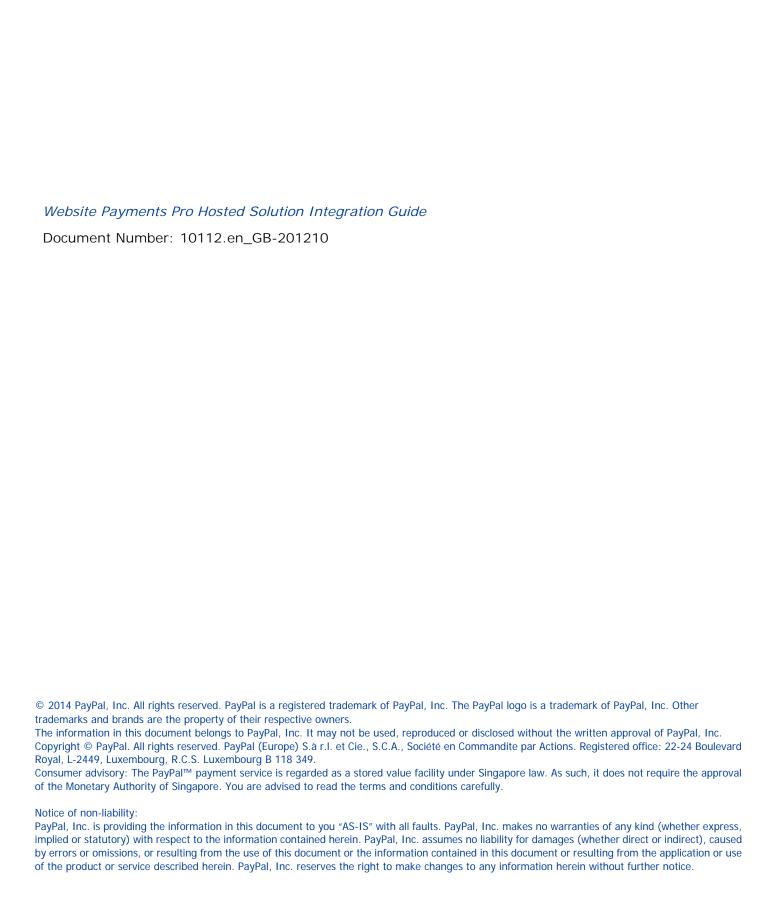


# Website Payments Pro Hosted Solution Integration Guide

(Payflow Edition)

**United Kingdom** 

Last updated: May 2014



#### **Contents**

| Preface |                                                               |
|---------|---------------------------------------------------------------|
|         | About This Guide                                              |
|         | Revision History                                              |
|         | Documentation Feedback                                        |
| Chapter | 1 Getting Started with Website Payments Pro Hosted Solution 7 |
|         | Overview                                                      |
|         | Features and Benefits                                         |
|         | How Hosted Solution Works                                     |
|         | Introduction to Integrating with Hosted Solution              |
| Chapter | 2 Integrating Your Website Using HTML                         |
|         | Simple Hosted Solution Integration                            |
|         | Sample Integration                                            |
|         | HTML Variables for Payment Page Settings                      |
| Chapter | 3 Customising Your PayPal Payment Page                        |
|         | Modifying Your PayPal Account Settings                        |
|         | Configuration                                                 |
|         | Design                                                        |
|         | HTML Variables for Payment Page Look and Feel                 |
| Chapter | 4 Integrating iFrame in Your Website                          |
|         | Integrating iFrame                                            |
|         | HTML Integration                                              |
|         | API Integration                                               |
| Chapter | 5 Integrating Your Website Using API                          |
|         | Button Hosting                                                |

#### Contents

|         | Using the Button Manager API with Hosted Solution Checkout | 42 |
|---------|------------------------------------------------------------|----|
|         | Using URL Returned in the Response (Recommended)           | 42 |
|         | Using Form POST                                            | 44 |
|         | Encrypting Buttons Using Public and Private Key            |    |
|         | Example of Initiating Hosted Solution Checkout             |    |
|         | BMCreateButton API Operation                               | 49 |
|         | BMCreateButton Request                                     |    |
|         | BMCreateButton Response                                    |    |
|         | BMCreateButton Errors                                      |    |
| Chapter | 6 Order Processing                                         | 51 |
|         | Verifying Transaction Status and Authenticity              | 51 |
|         | Validate Instant Payment Notification (IPN)                |    |
|         | Fulfilling Order                                           |    |
| Appendi | ix A Obtaining API Credentials                             | 53 |
|         | Creating an API Signature                                  | 53 |
|         | Creating an API Certificate                                |    |
|         | Encrypting Your Certificate Into PKCS12 Format             |    |
|         | Importing Your Certificate                                 |    |
|         | importing rour certificate                                 | 50 |
| Appendi | ix B Error Messages                                        | 57 |
| ∧nnendi | iv C. Currency Codes                                       | 75 |

#### **About This Guide**

The Website Payments Pro Hosted Solution Integration Guide (Payflow Edition) describes how to integrate with Hosted Solution. It includes information about:

- Features and benefits of Hosted Solution.
- Integrating your website with Hosted Solution.
- Customising your hosted payment page.
- Verifying the status and authenticity of the transactions before fulfilling the orders.

#### **Intended Audience**

This guide is for Website Payments Pro Payflow Edition (UK) merchants and developers that want to integrate with Hosted Solution to add transaction processing to their website.

#### **Revision History**

The following table lists the history of revisions made to the *Website Payments Pro Hosted Solution Integration Guide (Payflow Edition)*.

TABLE P.1 Revision History for This Guide

| Date Published | Description                                                                                                                                                                                           |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| May 2014       | Updated the secure payments URL shown in the examples throughout the guide. Removed the s-xclick command from all examples and also updated the example hosted button IDs to use HSSS instead of HSS. |
| October 2012   | Added the new payment page customisation features to the Customising Your PayPal Payment Page chapter.                                                                                                |
| August 2011    | Created Website Payments Pro Hosted Solution Integration Guide.                                                                                                                                       |

#### **Documentation Feedback**

Help us improve this guide by sending feedback to:

documentationfeedback@paypal.com

# 1

## **Getting Started with Website Payments Pro Hosted Solution**

#### **Overview**

Hosted Solution is the fast and easy way to add transaction processing to your website. It is a secure, PayPal-hosted, web-based payment solution that allows you to securely send your buyers to PayPal's payment page to authorise and process transactions. Buyers pay with a debit or credit card, or their PayPal account and you do not have to capture or store credit card information on your website, thereby helping towards achieving PCI compliance.

Hosted Solution is the choice for merchants who prefer a solution where all financial details are handled by PayPal.

In addition to Hosted Solution, PayPal recommends that you implement the PayPal Express Checkout button on your website. The button appears much earlier in the payment flow and gives existing PayPal account holders the opportunity to use PayPal, thereby increasing the transaction completion rate.

#### **Features and Benefits**

Here are the features and benefits of Hosted Solution:

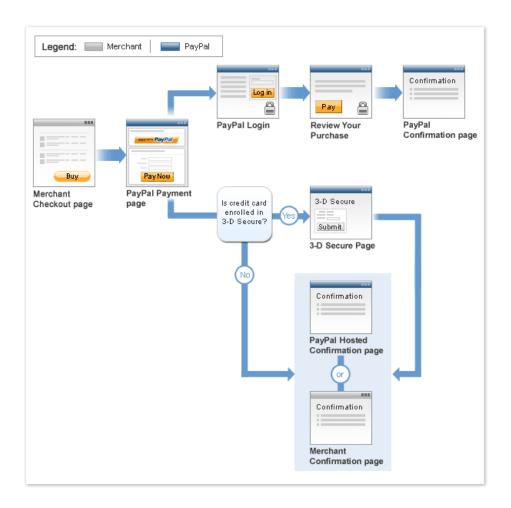
• **PCI compliance** - Payment Card Industry (PCI) Data Security Standards (DSS) is a global security standard which applies to all businesses that collect, store, process, or transmit card holder information. You can use PayPal's hosted payment page as part of the PCI compliance solution for your business.

**Note:** Hosted Solution implementation helps achieving PCI compliance, and does not necessarily guarantee it.

- Supports iFrame PayPal offers a compact payment form that can be integrated in an iFrame on your website. The buyer completes the payment on your website and you can maintain the checkout look and feel in the master frame that surrounds the compact form. The credit card fields are part of the compact form so you do not have to collect this information separately. For more information, refer to Chapter 4, "Integrating iFrame in Your Website.
- Support for 3-D Secure Buyer Authentication Protocol 3-D Secure can help to add an extra layer of fraud protection for online credit and debit card payments from your buyers. It can benefit your business by helping to reduce the number of unauthorised chargebacks you receive and the time it takes to resolve them. You can enable 3-D Secure via the PayPal-hosted payment page quickly, easily, and at no extra cost.

- **Virtual Terminal** PayPal-hosted online payment form, which enables you to accept phone fax, mail orders for all major credit cards.
- Supports Major Credit and Debit Cards Supports Visa, Visa Debit, Visa Electron, MasterCard, and Switch/Maestro.

#### **How Hosted Solution Works**



In the figure above, the top flow is for paying using your PayPal account and the bottom flow is for paying with a card.

#### Getting Started with Website Payments Pro Hosted Solution

Introduction to Integrating with Hosted Solution

To integrate your website with Hosted Solution:

- 1. Generate a button in your website checkout flow using HTML or API solution. The button could be labeled **Pay** or **Buy** or similar. When the buyer clicks this button, they are redirected to the payment page hosted by PayPal.
- 2. On the payment page, the buyer enters their debit or credit card information and clicks the Pay Now button. The buyer can also elect to use their PayPal account by clicking the Pay with PayPal button.
- **3.** If the transaction is successful, the buyer either sees PayPal's confirmation page or is redirected to a URL you specify. If the transaction is unsuccessful, an error message is displayed, and the buyer can rectify the error and retry the transaction.

You can specify the content of the payment page and configure its appearance to reflect the look and feel of your website (including your logo).

#### Introduction to Integrating with Hosted Solution

After signing up for Hosted Solution, follow these steps to integrate your website with Hosted Solution:

- 1. Connect your website to Hosted Solution: Identify a point in your website checkout flow where you want to place a **Pay** or similar button that the buyer clicks on to initiate the payment. You can do this using HTML or API. Clicking on this button redirects the buyer's browser to PayPal's payment page for transaction processing. Depending on how you want to integrate, follow the steps described in Chapter 2, "Integrating Your Website Using HTML or Chapter 5, "Integrating Your Website Using API.
- 2. Optionally, customise the appearance and content of your PayPal-hosted payment page by either sending the appropriate HTTP variables or by editing your PayPal account settings. Refer to Chapter 3, "Customising Your PayPal Payment Page.

#### Getting Started with Website Payments Pro Hosted Solution

Introduction to Integrating with Hosted Solution

### Integrating Your Website Using HTML

This chapter provides instructions for a simple integration that enables you to begin processing transactions using Hosted Solution.

**Note:** PayPal recommends that you implement the simple integration to familiarise yourself with Hosted Solution before implementing a more customised integration.

As part of a simple integration, you get the default settings on your payment page. To customise the look and feel of the page so it matches your website, you can do one of the following:

- Change your settings in your Profile section on PayPal.com, as described in "Modifying Your PayPal Account Settings" on page 17.
- Add the appropriate HTML variables to the payment page, as described in Table 2.1,
   "HTML Variables for Settings of Payment Page and Table 3.1, "HTML Variables for Look and Feel of Payment Page.

**IMPORTANT:** HTML variables will override the settings you save on your profile page.

#### **Simple Hosted Solution Integration**

To integrate your website with Hosted Solution, identify a point in your website checkout flow where you want to place a button that the buyer clicks to initiate the payment. The button should be labeled **Continue to Payment**, **Pay** or similar, and when clicked, should execute a Form POST to PayPal. Clicking on this button redirects the buyer's browser to the PayPal payment page where they can pay with debit or credit card, or their PayPal account.

The Form POST contains a set of HTML variables that describe the transaction and associate it with your Website Payments Pro account. In the Form POST, you must specify the following:

- subtotal OR total amount of the transaction
- partner the partner must be PayPalUK.
- vendor Your merchant login ID that you created when you registered for the account.
- paymentaction Indicates whether the transaction is for payment on a final sale or an authorisation for a final sale (to be captured later).

The default currency is USD. Additionally, you can specify the appropriate HTML variables listed in Table 2.1, "HTML Variables for Settings of Payment Page to customise the information collected on the payment page or Table 3.1, "HTML Variables for Look and Feel of Payment Page to customise the look and feel of the page. If the payment is successful, then the buyer either sees the PayPal confirmation page or is redirected to the URL you specify in your configuration.

The return URL is appended with a Transaction ID on the query string during the redirect back from the payment page to your website. This Transaction ID can be used to retrieve the status and verify the authenticity of the transaction. For detailed information on verifying the authenticity of the transaction before fulfilling the order, refer to Chapter 6, "Order Processing.

#### **Sample Integration**

Below is an example of a simple Hosted Solution integration:

1. Sample Hosted Solution Form POST:

The bold text is the value for the corresponding variable. It is recommended that you enclose the values in quotes. For detailed information on these values, refer to Table 2.1, "HTML Variables for Settings of Payment Page.

- **2.** Output the HTML text into your website at the point where buyers will proceed with their checkout.
- **3.** Open your checkout page and test the button to ensure that it opens the PayPal payment page.

#### **HTML Variables for Payment Page Settings**

The table below lists the Hosted Solution HTML variables you can use to send in additional transaction information along with your web request. For a list of HTML variables that you can use to customise the look and feel of your payment page, refer to Table 3.1, "HTML Variables for Look and Feel of Payment Page.

