and Quantity; Name and Unit Price
Another alternative is to provide two inputs with the same name. The values will be treated as quantity and price respectively.

Example 1: Product quantity and unit price in separate INPUT fields

Scenario: You want the customer to type in the number of pairs of socks that he/she wishes to purchase. You require a text input for quantity, plus a hidden input for the price of $10.95.

```
<input type="text" name="Red Socks">
<input type="hidden" name="Red Socks" value="10.95">
```

Example 2: Product quantity and unit price in SELECT and INPUT fields

Scenario: You want the customer to select the number of pairs of socks that he/she wishes to purchase from a drop down list. You require a select input for quantity, plus a hidden input for the price of $10.95.

```
<select name="Red Socks">
   <option value="1">1</option>
   <option value="2">2</option>
   <option value="3">3</option>
   <option value="4">4</option>
</select>
<input type="hidden" name="Red Socks" value="10.95">
```

This would be treated by the NAB Transact Payment Gateway as a value of "quantity,10.95", thus allowing the customer to select the quantity but without complex code embedded in the HTML. Note that quantity always precedes price.

2.3.5.4   Hide Products with No Quantity Selected
The payment pages and emails will, by default, list all products submitted from your order form regardless of quantity.
This means that products with a quantity of zero will be listed along side products with a quantity greater than zero.

If you want the NAB Hosted Payment Page to hide products where the quantity equals zero, set the "print_zero_qty" INPUT field to a value of "FALSE".

Example: Hide Products with a Zero Quantity

```
<input type="hidden" name="print_zero_qty" value="FALSE">
```

2.3.6 Customer Information Inputs
Customer information fields appear on the payment page, receipt page and emails separate from the products.

They are used to collect personal information from your customer so that you may fulfil their completed order.

There is no limit to what you can include as customer information.

2.3.6.1   Make an Input Field a Customer Information Field
Customer information fields consist of:
•   An INPUT field named with the label you want to appear on the payment pages and emails
•   A hidden "information_fields" INPUT with the value of the previous field's name.

Example: Customer information fields

Scenario: You must accept your customer's Address, Post Code and Shoe Size to be able to fulfil their order. This information will be collected from your web site order form via "information_fields". These fields, together with the product fields, will constitute the order. You therefore require the following:

```
<input type="text" name="Address"><input type="hidden" name="information_fields" value="Address">
<input type="text" name="Post Code"><input type="hidden" name="information_fields" value="Post Code">
<input type="text" name="Shoe Size"><input type="hidden" name="information_fields" value="Shoe Size">
```

This would display three text boxes to allow input of "Address", "Post Code" and "Shoe Size" for customer information fields. This makes it very easy to add or remove information fields without editing several parts of the page.

Alternatively, you may list all the information field inputs together.

Example: Information fields in a single input list

```
<input type="text"   name="Address">
<input type="text"   name="Post Code">
<input type="text"   name="Shoe Size">
<input type="hidden" name="information_fields" value="Address,Post Code,Shoe Size">
```

2.3.6.2   Hiding Customer Information Field Labels

You may have several information field inputs that make up the complete address of your customer.

You can hide some or all of the field labels on the payment page by using the input field "suppress_field_names".

Example: Hide some information field labels

Scenario: Only show the label "Address" next to all the address fields completed by the customer

```
<input type="text"   name="Address">
<input type="text"   name="State">
<input type="text"   name="Post Code">
<input type="text"   name="Country">
<input type="hidden" name="information_fields" value="Address,State,Post Code,Country">
<input type="hidden" name="suppress_field_names" value="Post Code,State,Country">
```

2.3.7 Requiring Customer Information Input Field Completion

You may have customer information input fields that must be completed in order to fulfil an order.

You can enforce this by making some or all "information_fields" required fields.

Use the INPUT field "required_fields" with a value containing the name of "information_fields" that are required to be completed by your customer.

As with "information_fields", this can be a single input with comma-separated values, or several inputs with single values.

