



# ***Website Payments Pro Integration Guide***

For Professional Use Only  
Currently only available in English.

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A usage Professional Uniquement  
Disponible en Anglais uniquement pour l'instant.

## *PayPal Website Payments Pro Integration Guide*

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# Preface

## **This Document**

This release of the *Website Payments Pro Integration Guide*, a document that describes PayPal Direct Payment and PayPal Express Checkout as payment solutions for customer checkout on your website, supersedes the previous release issued in May, 2006.

## **Intended Audience**

This document is written for merchants who use either PayPal Direct Payment or PayPal Express Checkout and the programmers who implement these products on a merchant's website.

## **Background Information about the PayPal Web Services API**

Consult the *PayPal Web Services API Reference* for information about the following:

- Architecture of the PayPal Web Services API, such as security and authentication basics
- The location of PayPal's Web Services Definition Language (WSDL) and X-Schema Definition files
- The structure of SOAP requests and responses
- Other APIs, such as GetTransactionDetails and TransactionSearch

## **Organization of This Document**

[Chapter 1, "Website Payments Pro Overview,"](#) describes what Website Payments Pro is, who can use it, what developers need to know to make it work, and why it is the perfect checkout solution for your website.

[Chapter 2, "How Express Checkout Works,"](#) is a detailed, step-by-step explanation of how Express Checkout works and how it can be integrated into your checkout process.

[Chapter 3, "How Direct Payment API Works,"](#) presents a more in-depth technical overview of how the Direct Payment API works.

[Chapter 4, "How Authorization & Capture Works,"](#) details how Authorization & Capture works.

[Chapter 5, "Design Choices for Best Buying Experience,"](#) details guidelines for placing PayPal logo graphics on your website, variations on those guidelines, and special considerations in integrating Express Checkout in some cases of the customer experience, such as handling shipping addresses and reapproving the use of PayPal.

[Chapter 6, "Express Checkout API"](#) details the required and optional elements of all SOAP requests and responses for PayPal Express Checkout.

[Chapter 7, "Direct Payment API"](#) details the required and optional elements of all SOAP requests and responses for PayPal Direct Payment.

Chapter 8, “Authorization & Capture API” details the required and optional elements of all SOAP requests and responses for Authorization & Capture.

### Notational Conventions

This document uses typefaces to identify the characteristics of text. These typefaces and the characteristics they imply are described below:

Typeface	How Used
serif italics	A document title.
	A term being discussed or defined. For example: A file is a readable or writable stream of characters ...
	Boolean values (not keywords). For example: The function returns true if it encounters an error.
monospaced	Pathnames or file names that appear in body text frames.
	Code-related names that appear in body text frames. Such names are used for functions, callbacks, arguments, data structures, and fields. For example: <code>AbstractResponseType</code> is the SOAP response type definition on which all PayPal API response methods are based.
	Components of Internet protocol requests and responses, such as HTTPS and FORM variables. For example: The PayPal system uses a <code>method=POST</code> request to return IPN status variables related to subscriptions, such as <code>txn_type</code> .
Serif bold	User interface names, such as window names or menu selections. For example: On the <b>Profile</b> page, click Email to confirm your email address.
San-serif oblique	Placeholders used in the context of a format or programming standard or formal descriptions of PayPal system syntax. Placeholders indicate values or names that the reader should provide. Example: For example, <code>amount</code> is the variable for a single-item shopping cart, but <code>amount_X</code> is the name of the variable for a multi-item shopping cart. <code>amount_3</code> is the item amount for the third item in a multiple-item shopping cart.

To convey additional information, this document may also apply color and underlining to words or phrases that use the typefaces described above. Such use is described below:

Text attribute	How Used
<a href="#">xxxxxx</a>	Hypertext link to a page in the current document or to another document in the set.
<a href="#">xxxxxx</a>	Hypertext link to a URL or that initiates a web action, such as sending mail.

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Click **Help Center** at the bottom of the box on the right side of the page.

Click **Email PayPal Technical Support**.

Complete the form.

## Revision History

Revision history for *PayPal Website Payments Pro Integration Guide*.

**TABLE P.1** *Revision History*

Date	Description
August 2006	Minor corrections
July 2006	Direct Payment API now supports the Switch and Solo credit cards and can be used with any PayPal-supported currency.
May 2006	Miscellaneous updates
March 2006	Miscellaneous corrections
January 2006	Additional API error messages for Express Checkout: 10445, 10446.
December 2005	Removed erroneous description that stated that the SetExpressCheckoutRequest field <code>cpp-header-image</code> must be URL-encoded.



# 1

## Website Payments Pro Overview

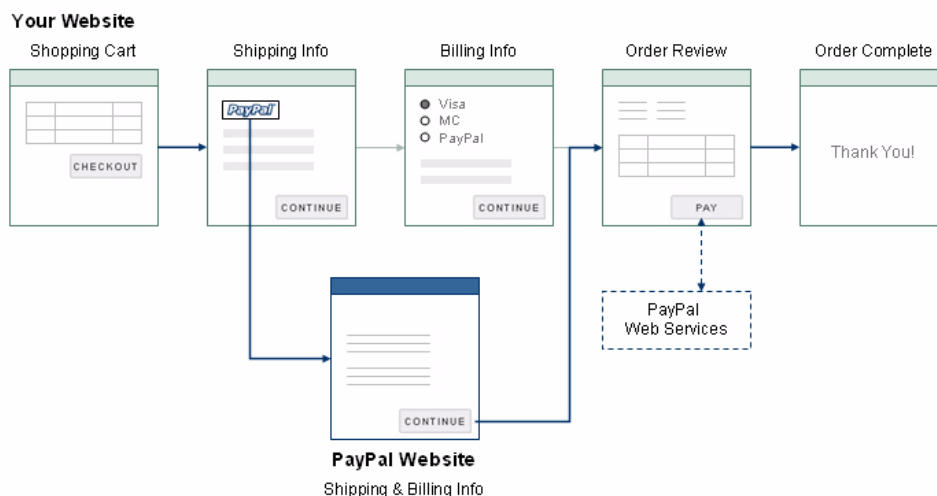
With Website Payments Pro, you get the payment processing capabilities of a merchant account and gateway – plus much more. It is an all-in-one payment solution that includes PayPal Direct Payment API and PayPal Express Checkout.

- **Direct Payment API** enables you to accept credit card payments directly on your website. PayPal remains invisible, so you control the customer experience.
- **PayPal Express Checkout** allows PayPal account holders to check out fast with saved information, and enables you to gain incremental sales from PayPal's growing base of users.

### How Website Payments Pro Works

Figure 1.1, “High-Level View of Website Payments Pro,” is an example of a standard checkout process. Website Payments Pro has the flexibility to work with your unique checkout process, whether it is one page or has multiple steps.

**FIGURE 1.1** High-Level View of Website Payments Pro



After selecting products to purchase, your customer chooses whether they want to pay using PayPal or pay with credit cards directly on your website.

If your customer pays using credit cards on your website, PayPal processes them in the background.

If your customer chooses to use PayPal, he is transferred to PayPal to login and select a shipping address and payment method, and is returned to your website to complete his purchase.

Once the buyer completes their order, you receive your payment in seconds.

---

## Direct Payment API Overview

The Direct Payment API offers you direct credit card payment processing capability through PayPal. For credit card transactions, customers can stay on your website as PayPal processes the payment in the background.

For each payment, Direct Payment API takes the billing address, transaction amount, credit card information, and item information as inputs. Within seconds, the API returns a confirmation that the transaction has been processed. Additionally, Direct Payment API lets you flag potentially fraudulent transactions, and provides you with industry-standard AVS and CVV2 responses for each transaction.

By integrating Direct Payment API with Express Checkout as part of the Website Payments Pro solution, you can accept all major payment types, including PayPal, while working with a single provider that processes and manages all of your online payments for you.

**IMPORTANT:** *Direct Payment API is not a standalone product. You are required to use Direct Payment API and Express Checkout together as part of the Website Payments Pro solution. See “[Website Payments Pro Business Rules](#)” on [page 17](#).*

The Direct Payment API is not covered by the PayPal Seller Protection Policy (SPP).

---

## Express Checkout Overview

The more convenient it is for your customers to buy from you, the more they'll buy. Express Checkout allows customers the option to pay quickly through PayPal – and gives your business more benefits:

- **Give buyers more convenience, and get more sales.** Since your customers simply log in to use information they've already entered with PayPal, they save time by completing transactions in fewer steps. This helps increase loyalty and sales.
- **Complete sales on your website, and get more upsell opportunities.** Buyers finish their orders on your website. This gives you more advertising opportunities.
- **Help customers feel safer, so they buy more.** Buyers prefer to pay with PayPal because their customer information is kept safe. When they're confident about the security of their information, they purchase more.



## How It Works

After selecting products to purchase, your customers click **Checkout with PayPal** on your website.

They're transferred to PayPal, where they select their payment method, as well as the correct shipping and billing address, then are returned to your website to complete their purchase.

PayPal automatically gives you the shipping address, email address, and other customer information to fulfill the order.

With Express Checkout, your buyers finish their orders on your website, not PayPal's, so you can:

- Get real time notification of successful payments.
- Automate your internal business processes.
- Ensure buyers make it to your final confirmation page.
- Be notified that the buyer's address is confirmed, and ensure you're eligible for coverage under PayPal's Seller Protection Policy.

---

## Website Payments Pro Business Rules

Website Payments Pro must be integrated on your website in the following ways. You must:

1. Present the PayPal Express Checkout button and associated messaging before requesting shipping address, billing address, and financial information. PayPal account holders should not be required enter any of this information on your website, because the information is available from their PayPal accounts. See "[Button Placement Business Rules for Express Checkout Shortcut](#)" on page 58.
2. Display PayPal as an option along side other payment methods, wherever other payment methods are offered. See "[Button Placement Business Rules for Express Checkout Mark](#)" on page 62.
3. Present the PayPal mark graphic wherever other payment marks are displayed.

**NOTE:** You can find this logo graphic in the PayPal logo center at the following location:

<https://www.paypal.com/logocenter>

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## Compatibility

Website Payments Pro works with many other PayPal products, such as Instant Payment Notification, Settlement System, Downloadable History Log, Authorization & Capture, and more.

With Express Checkout, you can accept all major credit and debit cards, bank transfers, and PayPal balance payments.

With PayPal Direct Payment API, you can accept all major credit and debit cards, including Visa, Master Card, American Express, and Discover.

---

## Technical Requirements

Integrating Express Checkout API and Direct Payment API requires the knowledge of the following:

<b>SOAP-based XML</b>	SOAP API calls exchange information between PayPal and the merchant site. For information about PayPal's SOAP APIs see, the <i>PayPal Web Services API Reference</i> . In addition, see information about the PayPal SDK, below.
<b>SSL Certificates</b>	The latest encryption technology ensures that data is communicated safely and securely.
<b>The PayPal Sandbox</b>	The Sandbox is a simulation of PayPal's live environment. PayPal strongly recommends that you test your integration of Express Checkout with the Sandbox to verify its completeness. For information about the Sandbox, see the <i>PayPal Sandbox User Guide</i> .