TABLE 2.1 HTML Variables for Settings of Payment Page

| Variable           | Description                                                                                                                                                                                           | Mandatory |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| address1           | Street name of shipping address. (1 of 2 fields)                                                                                                                                                      | No        |
| address2           | Street name of shipping address. (2 of 2 fields)                                                                                                                                                      | No        |
| address_override   | The payer is shown the passed-in address but cannot edit it. This variable is overridden if there are errors in the address. The allowable values are true/false. Default is false.                   | No        |
| billing_address1   | Street name of the billing address. (1 of 2 fields)                                                                                                                                                   | No        |
| billing_address2   | Street name of the billing address. (2 of 2 fields)                                                                                                                                                   | No        |
| billing_city       | City name of the billing address.                                                                                                                                                                     | No        |
| billing_country    | Country code of the billing address.                                                                                                                                                                  | No        |
| billing_first_name | First name of person the item is being billed to.                                                                                                                                                     | No        |
| billing_last_name  | Last name of person the item is being billed to.                                                                                                                                                      | No        |
| billing_state      | State name of the billing address.                                                                                                                                                                    | No        |
| billing_zip        | Zip code of the billing address.                                                                                                                                                                      | No        |
| bn                 | Identifies the source that built the code for the button.  Format - <company>_<service>_<product>_<country></country></product></service></company>                                                   | No        |
| buyer_email        | Email address of the buyer.                                                                                                                                                                           | No        |
| cancel_return      | The browser will be redirected to this URL if the buyer clicks "Return to Merchant" link. Be sure to enter the complete URL, including http:// or https://.                                           | No        |
| cbt                | Sets the text for the "Return to Merchant" link on the PayPal confirmation page. For business accounts, the return button displays your business name in the place of the word "Merchant" by default. | No        |
| city               | City name of shipping address.                                                                                                                                                                        | No        |
| country            | Country name of shipping address.                                                                                                                                                                     | No        |
| currency_code      | The currency of the payment. The default is USD.                                                                                                                                                      | No        |

TABLE 2.1 HTML Variables for Settings of Payment Page (Continued)

| Variable      | Description                                                                                                                                                                                                                                                                                  | Mandatory |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| custom        | A free-form field for your own use. This variable is never presented to the buyer and will be returned in IPN messages.                                                                                                                                                                      | No        |
| discount      | Shipping discount for this order. Specify the discount as a positive amount.  Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95. | No        |
| first_name    | First name of person the item is being shipped to.                                                                                                                                                                                                                                           | No        |
| handling      | Handling charged. This amount is added to subtotal for the total amount.                                                                                                                                                                                                                     | No        |
| insurance     | Total shipping insurance cost for this order.  Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.                                |           |
| invoice       | Order number in the merchant's ordering/invoice system.                                                                                                                                                                                                                                      | No        |
| last_name     | Last name of person the item is being shipped to.                                                                                                                                                                                                                                            | No        |
| lc            | The language of the login or sign-up page.                                                                                                                                                                                                                                                   | No        |
| night_phone_a | The area code of the U.S. phone number, or the country code of the phone number outside the U.S. This prepopulates the buyer's home phone number.                                                                                                                                            | No        |
| night_phone_b | The three-digit prefix for U.S. phone numbers, or the entire non-U.S. phone number for numbers outside the U.S., excluding the country code. This pre-populates the buyer's home phone number.  Note: Use this variable for non-US numbers.                                                  | No        |
| night_phone_c | The four-digit phone number for U.S. phone numbers. This pre-populates the buyer's home phone number.                                                                                                                                                                                        | No        |
| notify_url    | The URL to which PayPal posts information about the transaction in the form of Instant Payment Notification. Be sure to enter the complete URL, including http:// or https://.                                                                                                               | No        |
| partner       | ID provided to you by the authorized PayPal reseller who registered you for Payflow. If you purchased your account directly from PayPal, use PayPalUK.                                                                                                                                       | Yes       |

TABLE 2.1 HTML Variables for Settings of Payment Page (Continued)

| Variable      | Description                                                                                                                                                                                                                                                                                                                        | Mandatory |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| paymentaction | Indicates whether the transaction is for payment on a final sale or an authorisation for a final sale (to be captured later).  • Allowable Values: - authorization or sale  • Default Value - sale                                                                                                                                 | Yes       |
| return        | The URL to which the buyer's browser is redirected to after completing the payment. Be sure to enter the complete URL, including http:// or https://.                                                                                                                                                                              | No        |
| shipping      | Shipping charged. This amount is added to subtotal for the total amount.                                                                                                                                                                                                                                                           | No        |
| state         | State of the shipping address.                                                                                                                                                                                                                                                                                                     | No        |
| subtotal      | Amount charged for the transaction. If shipping, handling, taxes, insurance, and discount are not specified, this is the total amount charged. The value must include a decimal and the exact amount to the cent (42.00, not 42). Do not include comma separators (1234.56, not 1,234.56). You must either pass subtotal or total. | Yes       |
| tax           | Taxes charged. This amount is added to subtotal for the total amount.                                                                                                                                                                                                                                                              | No        |
| vendor        | Your merchant login ID that you created when you registered for the account.                                                                                                                                                                                                                                                       | Yes       |
| total         | Total transaction amount, including shipping, handling, taxes, insurance, and discount. The value must include a decimal and the exact amount to the cent (42.00, not 42). Do not include comma separators (1234.56, not 1,234.56).                                                                                                |           |
| zip           | Postal code of the shipping address.                                                                                                                                                                                                                                                                                               | No        |

#### Integrating Your Website Using HTML

HTML Variables for Payment Page Settings

# 3

# **Customising Your PayPal Payment Page**

You can customise the look and feel of the PayPal payment page in the following two ways:

- Modifying Your PayPal Account Settings
- Using HTML Variables for Payment Page Look and Feel

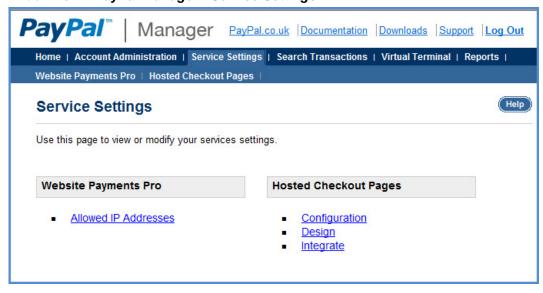
**Note:** HTML variables will override the settings you save on your profile page.

#### **Modifying Your PayPal Account Settings**

The settings and appearance of your PayPal payment page can be customised. To modify your payment page (also named a hosted checkout page), login to <a href="PayPal Manager">PayPal Manager</a> and select Service Settings. Under the Hosted Checkout Pages section, modify the settings on the following pages:

- Configuration: to configure your payment page settings.
- Design: to specify your payment page layout and appearance.

FIGURE 3.1 PayPal Manager - Service Settings

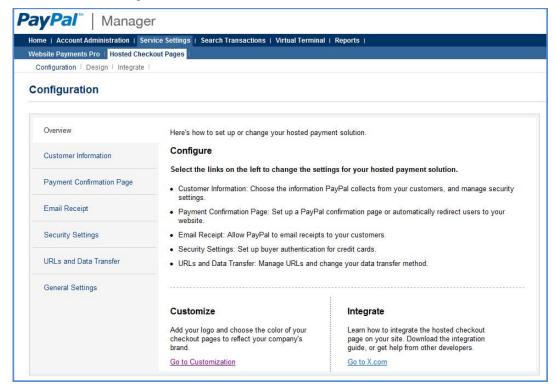


#### Configuration

#### Overview

From the Configuration overview page you can navigate to each of the following tabs to configure the settings of your PayPal payment page:

FIGURE 3.2 Configuration - Overview



- Customer Information: Specify if you would like to display the customer's billing or shipping information on your payment page and which fields are required or editable.
- Payment Confirmation Page: Choose the payment confirmation page settings. This is the page that your customers see after a successful transaction.
- Email Receipt: Select to send your customers an email receipt and customise this email receipt.
- Security Settings: Enroll in the buyer authentication program.
- URLs and Data Transfer: Specify the significant URLs on your website. PayPal will redirect your customers from the PayPal payment page to the URLs you provide.
- General Settings: Customise the payment page button label, edit your customer service contact information and other settings.

The Configuration overview page also includes a link to the PayPal developer portal (<a href="https://www.x.com/developers/paypal/">https://www.x.com/developers/paypal/</a>) and a link to the Design page where you can modify the appearance of your payment page.

#### **Customer Information**

From the *Customer Information* settings tab, you can select if you would like to display *Billing information* and *Shipping information* fields on your PayPal payment page. When you check the checkbox next to either *Billing information* or *Shipping information*, a list of applicable fields appears on the page. All of the listed fields will be displayed on your payment page.

Configuration Overview To process payments, we collect credit card numbers and expiration dates from your customers. You can select additional information to collect and display on the payment page. You can also collect information from your own website and send it to us in your web payment request. Customer Information Select the information you want to collect from customers. Billing information Payment Confirmation Page Name **Email Receipt** Make these fields editable: Security Settings Company Name First Name Last Name Make these fields required: URLs and Data Transfer Company Name First Name Last Name General Settings Make these fields editable: ☐ Address 1 ☐ Address 2 ☐ City ☐ State/Province/Region ☐ ZIP/Postal code ☐ Country Make these fields required: Address 1 Address 2 City State/Province/Region ZIP/Postal code Country Contact information Make these fields editable Phone number Email address Make these fields required: Phone number Email address Shipping information Save Changes

FIGURE 3.3 Configuration - Customer Information

From this list of customer information fields you can select which fields you would like to make *editable* or *required* on your payment page. Check the box next to each required field in the *make these fields required* section and next to the editable fields in the *make these fields editable* section.

FIGURE 3.4 Configuration - Customer Information settings page (field options)



From this list of customer information fields you can select which fields you would like to make *editable* or *required* on your payment page. Check the box next to each required field in the *make these fields required* section and next to the editable fields in the *make these fields editable* section.

PayPal recommends that you display as few options as possible on the payment page. Also, if you choose to collect information on the payment page that you have already collected on your website, this creates a poor buyer experience. For example, you may have already collected shipping address on your own website to calculate the shipping cost. Therefore, it is not necessary to collect this information again on the payment page.

Instead of collecting the buyer's shipping address again on the PayPal payment page, you can pass to PayPal the shipping address information which you collected. PayPal will then display the pre-filled and editable shipping address fields on your payment page. For more information on passing values to the PayPal payment page go to: "HTML Variables for Payment Page Settings" on page 13.

From the *Customer Information* tab you can choose whether to display the following customer information fields on your PayPal payment page. You can also determine which fields will be required and/or editable:

| Billing Information Fields       | Shipping Information Fields               |  |
|----------------------------------|-------------------------------------------|--|
| Name                             | Name                                      |  |
| <ul> <li>Company Name</li> </ul> | <ul> <li>Company Name</li> </ul>          |  |
| • First Name                     | <ul> <li>First Name</li> </ul>            |  |
| • Last Name                      | <ul> <li>Last Name</li> </ul>             |  |
| Address                          | Address                                   |  |
| • Address 1                      | <ul> <li>Address 1</li> </ul>             |  |
| • Address 2                      | <ul> <li>Address 2</li> </ul>             |  |
| • City                           | • City                                    |  |
| • State/Province/Region          | <ul> <li>State/Province/Region</li> </ul> |  |
| • ZIP/Postal code                | <ul> <li>ZIP/Postal code</li> </ul>       |  |
| • Country                        | <ul> <li>Country</li> </ul>               |  |
| Contact Information              | <b>Contact Information</b>                |  |
| • Phone number                   | <ul> <li>Phone number</li> </ul>          |  |
| • Email address                  | <ul> <li>Email address</li> </ul>         |  |

#### Customising Your PayPal Payment Page

Modifying Your PayPal Account Settings

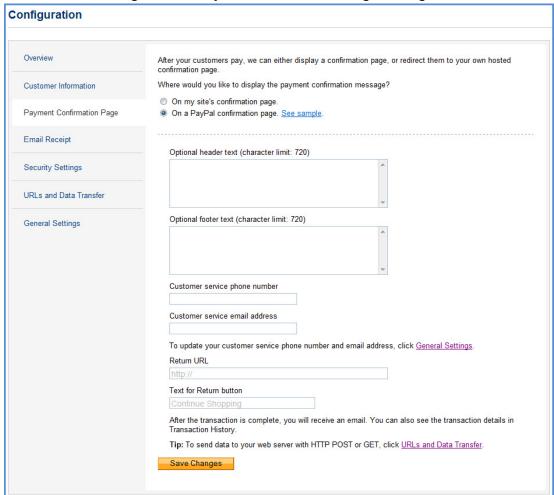
**NOTE:** Some merchants are required to pass the customer's billing information with every transaction. It is recommended that you test your integration first, particularly if you plan to use iFrame, to determine if the billing information fields are required.

You can also override the *Customer Information* tab settings at transaction time by passing HTML variables to the paypal payment page. For more information see "HTML Variables for Payment Page Look and Feel" on page 33.

#### **Payment Confirmation Page**

From the *Payment Confirmation Page* tab, you can specify which page the buyer will see after making a successful payment. You can choose to display either a PayPal confirmation page or a payment confirmation page hosted on your website:

FIGURE 3.5 Configuration - Payment Confirmation Page settings



#### • On my site's confirmation page

If you select this option, you are asking PayPal to redirect the buyer to your own payment confirmation page hosted on your website. You will be asked to provide the *Return URL*. The *Return URL* is the first page the customer sees on your site after leaving the PayPal pages. If you choose to host your own payment confirmation page, enter the path to your payment confirmation page in the *Return URL* field.

When PayPal redirects the buyer to a payment confirmation page hosted on your website, you will have to include a message on this page about the outcome of the transaction. Be sure to display the specifics of the order using the Transaction ID that is passed back to you.

#### • On a PayPal confirmation page

By selecting this option you are choosing to display a PayPal hosted confirmation page to the buyer. You can customise your PayPal hosted confirmation page with the following information:

- (Optional) header text
- (Optional) footer text
- Customer service phone number.
  - To update your customer service contact information go to General Settings.
- Customer service email address.
  - To update your customer service contact information go to General Settings.
- Return URL

The *Return URL* is the page on your site that the customer returns to after leaving PayPal. In the the *Return URL* field, enter the path to a page on your site that you would like buyers to see after the PayPal confirmation page. The buyer returns to your site by clicking a link on the PayPal confirmation page. You can customise the link text.

Text for return button / link

Here you can specify the *text* of the link on the PayPal confirmation page that sends the user back to your site.

To change how information is sent from PayPal to your web server, via HTTP POST or GET, go to the URLs and Data Transfer settings tab.