Example: Configuring Required Fields

Scenario: You need the customer's address to deliver their goods.

```
<input type="text"   name="Address">
<input type="hidden" name="information_fields" value="Address">
<input type="hidden" name="required_fields"    value="Address">
```

2.3.8 Unique Payment Reference

The "payment_reference" field can be used to tag orders with an identifier meaningful to you. This may be your invoice number, or could be a unique tracking number produced as part of your own web site.

The payment reference appears on all web pages and emails, as well as in the NAB Transact administration, reporting and search tool and transaction history list. It is ideal for tying transactions to order emails.

Example: Defining a payment reference

Scenario: Your company wants to include its invoice numbers on every order.

`<input type="hidden" name="payment_reference" value="Invoice#642193">`

2.3.9 Customer's Email Address

The payment page served by the NAB Transact Payment Gateway has an input field for the customer's email address.

You can pre-populate this field from within your order form by using the INPUT field "receipt_address".

Example: Capturing the customer's email address

Scenario: Have the customer type their email address into a text box.

`<input type="text" name="receipt_address">`

You may also populate the payment page customer email address field from another field listed in "information_fields".

Use double brackets "<<" and ">>" around the field name value that contains the email address.

Example: Using an "information_fields" item as the customer email address

Scenario: You collect the customers email on your own form using an INPUT field named "Email" and want this to appear on the payment page in the Email Address input field.

`<input type="text"   name="Email">`
`<input type="hidden" name="information_fields" value="Email">`
`<input type="hidden" name="receipt_address"    value="<<Email>>">`

2.3.10   Handling GST

GST can be handled in one of two ways:
- Prices do not include GST and GST must be calculated and added to the invoice
- Prices already include GST and tax laws require this to be stated

2.3.10.1 Enable GST handling

To enable GST handling by the Hosted Payment Page Gateway, include the INPUT field "gst_rate" set to a rate of "10".

Example: ENABle GST handling

`<input type="hidden" name="gst_rate" value="10">`

2.3.10.2 Calculate GST and Add to Invoice Total

Calculating GST is the default. However, you can use the INPUT "gst_added" with a value of "false". This must be used in conjunction with "gst_rate".

Example: GST is calculated and added to invoice total

`<input type="hidden" name="gst_rate"  value="10">`
`<input type="hidden" name="gst_added" value="false">`

2.3.10.3 State the Inclusion of GST

If you have already included GST in your prices, the system can state this by setting the INPUT field "gst_added" to a value of "true". This must be used in conjunction with "gst_rate".

Example: State the inclusion of GST

```
<input type="hidden" name="gst_rate"  value="10">
<input type="hidden" name="gst_added" value="true">
```

2.3.10.4 Exempting Product Fields from GST Calculation

Some of your products may not incur GST. You can specify the names of those products using the INPUT "gst_exempt_fields".

Example: Exempting products from GST calculation

Note: This only applies when "gst_added" is omitted or set to "false"

```
<input type="hidden" name="Product 1" value="10.95">
<input type="hidden" name="gst_rate"  value="10">
<input type="hidden" name="gst_added" value="false">
<input type="hidden" name="gst_exempt_fields" value="Product 1">
```

2.3.11   Payment and Receipt Page Formatting Inputs

2.3.11.1 Change the Background Colour

Use the INPUT field "colour_page" to set the background colour of the NAB Hosted Payments Page web pages.

Example: Change the background colour to blue

```
<input type="hidden" name="colour_page" value="#336699">
```

2.3.11.2 Change the Text Colour

Use the INPUT field "colour_text" to set the text colour of the NAB Hosted Payments Page web pages.

Example: Change the text to grey

```
<input type="hidden" name="colour_text" value="#DDDDDD">
```

2.3.11.3 Change the Table Background Colour

Use the INPUT field "colour_table" to set the main table colour of the NAB Hosted Payments Page web pages.

Example: Change the table background colour to red

```
<input type="hidden" name="colour_table" value="#FF0000">
```

2.3.11.4 Change the Font

Use the INPUT field "font" to set the font of the NAB Hosted Payments Page web pages.