## The PayPal SDK

The PayPal SDK for Java, Microsoft .NET, and PHP is a set of tools and programs that eases application development. Integrated access to the PayPal Web Services APIs is one of the main features of the PayPal SDK. The PayPal SDK uses the underlying platform's SOAP toolkit to communicate with the PayPal API endpoint. Stub classes representing the requests, the responses, and their data can set request parameters and read response values.

For information about the PayPal SDK, see <https://www.paypal.com/sdk>.

---

## Get Started Quickly: Integration Center

PayPal's Integration Center at <https://www.paypal.com/integration> has step-by-step details for getting started with the PayPal Software Development Kits (SDKs), Website Payments Pro, Express Checkout, Website Payments Standard, Authorization & Capture, Instant Payment Notification, and more.

Visit the Integration Center at:

<https://www.paypal.com/integration>



# 2

## How Express Checkout Works

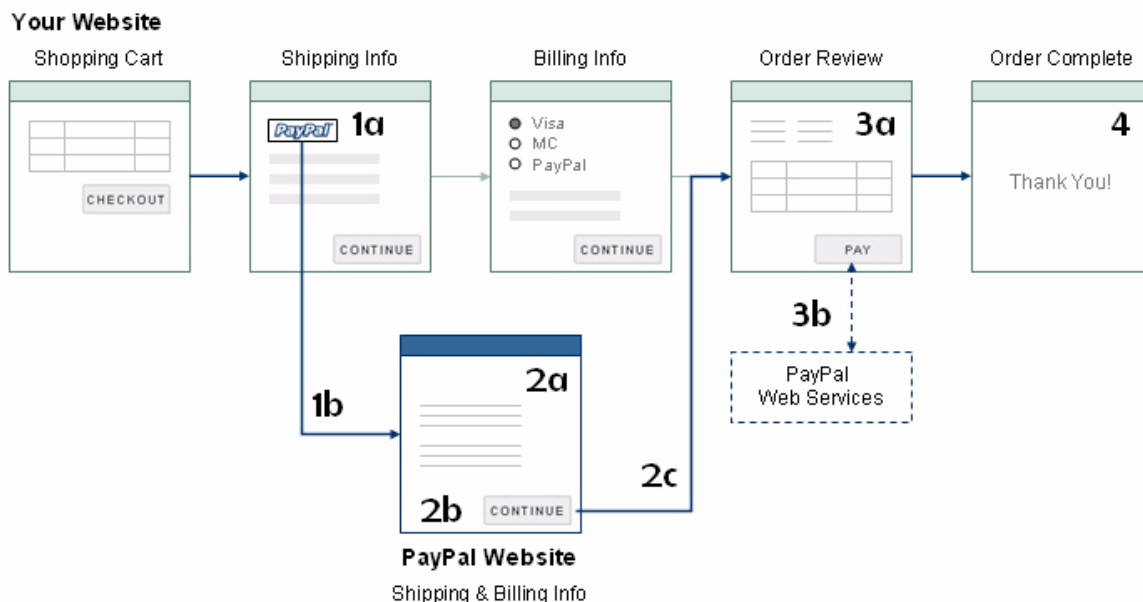
PayPal Express Checkout is a combination of the checkout process on your website, PayPal login and review pages on <https://www.paypal.com>, and PayPal Web Services API SOAP requests/responses.

To explain how Express Checkout works, this chapter presents a generalized checkout process and details how Express Checkout can be implemented with it. This generalized checkout process, which might differ from your own, is shown in [Figure 2.1, “Generalized Customer Checkout.”](#) Each numbered step in the diagram coincides with what this guide refers to as Express Checkout Integration Points 1, 2, and 3.

The Integration Points occur in the following sequence. Your customer always starts and completes his order on your website.

1. When a customer clicks **Checkout with PayPal**, he is transferred to PayPal to log in.
2. The customer then selects a shipping address and payment method and approves the use of PayPal.
3. PayPal then returns the customer to your website to review and finalize the order.

**FIGURE 2.1 Generalized Customer Checkout**



At each Integration Point, you must set certain required API element values, and you can affect the behavior and usefulness of Express Checkout by setting optional elements.

After a succinct description of the technical view of implementing Express Checkout, the remainder of this chapter includes detailed steps for each of the Integration Points.

**TABLE 2.1 Steps in Integrating Express Checkout**

Step	Description	See Page
1a	After selecting products to purchase, your customer clicks the <b>Checkout with PayPal</b> button on your website. This allows your customer to quickly skip entering shipping and billing information on your website.	<a href="#">26</a>
1b	<b>Integration Point 1</b> You make an API call to pass PayPal the transaction details. You then transfer the customer to PayPal via an HTTP redirect. Your customer is transferred to PayPal.	<a href="#">27</a>
2a	Your customer selects a shipping address and payment method stored on PayPal.	<a href="#">32</a>
2b	Your customer clicks <b>Continue Checkout</b> to approve the use of PayPal and is returned to your website.	<a href="#">34</a>
2c	<b>Integration Point 2</b> Your customer is transferred back to your website. PayPal transfers the customer via an HTTP redirect. You then make an API call to retrieve transaction details, such as shipping address, email address, and other information needed to fulfill your order.	<a href="#">34</a>
3a	Your customer finishes the checkout process on your website, reviews the order, and completes the order.	<a href="#">37</a>
3b	<b>Integration Point 3.</b> When your customer places the order, you make an API call to PayPal to request payment. (Your customer does not see this step.) The payment transaction is initiated, and PayPal sends your customer an email receipt for the payment.	<a href="#">39</a>
4	You transfer your customer to your order confirmation page.	<a href="#">42</a>

Express Checkout gives you the flexibility to put PayPal either first in your checkout process or on your billing page along with other payment options.

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## Express Checkout Integration Points: Technical View

A technical view of implementing Express Checkout is shown in [Figure 2.2, “Express Checkout Integration Points: Technical View”](#) on page 24:

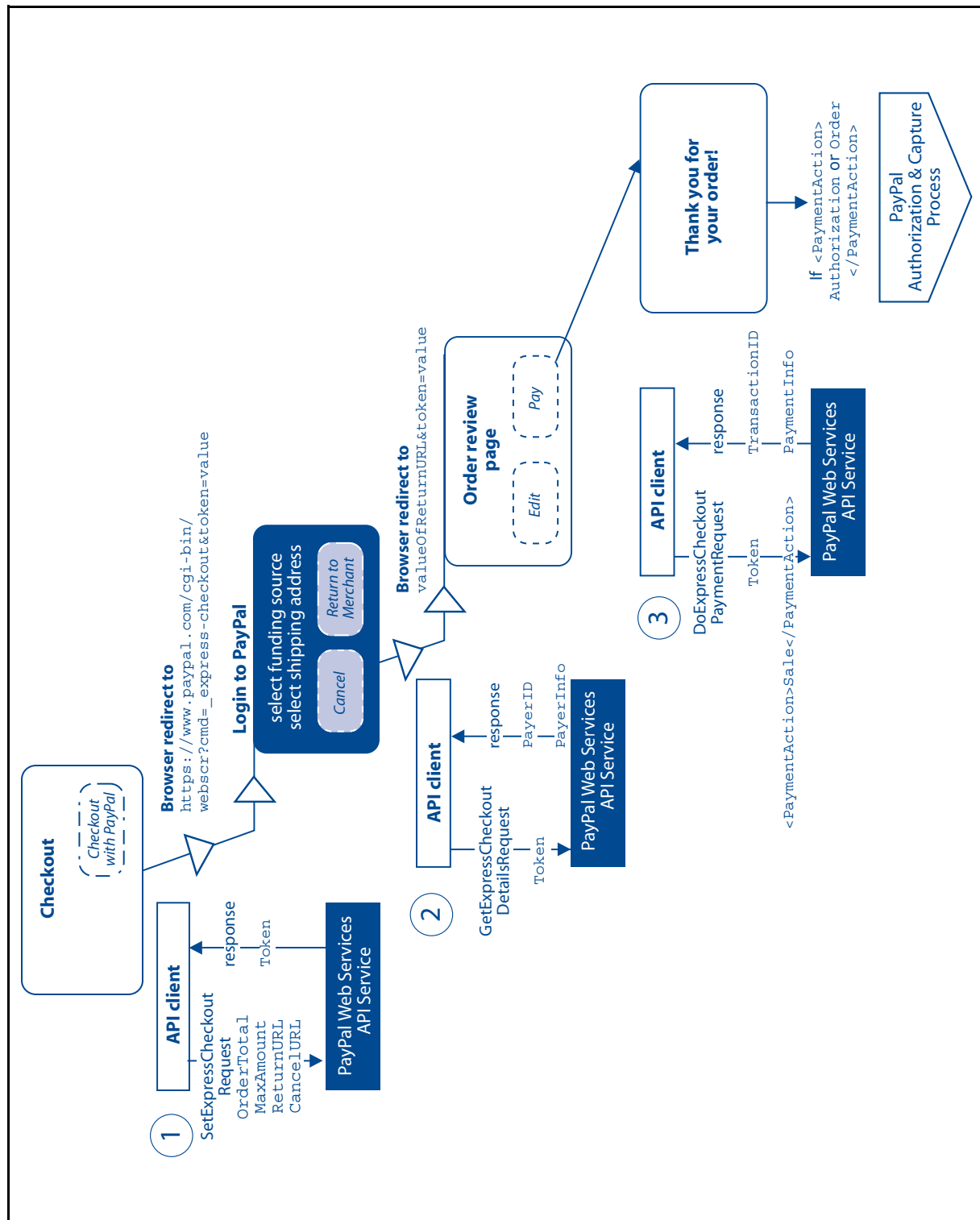
1. Preparatory indication to PayPal that you intend to use Express Checkout for the payment for the customer’s order: `SetExpressCheckoutRequest`.
2. Getting details from PayPal about this customer (such as shipping address) and optionally allowing the customer to edit these details during the order review:  
`GetExpressCheckoutDetailsRequest`.
3. Making the payment transaction at the end of checkout, whether as the complete amount of the sale or as an authorization for a total amount that you must later process with Authorization & Capture: `DoExpressCheckoutPaymentRequest`.