#### **Email Receipt**

From the *Email Receipt* settings tab, you can specify if you would like PayPal to send an email receipt to the buyer once a successful payment is made. This feature is disabled by default. To enable it, check the checkbox next to *Allow PayPal to email receipts*.

You can customize the following information in the email receipt:

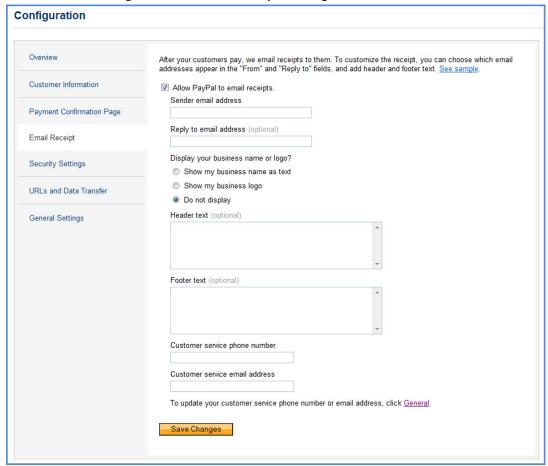
- Sender's email address
- Reply-to email address (optional)
- Display your business name or logo?

You can select from the following options:

- Show my business name as text
- Show my business logo
- Do not display
- Header text (optional)
- Footer text (optional)
- Customer service phone number
- Customer service email address

To update your customer service contact information, go to the General Settings tab.

FIGURE 3.6 Configuration - Email Receipt settings



#### **Security Settings**

From the *Security Settings* tab, you can enroll in the Buyer Authentication programs for the 3 major card issuers.

#### **Buyer Authentication:**

Some card issuers offer buyer authentication programs. These programs require buyers to enter a password when paying online with their card. A buyer authentication program like the 3-D Secure implementations: Verified by Visa or MasterCard SecureCode is an additional form of authentication which provides a credit and debit card holder another layer of security while paying for online purchases. This deters the unauthorised use of the buyer's credit or debit card during online purchases and also reduces the chargeback rate for the merchants implementing this scheme.

Enroll in buyer authentication for these card types:

Maestro

Do you want to accept transactions that aren't covered by buyer authentication?

- Yes
- No
- Visa

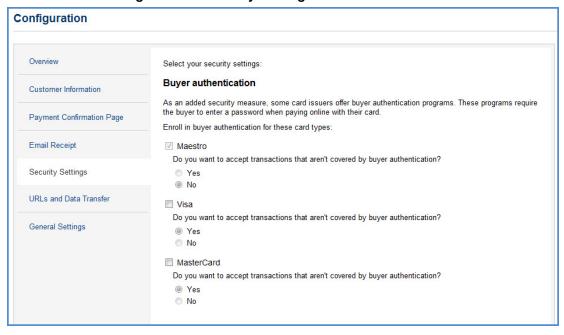
Do you want to accept transactions that aren't covered by buyer authentication?

- Yes
- No
- Mastercard

Do you want to accept transactions that aren't covered by buyer authentication?

- Yes
- No

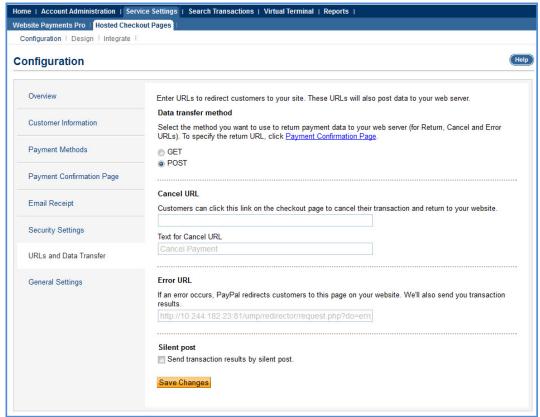
FIGURE 3.7 Configuration - Security Settings



#### **URLs and Data Transfer**

The *URLs* and *Data Transfer* settings help you manage how data is transfered between PayPal and your website (via GET or POST). You can also set the Cancel and Error URL values here. To modify the Return URL, go to the Payment Confirmation Page.

FIGURE 3.8 Configuration - URLs and Data Transfer



You can configure the following settings from the URLs and Data Transfer tab:

#### Data transfer method

Select the HTTP method you would like PayPal to use to send back payment data to your web server. This data transfer method applies to Return, Cancel and Error URLs. The options are:

- GET
- POST

#### **Cancel URL**

If a customer chooses to cancel a payment, this link will direct the customer back to a page on your site that you specify.

#### Customising Your PayPal Payment Page

Modifying Your PayPal Account Settings

#### Cancel URL

Enter the URL of the page on your website where the buyer should return to if the buyer chooses to cancel the payment.

You can also set the Cancel URL dynamically at transaction time by passing a HTML variable to PayPal. This HTML variable will override the Cancel URL specified in your account settings. For more information, go to: "HTML Variables for Payment Page Settings" on page 13

#### Text for Cancel URL

Here you can customize the text of the payment cancellation link displayed on your PayPal payment page.

#### **Error URL**

This is the URL of the page on your website that PayPal should redirect buyers to if an error occurs during the payment transaction.

#### **General Settings**

The *General Settings* tab helps you customize your PayPal payment page further. Here are the payment page customization options available in the *General Settings* tab:

#### Transaction processing mode

If you are in the process of integrating your PayPal payment page with your website, you can set your transaction processing mode to *Test*. This allows you to ensure your website is fully integrated with PayPal before you set the processing mode to *Live*. You can also use your sandbox account email instead of your PayPal account email to accept payments when the processing mode is set to *Test*.

#### PayPal logo

PayPal highly recommends that you choose to display the PayPal logo on your payment page. Your options are:

- Yes (recommended)
- No

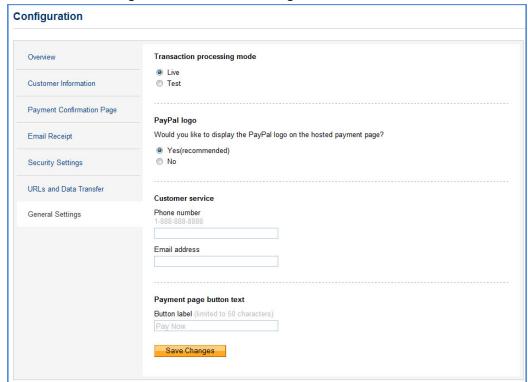
#### **Customer service**

You can edit your customer service contact information on this page. This information will be displayed on your payment page. Your customer service contact information is also shown on the optional Payment Confirmation Page and Email Receipt, if you choose to enable these features.

• Phone number

#### Email address

FIGURE 3.9 Configuration - General Settings



#### Payment page button text

You can customize the text on the *Pay Now* button.

#### Design

The *Design* page allows you to customise the layout and appearance of your PayPal payment page. Here you can select one of the available page layouts. Depending on which layout you select, you can customise the header, the background color, the subheader text, the color of the pay button, the color of the button text, and the order summary section of your payment page.

At the top of the page, you will see the three layout templates that PayPal offers. Template A is the default template. You can select any one of these templates. If you would like an iFrame integration, select the *MiniLayout* template.

After you select the layout template you prefer, you can customise individual sections of this template. To make changes to a section, left-click on the section you are trying to modify or on the corresponding *Click to Edit* button for that section. A pop-up window will appear containing the settings applicable to that section, such as a color selector to change the color or a field for you to enter text.

#### Customising Your PayPal Payment Page

Modifying Your PayPal Account Settings

When you have completed customising your layout template, click one of the following buttons:

- **Preview** Preview the changes you have made to your template before saving and publishing it.
- Save and Publish Save all the changes you have made and publish the updated template. Your buyers will see the updated payment page.
- Cancel Discard all the changes you have made in this session.
- Undo Changes Discard all changes you have made since the last time you saved the template. Your buyers will see the last saved template.

**NOTE:** You must make all modifications (including changing templates) within the same session, otherwise all changes will be lost and you will have to redo your changes. If the session times out, the design of the template will remain at the version that was last published.

#### **Choosing a Layout**

Choose from the following three design templates or layouts:

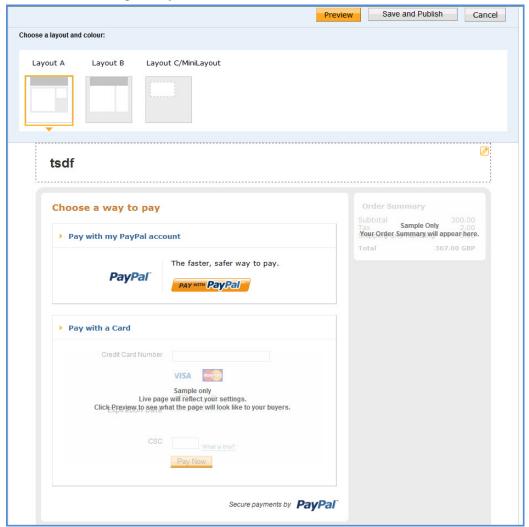
- Layout A
- Layout B
- MiniLayout

#### Customising Your PayPal Payment Page

Modifying Your PayPal Account Settings

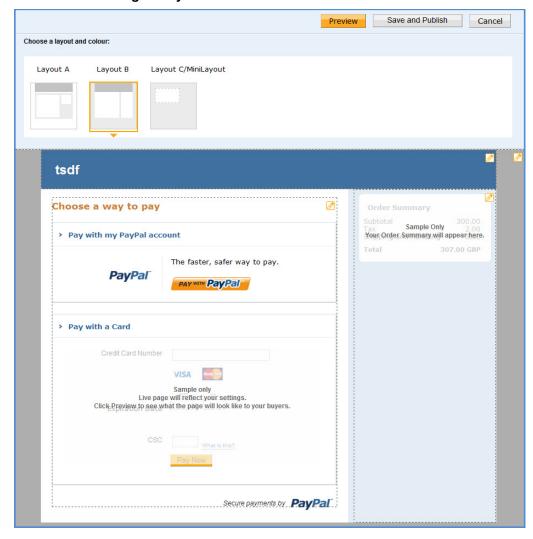
Layout A. Layout A is selected by default. Layout A consists of a header at the top of the page, a payment method section on the left and an order summary section on the right. You can only customise the header in this layout. You can specify the height of the header, show your company name in text or upload your company logo. You can also choose the horizontal alignment of the header.

FIGURE 3.10 Design - Layout A



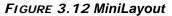
Layout B. Layout B has the most customisation options. Like Layout A, it consists of a header at the top of the page, a payment method section to the left and an order summary section to the right. In Layout B, you can also customise the header background color, the page background color or choose a page background image. In the payment method section on the left, you can choose the colors of the subheader text, the section border, the Pay button, and the Pay button text. In the order summary section on the right, you can customise the background color or use a background image.

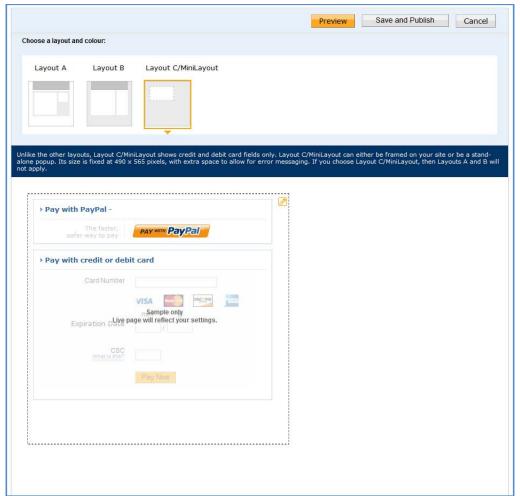
FIGURE 3.11 Design - Layout B



*MiniLayout*. Unlike the other layouts, MiniLayout shows only the payment method section. There is no header or order summary section. MiniLayout can either be displayed in a standalone popup window or framed on your site in an iFrame. For more information on the iFrame integration, see "Integrating iFrame" on page 37. The size of the MiniLayout is fixed at 490 x 565 pixels, with extra space to allow for error messages.

In MiniLayout you can customise the subheader text color, the border color, the Pay button color and the Pay button text color.





#### **Layout Template Customisation Options**

Consider the following when you customise your template:

- **Header** (applicable to Layouts A and B) By default, the business name from your profile is shown in the header. You can change the following:
  - Header height and color

#### Customising Your PayPal Payment Page

Modifying Your PayPal Account Settings

- Font type, size, and color
- Swap between displaying the business name or the business logo image
- Position of the business name or the logo
- In Layouts B you can also change the header background color.
- Page Background (applicable to Layout B) You can change the following:
  - Background color
  - Background image URL
- **Payment Method Section** (applicable to Layouts B and MiniLayout) You can change the following:
  - Section border color
  - Subheader text color
  - Pay Button color and button text color
- Order Summary Section (applicable to Layout B only) You can change the following:
  - Section background color
  - Background image URL

#### **HTML Variables for Payment Page Look and Feel**

The table below lists the Hosted Solution HTML variables you can use to customise the look and feel of your payment page. The HTML variables that you pass at transaction time will override the payment page settings in your PayPal account profile. For additional HTML variables, refer to: HTML Variables for Payment Page Settings.