Example: Change the font to "Courier New"

```
<input type="hidden" name="font" value="Courier New">
```

2.3.12   Updating your System after a Transaction is Approved

Two methods exist to remotely update your system following an approved transaction: return_link_url and reply_link_url.

- The **return_link_url** is the visible clickable hyperlink on the top and bottom of the transaction receipt screen that the customer sees in the event of an approved transaction. The customer must click on the URL for the remote service to receive data.
- The **reply_link_url** is a server-side request from the NAB Transact payment server to a web service within the client's web site or hosting environment. It is triggered automatically at the time the receipt page is displayed to the customer.

NOTE: The reply_link_url can ONLY make a connection to a web service on port 80

Both the return_link_url and reply_link_url are formatted in the same way.

2.3.12.1 Formatting the return_link_url and reply_link_url
Any information or hidden field variables passed to NAB Transact from the payment form are available to be returned via these methods. You may also include additional variables that might be useful to you in processing the returned data.

Example 1: Returning an information or hidden field

<input type="text" name="Address">
<input type="hidden" name="information_fields" value="Address">
<input type="hidden" name="reply_link_url" value="http://www.myserver.com.au/result.asp?Address=">

If the customer types in "2 Main Street" into the text field, the URL-encoded string returned will be:
http://www.myserver.com.au/result.asp?Address=2+Main+Street">

Example 2: Returning both dynamic and hard-coded variables

<input type="text" name="Address">
<input type="hidden" name="information_fields" value="Address">
<input type="hidden" name="reply_link_url" value="http://www.myserver.com.au/result.asp?sessionid=12345&Address=">

If the customer types in "2 Main Street" into the text field, the URL-encoded string returned will be:
http://www.myserver.com.au/result.asp?sessionid=12345&Address=2+Main+Street

Here, the system has included the hard-coded variable sessionid, as well as dynamically populated the user-input data for the address field.

3. Glossary

Client Id	Your NAB Transact access code ("vendor_name") for use of NAB Transact Administration tools. Also used in your payment form as your account identifier. Also used when calling NAB Transact Service Centre on 1 300 138 313
Merchant Number	Your 8-digit National Australia Bank Merchant number. E.g. 22123456. Used when calling for banking support 1 300 138 313 Option 1.
HTML	Hypertext Markup Language. The language interpreted by web browsers. This is the language used to create your NAB Hosted Payments Page payment form.
FORM	The HTML tag used to mark the start and end of the area of your payment page that passes name/value data pairs to NAB Transact
FTP	File Transfer Protocol. The method by which files are transferred from one computer to another. This is the common method used for uploading web pages to a web hosting environment.
Input Field	HTML tags that define Form input fields. Used to submit information to NAB Transact from your order form.
SSL	Secure Sockets Layer. The mechanism used to encrypt form data submitted from a browser.
Verified by Visa & MasterCard SecureCode	Methods used to authenticate a cardholder during an online card payment. Cardholders that are enrolled in Verified by Visa and MasterCard SecureCode will be asked to enter their password during the payment process.
CVV	Cardholder Verification Value. This is an extra code printed on the back of a Visa or MasterCard, typically shown as the last three digits on the signature strip. It is used during a payment as part of the cardholder authentication process. You may also know it as the Card Verification Code (CVC), the Card Security Code or the Personal Security Code. American Express and Diner Club Cards use a 4 digit Security Code in much the same manner.
GST	Australian Goods and Services Tax.