For precise details about the elements in all three SOAP requests and responses, see [Chapter 6, “Express Checkout API.”](#)

## How Express Checkout Works

### Express Checkout Integration Points: Technical View

**FIGURE 2.2** Express Checkout Integration Points: Technical View





**TABLE 2.2 Express Checkout Program Flow-of-Control and Integration Points**

Customer...	Merchant...	PayPal...
<b>1</b> Clicks <b>Checkout with PayPal</b> button.	Sends SOAP request <code>SetExpressCheckoutRequest</code> with the required elements – estimated <code>OrderTotal</code> , <code>ReturnURL</code> , and <code>CancelURL</code> – and optional elements, such as <code>MaxAmount</code> .	Returns <code>SetExpressCheckoutResponse</code> with <code>Token</code> and appends the values of <code>Token</code> and <code>PayerID</code> to your return URL.
	Adds value of element <code>Token</code> from <code>SetExpressCheckoutRequest</code> as a name/value pair to the following URL, and redirects the user's browser to it:	
	<a href="https://www.paypal.com/cgi-bin/webscr?cmd=_express-checkout&amp;token=value">https://www.paypal.com/cgi-bin/webscr?cmd=_express-checkout&amp;token=value</a>	
<b>2</b> Logs in to PayPal, approves the use of PayPal, and clicks <b>Continue Checkout</b> .		With a GET, redirects user's browser to merchant's <code>ReturnURL</code> with token value appended.
	Sends SOAP request <code>GetExpressCheckoutDetailsRequest</code> with <code>Token</code> to retrieve your customer's information.	Returns <code>GetExpressCheckoutDetailsResponse</code> with <code>PayerID</code> , email address, shipping address, confirmed or unconfirmed status of that shipping address, and other details.
	Renders page in customer's browser for the next step in checkout process, such as your "Order Review" page.	
<b>3</b> Clicks "Confirm Order" button	Sends SOAP request <code>DoExpressCheckoutPaymentRequest</code> with the required elements <code>Token</code> , <code>OrderTotal</code> , <code>PaymentAction</code> , and <code>PayerID</code> returned by <code>GetExpressCheckoutDetailsResponse</code> .	Returns <code>PaymentInfo</code> with important <code>TransactionID</code> value and other details about the payment.

## Relationship to Authorization & Capture

PayPal assumes that at the end of the checkout process, you will make a final sale and payment transaction via PayPal. If at point of sale you do not know the complete cost of the order—for example, if shipping, handling, and tax is not precisely known, or if you want to upsell—you can authorize a transaction that you capture later with Authorization & Capture.

For more information about Authorization & Capture, see [Chapter 4, “How Authorization & Capture Works.”](#)

## Step 1a: Customer Selects PayPal on Your Website

PayPal recommends that you place the Express Checkout button on your website before your customers are required to enter their shipping and billing information, as shown in [Figure 2.3, “PayPal Express Checkout Button Before Shipping Address Information.”](#)

**FIGURE 2.3** *PayPal Express Checkout Button Before Shipping Address Information*

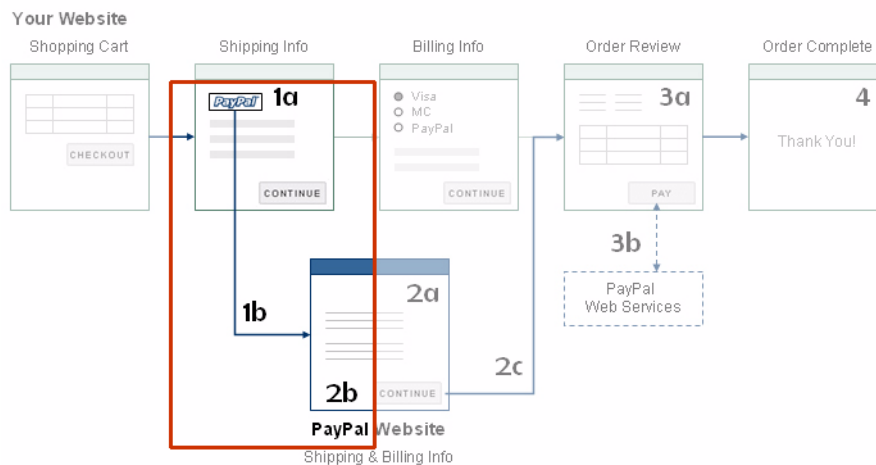
The screenshot shows the DesignerFotos website checkout page. At the top is the DesignerFotos logo. Below it is a section titled "Shipping Information" with the instruction: "Please enter a shipping address and shipping method, then click the 'Continue' button." A prominent orange banner reads "Fast, Secure Checkout with PayPal". Below this banner is a "Checkout With PayPal" button with a right-pointing arrow. To the right of the button, text says: "Save time. Checkout securely. Pay without sharing your financial information." Below the banner is a "Shipping Address" section with input fields for: First Name, Last Name, Street Address 1, Street Address 2 (Optional), City, State (a dropdown menu currently showing "California"), Zip / Postal Code, Country (a dropdown menu currently showing "United States"), and Telephone Number. Below the address fields is a "Shipping Method" section with a dropdown menu currently showing "Standard Shipping (3-5 Business Days)". At the bottom of the form is a "Continue" button. At the very bottom of the page are links for "About DesignerFotos", "Return Policy", "Privacy Policy", "Terms of Service", and "Help".

**NOTE:** Your customer always reviews transaction details and makes the final payment on your website. PayPal handles the payment verification and passes you the customer's shipping information. PayPal never shares your customer's financial information with anyone.

## Step 1b: Integration Point 1

As shown in [Figure 2.4, “Express Checkout Integration Point 1,”](#) Integration Point 1 is where you transfer a customer's browser to PayPal to select or add a shipping address and funding source.

**FIGURE 2.4 Express Checkout Integration Point 1**



Integration Point 1 consists of the following events and actions:

- The customer clicks the **Checkout with PayPal** button.
- You send `SetExpressCheckoutRequest` to PayPal.
- PayPal returns the `SetExpressCheckoutResponse`.
- You redirect the customer's browser to PayPal.

## Usage Notes About SetExpressCheckout Elements

The following is important usage information about some of the required or optional elements in the first SOAP request for Express Checkout. For complete details about all elements, see [“SetExpressCheckout” on page 74](#).

For information about suggested use of elements related to shipping address information, see [“Sending Shipping Address Information to PayPal” on page 63](#).

**TABLE 2.3 SetExpressCheckoutRequest Usage Notes**

Element	Required or Optional?	Notes
OrderTotal	Required	<p>The total estimated cost of the order to the customer.</p> <p>If shipping and tax charges are known, include them in OrderTotal; if not, OrderTotal should be the current subtotal of the order.</p>
MaxAmount	Optional	<p>The expected maximum total amount of the complete order, including shipping and tax charges.</p> <p>PayPal uses an adjusted OrderTotal to determine which funding sources it can authorize for use by the customer. PayPal business logic calculations account for the fact that shipping and tax will likely be added to the OrderTotal before the customer completes the purchase. MaxAmount is additional information for PayPal's business logic to properly calculate the customer's available funds for your unique circumstances.</p> <p>If OrderTotal is the final amount, set MaxAmount equal to OrderTotal.</p> <p><b>NOTE:</b> If the final OrderTotal sent with the DoExpressCheckoutPaymentRequest (the final PayPal Express Checkout API) exceeds the value of MaxAmount, the payment will still be successfully processed.</p>
ReturnURL	Required	<p>URL to which the customer's browser is returned after approving use of PayPal.</p> <p>PayPal recommends that the value of the required ReturnURL element be the final review page on which the customer confirms the order and payment.</p> <p>The value of your ReturnURL must always assume GET as the FORM METHOD, just as if the value were to be included in a FORM. That is, your ReturnURL must expect to read from the QUERY_STRING environment variable, not from standard input.</p> <p>For your programmatic control on the redirect of the customer's browser to your website, the value of ReturnURL can include any name/value pairs your programs require.</p>

**TABLE 2.3** *SetExpressCheckoutRequest Usage Notes*

Element	Required or Optional?	Notes
CancelURL	Required	<p>URL to which the customer is returned if he decides not to use PayPal or if PayPal is not able to authorize the customer.</p> <p>PayPal recommends that the value of the required CancelURL be the original page on which the customer chose to use PayPal. For instance, if the customer were transferred to PayPal from your shipping information page, the CancelURL value should be the URL of your shipping information page. If the customer clicks <b>Cancel</b> on the PayPal website, PayPal redirects the customer's browser to your shipping information page, where the customer can continue with your standard checkout process.</p>
PaymentAction	Optional	<p>How you want to obtain payment:</p> <ul style="list-style-type: none"> <li>• Sale indicates that this is a final sale for which you are requesting payment.</li> <li>• Authorization or Order indicate that this payment is subject to settlement with PayPal Authorization &amp; Capture. A PaymentAction of Authorization indicates to PayPal that the order total at the end of the customer's checkout will not be a final sale. If you choose this action, you will need to perform an additional step in order to capture the payment.</li> </ul> <p><b>IMPORTANT:</b> <i>You cannot set PaymentAction to Sale or Order on SetExpressCheckoutRequest and then change PaymentAction to Authorization on the final PayPal Express Checkout API DoExpressCheckoutPaymentRequest.</i></p> <p>For more information about PayPal Authorization &amp; Capture, see the <a href="#">Chapter 4, "How Authorization &amp; Capture Works."</a></p>

**TABLE 2.3 SetExpressCheckoutRequest Usage Notes**

Element	Required or Optional?	Notes
cpp-header-image	Optional	<p>A URL for the image you want to appear at the top left of the payment page. The image has a maximum size of 750 pixels wide by 90 pixels high.</p> <p><b>IMPORTANT:</b> <i>PayPal recommends that you provide an image from a secure (https) server. If the image is not on a secure server, when the customer's browser is redirected to the PayPal website, the customer will see a message about potential security risks (a mixture of secure and insecure items). This message might intimidate some customers from continuing with their purchase.</i></p> <p>In <a href="#">Figure 2.5, “PayPal Login Page”</a> on page 32, the DesignerFotos image beneath the PayPal logo demonstrates how a cpp-header-image appears.</p> <p>For more information about custom payment pages, see the <i>Website Payments Standard Integration Guide</i>.</p>
Custom	Optional	<p>The optional Custom element is a <i>passthrough variable</i>. Its value is returned verbatim on the final PayPal Express Checkout API, DoExpressCheckoutPaymentResponse. You can use this value for whatever purpose you desire, such as an accounting tracking number or additional data needed by your programs (for example, a session-id or other variable).</p>

**TABLE 2.4 SetExpressCheckoutResponse Usage Notes**

Element	Notes
Token	<p>A timestamped token by which you identify to PayPal that you are processing this payment with Express Checkout.</p> <p><b>NOTE:</b> The token expires after three hours.</p>

## Transferring Your Customer to PayPal

After you receive a successful response from PayPal, you should add the value of the `Token` from `SetExpressCheckoutResponse` as a name/value pair to the following URL, and redirect your customer's browser to it:

```
https://www.paypal.com/cgi-bin/webscr?cmd=_express-checkout&token=value_from_SetExpressCheckoutResponse
```

Express Checkout has a variation on this redirect URL that allows you to bypass calling the second API, `GetExpressCheckoutDetails`. See [“Allow the Customer to Confirm Before Calling `DoExpressCheckoutPayment`” on page 68](#).