TABLE 3.1 HTML Variables for Look and Feel of Payment Page

| Variable            | Description                                                                                                                                               |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| bodyBgColor         | Color of the surrounding background of the payment page.                                                                                                  |
| bodyBgImg           | Image of the surrounding background of the payment page. The file extension can be .gif, .jpg, .jpeg, or .png format.                                     |
| footerTextColor     | Color of the footer text.                                                                                                                                 |
| headerBgColor       | Color of the header background.                                                                                                                           |
| headerHeight        | Height of the header banner. It can be from 50 to 140 pixels. The width cannot be changed. It is always 940 pixels.                                       |
| logoFont            | Font type of the logo text.                                                                                                                               |
| logoFontColor       | Color of the logo text.                                                                                                                                   |
| logoFontSize        | Font size of the logo text.                                                                                                                               |
| logoImage           | Image displayed in the logo. The acceptable file extension formats are .gif, .jpg, .jpeg, or .png. The width of the image cannot be more than 940 pixels. |
| logoImagePosition   | Position of the image in the logo.                                                                                                                        |
| logoText            | Business name displayed on your profile page. This field is editable and text specified here is displayed on the header if logoImage is not specified.    |
| orderSummaryBgColor | Color of the Order Summary column on the right side of the payment page. You cannot change the color of the Order Summary box.                            |
| orderSummaryBgImage | Background image you can put in the Order Summary Column. The acceptable file extension formats are .gif, .jpg, .jpeg, or .png.                           |
| pageButtonBgColor   | Background color of the Pay Now button.                                                                                                                   |
| pageButtonTextColor | Color of the <b>Pay Now</b> button. You cannot change the text of the button.                                                                             |
| pageTitleTextColor  | Color of the text used in the title of the page. (Text that says "Choose a way to pay.")                                                                  |
| sectionBorder       | Background of the section that displays "Pay with my PayPal account" or "Pay with a Card".                                                                |

TABLE 3.1 HTML Variables for Look and Feel of Payment Page

| Variable               | Description                                                                                                                                                                                |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| showCustomerName       | Display customer name (first name and last name).  • Default Value: true  • Allowable Value: true or false, where true = show and false = hide.                                            |
| showBillingAddress     | <ul> <li>Display billing address information.</li> <li>Default Value: true</li> <li>Allowable Value: true or false, where true = show and false = hide.</li> </ul>                         |
| showBillingPhone       | <ul> <li>Display billing phone number.</li> <li>Default Value: true</li> <li>Allowable Value: true or false, where true = show and false = hide.</li> </ul>                                |
| showBillingEmail       | <ul> <li>Display email address for billing purposes.</li> <li>Default Value: false</li> <li>Allowable Value: true or false, where true = show and false = hide.</li> </ul>                 |
| showHostedThankyouPage | <ul> <li>Display PayPal's confirmation page.</li> <li>Default Value: true</li> <li>Allowable Value: true or false, where true = show and false = hide.</li> </ul>                          |
| showShippingAddress    | <ul> <li>Display shipping address.</li> <li>Default Value: false</li> <li>Allowable Value: true or false, where true = show and false = hide.</li> </ul>                                   |
| subheaderText          | Color of the "Pay with my PayPal account" or "Pay with a Card" text.                                                                                                                       |
| template               | Template used for your payment page. Options are templateA and templateB. Use templateD for MiniLayout. MiniLayout is the iFrame integration. For more information see: Integrating iFrame |

### Integrating iFrame in Your Website

PayPal offers a compact payment form that can be integrated in an iFrame on your website. Since this form is integrated on your website, the buyer never leaves your website, thereby reducing potential drop-offs. You can also maintain your checkout look and feel in the master frame that surrounds the compact payment form. The credit card fields are part of the compact payment form so you do not have to collect this information separately. The form also supports 3-D Secure frames.

IMPORTANT: Due to security concerns involving iFrame, the following browsers are supported and secure to use - Internet Explorer 8.0, Opera 10.50, Firefox 8.0, Chrome 4.1, Safari 4.0. Transactions involving users of other browsers should not use the iFrame flow or abandon the transaction. Additionally, there is another risk beyond the iFrame flow - should the PayPal iFrame become the source of an attack, it would appear that the attack is originating from the merchant site; do not use the iFrame flow if you wish to avoid this additional risk.

**Note:** Due to spoof concerns, the form does not contain any PayPal branding.

If you would like an iFrame integration you must use the MiniLayout template. You can either select MiniLayout from the Customisation page of your PayPal account. Or you can pass the HTML variable Template=templateD at transaction time. The examples in this chapter use the latter HTML variable method to select the MiniLayout template.

The compact payment form contains the following fields:

- Credit card number
- Expiry date
- CVV2 number (if applicable, based on the card type)
- Any additional fields required for other card types, such as start date and issue number for Maestro or Switch.

The form also offers the following options:

- Remove the **Pay with PayPal** button. Although the form offers the option to pay using PayPal account by default, you can contact your account manager or customer support to turn this option off.
- Manually customize the color of the **Pay Now** button.

**IMPORTANT:** The compact payment form does not display the buyer's billing address, even if showBillingAddress=true is passed. However, for some merchants,

#### Integrating iFrame in Your Website

it may be necessary to pass the billing address to successfully process the transactions.

## Integrating iFrame

Choose one of the following methods to integrate the compact payment form in your website:

- HTML Integration
- API Integration

**IMPORTANT:** For optimal performance, PayPal recommends that you load the iFrame asset before other assets such as images and JavaScripts. If there are too many assets running on your payment page when you load iFrame, the request for the iFrame may not be placed or might get delayed. This may result in the buyers seeing a blank iFrame.

#### **HTML** Integration

To manually integrate the compact payment form in your website, perform the following steps:

1. Enter the iFrame tag at the location where you want the compact payment form to appear on your website. For example:

```
<iframe name="hss iframe" width="570px" height="540px"></iframe>
```

The allowable size for the compact payment form is 570 pixels in width to 540 pixels in height.

2. Below is the iFrame code, add the hidden form that is populated with the appropriate Hosted Solution variables (including the total amount to be paid) and specify the variable templateD. For example:

**3.** Ensure that the target name matches the iFrame name, as highlighted in the example below:

```
<iframe name="hss_iframe" width="570px" height="540px"></iframe>
<form style="display:none" target="hss_iframe" name="form_iframe"
method="post"
action="https://securepayments.paypal.com/webapps/HostedSoleSolutionApp/
webflow/sparta/hostedSoleSolutionProcess">
```

**4.** Submit the form using JavaScript. For example:

```
<script type="text/javascript">
      document.form_iframe.submit();
</script>
```

#### **Example of Manual Integration**

The complete example as per the above steps is as follows:

```
<iframe name="hss_iframe" width="570px" height="540px"></iframe>
<form style="display:none" target="hss iframe" name="form iframe"</pre>
method="post"
action="https://securepayments.paypal.com/webapps/HostedSoleSolutionApp/web
flow/sparta/hostedSoleSolutionProcess">
<input type="hidden" name="cmd" value=" hosted-payment">
<input type="hidden" name="total" value="50.00">
<input type="hidden" name="partner" value="PayPalUK">
<input type="hidden" name="vendor" value="vendorname">
<input type="hidden" name="paymentaction" value="sale">
<input type="hidden" name="template" value="templateD">
<input type="hidden" name="return"</pre>
value="https://yourwebsite.com/receipt page.html">
</form>
<script type="text/javascript">
    document.form iframe.submit();
</script>
```

## **API Integration**

To integrate the compact payment form in your website using the API, refer to "Using the Button Manager API with Hosted Solution Checkout" on page 42.

**NOTE:** Use template=**templateD** for this type of integration.

There are two options in the response to initiate the Hosted Solution payment flow:

- Using URL Returned in the Response
- Using Form POST

#### Using URL Returned in the Response

In the URL identified in the response as EMAILLINK, add "src" for iFrame as per the example below to redirect the buyer and initiate the payment flow.

```
<iframe
src="https://www.securepayments.paypal.com/...?hosted_button_id=HSSS-.."
width="570px" height="540px"></iframe>
```

The allowable size of the compact payment form is 570 pixels in width to 540 pixels in height

#### **Using Form POST**

Identify the WEBSITECODE in the response and use the code to create a **Pay Now** button on your review page. When your buyer clicks the button, they are redirected to the PayPal hosted payment page. Like the URL, the button is usable for approximately two hour or until the payment is successful.

1. Enter the iFrame tag at the location where you want the compact payment form to appear on your website. For example:

```
<iframe name="hss iframe" width="570px" height="540px"></iframe>
```

The allowable size for the compact payment form is 570 pixels in width to 540 pixels in height.

**2.** Insert the following in the iFrame tag:

```
<form
action="https://www.securepayments.paypal.com/webapps/HostedSoleSolution
App/webflow/sparta/hostedSoleSolutionProcess" method="post">
<input type="hidden" name="hosted_button_id" value="HSSS-GDrPDzuW-
ADwkFDMjQmpUKlgTDdR.tv5alaGS61.XWVVB1MTMQEnGNoLakufQb89zTjf6">
<input type="image" src="https://www.paypal.com/i/btn/btn_paynow_LG.gif"
border="0" name="submit" alt="PayPal - The safer, easier way to pay
online.">
<img alt="" border="0" src="https://www.paypal.com/i/scr/pixel.gif"
width="1" height="1">
</form>
```

**3.** Submit the form using JavaScript. For example:

```
<script type="text/javascript">
          document.form_iframe.submit();
</script>
```

#### **Example of API (Form POST) Integration**

The complete example as per the above steps is as follows:

# Integrating Your Website Using API

Using the Button Manager API, you can programmatically create the checkout button that initiates the Hosted Solution checkout flow on your website. You create the checkout button dynamically when the buyer attempts to checkout on your website. When the buyer clicks on your checkout button, you call the BMCreateButton API operation to create a checkout button and display it on your web page. When the buyer clicks on this checkout button, he or she is redirected to the PayPal payment page where he or she can complete the payment. You can use 3-D Secure functionality on the PayPal payment page.

HTML variables control the presentation of the PayPal payment pages, the information contained on the pages, and pages to which your buyer can be returned to when leaving the payment pages. For a list of HTML variables, refer to "HTML Variables for Payment Page Settings" on page 13.

For complete information on the Button Manager API, refer to the <u>Button Manager API (NVP)</u> or <u>Button Manager API (SOAP)</u>.

**NOTE:** Using the Button Manager API, you can programmatically create the checkout button, but not manage, edit, or delete it.

# **Button Hosting**

For Hosted Solution, using BUTTONTYPE=PAYMENT, you can create the following kinds of checkout buttons:

- Token buttons (BUTTONCODE=TOKEN) are not stored on PayPal. They are dynamic and initiate the Hosted Solution checkout flow. The parameters associated with this kind of button are secure. They have a lifetime of approximately two hours, if not used.
- Encrypted buttons (BUTTONCODE=ENCRYPTED) are not stored on PayPal. The parameters associated with this kind of button are encrypted. You must update the web pages that use an encrypted button each time the button or the associated information changes.
- Clear text buttons (BUTTONCODE=CLEARTEXT) are not stored on PayPal. The parameters associated with this kind of button are not encrypted. They can be used dynamically because you can change the value of a parameter anytime. However, if you use them, recognize the risk that sensitive information can be altered or stolen.

**NOTE:** Hosted buttons (BUTTONCODE=HOSTED) are not supported for Hosted Solution and will return an error if used.

For more information about Button Manager API usage, refer to "BMCreateButton API Operation" on page 49.

## Using the Button Manager API with Hosted Solution Checkout

**NOTE:** Before using the Button Manager API, you must acquire PayPal API credentials. For more information, refer to Appendix A, "Obtaining API Credentials.

To create a checkout button on your website, you call the BMCreateButton API operation. When the buyer clicks on the checkout button, PayPal initiates the Hosted Solution checkout flow.

You must decode the response from the BMCreateButton API. For information about URL encoding, refer to the <u>Name-Value Pair API Developer Guide</u>.

There are two options in the response to initiate the Hosted Solution payment flow:

- Using URL Returned in the Response (Recommended)
- Using Form POST

#### Using URL Returned in the Response (Recommended)



Using the URL identified in the response as EMAILLINK, you can redirect the buyer and initiate the payment flow.

**NOTE:** PayPal recommends using TOKEN or ENCRYPTED.

42

#### **Example of TOKEN**

EMAILLINK=https://securepayments.paypal.com/webapps/HostedSoleSolutionApp/webflow/sparta/hostedSoleSolutionProcess?hosted\_button\_id=HSSS-GDrPDzuW-ADwkFDMjQmpUK1gTDdR.tv5alaGS61.XWVVB1MTMQEnGNoLakufQb89zTjf6&HOSTEDBUTTONID=HSSS-GDrPDzuW-ADwkFDMjQmpUK1gTDdR.tv5alaGS61.XWVVB1MTMQEnGNoLakufQb89zTjf6&TIMESTAMP=2011-08-17T22:58:45Z&CORRELATIONID=5366c981124b1&ACK=Success&VERSION=65.0&BUILD=2066255

#### **Example of ENCRYPTED**

EMAILLINK=https://securepayments.paypal.com/webapps/HostedSoleSolutionApp/webflow/sparta/hostedSoleSolutionProcess?cmd= hosted-

payment&currency\_code=GBP&paymentaction=sale&shipping=1&tax=1&return=http%3 a%2f%2fwww%2epaypal%2ecom&partner=PayPalUK&vendor=ukpro2002&total=7&subtotal=1&TIMESTAMP=2011-08-

17T22:59:57Z&CORRELATIONID=3b76bdaf28f3e&ACK=Success&VERSION=65.0&BUILD=2066255

#### **Example of CLEARTEXT**

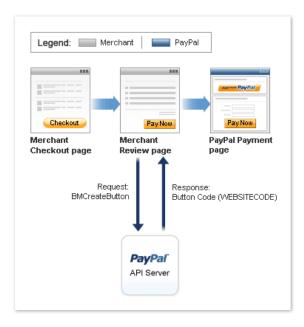
EMAILLINK=https://securepayments.paypal.com/webapps/HostedSoleSolutionApp/webflow/sparta/hostedSoleSolutionProcess?cmd= hosted-

payment&currency\_code=GBP&paymentaction=sale&shipping=1&tax=1&return=http%3 a%2f%2fwww%2epaypal%2ecom&partner=PayPalUK&vendor=ukpro2002&total=7&subtotal=1&TIMESTAMP=2011-08-

17T23:00:57Z&CORRELATIONID=6dcc37afaa5ec&ACK=Success&VERSION=65.0&BUILD=206 6255

The button variables control the presentation in the flow and the information that is provided to the buyer initially. Because the URL is associated with a Hosted Solution token, the URL is usable for approximately two hours after it is created or until the payment is successful.

#### **Using Form POST**



Identify the WEBSITECODE in the response and use the code to create a **Pay Now** button on your review page. When your buyer clicks the button, they are redirected to the PayPal hosted payment page. Like the URL, the button is usable for approximately two hours or until the payment is successful.