4. Appendices

4.1 Appendix A: Example Payment Form

```
<html>
<head>
<title> NAB Transact - Example Order Page </title>
</head>
<body>
<b>My Online Store</b>
<p><i>Simply save this form to your computer and change it to suit your needs.
<br>You will find some help in the HTML code of this page that explains some key points.
<br>Please refer to the NAB Hosted Payments Page Integration Guide for more help.</i>
<p>Please make your selections and fill in your name and address.
<br>Once you press "Submit Form" you will be taken to a secure area where
<br>you can safely enter your credit card details.
<!-- This form points to our test service
When you activate your service you must change this line to read
<form method="post" action="https://transact.nab.com.au/test/hpp/payment">
 -->
<form method="post" action="https://transact.nab.com.au/live/hpp/payment">
<!-- The only mandatory field is vendor_name. Insert yours here in place of "NAB0010".
    It will be of the format NAB0010. -->
<input type="hidden" name="vendor_name" value="NAB0010">

<!-- Optional - Make sure that products with zero quantity are not displayed on the Payment Page -->
<input type="hidden" name="print_zero_qty" value="false">

<!-- More optional Fields that you may eNABle See the documentation for more info.
<input type="hidden" name="colour_page" value="#FFFFFF">
<input type="hidden" name="colour_text" value="#000000">
<input type="hidden" name="colour_table" value="#FFFFFF">
<input type="hidden" name="font" value="Arial">
<input type="hidden" name="gst_rate" value="10">
<input type="hidden" name="gst_added" value="true">
<input type="hidden" name="gst_exempt_fields" value="">
<input type="hidden" name="payment_reference" value="">
<input type="hidden" name="receipt_address" value="">
<input type="hidden" name="return_link_text" value="Click Here to Return to the Home Page">
<input type="hidden" name="return_link_url" value="http://www.myserver.com.au">
<input type="hidden" name="reply_link_url" value="http://www.myserver.com.au/update.asp?Name=&Address=">
-->
<table border="2" width="320">
    <tr align="center">
     <td><b>Product</b></td>
     <td><b>Quantity</b></td>
     <td><b>Price (AUD$)</b></td>
    </tr>
<!-- Each of these table elements show all that is required to list a product. If you want to delete or add a product simply copy and
paste a new table row and change the NAME of the SELECT and INPUT fields, the price and the onscreen product name. Note that
the quantity input always precedes the price input. That way the product is treated by NAB Transact as "quantity,price" for each item
and it will be correctly displayed on the Payment Page. -->
    <tr align="center">
    <td>Product 1</td>
    <td><SELECT NAME="Product 1" SIZE="1">
        <OPTION SELECTED>0
        <OPTION>1
        <OPTION>2
```

```
        <OPTION>3
        <OPTION>4
        <OPTION>5</SELECT>
        <input type="hidden" name="Product 1" value="10"></td>
      <td>$10.00</td>
    </tr>
    <tr align="center">
      <td>Product 2</td>
      <td><SELECT NAME="Product 2" SIZE="1">
        <OPTION SELECTED>0
        <OPTION>1
        <OPTION>2
        <OPTION>3
        <OPTION>4
        <OPTION>5</SELECT>
        <input type="hidden" name="Product 2" value="12"></td>
      <td>$12.00</td>
    </tr>
    <tr align="center">
      <td>Product 3</td>
      <td><SELECT NAME="Product 3" SIZE="1">
        <OPTION SELECTED>0
        <OPTION>1
        <OPTION>2
        <OPTION>3
        <OPTION>4
        <OPTION>5</SELECT>
        <input type="hidden" name="Product 3" value="14"></td>
      <td>$14.00</td>
    </tr>
    <tr align="center">
      <td>Product 4</td>
      <td><SELECT NAME="Product 4" SIZE="1">
        <OPTION SELECTED>0
        <OPTION>1
        <OPTION>2
        <OPTION>3
        <OPTION>4
        <OPTION>5</SELECT>
        <input type="hidden" name="Product 4" value="16"></td>
      <td>$16.00</td>
    </tr>
    <tr align="center">
      <td>Product 5</td>
      <td><SELECT NAME="Product 5" SIZE="1">
        <OPTION SELECTED>0
        <OPTION>1
        <OPTION>2
        <OPTION>3
        <OPTION>4
        <OPTION>5</SELECT>
        <input type="hidden" name="Product 5" value="18"></td>
      <td>$18.00</td>
    </tr>
</table>
<p>
```

```html
<!-- Each table row contains all the necessary information to list an "information_field".
If you need to add more information fields or even some HIDDEN ones, simply add a new input field
with the name="new field name" as well as an "information_fields" input with value="new field name". -->
<table>
    <tr>
     <td><b>Name</b></td>
     <td><input type="text" name="Name" size=30><input type="hidden" name=information_fields value="Name"></td>
    </tr>
    <tr>
     <td><b>Street/P.O. Box</b></td>
     <td><input type="text" name="Street/PO Box" size=30><input type="hidden" name=information_fields value="Street/PO Box"></td>
    </tr>
    <tr>
     <td><b>City</b></td>
     <td><input type="text" name="City" size="30"><input type="hidden" name="information_fields" value="City"></td>
    </tr>
    <tr>
     <td><b>State</b></td>
     <td><input type="text" name="State" size="30"><input type="hidden" name="information_fields" value="State"></td>
    </tr>
    <tr>
     <td><b>Post Code</b></td>
     <td><input type="text" name="Post Code" size="30"><input type="hidden" name="information_fields" value="Post Code"></td>
    </tr>
    <tr>
     <td><b>E-Mail</b></td>
     <td><input type="text" name="E-Mail" size="30"><input type="hidden" name="information_fields" value="E-Mail"></td>
    </tr>
    <tr>
     <td><b>Telephone</b></td>
     <td><input type="text" name="Telephone" size="30"><input type="hidden" name="information_fields" value="Telephone"></td>
    </tr>
</table>

<BR><input type="reset" CLASS="button" value="Reset Form"> <input type="submit" value="Submit Form">
<P>When you press "Submit Form" you will be taken to a secure area
<br>where you can safely enter your credit card information.

<!-- The end of the FORM -->
</form>
</body>

</html>
```