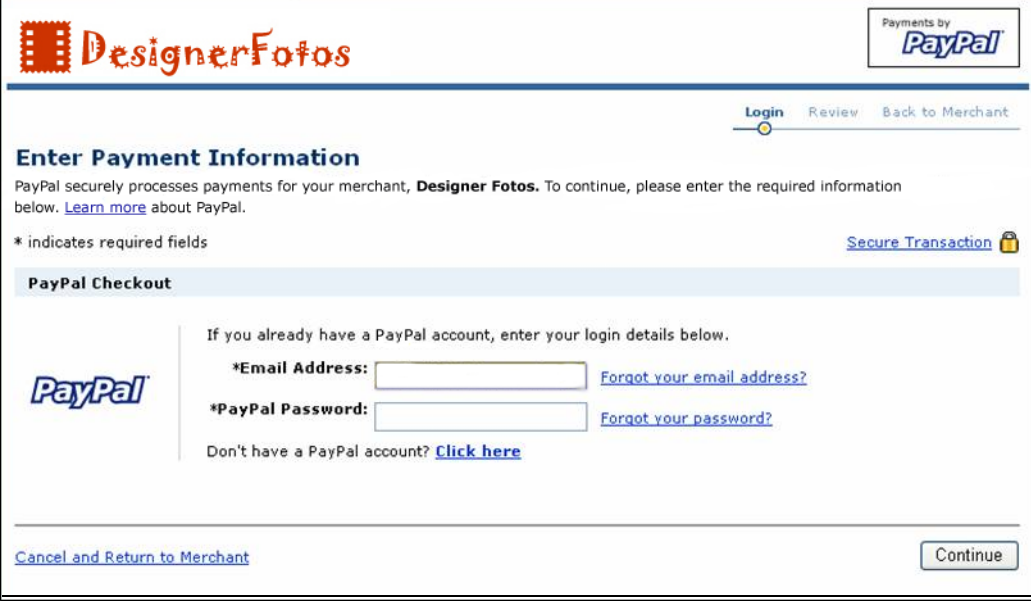
### Recommendation for Browser Redirection

For redirecting the customer's browser to the PayPal URL, PayPal recommends that you use the HTTPS response 302 “Object Moved” with your URL as the value of the `Location` header in the HTTPS response. Ensure that you use an SSL-enabled server to prevent browser warnings about a mix of secure and insecure graphics.

## Step 2a: Customer Approves Use of PayPal

The next step after redirecting the customer's browser to PayPal with the response token is for the customer to approve PayPal as the payment method for his purchase. The customer is redirected to the PayPal login page to enter his email and password as shown in [Figure 2.5, "PayPal Login Page."](#) If the customer does not have a PayPal account, he can click the **Don't have a PayPal account? Click Here** link and enter his credit card information to register for a PayPal account.

**FIGURE 2.5** PayPal Login Page



The screenshot shows the PayPal login page for the merchant "Designer Fotos". At the top left is the "DesignerFotos" logo. At the top right is the "Payments by PayPal" logo. Below the logos is a navigation bar with links: "Login" (active), "Review", and "Back to Merchant". The main heading is "Enter Payment Information". Below this, a message states: "PayPal securely processes payments for your merchant, **Designer Fotos**. To continue, please enter the required information below. [Learn more](#) about PayPal." A note indicates that an asterisk (\*) denotes required fields. There is a "Secure Transaction" link with a padlock icon. The "PayPal Checkout" section contains the PayPal logo and instructions: "If you already have a PayPal account, enter your login details below." It features two input fields: "\*Email Address:" and "\*PayPal Password:". Each field has a "Forgot your [email/password]?" link. Below the password field is a link: "Don't have a PayPal account? [Click here](#)". At the bottom left is a link: "Cancel and Return to Merchant". At the bottom right is a "Continue" button.

If the customer has previously been to PayPal, his email address is pre-filled to save time during login.

After the customer logs in to PayPal, he needs to verify his information on the "Review Your PayPal Information" page, as shown in [Figure 2.6, "PayPal Review Page."](#)



FIGURE 2.6 PayPal Review Page

**DesignerFotos** Payments by **PayPal**

Login **Review** Back to Merchant

### Review Your Payment

Review the payment details below and click **Pay** to complete your secure payment.

\* indicates required fields [Secure Transaction](#)

#### Gift Certificates or Coupons

To use a gift certificate, coupon or points stored in your account, click **Select Code**

**Select Code** **OR** Enter a redemption code and click **Redeem Code**

Enter Code:  **Redeem Code**

[Learn more](#) about redemption codes.

#### Seller Information

**Seller Name**  
Designer Fotos

#### Shipping Information

**Shipping Address**  
123 Anystreet  
Anytown, CA 95123  
United States  
[Edit Address](#)

#### Payment Method

**Instant Transfer:** Fleet Bank XXXXXX4338  
**Back Up Funding Source:** MasterCard XXXX-XXXX-XXXX-1220

[More Funding Options](#)

[Cancel and Return to Merchant](#) **Pay**

The customer then:

1. Can review his default funding source and shipping address, select other funding sources or shipping address already saved on PayPal, or enter new ones.

**NOTE:** PayPal returns your customer to the ReturnURL specified by you in SetExpressCheckoutRequest. If the customer clicks the **Cancel** button, PayPal returns him to the CancelURL specified in the SetExpressCheckoutRequest.

2. Clicks **Pay** to approve the use of PayPal.
3. Returns to your website to complete the purchase.

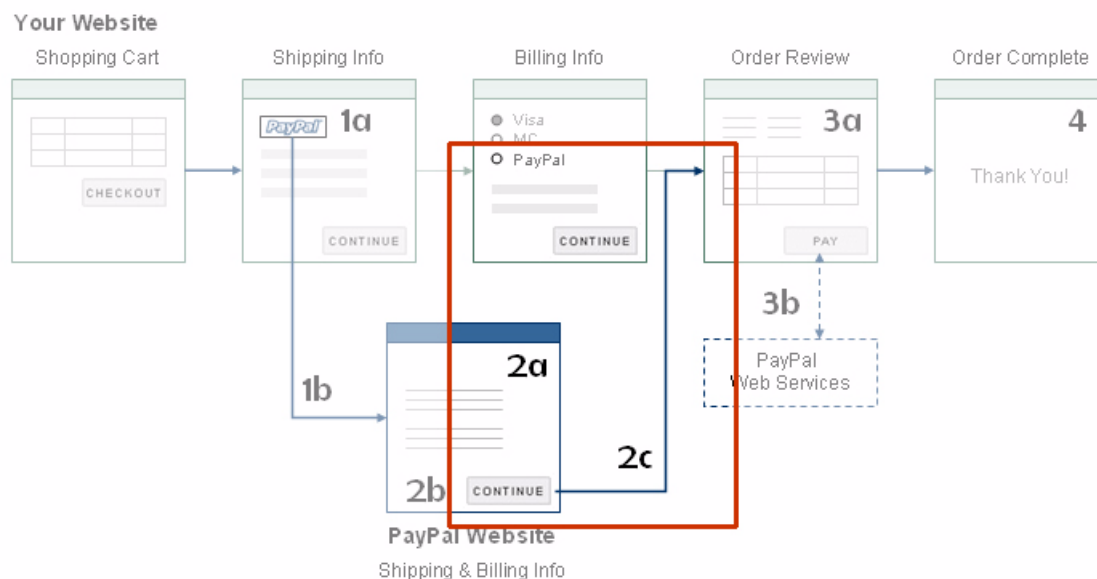
## Step 2b: Customer Returns to Your Website

After the customer has selected shipping and billing information on the PayPal website, he clicks **Pay**, which is the customer's approval of the use of PayPal. PayPal then redirects the customer's browser to your website as described in "[Step 2c: Integration Point 2](#)."

## Step 2c: Integration Point 2

Figure 2.7, "Express Checkout Integration Point 2" illustrates Express Checkout Integration Point 2.

**FIGURE 2.7 Express Checkout Integration Point 2**



Integration Point 2 consists of the following events and actions:

- The customer clicks **Continue Checkout** on the PayPal review screen.
- PayPal transfers your customer to the location you specified in the ReturnURL.
- You send the `GetExpressCheckoutDetailsRequest` to PayPal.
- PayPal returns the `GetExpressCheckoutDetailsResponse`.
- You display the next screen of your checkout process to your customer.

After your customer has reviewed and approved his financial and shipping information, and done any necessary editing, PayPal redirects his browser to the ReturnURL provided in `SetExpressCheckoutRequest`.

## ReturnURL, CancelURL, and the Express Checkout Token

PayPal appends the name/value pair `token=tokenValue` to the value of your ReturnURL and CancelURL. For example, if you set ReturnURL as follows:

```
https://www.newco.com/ourcheckout
```

PayPal changes the value as follows:

```
https://www.newco.com/ourcheckout?token=tokenValue
```

Similarly, if your ReturnURL value already has name/value pairs, like the following:

```
https://www.newco.com/ourcheckout?cartid=1234
```

PayPal prefixes the appended token with the name/value pair delimiter, like this:

```
https://www.newco.com/ourcheckout?cartid=1234&token=tokenvalue
```

Once the customer arrives at this ReturnURL, you need to send the `GetExpressCheckoutDetailsRequest` with the Token value provided in `SetExpressCheckoutResponse`. PayPal then sends you a response with your customer's transaction information.

For a list of all elements in `GetExpressCheckoutDetailsResponse`, see [“GetExpressCheckoutDetailsResponse” on page 84](#).

## Usage Notes About GetExpressCheckoutDetails Elements

The following outlines usage information for some of the important elements sent in this response.

**TABLE 2.5** *GetExpressCheckoutDetailsResponse Usage Notes*

Element	Notes
Payer	Email address of the payer.
PayerID	Unique PayPal customer account number. You must provide this value with <code>DoExpressCheckoutPaymentRequest</code> .
PayerStatus	The payer's PayPal account status.  A value of <code>Verified</code> means that the customer has confirmed ownership of a bank account or has verified his account status through other means.
FirstName LastName	The payer's name.