**NOTE:** PayPal recommends using TOKEN or ENCRYPTED.

#### **Example for TOKEN**

```
WEBSITECODE=<form
```

action="https://securepayments.paypal.com/webapps/HostedSoleSolutionApp/web
flow/sparta/hostedSoleSolutionProcess" method="post">
<input type="hidden" name="hosted\_button\_id" value="HSSS-GDrPDzuWADwkFDMjQmpUKlgTDdR.tv5alaGS6l.XWVVB1MTMQEnGNoLakufQb89zTjf6">
<input type="image"
src="https://www.paypal.com/en\_GB/i/btn/btn\_paynow\_LG.gif" border="0"
name="submit" alt="PayPal - The safer, easier way to pay online.">
<img alt="" border="0" src="https://www.paypal.com/en\_GB/i/scr/pixel.gif"
width="1" height="1">
</form>

#### **Example for ENCRYPTED**

WEBSITECODE=<form

action="https://securepayments.paypal.com/webapps/HostedSoleSolutionApp/web flow/sparta/hostedSoleSolutionProcess" method="post">

```
<input type="hidden" name="encrypted" value="----BEGIN PKCS7-----</pre>
MIIHkwYJKoZIhvcNAQcEoIIHhDCCB4ACAQExqqE0MIIBMAIBADCBmDCBkjELMAkGA1UEBhMCVVM
xCzAJBqNVBAqTAkNBMRYwFAYDVQQHEw1Nb3VudGFpbiBWaWV3MRQwEqYDVQQKEwtQYX1QYWwqSW
5jLjEVMBMGA1UECxQMc3RhZ2UyX2NlcnRzMRMwEQYDVQQDFApzdGFnZTJfYXBpMRwwGqYJKoZIh
vcNaQkBFg1yZUBwYX1wYWwuY29tAgEAMA0GCSqGSIb3DQEBAQUABIGAsqS5KoYWmzqj2cr1/I9v
a72rukNNWuxh2TBBhhx4P7DGcYeIzA82FzS3MmZTJfY2VydHMEwHwweqfs3yBjMA0GCSqGSIb3D
QEBAQUABIGAdW7vFpnU+jbGW1if7YCAsMiViJbw5HKK3TNkeJvv8pxFZetWb3H00KWM3zzaPz1v
URBuDCQa814R1Eb3n/zT7k2/eusAq4LbS6YEPu2od/AUTDkyDSCA32XBjS78yzpJ5KHTW4eoeff
18pCEkrcRwfV4hygsSqTOuvfPOBer3yA=----END PKCS7-----
">
<input type="image"</pre>
src="https://www.paypal.com/en GB/i/btn/btn paynow LG.gif" border="0"
name="submit" alt="PayPal - The safer, easier way to pay online.">
<img alt="" border="0" src="https://www.paypal.com/en GB/i/scr/pixel.gif"</pre>
width="1" height="1">
</form>
```

#### **Example of CLEARTEXT**

```
WEBSITECODE=<form
action="https://securepayments.paypal.com/webapps/HostedSoleSolutionApp/web
flow/sparta/hostedSoleSolutionProcess" method="post">
<input type="hidden" name="cmd" value=" hosted-payment">
<input type="hidden" name="currency code" value="GBP">
<input type="hidden" name="paymentaction" value="sale">
<input type="hidden" name="return" value="http://www.yourwebsite.com">
<input type="hidden" name="partner" value="PayPalUK">
<input type="hidden" name="vendor" value="ukpro2002">
<input type="hidden" name="total" value="7">
<input type="hidden" name="subtotal" value="1">
<input type="image"</pre>
src="https://www.paypal.com/en GB/i/btn/btn paynow LG.qif" border="0"
name="submit" alt="PayPal — The safer, easier way to pay online.">
<img alt="" border="0" src="https://www.paypal.com/en GB/i/scr/pixel.gif"</pre>
width="1" height="1">
</form>
```

Note: The PayPal payment page displays a button identified as **Pay Now** to complete the checkout flow. The **Pay Now** button on the PayPal page is different than the **Pay Now** button created by the BMCreateButton API operation on the review page. You may need to change the URL for the latter in BUTTONIMAGEURL to avoid confusion. If a URL is not specified in BUTTONIMAGEURL, then the default **Pay Now** is used for the button.

## **Encrypting Buttons Using Public and Private Key**

Using Encrypted Website Payments helps secure payment buttons that you generate or write manually. Encrypted Website Payments protects the HTML button code that contains pricing information by encrypting it. HTML button code that you protect by using Encrypted Website Payments cannot be altered by malicious third parties to create fraudulent payments. For

Using the Button Manager API with Hosted Solution Checkout

detailed information, refer to Chapter 7, "Protecting Buttons by Using Encrypted Website Payments

# **Example of Initiating Hosted Solution Checkout**

The example shows the NVP parameters using BUTTONCODE=TOKEN for creating a URL to initiate the Hosted Solution checkout flow. Refer to Table 5.1 for more information about the parameters in the example.

**TABLE 5.1 API Credentials** 

| Parameter | Value                                                                                                      |  |
|-----------|------------------------------------------------------------------------------------------------------------|--|
| USER      | (Required) Your PayPal API Username                                                                        |  |
| PWD       | (Required) Your PayPal API Password                                                                        |  |
| VERSION   | (Required) Version number of the NVP API service, such as 80.0                                             |  |
| SIGNATURE | (Optional) Your PayPal API signature string. If you use an API certificate, do not include this parameter. |  |

```
<form method=post action=https://api-3t.paypal.com/nvp>
<input type=hidden size=40 name="USER" value=your PayPal API username>
<input type=hidden size=40 name="PWD" value=your PayPal API password>
<input type=hidden size=80 name="SIGNATURE" value=Your PayPal API</pre>
Signature>
<input type=hidden name="VERSION" value=80.0>
<input type=hidden name="BUTTONCODE" value=token>
<input type=hidden name="BUTTONTYPE" value=payment>
<input type=hidden size=40 name="L BUTTONVAR0" value="paymentaction=sale">
<input type=hidden size=40 name="L BUTTONVAR1" value="partner=PayPalUK">
<input type=hidden size=40 name="L BUTTONVAR2" value="your vendor name">
<input type=hidden name="L BUTTONVAR3" value="invoice=12345678">
<input type=hidden name="L BUTTONVAR4" value="lc=GB">
<input type=hidden name="L BUTTONVAR5" value="total=0.50">
<input type=hidden name="L BUTTONVAR6" value="subtotal=0.10">
<input type=hidden name="L BUTTONVAR7" value="shipping=0.01">
<input type=hidden name="L_BUTTONVAR8" value="handling=0.01">
<input type=hidden name="L BUTTONVAR9" value="tax=0.01">
<input type=hidden name="L BUTTONVAR10" value="currency code=GBP">
<input type=hidden size=40 name="L BUTTONVAR11" value="showCardInfo=true">
<input type=hidden size=40 name="L BUTTONVAR12"</pre>
value="showCustomerName=true">
<input type=hidden size=40 name="L BUTTONVAR13"</pre>
value="showBillingAddress=true">
<input type=hidden size=40 name="L BUTTONVAR14"</pre>
value="showBillingPhone=true">
<input type=hidden size=40 name="L BUTTONVAR15"</pre>
value="showBillingEmail=true">
<input type=hidden size=40 name="L BUTTONVAR16"</pre>
value="showShippingAddress=true">
<input type=hidden size=40 name="L BUTTONVAR17"</pre>
value="showHostedThankyouPage=true">
<input type=hidden size=40 name="L BUTTONVAR18"</pre>
value="notify url=http://your IPN URL">
<input type=hidden size=40 name="L BUTTONVAR19" value="custom=custom</pre>
information here">
<input type=hidden size=40 name="L BUTTONVAR20"</pre>
value="cancel return=http://your merchant URL">
<input type=hidden size=40 name="L_BUTTONVAR21" value="return=http://your</pre>
merchant URL">
<input type=hidden name="L BUTTONVAR22" value="first name=Mr.">
<input type=hidden name="L BUTTONVAR23" value="last name=Chau">
<input type=hidden name="L BUTTONVAR24" value="address1=Gardens">
<input type=hidden name="L BUTTONVAR25" value="address2=99343 ba">
<input type=hidden name="L BUTTONVAR26" value="city=Paris">
<input type=hidden name="L BUTTONVAR27" value="state=Alsac">
<input type=hidden name="L BUTTONVAR28" value="zip=75002">
<input type=hidden name="L BUTTONVAR29" value="country=FR">
<input type=hidden size=40 name="L BUTTONVAR30"</pre>
value="billing first name=John">
```

```
<input type=hidden size=40 name="L BUTTONVAR31"</pre>
value="billing last name=Tiger">
<input type=hidden size=40 name="L BUTTONVAR32"</pre>
value="billing address1=5088 Craven Hill Gardens">
<input type=hidden size=40 name="L BUTTONVAR33"</pre>
value="billing address2=Apt# 199343 ba">
<input type=hidden size=40 name="L BUTTONVAR34"</pre>
value="billing city=Wolverhampton">
<input type=hidden size=40 name="L BUTTONVAR35" value="billing_state=West</pre>
Midlands">
<input type=hidden size=40 name="L BUTTONVAR36" value="billing zip=W124LQ">
<input type=hidden size=40 name="L BUTTONVAR37" value="billing country=GB">
<input type=hidden size=40 name="L BUTTONVAR38"</pre>
value="billing phone=6502122200">
<input type=hidden size=40 name="L BUTTONVAR39"</pre>
value="billing company name=Company name">
<input type=hidden size=40 name="L BUTTONVAR40"</pre>
value="billing fax=6502122200">
<input type=hidden size=40 name="L BUTTONVAR41"</pre>
value="billing middle name=V">
<input type=hidden size=40 name="L BUTTONVAR42" value="night phone a=408">
<input type=hidden size=40 name="L BUTTONVAR43" value="night phone b=398">
<input type=hidden size=40 name="L BUTTONVAR44" value="night phone c=3065">
<input type=hidden size=40 name="L BUTTONVAR45"</pre>
value="buyer_email=john.smith@email.com">
<input type=hidden size=40 name="L BUTTONVAR46" value="bn=GBD">
<input type=hidden size=40 name="L BUTTONVAR47" value="cbt=your preferred</pre>
business display name">
<input type=hidden size=40 name="L BUTTONVAR48"</pre>
value="address override=true">
<input type=hidden size=40 name="L BUTTONVAR49"</pre>
value="cpp header image=Red">
<input type=hidden size=40 name="L BUTTONVAR50" value="logoText=PayPal">
<input type=hidden size=40 name="L BUTTONVAR51"</pre>
value="logoImage=http://images.com/logo.gif">
<input type=hidden size=40 name="L BUTTONVAR52"</pre>
value="logoImagePosition=center">
<input type=hidden size=40 name="L BUTTONVAR53" value="logoFont=Arial</pre>
Bold">
<input type=hidden size=40 name="L BUTTONVAR54" value="logoFontSize=24px">
<input type=hidden size=40 name="L BUTTONVAR55" value="bodyBgImg=sdf">
<input type=hidden size=40 name="L BUTTONVAR56" value="headerHeight=70px">
<input type=hidden size=40 name="L BUTTONVAR57"</pre>
value="orderSummaryBgImage=http://images.com/ordersummary.jpg">
<input type=hidden size=40 name="L BUTTONVAR58" value="template=templateA">
<input type=submit name=METHOD value=BMCreateButton>
</form>
```

# **BMCreateButton API Operation**

Use the BMCreateButton API operation to create Hosted Solution checkout button.

- BMCreateButton Request
- BMCreateButton Response
- BMCreateButton Errors

#### **BMCreateButton Request**

The request fields specify the characteristics of your button, which include associated menu items related to the button. You can specify up to 5 menu items, each of which can include up to 10 possible selections.

#### **BMCreateButton Request Fields**

| Field                | Description                                                                                                                                                                                                                                                                                                                                                                                          |  |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| METHOD               | (Required)                                                                                                                                                                                                                                                                                                                                                                                           |  |
|                      | BMCreateButton                                                                                                                                                                                                                                                                                                                                                                                       |  |
| BUTTONCODE           | <ul> <li>(Optional) The kind of button code to create. It is one of the following values:</li> <li>TOKEN - A secure button, not stored on PayPal, used only to initiate the Hosted Solution checkout flow; default for Pay Now button. Since version 65.2</li> <li>ENCRYPTED - An encrypted button, not stored on PayPal</li> <li>CLEARTEXT - An unencrypted button, not stored on PayPal</li> </ul> |  |
| BUTTONTYPE           | (Required) The kind of button you want to create.  PAYMENT - Pay Now button; since version 65.2                                                                                                                                                                                                                                                                                                      |  |
| L_BUTTONVAR <i>n</i> | (Optional) HTML standard button variables                                                                                                                                                                                                                                                                                                                                                            |  |

# **BMCreateButton Response**

The response contains an ID if the button is hosted on PayPal, and code for HTML in a website and for a link in email.

#### **BMCreateButton Response Fields**

| Field          | Description                                        |  |
|----------------|----------------------------------------------------|--|
| WEBSITECODE    | HTML code for web pages                            |  |
| EMAILLINK      | Code for URL for the Hosted Solution checkout flow |  |
| HOSTEDBUTTONID | ID of a Hosted Solution token                      |  |

#### **BMCreateButton Errors**

| Error Code | Short Message    | Long Message                                                                                                                                 |  |
|------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--|
| 10001      | Internal Error   | Internal Error                                                                                                                               |  |
| 11923      | Invalid Argument | The button image value specified is invalid.                                                                                                 |  |
| 11924      | Invalid Argument | The button image URL specified is invalid.                                                                                                   |  |
| 11925      | Invalid Argument | The button type specified is invalid.                                                                                                        |  |
| 11926      | Invalid Data     | One of the parameters specified using ButtonVar is invalid.                                                                                  |  |
| 11937      | Invalid Argument | A text box name specified is invalid. Text box names must not exceed 64 characters.                                                          |  |
| 11938      | Invalid Argument | The button code value specified is invalid.                                                                                                  |  |
| 11943      | Invalid Argument | The button country value specified is invalid.                                                                                               |  |
| 11945      | Invalid Data     | The button country and language code combination specified is invalid.                                                                       |  |
| 11947      | Invalid Argument | The tax rate specified is invalid. Make sure any punctuation marks are in the correct places and value specified is in the range 0.0 to 100. |  |
| 11948      | Invalid Argument | The amount specified is invalid. Make sure any punctuation marks are in the correct places.                                                  |  |
| 12210      | Invalid Argument | The currency code value specified is invalid.                                                                                                |  |
| 13117      | Invalid Argument | Subtotal amount is not valid.                                                                                                                |  |
| 13118      | Invalid Argument | Tax amount is not valid.                                                                                                                     |  |
| 13119      | Invalid Argument | Handling amount is not valid.                                                                                                                |  |
| 13120      | Invalid Argument | Shipping amount is not valid.                                                                                                                |  |

# 6 Order Processing

This chapter walks you through the end to end order processing experience. It includes information about verifying the status and authenticity of the order before fulfilling it.