4.2 Appendix B: Accepted Input Field Names

Mandatory	Recommended	Optional
vendor_name payment_alert	information_fields required_fields suppress_field_names hidden_fields	colour_page colour_text colour_table font gst_rate gst_added gst_exempt_fields payment_reference print_zero_qty receipt_address return_link_text return_link_url reply_link_url

4.2.1 Mandatory Fields
vendor_name

Class	Mandatory
Default	N/A
Description	The Account Name provided to you upon service activation by NAB Transact Service Centre.
Typical Use	<input type="hidden" name="vendor_name" value="NAB0010">

payment_alert

Class	Mandatory
Default	N/A
Description	The email address to which the notification of a payment should be forwarded. If this is omitted, no order emails will be sent to you. You may include several email addresses, separated by commas.
Typical Use	<input type="hidden" name="payment_alert" value="sales@yourdomain.com.au">

4.2.2 Recommended Fields
information_fields

Class	Optional but recommended
Default	N/A
Description	A comma separated list of customer information input field names. Unless listed in "hidden_fields", the field name and value will be listed on the payment and receipt pages and emails in the order specified in the list. The list should not contain any of the reserved field names identified in this document. Any underscores contained in the field names listed will print as spaces.
Typical Use	<input type="hidden" name="information_fields" value="Name,Address 1,Address 2"

required_fields

Class	Optional but recommended
Default	N/A
Description	A comma separated list of "information_fields" that be submitted with a value in order for the payment page to be displayed. It should be a subset of the fields listed in 'information_fields' though if you want to force a customer to buy a particular product, you can specify non-information fields also.
Typical Use	<input type="hidden" name="required_fields" value="Name,Address">

suppress_field_names

Class	Optional
Default	N/A
Description	A comma separated list of "information_fields" where the value of the field will be displayed on the payment page, but the field name will not. The field names will appear in the merchant email.
Typical Use	<input type="hidden" name="suppress_field_names" value="Address 1,Address 2">

hidden_fields

Class	Optional but recommended
Default	N/A
Description	A comma separated list of input field names which are not to be reported on the web pages or on the emails. Generally used to hide configuration information from the customer's view. Fields listed here will also be available for functions such as "return_link_url" and 'reply_link_url' (See 0 and 0 below).
Typical Use	<input type="hidden" name="hidden_fields" value="hidden field 1,hidden field 2">