**TABLE 2.5** *GetExpressCheckoutDetailsResponse Usage Notes*

Element	Notes
Address	<p>The payer's shipping address selected on PayPal.</p> <p><b>NOTE:</b> With <code>SetExpressCheckoutRequest</code>, if you sent PayPal an <code>Address</code> in and set <code>AddressOverride</code>, on <code>GetExpressCheckoutDetailsResponse</code> PayPal returns the shipping address you originally sent on <code>SetExpressCheckoutRequest</code>.</p> <p>For the recommended use of elements on <code>SetExpressCheckoutRequest</code> for handling shipping address information that the customer enters on your website (not on PayPal), see <a href="#">“Sending Shipping Address Information to PayPal” on page 63</a>.</p>
AddressStatus	<p>The status of the customer's shipping address.</p> <p>A status of <code>Confirmed</code> means that the shipping address matches a billing address on record with PayPal and that that billing address has been verified by AVS. Your use of a <code>Confirmed</code> address is one of the requirements for you to be protected by PayPal's Seller Protection Policy (SPP). For more information about the Seller Protection Policy, see the following: <a href="https://www.paypal.com/spp">https://www.paypal.com/spp</a></p>
ContactPhone	<p>Payer's contact telephone number.</p> <p><code>ContactPhone</code> is returned to you only if you set this as a preference in the <b>Website Payment Preferences</b> of your Profile on <a href="https://www.paypal.com">https://www.paypal.com</a>.</p>

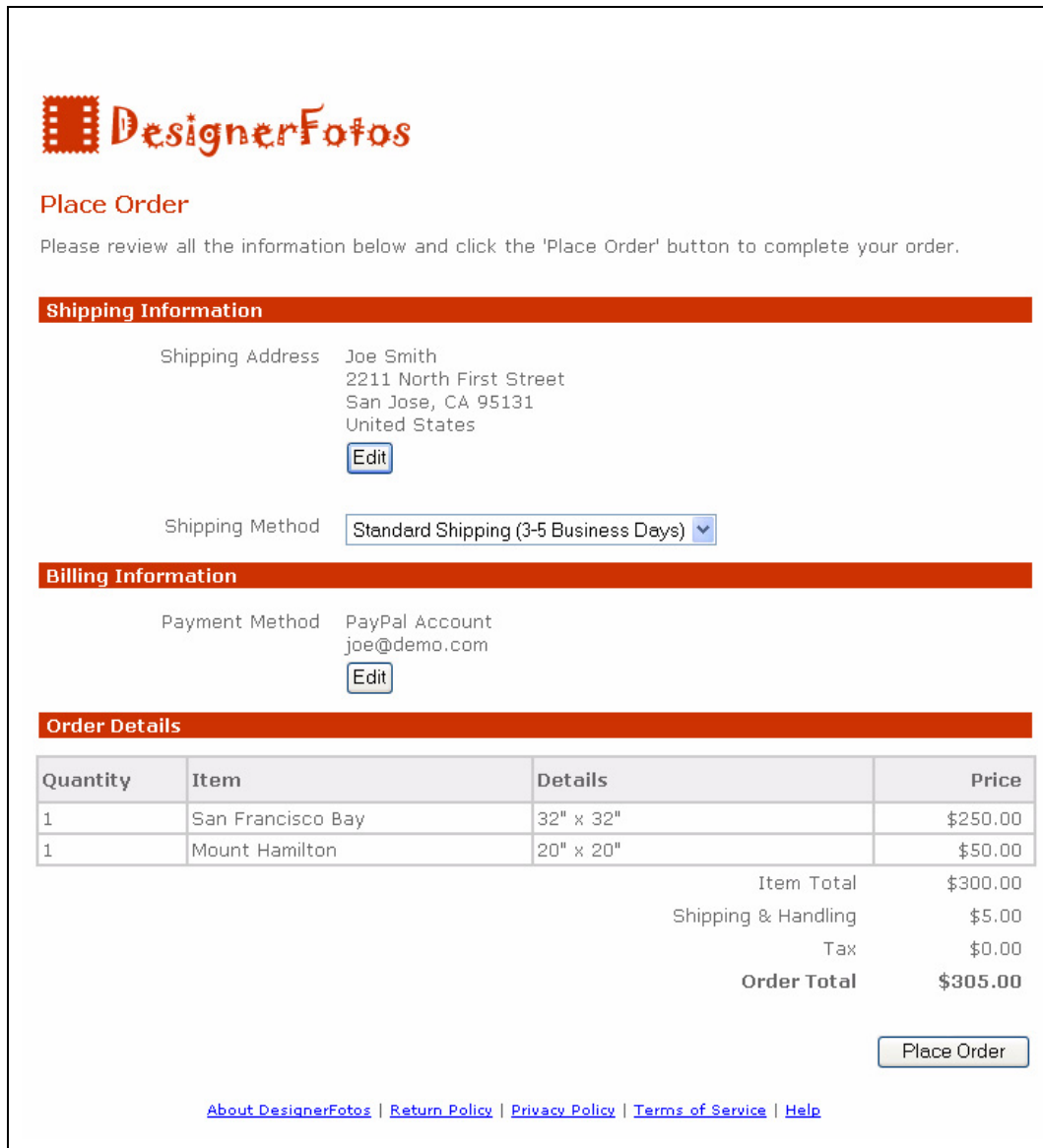
To protect the privacy of your customer, PayPal does not share billing address or financial information, such as credit card numbers.

**NOTE:** The terms of PayPal's Privacy Policy allow you to use a customer's personal information only for communications relating to the transaction, unless the customer expressly gives you permission to use the information for other purposes. For information about the PayPal Privacy Policy, see <http://www.paypal.com/privacy>.

## Step 3a: Customer Completes Order

After you receive a successful `GetExpressCheckoutDetailsResponse`, display the next page in your checkout process. This page might be your order review page or a page on which the customer can select a shipping method, enter shipping instructions, or specify any other information necessary to complete the purchase.

**FIGURE 2.8** Example of Order Review Page



**DesignerFotos**

**Place Order**

Please review all the information below and click the 'Place Order' button to complete your order.

**Shipping Information**

Shipping Address Joe Smith  
2211 North First Street  
San Jose, CA 95131  
United States  
[Edit](#)

Shipping Method

**Billing Information**

Payment Method PayPal Account  
joe@demo.com  
[Edit](#)

**Order Details**

Quantity	Item	Details	Price
1	San Francisco Bay	32" x 32"	\$250.00
1	Mount Hamilton	20" x 20"	\$50.00
Item Total			\$300.00
Shipping & Handling			\$5.00
Tax			\$0.00
<b>Order Total</b>			<b>\$305.00</b>

[Place Order](#)

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PayPal recommends that you alter your order review page as follows. [Figure 2.8, “Example of Order Review Page” on page 37](#) is an example of a page that has been altered to reflect these guidelines.

**TABLE 2.6 Shipping, Billing and Order Total Usage**

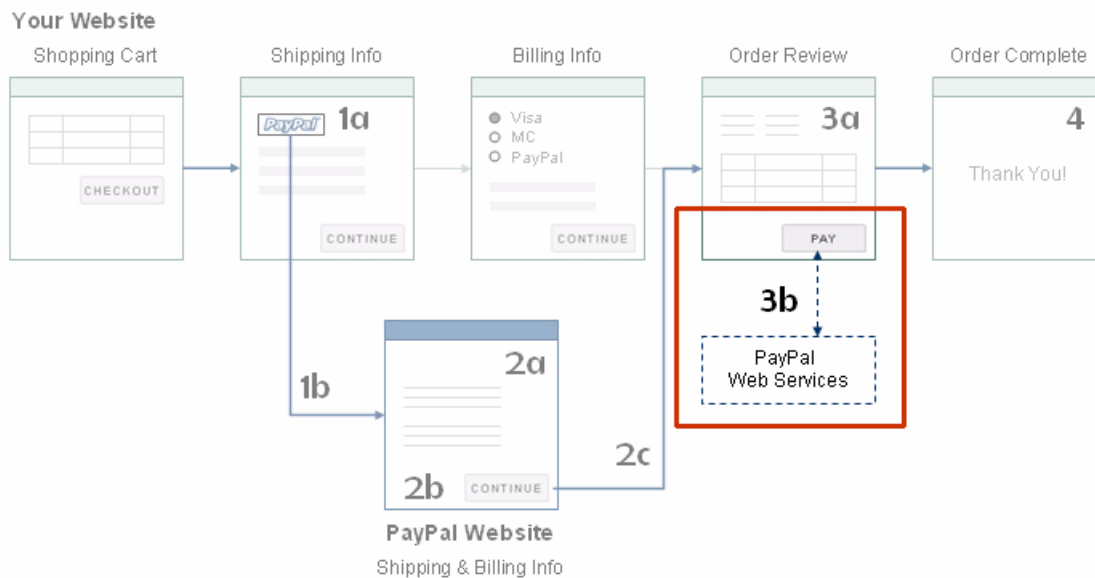
Shipping Information Section	<p>Display the shipping address supplied by PayPal.</p> <p>The “Edit Shipping” button should return your customer to PayPal to edit shipping information on the PayPal website. This allows the customer to quickly select a different address that he already has stored with PayPal, or enter a new address. This also ensures that PayPal can provide you with the updated AddressStatus for the new shipping address.</p> <p>For other recommendations about the design of your order review page, see <a href="#">“Edit Shipping” on page 68</a>.</p> <p>For information about AddressStatus, see <a href="#">“AddressStatus” on page 86</a>.</p>
Billing Information Section	<p>For billing information, display the customer’s PayPal email address provided in Express Checkout.</p>
Order Total	<p>With Express Checkout, you must display to the customer the same exact OrderTotal value that you send to PayPal in DoExpressCheckoutPaymentRequest.</p>

When the customer clicks the “Place Order” button, send DoExpressCheckoutPaymentRequest to initiate the payment. After a successful response is sent from PayPal, direct the customer to your order completion page to inform him that you received his order.

## Step 3b: Integration Point 3

Figure 2.9, “Express Checkout Integration Point 3” illustrates Express Checkout Integration Point 3.

**FIGURE 2.9 Express Checkout Integration Point 3**



Integration Point 3 consists of the following events and actions:

- The customer clicks the “Place Order” button on your website.
- You send the `DoExpressCheckoutPaymentRequest` to PayPal.
- PayPal returns the `DoExpressCheckoutPaymentResponse`.
- You redirect the customer to your “Order Confirmation” page.

## Usage Notes About `DoExpressCheckoutPaymentRequest` Elements

The following are important usage information about some of the required or optional elements in the final SOAP request for Express Checkout.