# **Verifying Transaction Status and Authenticity**

When the buyer successfully completes a transaction, they are redirected either to the PayPal confirmation page or a website you specified in the return variable or on the Settings page in the Profile section (as outlined in "Simple Hosted Solution Integration" on page 11). When the browser is redirected to the website you specified, a Transaction ID is appended to it.

When you receive the redirect (URL with Transaction ID), you must verify that the order was completed successfully on PayPal before sending the items to the buyer. You can do so by checking the confirmation email sent to you by PayPal or by verifying the transaction history.

## **Validate Instant Payment Notification (IPN)**

IPN enables you to receive messages about transaction payments and activity from PayPal through asynchronous, server-to-server communication. This allows you to integrate your online payments with your order fulfillment process.

Through IPN, you receive messages for the following:

- Payments and their status (pending, complete, or denied)
- Authorisations, chargebacks, disputes, reversals, and refunds.

After a transaction has been processed, PayPal sends an IPN to the notification URL specified in your transaction using the parameter notify\_url, or in your PayPal Profile. You must verify that the Transaction ID, transaction amount, and other order specific parameters such as Invoice ID that are sent in the IPN match with the information you have in your order processing system. For more details, refer to Instant Payment Notification Guide.

# **Fulfilling Order**

After you have verified the authenticity of the payment amount and status, you can fulfil the order by shipping the item to the buyer.

# **Order Processing**

Fulfilling Order



# **Obtaining API Credentials**

To use the PayPal APIs, you must have API credentials that identify you as a PayPal account holder who is authorized to perform various API operations. Although you can use either an API *signature* or a *certificate*, PayPal recommends you use a signature.

**IMPORTANT:** Although you have both a signature and a certificate, you cannot use both at the same time.

## **Creating an API Signature**

An API consists of an API username along with an associated API password and signature, all of which are assigned by PayPal. You need to include this information whenever you execute a PayPal API operation.

You must have a PayPal account to create a signature.

To create an API signature:

- 1. Log in to PayPal, then click **Profile** under **My Account**.
- 2. Under Account Information, click Request API Credentials.
- 3. Under Option 1 PayPal API, click Set up PayPal API credentials and permissions.
- 4. Under Option 2, click View API Signature.
- **5.** Save the information and click **Done** to complete the process.

# **Creating an API Certificate**

Create an API certificate only if your website requires it. Typically, you want to create an API signature for your credentials instead.

You must have a PayPal account to create an API certificate.

**NOTE:** The certificate for API credentials is not the same as an SSL certificate for your website; they are not related to each other.

If you do need a certificate, follow these instructions:

- 1. Log in to PayPal, then click **Profile** under **My Account**.
- 2. Under Account Information, click Request API Credentials.
- 3. Under Option 1 PayPal API, click Set up PayPal API credentials and permissions.

- 4. Under Option 2, click View API Signature.
- **5.** Save the values for API Username and API Password, and click **Done**.
- **6.** Click **Download Certificate** and save the file.
- 7. Rename the file to something familiar, such as paypal\_live\_cert.pem. It is not necessary to keep the .txt file extension. Be sure to remember where you save the file.

After completing this task:

- If you use the PayPal SDK for Java, the PayPal SDK for .NET, or the PayPal SDK for Classic ASP, you must encrypt your certificate in PCKS12 format.
- If you use the PayPal SDK for .NET or Classic ASP, you must take additional steps to import the certificate.

# **Encrypting Your Certificate Into PKCS12 Format**

PayPal SDKs for Java, .NET, and Classic ASP require the additional task of encrypting your certificate into PKCS12 format. Perform this task for both your Sandbox certificate and your live certificate.

**Note:** This task is not required if you are using the PayPal SDK for PHP.

The certificate you download from PayPal is in PEM format. It contains both your public certificate and the associated private key. Although the PEM certificate is not human readable, the file is not encrypted.

The steps in this task require you to use the OpenSSL encryption tool. On Unix, this tool is typically installed for you. On Windows, you typically must download OpenSSL yourself; in this case, accept the defaults when you install OpenSSL and add OpenSSL to the path.

Note: In Windows, the Path is a System environment variable, which is accessible from the **Advanced** tab when you right-click on your **My Computer** icon and view its properties. Do not confuse the **System variables** path with with the **User variables** path. Add OpenSSL to the **System variables** path.

To encrypt your certificate into PKCS12 format:

**1.** Use OpenSSL to create the PKCS12-format certificate from the downloaded PEM-format certificate.

```
openssl pkcs12 -export -in download.txt -inkey download.txt -out certificate.pl2
```

- 2. At the prompt, enter an Export Password for the certificate.
- **3.** Save your Export Password.

# **Importing Your Certificate**

For either PayPal SDK for .NET or Classic ASP, you must download and execute the Windows HTTP Services Certificate Configuration Tool, WinHTTPCertCfg. If you use the .NET platform and develop with the PayPal SDK for .NET, you need to take a few more steps before your certificate can be used.

You must use WinHTTPCertCfg to import the certificate into the Windows Certificate Store and grant access to your private key to the user executing your web application. This is a Windows requirement, not a PayPal requirement. You can download WinHTTPCertCfg from the Microsoft Windows Server 2003 Resource Kit Tools page. For Microsoft documentation, see WinHttpCertCfg.exe, a Certificate Configuration Tool.

#### To import a certificate:

- 1. Execute WinHTTPCertCfg to import the certificate into the Windows Certificate Store and grant access to your private key to the party executing your web application.
  - WinHttpCertCfg -i certificate.p12 -p privateKeyPassword -c where certificate is your PKCS12 certificate and privateKeyPassword is your Export Password.
- **2.** Using WinHTTPCertCfg, change the *username* in LOCAL\_MACHINE\My -a *username* to one of the following values:

TABLE A.1

| Configuration                       | Username value                                                  |
|-------------------------------------|-----------------------------------------------------------------|
| ASP. NET                            | ASPNET                                                          |
| Windows IIS 5 default configuration | IWAM_machineName, where <i>machineName</i> is the computer name |
| Windows IIS 6 default configuration | "NETWORK SERVICE" (You must include the quote marks.)           |

# Obtaining API Credentials

Importing Your Certificate



# **Error Messages**

The table below lists error codes and the appropriate correction action.

TABLE B.1 Error Codes and the Corresponding Corrective Actions

| Error Code | Error Message                         | Corrective Action (if applicable)                                                                                                                                                                                                            |
|------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1          | User authentication failed.           | Error is caused by one or more of the following:                                                                                                                                                                                             |
|            |                                       | Login information is incorrect. Verify that USER, VENDOR, PARTNER, and PASSWORD have been entered correctly. VENDOR is your merchant ID and USER is the same as VENDOR unless you created a Payflow Pro user. All fields are case sensitive. |
|            |                                       | Invalid Processor information entered. Contact merchant bank to verify.                                                                                                                                                                      |
|            |                                       | "Allowed IP Address" security feature implemented.  The transaction is coming from an unknown IP address See PayPal Manager online help for details on how to use Manager to update the allowed IP addresses.                                |
|            |                                       | You are using a test (not active) account to submit a transaction to the live PayPal servers. Change the host address from the test server URL to the live server URL.                                                                       |
| 2          | Invalid tender type.                  | Your merchant bank account does not support the following credit card type that was submitted.                                                                                                                                               |
| 3          | Invalid transaction type.             |                                                                                                                                                                                                                                              |
| 4          | Invalid amount format.                | Transaction type is not appropriate for this transaction. For example, you cannot credit an authorization-only transaction.                                                                                                                  |
| 5          | Invalid merchant information.         | Processor does not recognize your merchant account information. Contact your bank account acquirer to resolve this problem.                                                                                                                  |
| 6          | Invalid or unsupported currency code  | Use valid currency code.                                                                                                                                                                                                                     |
| 7          | Field format error.                   | Invalid information entered. See RESPMSG.                                                                                                                                                                                                    |
| 8          | Not a transaction server              |                                                                                                                                                                                                                                              |
| 9          | Too many parameters or invalid stream |                                                                                                                                                                                                                                              |
| 10         | Too many line items                   |                                                                                                                                                                                                                                              |

 TABLE B.1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                             | Corrective Action (if applicable)                                                                                                                                                                                                                                                                                                                                        |
|------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11         | Client time-out waiting for response      |                                                                                                                                                                                                                                                                                                                                                                          |
| 12         | Declined                                  | Check the credit card number, expiration date, and transaction information to make sure they were entered correctly. If this does not resolve the problem, have the customer call their card issuing bank to resolve.                                                                                                                                                    |
| 13         | Referral.                                 | Transaction cannot be approved electronically but can<br>be approved with a verbal authorization. Contact your<br>merchant bank to obtain an authorization and submit a<br>manual Voice Authorization transaction.                                                                                                                                                       |
| 14         | Invalid Client Certification ID.          | Check the HTTP header. If the tag, X-VPS-VIT-CLIENT-CERTIFICATION-ID, is missing, RESULT code 14 is returned.                                                                                                                                                                                                                                                            |
| 19         | Original transaction ID not found.        | The transaction ID you entered for this transaction is not valid. See RESPMSG.                                                                                                                                                                                                                                                                                           |
| 20         | Cannot find the customer reference number |                                                                                                                                                                                                                                                                                                                                                                          |
| 22         | Invalid ABA number                        |                                                                                                                                                                                                                                                                                                                                                                          |
| 23         | Invalid account number.                   | Check credit card number and re-submit.                                                                                                                                                                                                                                                                                                                                  |
| 24         | Invalid expiration date.                  | Check and re-submit.                                                                                                                                                                                                                                                                                                                                                     |
| 25         | Invalid Host Mapping.                     | Error is caused by one or more of the following: You are trying to process a tender type such as Discover Card, but you are not set up with your merchant bank to accept this card type. You are trying to process an Express Checkout transaction when your account is not set up to do so. Contact your account holder to have Express Checkout added to your account. |
| 26         | Invalid vendor account.                   | Login information is incorrect. Verify that USER, VENDOR, PARTNER, and PASSWORD have been entered correctly. VENDOR is your merchant ID and USER is the same as VENDOR unless you created a Payflow Pro user. All fields are case sensitive.                                                                                                                             |
| 27         | Insufficient partner permissions          |                                                                                                                                                                                                                                                                                                                                                                          |
| 28         | Insufficient user permissions             |                                                                                                                                                                                                                                                                                                                                                                          |
| 29         | Invalid XML document.                     | This could be caused by an unrecognized XML tag or a bad XML format that cannot be parsed by the system.                                                                                                                                                                                                                                                                 |
| 30         | Duplicate transaction                     |                                                                                                                                                                                                                                                                                                                                                                          |

 TABLE B. 1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                               | Corrective Action (if applicable)                                                                                                                                         |
|------------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 31         | Error in adding the recurring profile       |                                                                                                                                                                           |
| 32         | Error in modifying the recurring profile    |                                                                                                                                                                           |
| 33         | Error in canceling the recurring profile    |                                                                                                                                                                           |
| 34         | Error in forcing the recurring profile      |                                                                                                                                                                           |
| 35         | Error in reactivating the recurring profile |                                                                                                                                                                           |
| 36         | OLTP Transaction failed                     |                                                                                                                                                                           |
| 37         | Invalid recurring profile ID                |                                                                                                                                                                           |
| 50         | Insufficient funds available in account     |                                                                                                                                                                           |
| 51         | Exceeds per transaction limit               |                                                                                                                                                                           |
| 99         | General error.                              | See RESPMSG.                                                                                                                                                              |
| 100        | Transaction type not supported by host      |                                                                                                                                                                           |
| 101        | Time-out value too small                    |                                                                                                                                                                           |
| 102        | Processor not available                     |                                                                                                                                                                           |
| 103        | Error reading response from host            |                                                                                                                                                                           |
| 104        | Timeout waiting for processor response.     | Try your transaction again.                                                                                                                                               |
| 105        | Credit error.                               | Make sure you have not already credited this transaction, or that this transaction ID is for a creditable transaction. (For example, you cannot credit an authorization.) |
| 106        | Host not available                          |                                                                                                                                                                           |
| 107        | Duplicate suppression time-<br>out          |                                                                                                                                                                           |

 TABLE B.1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                                                                                             | Corrective Action (if applicable)                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 108        | Void error.                                                                                               | See RESPMSG. Make sure the transaction ID entered has not already been voided. If not, then look at the Transaction Detail screen for this transaction to see if it has settled. (The Batch field is set to a number greater than zero if the transaction has been settled). If the transaction has already settled, your only recourse is a reversal (credit a payment or submit a payment for a credit).                                                                    |
| 109        | Time-out waiting for host response                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 110        | Referenced auth (against order) Error                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 111        | Capture error.                                                                                            | Either an attempt to capture a transaction that is not an authorization transaction type, or an attempt to capture an authorization transaction that has already been captured.                                                                                                                                                                                                                                                                                               |
| 112        | Failed AVS check.                                                                                         | Address and ZIP code do not match. An authorization may still exist on the cardholder's account.                                                                                                                                                                                                                                                                                                                                                                              |
| 113        | Merchant sale total will exceed the sales cap with current transaction. ACH transactions only.            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 114        | Card Security Code (CSC)<br>Mismatch. An authorization<br>may still exist on the<br>cardholder's account. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 115        | System busy, try again later                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 116        | VPS Internal error. Failed to lock terminal number                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 117        | Failed merchant rule check.                                                                               | One or more of the following three failures occurred: An attempt was made to submit a transaction that failed to meet the security settings specified on the PayPal Manager <i>Security Settings</i> page. If the transaction exceeded the Maximum Amount security setting, then no values are returned for AVS or CSC.  AVS validation failed. The AVS return value should appear in the RESPMSG.  CSC validation failed. The CSC return value should appear in the RESPMSG. |
| 118        | Invalid keywords found in string fields                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