4.2.3 Optional Fields

colour_page

Class	Optional
Default	FFFFFF
Description	RGB Hexadecimal colour code for the colour of the background of the web pages page generated by NAB Transact.
Typical Use	<input type="hidden" name="colour_page" value="EEEEEE">

colour_table

Class	Optional
Default	CCCCCC
Description	RGB Hexadecimal colour code for the colour of the background of the main table on the payment and receipt pages generated by NAB Transact
Typical Use	<input type="hidden" name="colour_table" value="FFFFFF">

colour_text

Class	Optional
Default	000000
Description	RGB Hexadecimal colour code for the colour of the text on the web page generated by NAB Transact
Typical Use	<input type="hidden" name="colour_text" value="000000">

font

Class	Optional
Default	"ARIAL,GENEVA,VERDANA"
Description	A comma separated list suitable for use with the style element "font-family". The font used on the web pages generated by NAB Transact.
Typical Use	<input type="hidden" name="font" value="Courier New">

gst_rate

Class	Optional
Default	N/A
Description	Initiates GST handling. Use this GST field alone if your prices do not include GST. If the prices already include GST, then also use the "gst_added" function (see 0 below).
Typical Use	<input type="hidden" name="gst_rate" value="10">

gst_added

Class	Optional
Default	FALSE
Description	Use with "gst_rate" (see 0 above) to specify whether GST has been included in product prices passed from the order form. If you want NAB Transact to calculate your GST and add it to the invoice total, then omit this field or set it to "FALSE". If you have included GST in your prices, then set this to "TRUE" to have a message displayed on the payment and receipt pages that GST has been added at a percentage specified by "gst_rate".
Typical Use	<input type="hidden" name="gst_added" value="TRUE"

gst_exempt_fields

Class	Optional but recommended
Default	N/A
Description	This is a list of product names that should not have a GST calculation applied to them, once "gst_rate" (see 0 above) and "gst_added" (if applicable, see 0 above) have been set. This can either be either a comma separated list or separate input fields with the name "gst_exempt_fields".
Typical Use	<input type="hidden" name="gst_exempt_fields" value="Product 1,Product 2">

payment_reference

Class	Optional
Default	N/A
Description	An invoice tracking string specified by the merchant, used to correlate NAB Transact and merchant data. Any characters may be used to form the field value. The value of this field appears on all web pages and emails, as well as in the online Merchant Login. Payments on the test server have a payment reference of 'Test Payment Only - DO NOT CHARGE'.
Typical Use	<input type="hidden" name="payment_reference" value="Order No: j456-123">

print_zero_qty

Class	Optional
Default	TRUE
Description	Allows submitted product fields with a quantity of zero to be listed on the web pages and emails generated by NAB Transact. When set to "FALSE", products with zero quantities are not listed, thereby creating neater web pages and emails when a large product range is listed on the merchant order form.
Typical Use	<input type="hidden" name="print_zero_qty" value="FALSE">

receipt_address

Class	Optional
Default	N/A
Description	The email address field used on the payment page. When the field is submitted, the email address on the payment page is populated with the value of this field. It may be set to the value of another email address input field by setting the "receipt_address" value as the email address Input name enclosed in double brackets "<<" and ">>" (see 0 above).
Typical Use	N/A

return_link_text

Class	Optional
Default	Return to "merchant's business name"
Description	The text of the link displayed at the top and bottom of the receipt page. The URL linked to this text can be defined using the field "return_link_url" Please also refer to 0 2.3.12 Updating your system after a transaction is approved
Typical Use	<input type=hidden name="return_link_text" value="Return to Home Page">

return_link_url

Class	Optional
Default	Return to the merchant's order form on the merchant's web site
Description	A full path URL linking back to the merchant's web site from the NAB Transact receipt page. The default is to link back to the merchant's order form page, however, you can define any valid URL. The text of the link is defined by "return_link_text" (see 0 above). You may also include cgi arguments based on variables passed to NAB Transact from your order form and also include some NAB Transact internal fields To use this effectively, you should have a cgi handler listening as appropriate. For example: "http://www.myserver.com.au/cgi-bin/handler.cgi?Name=&Address=" The actual values for Name and Address would be inserted by NAB Transact automatically. Internal fields that can be inserted are: • bank_reference (bank authorization code) • card_type (Visa, MasterCard, etc) • payment_amount (Invoice Total) • payment_date (returned as UNIX timestamp) • payment_number (incremental invoice number) • remote_ip (Customer's browser IP address) Please also refer to 0 2.3.12 Updating your system after a transaction is approved
Typical Use	<input type="hidden" name="return_link_url" value="http://www.myserver.com.au/program.cgi?payment_amount=&Suburb=">