**TABLE 2.7 DoExpressCheckoutPaymentRequest Usage Notes**

Element	Required or Optional ?	Notes
OrderTotal	Required	<p>Total of the order, including shipping, handling, and tax. This must be the final amount of the purchase and can differ from the original, estimated OrderTotal you sent in the SetExpressCheckoutRequest.</p> <p><b>NOTE:</b> PayPal does not enforce a maximum difference between the original estimated OrderTotal and the one you send on DoExpressCheckoutPaymentRequest . However, if the difference is substantial, your customer may no longer be approved to use the funding source he originally accepted.</p>
PaymentAction	Required	<p>How you want to obtain payment:</p> <ul style="list-style-type: none"> <li>• Sale indicates that this is a final sale for which you are requesting payment.</li> <li>• Authorization or Order indicate that this payment is subject to settlement with PayPal Authorization &amp; Capture.</li> </ul> <p><b>NOTE:</b> If you set PaymentAction to Sale or Order on SetExpressCheckoutRequest, you cannot change the PaymentAction value on DoExpressCheckoutPaymentRequest.</p> <p>You can, however, set PaymentAction to Sale on DoExpressCheckoutPaymentRequest if you originally set it to Authorization on SetExpressCheckoutRequest.</p> <p><b>IMPORTANT:</b> <i>PayPal requires that a merchant using Express Checkout display to the customer the same amount that the merchant sends to PayPal for initial authorization in the OrderTotal element with the DoExpressCheckoutPaymentRequest API.</i></p>
ItemTotal ShippingTotal HandlingTotal TaxTotal	Optional	<p>You can send individual order-level totals for items, shipping, handling, and tax. If you send this information, PayPal includes it in the customer's transaction receipt from PayPal and on PayPal's Transaction Details page.</p> <p>If you send this information, the sum of these four totals must equal OrderTotal.</p>



**TABLE 2.7 DoExpressCheckoutPaymentRequest Usage Notes**

Element	Required or Optional ?	Notes
Order Description	Optional	The description you want to appear on the customer's transaction receipt from PayPal and on PayPal's Transaction Details page. PayPal recommends that you include your order number for this purchase if one is available.
PaymentItem <ul style="list-style-type: none"> <li>• Name</li> <li>• Number</li> <li>• Amount</li> <li>• Quantity</li> <li>• SalesTax</li> </ul> Payment Details <ul style="list-style-type: none"> <li>• ItemTotal</li> <li>• TaxTotal</li> </ul>	Payment Item is optional. • Payment Details is required.	<p>If you send details about each item, they are included in the customer's transaction receipt from PayPal and on PayPal's Transaction Details page.</p> <p>Providing this information allows your customer to review the purchase information in his PayPal account details, can remind your customer about the purchase details, and might decrease the likelihood that your customer will mistakenly file a chargeback.</p> <p>The following rules apply to the PaymentItem elements:</p> <ol style="list-style-type: none"> <li>1. If you send PaymentItem.Name, you must also send PaymentItem.Amount.</li> <li>2. If you send PaymentItem.Amount, the sum of (PaymentItem.Amount x Quantity) for all payment items must equal PaymentDetails.ItemTotal.</li> <li>3. If you send PaymentItem.SalesTax, the sum of (PaymentItem.SalesTax x Quantity) for all payment items must equal PaymentDetails.TaxTotal.</li> </ol>
ShipToAddress	Optional	<p>If you allow the customer to enter or edit shipping information on your website, you should pass your customer's shipping address to PayPal.</p> <p><b>IMPORTANT:</b> <i>If you are using the shipping address PayPal returned to you with GetExpressCheckoutDetailsResponse, do not pass this address back to PayPal on DoExpressCheckoutPaymentRequest.</i></p> <p><b>NOTE:</b> PayPal recommends that, whenever possible, you allow your customer to use the shipping address stored by PayPal. Doing so helps your customer complete the checkout more quickly and allows PayPal to provide you with the shipping AddressStatus in GetExpressCheckoutDetailsResponse.</p>

## Step 4: Customer Notified Order Is Complete

After the customer approves the order and it completes successfully, PayPal recommends that you display an order completion page showing the details of the transaction. An example is shown below.

**FIGURE 2.10** Example of Order Complete Page



### Your Order is Complete

Please print this receipt for your records.

**Shipping Information**

**Shipping Address** Joe Smith  
2211 North First Street  
San Jose, CA 95131  
United States

**Shipping Method** Standard Shipping (3-5 Business Days)

**Billing Information**

**Payment Method** PayPal Account  
joe@demo.com

**PayPal Transaction ID** 823487029384790

**Order Details**

**PhotoPal Order Number** 123-456-789

Quantity	Item	Details	Price
1	San Francisco Bay	32" x 32"	\$250.00
1	Mount Hamilton	20" x 20"	\$50.00
Item Total			\$300.00
Shipping & Handling			\$5.00
Tax			\$0.00
<b>Order Total</b>			<b>\$305.00</b>

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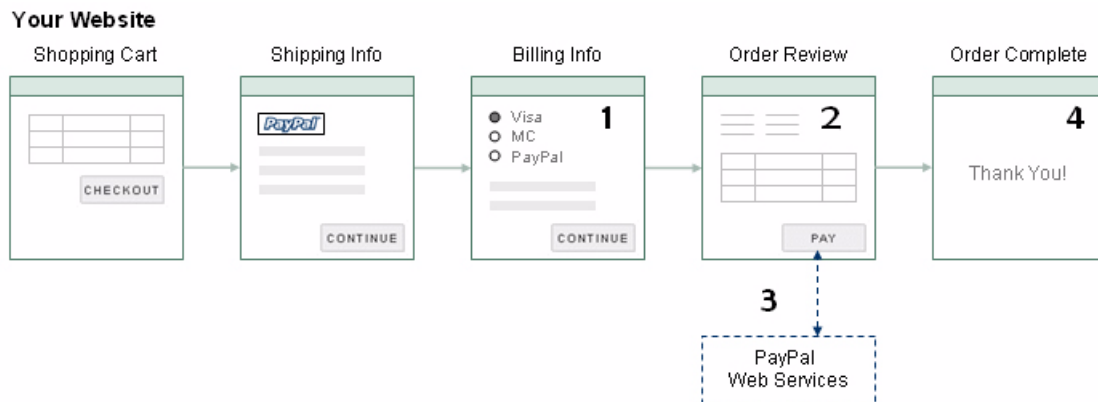
PayPal sends the customer an email notification with the completed transaction details of the order. You also receive an email of the payment and can view it in your Downloadable History Log or Account Overview.

# 3

## How Direct Payment API Works

PayPal Direct Payment API offers you direct credit card payment processing through PayPal. To pay with a credit card, your customer never leaves your website, as PayPal processes the payment behind the scene.

**FIGURE 3.1** Generalized Customer Checkout with Direct Payment API



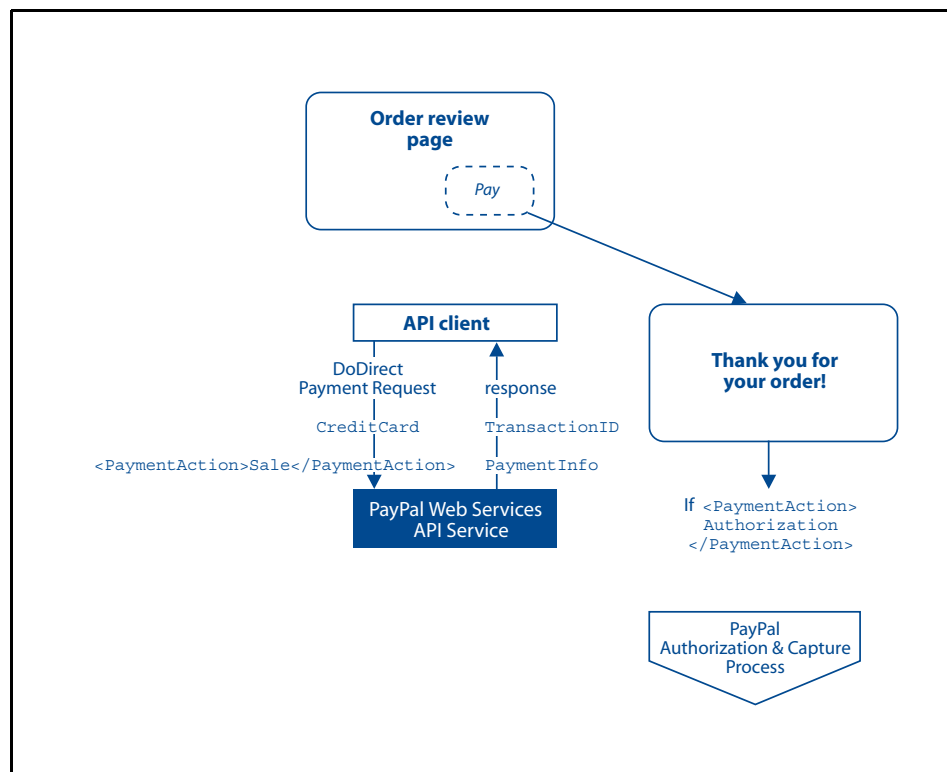
**TABLE 3.1** Steps in Checkout with Direct Payment API

Step	Description
1	On your website, the customer chooses to pay with a credit card and enters the credit card number and other details.
2	The customer reviews the order.
3	When your customer clicks “Pay” to place the order, you call a PayPal API to request payment, and the payment transaction is initiated. <b>NOTE:</b> The customer does not see this step. PayPal does not send your customer a receipt for the payment.
4	You transfer your customer to your order confirmation page.

## Technical Overview

At the point of payment in the checkout process, the “Pay” button on your website must send the DoDirectPaymentRequest to the PayPal Web Services API service, including required information you collected from the customer, such as the amount of the transaction, the buyer’s credit card number, expiration date, browser IP address, and an element that specifies whether this transaction is a final sale (complete transaction amount including shipping, handling and tax) or an authorization for a final amount that you must capture later with Authorization & Capture. The Direct Payment API SOAP response includes a transaction identification number and other information.

**FIGURE 3.2** PayPal Direct Payment Integration Point: Technical View



PayPal is completely invisible to your customer, before, during, and after the purchase. PayPal does not send an email receipt to the customer, nor will the customer’s credit card statement indicate that PayPal processed the payment.

For more details about the Direct Payment API, see [Chapter 7, “Direct Payment API.”](#)

**IMPORTANT:** *Direct Payment API is not a standalone product. You are required to use Direct Payment and Express Checkout together as part of the Website Payments Pro solution. For information about these business rules, see [Chapter 5, “Design Choices for Best Buying Experience.”](#)*

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## Relationship to Authorization & Capture

PayPal assumes that at the end of the checkout process, you will make a final sale and payment transaction via PayPal. If at point of sale you do not know the complete cost of the order—for example, if shipping, handling, and tax is not precisely known, or if you want to upsell—you can authorize a transaction that you capture later with Authorization & Capture.

For more information about Authorization & Capture, see the Authorization & Capture Integration Guide.



# 4

## How Authorization & Capture Works

Authorization & Capture is a settlement solution that provides merchants increased flexibility in obtaining payments from their buyers. During a traditional sale at PayPal, the authorization and capture action is completed simultaneously. Authorization & Capture separates the authorization of payment from the capture of the authorized payment.

Authorization & Capture is for merchants who have a delayed order fulfillment process and who typically make a \$1 auth at checkout. It enables merchants to modify the original authorization amount due to order changes occurring after the initial order is placed (such as taxes, shipping, or item availability). This chapter discusses the authorization and capture process and provides steps to help you authorize, capture, reauthorize, and void funds.