 TABLE B. 1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                                                                                                                                                                                                                                                                                                                                                     | Corrective Action (if applicable)                                                                                                                                                                                                                                                                                                                                                                                |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 119        | General failure within PIM<br>Adapter                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 120        | Attempt to reference a failed transaction                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 121        | Not enabled for feature                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 122        | Merchant sale total will exceed the credit cap with current transaction. ACH transactions only.                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 125        | Fraud Protection Services<br>Filter — Declined by filters                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 126        | Fraud Protection Services Filter — Flagged for review by filters Result code 126 indicates that a transaction triggered a fraud filter. This is not an error, but a notice that the transaction is in a review status. The transaction has been authorized but requires you to review and to manually accept the transaction before it will be allowed to settle. | Result code 126 is intended to give you an idea of the kind of transaction that is considered suspicious to enable you to evaluate whether you can benefit from using the Fraud Protection Services.  To eliminate result 126, turn the filters off. For more information, see the Fraud Protection Services documentation for your payments solution. It is available on the PayPal Manager Documentation page. |
| 127        | Fraud Protection Services<br>Filter — Not processed by<br>filters                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 128        | Fraud Protection Services Filter — Declined by merchant after being flagged for review by filters                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 131        | Version 1 Payflow Pro SDK client no longer supported.                                                                                                                                                                                                                                                                                                             | Upgrade to the most recent version of the Payflow Proclient.                                                                                                                                                                                                                                                                                                                                                     |
| 132        | Card has not been submitted for update                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 133        | Data mismatch in HTTP retry request                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 150        | Issuing bank timed out                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 151        | Issuing bank unavailable                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                  |

 TABLE B.1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                                                                                                      | Corrective Action (if applicable)                                                                                                 |
|------------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 200        | Reauth error                                                                                                       |                                                                                                                                   |
| 201        | Order error                                                                                                        |                                                                                                                                   |
| 402        | PIM Adapter Unavailable                                                                                            |                                                                                                                                   |
| 403        | PIM Adapter stream error                                                                                           |                                                                                                                                   |
| 404        | PIM Adapter Timeout                                                                                                |                                                                                                                                   |
| 600        | Cybercash Batch Error                                                                                              |                                                                                                                                   |
| 601        | Cybercash Query Error                                                                                              |                                                                                                                                   |
| 1000       | Generic host error.                                                                                                | This is a generic message returned by your credit card processor. The RESPMSG will contain more information describing the error. |
| 1001       | Buyer Authentication<br>Service unavailable                                                                        |                                                                                                                                   |
| 1002       | Buyer Authentication<br>Service — Transaction<br>timeout                                                           |                                                                                                                                   |
| 1003       | Buyer Authentication<br>Service — Invalid client<br>version                                                        |                                                                                                                                   |
| 1004       | Buyer Authentication<br>Service — Invalid timeout<br>value                                                         |                                                                                                                                   |
| 1011       | Buyer Authentication<br>Service unavailable                                                                        |                                                                                                                                   |
| 1012       | Buyer Authentication<br>Service unavailable                                                                        |                                                                                                                                   |
| 1013       | Buyer Authentication<br>Service unavailable                                                                        |                                                                                                                                   |
| 1014       | Buyer Authentication<br>Service — Merchant is not<br>enrolled for Buyer<br>Authentication Service (3-D<br>Secure). |                                                                                                                                   |
| 1016       | Buyer Authentication<br>Service — 3-D Secure error<br>response received.                                           | Instead of receiving a PARes response to a Validate Authentication transaction, an error response was received.                   |

 TABLE B.1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                                                                                                      | Corrective Action (if applicable)                                                                            |
|------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 1017       | Buyer Authentication<br>Service — 3-D Secure error<br>response is invalid.                                         | An error response is received and the response is not well formed for a Validate Authentication transaction. |
| 1021       | Buyer Authentication<br>Service — Invalid card type                                                                |                                                                                                              |
| 1022       | Buyer Authentication<br>Service — Invalid or missing<br>currency code                                              |                                                                                                              |
| 1023       | Buyer Authentication<br>Service — merchant status<br>for 3D secure is invalid                                      |                                                                                                              |
| 1041       | Buyer Authentication Service — Validate Authentication failed: missing or invalid PARES                            |                                                                                                              |
| 1042       | Buyer Authentication Service — Validate Authentication failed: PARES format is invalid                             |                                                                                                              |
| 1043       | Buyer Authentication Service — Validate Authentication failed: Cannot find successful Verify Enrollment            |                                                                                                              |
| 1044       | Buyer Authentication Service — Validate Authentication failed: Signature validation failed for PARES               |                                                                                                              |
| 1045       | Buyer Authentication<br>Service — Validate<br>Authentication failed:<br>Mismatched or invalid<br>amount in PARES   |                                                                                                              |
| 1046       | Buyer Authentication<br>Service — Validate<br>Authentication failed:<br>Mismatched or invalid<br>acquirer in PARES |                                                                                                              |

 TABLE B.1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                                                                                                                                      | Corrective Action (if applicable)                                                      |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1047       | Buyer Authentication Service — Validate Authentication failed: Mismatched or invalid Merchant ID in PARES                                          |                                                                                        |
| 1048       | Buyer Authentication Service — Validate Authentication failed: Mismatched or invalid card number in PARES                                          |                                                                                        |
| 1049       | Buyer Authentication Service — Validate Authentication failed: Mismatched or invalid currency code in PARES                                        |                                                                                        |
| 1050       | Buyer Authentication Service — Validate Authentication failed: Mismatched or invalid XID in PARES                                                  |                                                                                        |
| 1051       | Buyer Authentication Service — Validate Authentication failed: Mismatched or invalid order date in PARES                                           |                                                                                        |
| 1052       | Buyer Authentication Service — Validate Authentication failed: This PARES was already validated for a previous Validate Authentication transaction |                                                                                        |
| 10001      | Your payment can't be processed right now. Please try again later.                                                                                 | Try again later.                                                                       |
| 10004      | Your payment can't be processed. Please contact the merchant directly with this code.                                                              | There is a problem with your integration. Check the parameters that you have supplied. |

 TABLE B.1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                                                                         | Corrective Action (if applicable)                                                                                                           |
|------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 10009      | Your payment can't be processed. Please contact the merchant directly with this code. | Try again later.                                                                                                                            |
| 10010      | Your payment can't be processed. Please contact the merchant directly with this code. | Provide a valid invoice ID.                                                                                                                 |
| 10413      | Your payment can't be processed. Please contact the merchant directly with this code. | Subtotal, shipping, handling, and tax. Review the totals in your integration.                                                               |
| 10500      | Your payment can't be processed. Please contact the merchant directly with this code. | You have not agreed to the billing agreement.                                                                                               |
| 10501      | Your payment can't be processed. Please contact the merchant directly with this code. | Billing agreement is disabled or inactive.                                                                                                  |
| 10502      | Your credit card has expired. Please pay with a valid card.                           | Credit card used has expired.                                                                                                               |
| 10504      | Please enter a valid card security code.                                              | CVV provided is invalid. The CVV is between 3-4 digits long.                                                                                |
| 10505      | Your payment can't be processed. Please contact the merchant directly with this code. | Transaction was refused because the AVS response returned the value of N, and the merchant account is not able to accept such transactions. |
| 10507      | Your payment can't be processed. Please contact the merchant directly with this code. | Your PayPal account is restricted. Contact PayPal with this error code.                                                                     |
| 10508      | Please enter a valid card expiration date.                                            | Expiration date must be in the correct format.                                                                                              |
| 10509      | Your payment can't be processed. Please contact the merchant directly with this code. | PayPal was unable to determine the IP address of the buyer.                                                                                 |

 TABLE B.1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                                                                         | Corrective Action (if applicable)                                                                                                               |
|------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 10511      | Your payment can't be processed. Please contact the merchant directly with this code. | Review the integration to ensure that a valid PaymentAction value is supplied.                                                                  |
| 10512      | Please enter a first name.                                                            | First name of the buyer is required.                                                                                                            |
| 10513      | Please enter a last name.                                                             | Last name of the buyer is required.                                                                                                             |
| 10520      | Your payment can't be processed. Please contact the merchant directly with this code. | Amounts supplied do not match.                                                                                                                  |
| 10523      | Your payment can't be processed right now. Please try again later.                    | Try again later.                                                                                                                                |
| 10525      | Please enter a valid amount.                                                          | Verify your integration to ensure that the amounts are not zero.                                                                                |
| 10527      | Please enter a valid card number.                                                     | Credit card entered is invalid.                                                                                                                 |
| 10534      | Your payment can't be processed. Please contact the merchant directly with this code. | Credit card entered is currently restricted by PayPal.<br>Contact PayPal with this error code.                                                  |
| 10535      | Please enter a valid credit card number.                                              | Credit card entered is invalid.                                                                                                                 |
| 10536      | Your payment can't be processed. Please contact the merchant directly with this code. | All shopping cart items must be in the same currency.                                                                                           |
| 10537      | Your payment can't be processed. Please contact the merchant directly with this code. | Transaction was declined by the country filter managed by the merchant. To accept this transaction, change your risk settings on PayPal.        |
| 10538      | Your payment can't be processed. Please contact the merchant directly with this code. | Transaction was declined by the maximum amount filter managed by the merchant. To accept this transaction, change your risk settings on PayPal. |
| 10539      | Your payment can't be processed. Please contact the merchant directly with this code. | Transaction was declined by fraud filter managed by the merchant. To accept this translation, change your risk settings on PayPal.              |

 TABLE B.1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                                                                         | Corrective Action (if applicable)                                                                                                    |
|------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 10540      | Please enter a valid address.                                                         | Transaction was declined by PayPal because of an invalid address. Buyer should provide the correct address.                          |
| 10541      | Please enter a valid credit card number.                                              | Credit card entered is currently restricted by PayPal.<br>Contact PayPal with this error code.                                       |
| 10542      | Please enter a valid email address.                                                   | Email address is in an invalid format. Buyer should provide the email address in the correct format.                                 |
| 10544      | Your payment can't be processed. Please contact the merchant directly with this code. | Transaction was declined by PayPal. Contact PayPal with this error code.                                                             |
| 10545      | Your payment can't be processed. Please pay with another credit card.                 | Transaction was declined by PayPal because of possible fraudulent activity. Contact PayPal with this error code                      |
| 10546      | Your payment can't be processed. Please contact the merchant directly with this code. | Transaction was declined by PayPal because of possible fraudulent activity on the IP address. Contact PayPal with this error code.   |
| 10547      | Your payment can't be processed. Please contact the merchant directly with this code. | None - this is a PayPal internal error.                                                                                              |
| 10548      | Your payment can't be processed. Please contact the merchant directly with this code. | Merchant account attempting the transaction is not a business account at PayPal. Check your account settings.                        |
| 10549      | Your payment can't be processed. Please contact the merchant directly with this code. | Merchant account attempting the transaction is not able to process Direct Payment transactions. Contact PayPal with this error code. |
| 10550      | Your payment can't be processed. Please contact the merchant directly with this code. | Access to Direct Payment was disabled for your account. Contact PayPal with this error code.                                         |
| 10552      | Your payment can't be processed. Please contact the merchant directly with this code. | Merchant account attempting the transaction does not have a confirmed email address with PayPal. Check your account settings.        |

 TABLE B.1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                                                                         | Corrective Action (if applicable)                                                                                                                                |
|------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10553      | Your payment can't be processed. Please contact the merchant directly with this code. | Merchant attempted a transaction where the amount exceeded the upper limit for that merchant.                                                                    |
| 10554      | Your payment can't be processed. Please contact the merchant directly with this code. | Transaction was declined because of a risk filter for AVS. Specifically, the merchant has set to decline transaction when the AVS returned a no match (AVS = N). |
| 10555      | Your payment can't be processed. Please contact the merchant directly with this code. | Transaction was declined because of a risk filter for AVS. Specifically, the merchant has set to decline transaction when the AVS returned a partial match.      |
| 10556      | Your payment can't be processed. Please contact the merchant directly with this code. | Transaction was declined because of a risk filter for AVS. Specifically, the merchant has set to decline transaction when the AVS was unsupported.               |
| 10557      | Your payment can't be processed. Please contact the merchant directly with this code. | Check your payment receiving preferences. Contact PayPal if you more help.                                                                                       |
| 10558      | Your payment can't be processed. Please contact the merchant directly with this code. | Credit card supplied cannot be charged in the currency requested.                                                                                                |
| 10560      | Please enter a valid card issue number.                                               | Buyer should enter a valid card number.                                                                                                                          |
| 10561      | Please enter a complete billing address.                                              | Buyer should enter the complete billing address.                                                                                                                 |
| 10562      | Please enter a valid year for<br>the credit card expiration<br>date.                  | Buyer should enter a valid year for card expiration.                                                                                                             |
| 10563      | Please enter a valid month for the credit card expiration date.                       | Buyer should enter a valid month for card expiration.                                                                                                            |
| 10564      | Your payment can't be processed. Please contact the merchant directly with this code. | A duplicate transaction was detected, advice buyer to try again later.                                                                                           |

 TABLE B.1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                                                                         | Corrective Action (if applicable)                                    |
|------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| 10565      | Your payment can't be processed. Please contact the merchant directly with this code. | Merchant country is not supported.                                   |
| 10566      | Your payment can't be processed. Please pay with a different card type.               | Credit card type is not supported.                                   |
| 10567      | Please enter an issue number or a start date.                                         | Buyer should enter an issue number or a start date.                  |
| 10570      | Your payment can't be processed. Please pay with another credit card.                 | Credit card supplied doesn't support "Authorization".                |
| 10701      | Please enter a valid name for the billing address.                                    | Buyer should enter a valid name in the billing address.              |
| 10702      | Please enter a valid address in line 1 of the billing address.                        | Buyer should enter a valid address in line 1 of the billing address. |
| 10703      | Please enter a valid address in line 2 of the billing address.                        | Buyer should enter a valid address in line 2 of the billing address. |
| 10704      | Please enter a valid city in the billing address.                                     | Buyer should enter a valid city in the billing address.              |
| 10705      | Please enter a valid state in the billing address.                                    | Buyer should enter a valid state in the billing address.             |
| 10706      | Please enter a valid ZIP code in the billing address.                                 | Buyer should enter a valid zip code in the billing address.          |
| 10707      | Please enter a valid country in the billing address.                                  | Buyer should enter a valid country in the billing address.           |
| 10708      | Please enter a complete billing address.                                              | Buyer should enter the complete billing address.                     |
| 10709      | Please enter an address in line 1 of the billing address.                             | Buyer should enter an address in line 1 of the billing address.      |
| 10710      | Please enter a city in the billing address.                                           | Buyer should enter a city in the billing address.                    |
| 10711      | Please enter a state in the billing address.                                          | Buyer should enter a state in the billing address.                   |
| 10712      | Please enter a valid postal code in the billing address.                              | Buyer should enter a valid zip code in the billing address.          |