reply_link_url

Class	Optional
Default	N/A
Description	This is the same format as the "return_link_url", however, this is a triggered server-to-server event upon successful payment processing and is served independently from the receipt page or e-mails. There is a 15 second timeout on the server call. All of the "return_link_url" functionality is available (see 0 above). Note that the reply_link_url can be executed on port 80 only.
Typical Use	<input type="hidden" name="reply_link_url" value="http://www.yourdomain.com.au/program.cgi?payment_number=&Address=">

4.3 Appendix C: Response Codes

BANK RESPONSE CODES			
Code	**Response Text**	**Code**	**Response Text**
Approved			
00	Approved	08	Approved
11	Approved (not used)	16	Approved (not used)
Declined			
01	Refer to Card Issuer	41	Lost Card—Pick Up
02	Refer to Issuer's Special Conditions	42	No Universal Amount
03	Invalid Merchant	43	Stolen Card—Pick Up
04	Pick Up Card	44	No Investment Account
05	Do Not Honour	51	Insufficient Funds
06	Error	52	No Cheque Account
07	Pick Up Card, Special Conditions	53	No Savings Account
09	Request in Progress	54	Expired Card
10	Partial Amount Approved	55	Incorrect PIN
12	Invalid Transaction	56	No Card Record
13	Invalid Amount	57	Trans. not Permitted to Cardholder
14	Invalid Card Number	58	Transaction not Permitted to Terminal
15	No Such Issuer	59	Suspected Fraud
17	Customer Cancellation	60	Card Acceptor Contact Acquirer
18	Customer Dispute	61	Exceeds Withdrawal Amount Limits
19	Re-enter Transaction	62	Restricted Card
20	Invalid Response	63	Security Violation
21	No Action Taken	64	Original Amount Incorrect
22	Suspected Malfunction	65	Exceeds Withdrawal Frequency Limit
23	Unacceptable Transaction Fee	66	Card Acceptor Call Acquirer Security
24	File Update not Supported by Receiver	67	Hard Capture—Pick Up Card at ATM
25	Unable to Locate Record on File	68	Response Received Too Late
26	Duplicate File Update Record	75	Allowable PIN Tries Exceeded
27	File Update Field Edit Error	86	ATM Malfunction
28	File Update File Locked Out	87	No Envelope Inserted
29	File Update not Successful	88	Unable to Dispense
30	Format Error	89	Administration Error
31	Bank not Supported by Switch	90	Cut-off in Progress
32	Completed Partially	91	Issuer or Switch is Inoperative
33	Expired Card—Pick Up	92	Financial Institution not Found
34	Suspected Fraud—Pick Up	93	Trans Cannot be Completed
35	Contact Acquirer—Pick Up	94	Duplicate Transmission
36	Restricted Card—Pick Up	95	Reconcile Error
37	Call Acquirer Security—Pick Up	96	System Malfunction
38	Allowable PIN Tries Exceeded	97	Reconciliation Totals Reset
39	No CREDIT Account	98	MAC Error
40	Requested Function not Supported	99	Reserved for National Use

4.4   Appendix D: Location of CVV

The Card Verification Value (CVV) is an anti-fraud measure used to prevent the fraudulent use of cards. The CVV number is printed on the physical card and is randomly assigned. The CVV number is located differently for the various card types. The location of the CVV on each card type is outlined below:

Card Type	Location
Visa	It is the last 3 digits printed on the signature strip on the back of the card.
MasterCard	It is the last 3 digits printed on the signature strip on the back of the card.
Amex	It is the 4 digits printed above card number on the front of the card.
Diners Club	It is the last 3 digits printed on the signature strip on the back of the card.
JCB	Not used