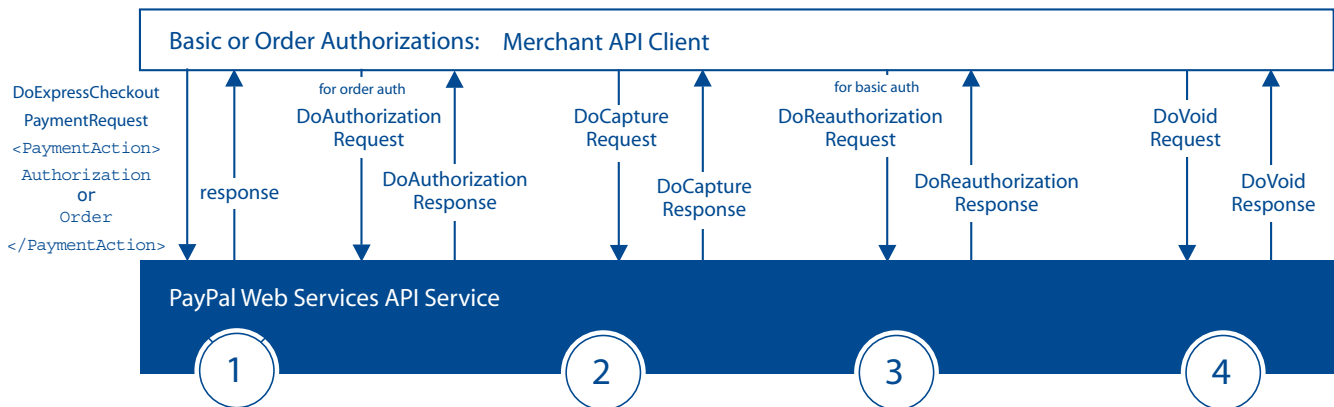
There are two ways to use Authorization & Capture:

1. Use the Authorization & Capture Application Programming Interface (API), which is discussed here.
2. Create an order or authorization with Website Payments Standard HTML and capture or void the authorization on the PayPal website (<https://www.paypal.com/>). This topic is not discussed here. For more information about the Authorization & Capture and Website Payments Standard, see the *Website Payments Standard Integration Guide*

## Fundamental Authorization Process With the APIs

The fundamental process for authorizing and capturing is shown below.

**FIGURE 4.1 Fundamental Authorization & Capture Process with APIs**



Authorization & Capture starts when your buyer authorizes a payment amount during checkout.

1. For example, you can use the PayPal Express Checkout API with the `<PaymentAction>` element set to `Authorization` or `Order`.

Similarly, you can use the Direct Payment API with the `<PaymentAction>` element set to `Authorization`. Currently, the Direct Payment API does not support order authorizations.

2. After your buyer completes checkout, you can then use the payment's transaction ID with Authorization & Capture APIs. You can:
  - Capture either a partial amount or the full authorization amount.
  - Authorize a higher amount, up to 115% of the originally authorized amount (not to exceed an increase of \$75 USD).
  - Void a previous authorization.

### Honor Period and Authorization Period

When your buyer approves an authorization, the buyer's balance can be placed on hold for a 29-day period to ensure the availability of the authorization amount for capture. You can reauthorize a transaction only once, up to 115% of the originally authorized amount (not to exceed an increase of \$75 USD).



After a successful reauthorization, PayPal honors 100% of authorized funds for three days. A day is defined as the start of the calendar day on which the authorization or reauthorization was made (from 12AM PST to 11:50PM PST).

You can settle without a reauthorization from day 4 to day 29 of the authorization period, but PayPal cannot ensure that 100% of the funds will be available after the three-day honor period. However, PayPal will not allow you to capture funds if the buyer's account is restricted, locked, or a fraudulent case occurs, or if your account has a high restriction level. You can use Authorization & Capture only when your account has a low restriction level.

The honor period and authorization period for authorizations is described below:

If you attempt to capture funds outside the honor period, PayPal applies best efforts to capture funds. However, there is a possibility that funds will not be available at that time.

Buyer and seller accounts cannot be closed if there is a pending (unsettled) authorization.

## Supported PayPal Payment Products

You can use Authorization & Capture with the PayPal products listed in Table 4.1, "PayPal Products Supporting Authorization & Capture."

By default, these products assume that a transaction is a final sale. You must explicitly specify that a transaction is a basic or order authorization.

**NOTE:** You must capture and void orders and order authorizations using the Authorization & Capture APIs. That is, you cannot process order authorizations on the PayPal website (<https://www.paypal.com>). The PayPal website supports processing only basic authorizations, not order authorizations.

**TABLE 4.1** *PayPal Products Supporting Authorization & Capture*

Product	Typical Usage
Website Payments	paymentaction="authorization"
Buy Now	paymentaction="authorization"
Donations	paymentaction="authorization"
Shopping carts	paymentaction="authorization"

### PayPal Products Not Supported

Authorization & Capture cannot be used with the following products:

- eBay checkout
- eCheck
- Gift Certificates and Coupons
- Subscriptions

- Instant Purchase
- Send Money
- Request Money
- Virtual Terminal
- Invoicing

## Order Authorizations Scenarios

The following are common scenarios you will encounter when implementing order authorizations.

### Simple Order

**TABLE 4.2 Simple Order Scenario**

Action	API Call	Running Balance
Your buyer orders an item from your website.		
You request an order from PayPal to authorize the payment, specifying the variable <code>paymentaction=order</code> . You receive a response that the order has been created for a payment amount of \$100.00.	DoExpressCheckoutPaymentRequest with:  <PaymentAction> order </PaymentAction>	
You request authorization for \$100.00.	DoAuthorizationRequest	<\$100.00>
You capture funds in the amount of \$115.00, the maximum amount allowed. The order now has a “Complete” status.	DoCaptureRequest	\$15.00

### Complex Order

**TABLE 4.3 Complex Order Scenario**

Action	API Call	Running Balance
Your buyer orders 2 items from your website.		

Action	API Call	Running Balance
You request an order from PayPal to authorize the payment, specifying the variable paymentaction=order. You receive a response that the order has been created for a payment amount of \$100.00.	DoExpressCheckoutPaymentRequest with:  <PaymentAction> order </PaymentAction>	
You request authorization #1 for \$75.00.	DoAuthorizationRequest	<\$75.00>
Your buyer contacts you and upgrades to next-day shipping. You capture funds in the amount of \$80.00 on authorization #1 to accommodate for the additional shipping charges.	DoCaptureRequest	\$5.00
You request authorization #2 for \$25.00.	DoAuthorizationRequest	<\$25.00>
Your buyer contacts you and changes an item on the order. You void authorization #2.	DoVoid	\$0.00
You request authorization #3 for \$35.00 for the new item selection.	DoAuthorizationRequest	<\$35.00>
You capture authorization #3 for \$35.00. Because the maximum amount of funds that can be captured has been reached (115% of the original order amount), the order now has a "Complete" status.	DoCaptureRequest	\$0.00

## Concurrent Authorizations

**TABLE 4.4 Concurrent Authorizations Scenario**

Action	API Call	Running Balance
Your buyer orders 3 pieces of equipment for \$300.00 from your website.		
You request an order from PayPal to authorize the payment, specifying the variable paymentaction=order. You receive a response that the order has been created for a payment amount of \$300.00.	DoExpressCheckoutPaymentRequest with:  <PaymentAction> order </PaymentAction>	
You request authorization #1 on day 1 for \$100.00 for the keyboard. You receive a response that the authorization has been created for a payment amount of \$100.00.	DoAuthorizationRequest	<\$100.00>

## How Authorization & Capture Works

### Order Authorizations Scenarios

Action	API Call	Running Balance
You capture authorization #1 for \$100.00. You ship the keyboard.	DoCaptureRequest	\$0.00
You request authorization #2 on day 2 for \$200.00 for the second component. You receive a response that the authorization has been created for a payment amount of \$200.00.	DoAuthorizationRequest	<\$200.00>
On day 3, you capture authorization #2 for \$200.00.	DoCaptureRequest	\$0.00
You ship the second component.		

Total Capture Hits Relative Tolerance With Open Authorizations

**TABLE 4.5 Total Capture Hits Relative Tolerance with Open Authorizations Scenario**

Action	API Call	Running Balance
Your buyer orders an item from your website for \$1000.00.		
You request an order from PayPal to authorize the payment, specifying the variable paymentaction=order. You receive a response that the order has been created for a payment amount of \$1000.00.	DoExpressCheckoutPaymentRequest with:  <PaymentAction> order </PaymentAction>	
Your buyer requests overnight shipping. You request authorization #1 for \$1100.00 (110% relative tolerance).	DoAuthorizationRequest	<\$1100.00>
You receive a response that the authorization has been created for a payment amount of \$1100.00. You ship the in-stock item by overnight shipping.		
You capture authorization #1 for \$1100.00.	DoCaptureRequest	\$0.00
Your buyer contacts you and adds another item to the order. You request authorization #2 for \$60.00, increasing the order total to \$1160.00, which exceeds the 115% tolerance limit of the original order.	DoAuthorizationRequest	<\$60.00>
You receive a response that the request for authorization #2 has been declined.		\$0.00

Void Authorizations

**TABLE 4.6 Void Authorizations Scenario**

Action	API Call	Running Balance
Your buyer orders 2 items from your website.		
You request an order from PayPal to authorize the payment, specifying the variable paymentaction=order. You receive a response that the order has been created for a payment amount of \$350.00.	DoExpressCheckoutPaymentRequest with: <PaymentAction> order </PaymentAction>	
You request authorization #1 on day 1 for \$100.00. You receive a response that the authorization has been created for a payment amount of \$100.00.	DoAuthorizationRequest	<\$100.00>
You ship the item. You capture authorization #1 for \$100.00.	DoCaptureRequest	\$0.00
You request authorization #2 on day 2 for \$200.00. You receive a response that the authorization has been created for a payment amount of \$200.00.	DoAuthorizationRequest	<\$200.00>
The buyer contacts you and cancels the remaining item.		
You void authorization #2.	DoVoid	\$0.00

## Partial Capture

**TABLE 4.7 Partial Capture Scenario**

Action	API Call	Running Balance
Your buyer orders an item from your website.		
You request an order from PayPal to authorize the payment, specifying the variable paymentaction=order. You receive a response that the order has been created for a payment amount of \$100.00.	DoExpressCheckoutPaymentRequest with: <PaymentAction> order </PaymentAction>	
.You request authorization #1 on day 1 for \$100.00. You receive a response that the authorization has been created for a payment amount of \$100.00.	DoAuthorizationRequest	<\$100.00>

## How Authorization & Capture Works

### Optimal Buyer Experience

Action	API Call	Running Balance
You ship the item. You capture authorization #1 for \$100.00.	DoCaptureRequest	\$0.00
With CompleteType set to NotComplete on the DoCapture API, you capture funds in the amount of \$50.00.	DoCaptureRequest	\$50.00

#### Complete Capture

**TABLE 4.8 Complete Capture Scenario**

Action	API Call	Running Balance
Your buyer orders an item from your website.		
You request an order from PayPal to authorize the payment, specifying the variable paymentaction=order. You receive a response that the order has been created for a payment amount of \$100.00.	DoExpressCheckoutPaymentRequest with:  <PaymentAction> order </PaymentAction>	
You request authorization #1 on day 1 for \$100.00. You receive a response that the authorization has been created for a payment amount of \$100.00.	DoAuthorizationRequest	<\$100.00>
You capture authorization #1 for \$100.00. You ship the item.	DoCaptureRequest	\$0.00

**NOTE:** The default for the DoCapture API is a Complete capture, not a Partial capture.

## Optimal Buyer Experience

This section details the best practices you should follow in using Authorization & Capture to ensure the best buying experience for your customers and getting the most from Authorization & Capture.