 TABLE B.1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                                                   | Corrective Action (if applicable)                                     |
|------------|-----------------------------------------------------------------|-----------------------------------------------------------------------|
| 10713      | Please enter a country in the billing address.                  | Buyer should enter a country in the billing address.                  |
| 10714      | Please enter a valid name in the billing address.               | Buyer should enter a valid name in the billing address.               |
| 10715      | Please enter a valid state in the billing address.              | Buyer should enter a valid state in the billing address.              |
| 10716      | Please enter a valid postal code in the billing address.        | Buyer should enter a valid zip code in the billing address.           |
| 10717      | Please enter a valid postal code in the billing address.        | Buyer should enter a valid zip code in the billing address.           |
| 10718      | Please enter a valid city in the billing address.               | Buyer should enter a valid city.                                      |
| 10719      | Please enter a valid addressee name in the shipping address.    | Buyer should enter a valid addressee name for shipping address.       |
| 10720      | Please enter a valid address in line 1 of the shipping address. | Buyer should enter a valid address in line 1 of the shipping address. |
| 10721      | Please enter a valid address in line 2 of the shipping address. | Buyer should enter a valid address in line 2 of the shipping address. |
| 10722      | Please enter a valid city in the shipping address.              | Buyer should enter a valid city in the shipping address.              |
| 10723      | Please enter a valid state in the shipping address.             | Buyer should enter a valid state in the shipping address              |
| 10724      | Please enter a valid postal code in the shipping address.       | Buyer should enter a valid postal code in the shipping address.       |
| 10725      | Please enter a valid country in the shipping address.           | Buyer should enter a valid country in the shipping address.           |
| 10726      | Please enter a complete shipping address.                       | Buyer should enter a complete shipping address.                       |
| 10727      | Please enter an address in line 1 of the shipping address.      | Buyer should enter an address1 in the shipping address.               |
| 10728      | Please enter a city in the shipping address.                    | Buyer should enter a city in the shipping address.                    |

 TABLE B.1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                                                                         | Corrective Action (if applicable)                                  |
|------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 10729      | Please enter a state in the shipping address.                                         | Buyer should enter a state in the shipping address.                |
| 10730      | Please enter a postal code in the shipping address.                                   | Buyer should enter a valid postal code in the shipping address.    |
| 10731      | Please enter a country in the shipping address.                                       | Buyer should enter a country in the shipping address.              |
| 10732      | Please enter a valid addressee name in the shipping address.                          | Buyer should enter a valid addressee in the shipping address.      |
| 10733      | Please enter a valid state in the shipping address.                                   | Buyer should enter a valid state in the shipping address.          |
| 10734      | Please enter a valid postal code in the shipping address.                             | Buyer should enter a valid postal code in the shipping address.    |
| 10735      | Please enter a valid postal code in the shipping address.                             | Buyer should enter a valid postal code in the shipping address.    |
| 10736      | Please enter a valid city and state in the shipping address.                          | Buyer should enter a valid city and state in the shipping address. |
| 10744      | Please enter a valid country in the billing address.                                  | Buyer should enter a valid country in the billing address.         |
| 10745      | Please enter a valid country in the shipping address.                                 | Buyer should enter a valid country in the shipping address.        |
| 10746      | Your payment can't be processed. Please contact the merchant directly with this code. | Credit card from this country is not supported.                    |
| 10747      | Your payment can't be processed. Please contact the merchant directly with this code. | Contact PayPal with this error code.                               |
| 10748      | Please enter a card security code.                                                    | Buyer should enter a Card Security Code.                           |
| 10750      | Please enter a valid state in the shipping address.                                   | Buyer should enter a valid state in the shipping address.          |
| 10751      | Please enter a valid state in the billing address.                                    | Buyer should enter a valid state in the billing address.           |

 TABLE B.1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                                                                                               | Corrective Action (if applicable)                                                                                                                                                                                    |
|------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10752      | Your payment can't be processed. Please pay with another card.                                              | Transaction was declined by the issuing bank, not PayPal. Buyer should attempt another card.                                                                                                                         |
| 10754      | Your payment can't be processed. Please pay with another card.                                              | Buyer should use a different credit card.                                                                                                                                                                            |
| 10755      | Your payment can't be processed. Please contact the merchant directly with this code.                       | Review your integration to ensure that the currency code is supported.                                                                                                                                               |
| 10756      | Your payment can't be processed. Please pay with another card.                                              | Buyer should use a different credit card.                                                                                                                                                                            |
| 10759      | Your payment can't be processed. Please pay with another card.                                              | Transaction was declined by PayPal. Contact PayPal with this error code.                                                                                                                                             |
| 10761      | Your payment can't be processed because this transaction appears to be a duplicate of a recent transaction. | Transaction was declined because PayPal is currently processing a transaction by the same buyer for the same amount. This error can occur when a buyer submits multiple, identical transactions in quick succession. |
| 10762      | Your payment can't be processed. Please pay with another card.                                              | Excessive CVV failures on the credit card. Buyer should try a different card.                                                                                                                                        |
| 10763      | Your payment can't be processed. Please contact the merchant directly with this code.                       | None - this is a PayPal internal error.                                                                                                                                                                              |
| 10764      | Your payment can't be processed. Please contact the merchant directly with this code.                       | Transaction was declined by PayPal. Contact PayPal with this error code.                                                                                                                                             |
| 11611      | Your payment can't be processed. Please contact the merchant directly with this code.                       | Check your Fraud Management Filters.                                                                                                                                                                                 |
| 11998      | Please enter the date when your credit card became valid.                                                   | Buyer should give the correct start date for their credit card.                                                                                                                                                      |

 TABLE B.1
 Error Codes and the Corresponding Corrective Actions (Continued)

| Error Code | Error Message                                                                         | Corrective Action (if applicable)                                                                                                                         |
|------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12000      | Your payment can't be processed. Please contact the merchant directly with this code. | This is related to insufficient 3DS parameters. Contact PayPal with this error code.                                                                      |
| 12001      | Your payment can't be processed. Please contact the merchant directly with this code. | This is related to insufficient 3DS parameters. Contact PayPal with this error code.                                                                      |
| 15001      | Your payment can't be processed. Please pay with another card.                        | Transaction was rejected by PayPal because of excessive failures over a short period of time for this credit card. Contact PayPal with this error code.   |
| 15002      | Your payment can't be processed. Please pay with another card.                        | Transaction was declined by PayPal. Contact PayPal with this error code.                                                                                  |
| 15003      | Your payment can't be processed. Please contact the merchant directly with this code. | Transaction was declined because the merchant does not have a valid commercial entity agreement on file with PayPal. Contact PayPal with this error code. |
| 15004      | Please enter a valid Card Security Code.                                              | Transaction was declined because the CVV entered does not match the credit card.                                                                          |
| 15005      | Your payment can't be processed. Please pay with another card.                        | Transaction was declined by the issuing bank, not PayPal. Buyer should attempt another card.                                                              |
| 15006      | Please enter a valid card number.                                                     | Transaction was declined by the issuing bank, not PayPal. Buyer should attempt another card.                                                              |
| 15007      | Your card is expired. Please pay with a valid card.                                   | Transaction was declined by the issuing bank because of an expired credit card. Buyer should attempt another card.                                        |
| 15008      | Your payment can't be processed. Please contact the merchant directly with this code. | Review your integration to ensure that the totals match.                                                                                                  |
| 15009      | Your payment can't be processed. Please contact the merchant directly with this code. | There is a mismatch in the currency code. Contact PayPal with this error code.                                                                            |
| 99998      | Your payment can't be processed. Please contact the merchant directly with this code. | Credit card data is invalid. Contact PayPal with this error code.                                                                                         |

# **Currency Codes**

The table below lists all the currencies supported by PayPal.

TABLE C.1 Currency Codes

| Currency |                        |
|----------|------------------------|
| Code     | Country Name           |
| AUD      | Australian Dollar      |
| CAD      | Canadian Dollar        |
| CHF      | Swiss Franc            |
| CZK      | Czech Koruna           |
| DKK      | Danish Krone           |
| EUR      | Euro                   |
| GBP      | British Pound Sterling |
| HKD      | Hong Kong Dollar       |
| HUF      | Hungarian Forint       |
| JPY      | Japanese Yen           |
| NOK      | Norwegian Krone        |
| NZD      | New Zealand Dollar     |
| PLN      | Polish Zloty           |
| SEK      | Swedish Krona          |
| SGD      | Singapore Dollar       |
| USD      | U.S. Dollar            |
|          |                        |

# Index

| Numerics                                                    | BUTTONTYPE 49                           |  |
|-------------------------------------------------------------|-----------------------------------------|--|
| 3-D Secure 7                                                | BUTTONTYPE=PAYMENT 41<br>buyer_email 13 |  |
| A                                                           | С                                       |  |
| address_override 13                                         | cancel_return 13                        |  |
| address1 13                                                 | cht 13                                  |  |
| address2 13                                                 | city 13                                 |  |
| API integration 41                                          | clear text buttons 41                   |  |
|                                                             | CLEARTEXT 41                            |  |
| В                                                           | Configuration                           |  |
|                                                             | Customer Information 19                 |  |
| background 32                                               | Email Receipt 22                        |  |
| billing_address1 13                                         | General Settings 26                     |  |
| billing_address2 13                                         | Payment Confirmation 21                 |  |
| billing_city 13                                             | Security Settings 23                    |  |
| billing_country 13                                          | URLs and Data Transfer 25               |  |
| billing_first_name 13                                       | country 13                              |  |
| billing_last_name 13                                        | currency codes 75                       |  |
| billing_state 13                                            | currency_code 13                        |  |
| billing_zip 13                                              | custom 14                               |  |
| BMCreateButton API 41, 42, 49                               | customising payment page 17             |  |
| BMCreateButton API Operation 49<br>BMCreateButton Errors 50 | customising your template 31            |  |
|                                                             |                                         |  |
| BMCreateButton Request 49 BMCreateButton Request Fields 49  | E                                       |  |
| BMCreateButton Response 49                                  | _                                       |  |
| BMCreateButton Response Fields 49                           | EMAILLINK 39, 42, 49                    |  |
| bn 13                                                       | ENCRYPTED 41                            |  |
| bodyBgColor 33                                              | encrypted buttons 41                    |  |
| bodyBgImg 33                                                | encryption 45                           |  |
| button hosting 41                                           | error messages 57                       |  |
| clear text buttons 41                                       |                                         |  |
| encrypted buttons 41                                        | F                                       |  |
| token buttons 41                                            |                                         |  |
| Button Manager API 41                                       | first_name 14                           |  |
| BUTTONCODE 49                                               | footerTextColor 33                      |  |
| BUTTONCODE=CLEARTEXT 41                                     |                                         |  |
| BUTTONCODE=ENCRYPTED 41                                     | G                                       |  |
| BUTTONCODE=HOSTED 41                                        |                                         |  |

BUTTONCODE=TOKEN 41

GetTransactionDetails API 53

| Н                                            | 0                                                                            |
|----------------------------------------------|------------------------------------------------------------------------------|
| handling 14<br>header 31<br>headerBgColor 33 | optional API operations 53<br>order processing 51<br>order summary column 32 |
| headerHeight 33                              | orderSummaryBgColor 33                                                       |
| HOSTED 41                                    | orderSummaryBgImage 33                                                       |
| HOSTEDBUTTONID 49                            | overview 7                                                                   |
| HTML integration 11                          | 5 , 62 , 12 , ,                                                              |
| HTTP variables 13, 33                        | _                                                                            |
| ,                                            | P                                                                            |
| I .                                          | pageButtonBgColor 33<br>pageButtonTextColor 33                               |
| iFrames 35                                   | pageTitleTextColor 33                                                        |
| API integration 38                           | paymentaction 15                                                             |
| manual integration 37                        | PCI complicance 7                                                            |
| Instant Payment Notification (IPN) 51        | preview 28                                                                   |
| integration                                  | private key 45                                                               |
| API 41                                       | public key 45                                                                |
| HTML 11                                      |                                                                              |
| invoice 14                                   | R                                                                            |
| L                                            | return 15                                                                    |
| L_BUTTONVAR 49                               | S                                                                            |
| last_name 14                                 | 3                                                                            |
| lc 14                                        | save and publish 28                                                          |
| logoFont 33                                  | sectionBorder 33                                                             |
| logoFontColor 33                             | settings 18                                                                  |
| logoFontSize 33                              | shipping 15                                                                  |
| logoImage 33                                 | showBillingAddress 34                                                        |
| logoImagePosition 33                         | showBillingEmail 34                                                          |
| logoText 33                                  | showBillingPhone 34                                                          |
|                                              | showCustomerName 34                                                          |
| M                                            | showHostedThankyouPage 34                                                    |
|                                              | showShippingAddress 34                                                       |
| METHOD 49                                    | simple integration 11                                                        |
| modifying account settings 17                | state 15                                                                     |
|                                              | subheaderText 34                                                             |
| N                                            | subtotal 15                                                                  |
| night_phone_a 14                             | -                                                                            |
| night_phone_b 14                             | Т                                                                            |
| night_phone_c 14                             | tax 15                                                                       |
| notify_url 14                                | template 34                                                                  |
|                                              | title 32                                                                     |
|                                              | TOKEN 41                                                                     |

token buttons 41 transaction status 51



WEBSITECODE 39, 44, 49

# Z

zip 15