### Capturing Funds on Basic Authorizations

PayPal recommends that you capture funds within the honor period of three days because PayPal will honor the funds for a 3-day period after the basic authorization. If you attempt to capture funds after the three-day period and the authorization fails, your request to capture funds may be declined.

After day 4 of the authorization period, you can initiate a reauthorization, which will start a new three-day honor period. However, it will not extend the original authorization period past 29 days. For example, if you successfully complete a reauthorization on day 29 of the authorization period, funds will only be honored until the end of the 29th day, and a new three-day honor period will start but not extend beyond day 29.

You should capture funds within 24 hours after you ship your buyer's order.

### Buyer Approval for Basic Authorizations

A buyer-initiated authorization allows you to capture funds from the buyer's account up to 115% of the originally authorized amount (not to exceed an increase of \$75 USD) and up to \$10,000 USD.

**IMPORTANT:** *If you want to update any details of the purchase that change the original authorization amount, PayPal requires that you obtain consent from the buyer at the time of purchase or at the time of capture.*

### Voiding Basic Authorizations

You should void an authorization if the authorization or reauthorization will not be used.

Voiding the authorization unlocks the temporary hold placed on your buyer's funding sources.



## How Authorization & Capture Works

*Optimal Buyer Experience*



# 5

## Design Choices for Best Buying Experience

You have a design choice for placing PayPal buttons on your website:

- **Implementation Point A: The Express Checkout Shortcut implementation**

with the button graphic at the beginning of checkout



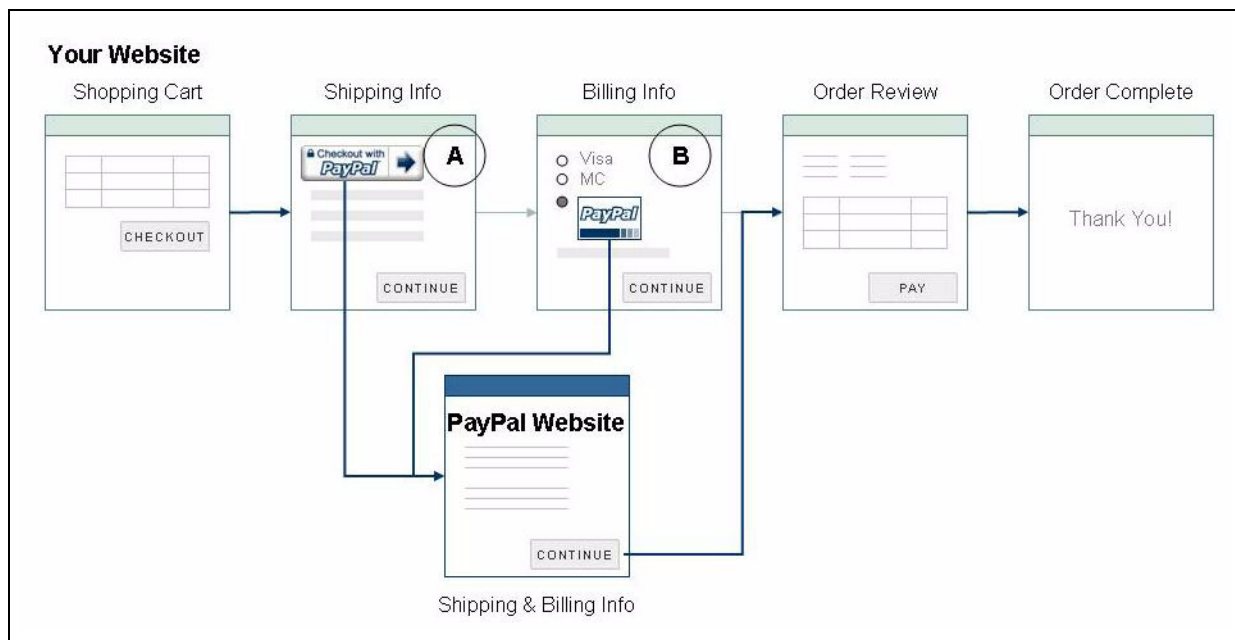
Or

- **Implementation Point B: The Express Checkout Mark implementation**

with the button graphic before the end of checkout



**FIGURE 5.1** Implementation Points A and B



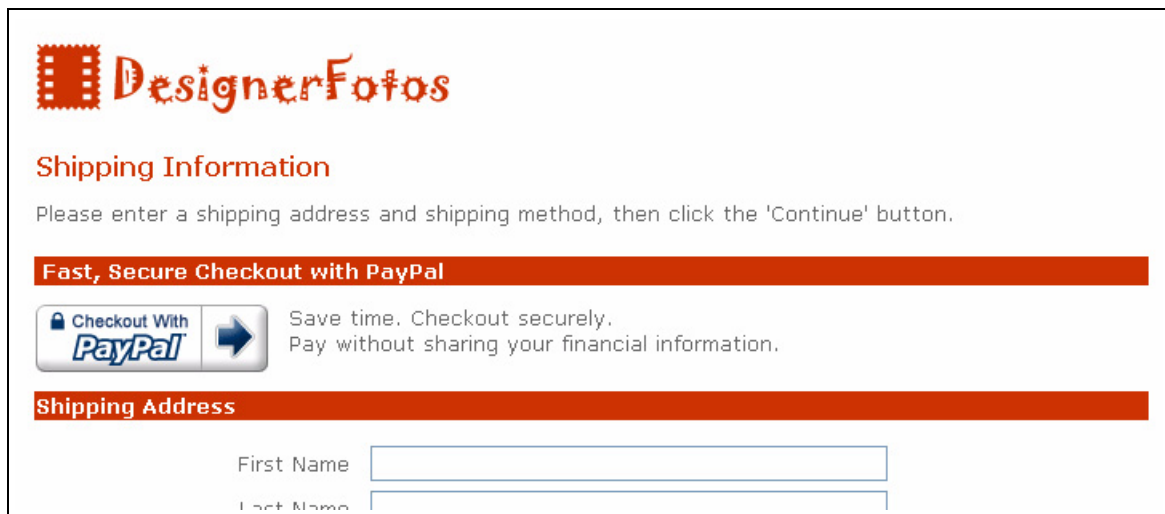
Whether you choose implementation point A or B, you call the same Express Checkout APIs.

## Implementation Point A: Express Checkout Shortcut

Putting PayPal first in your checkout—the Express Checkout Shortcut implementation—allows a customer to save time by skipping several checkout steps. This section details how to position PayPal at the beginning of your checkout process.

Figure 5.2, “Example of Button Placement for Express Checkout Shortcut” on page 58 is an example of how to implement the Express Checkout product as the first step of your checkout process. By placing the button before your customer is asked to enter shipping and billing information, your customer can check out quickly using information already stored on PayPal.

**FIGURE 5.2** Example of Button Placement for Express Checkout Shortcut



The screenshot shows the checkout process for DesignerFotos. At the top is the logo. Below it is the 'Shipping Information' section with a prompt to enter a shipping address and click 'Continue'. A red banner highlights 'Fast, Secure Checkout with PayPal'. Below this banner is the 'Checkout With PayPal' button, which includes a blue arrow icon. To the right of the button is the text: 'Save time. Checkout securely. Pay without sharing your financial information.' Below the banner is the 'Shipping Address' section with input fields for 'First Name' and 'Last Name'.

## Button Placement Business Rules for Express Checkout Shortcut

With the Express Checkout Shortcut implementation, adhere to the following four business rules. Following these rules helps PayPal account holders understand that they are offered the benefits of a faster checkout. In addition, this placement can increase impulse purchases, repeat purchases, and purchases from shoppers who are comfortable paying online only with PayPal.

Add the PayPal choice at the top of the first page of your checkout process *before* you ask for the shipping address or payment method.

Use the approved Express Checkout button



You can get the Express Checkout button logo and message text from the following location:

<https://www.paypal.com/express-checkout-buttons>

From this location, copy the HTML and paste it in the appropriate location of your checkout pages, as described in “[Implementation Point A: Express Checkout Shortcut](#)” on page 58. You might need to edit the variables in the HTML to suit your particular needs.

Put the text following text above either the **Checkout with PayPal** button or the corresponding message, whichever is most appropriate to your website design.

#### **Fast, Secure Checkout with PayPal**

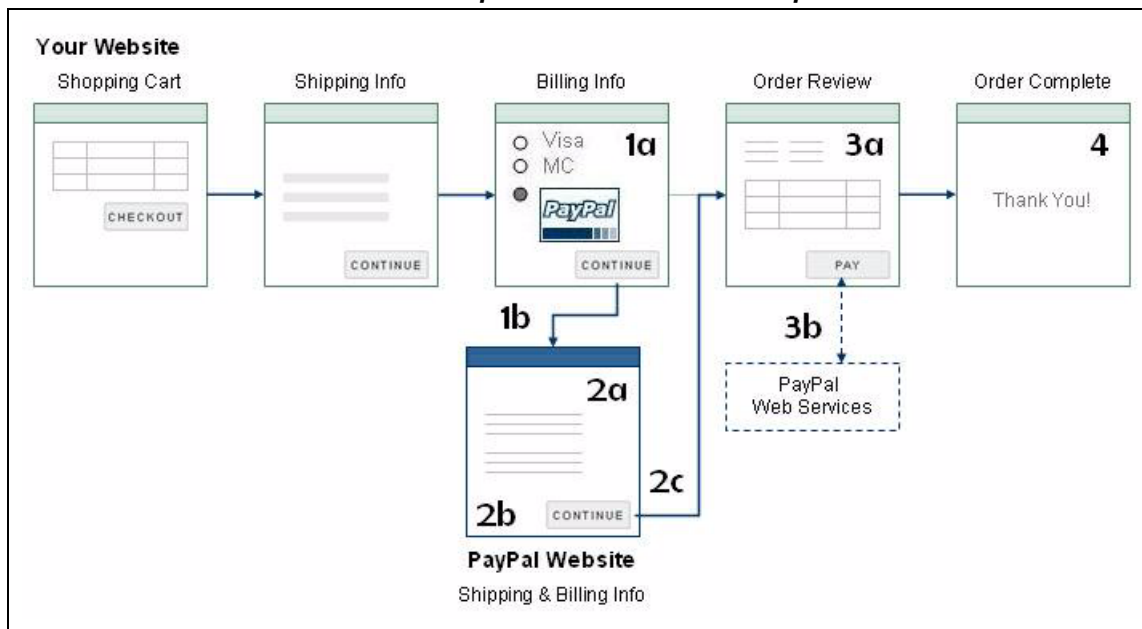
Put the following message next to the PayPal Express Checkout button:

Save time. Checkout securely. Pay without sharing your financial information.

## Implementation Point B: Express Checkout Mark

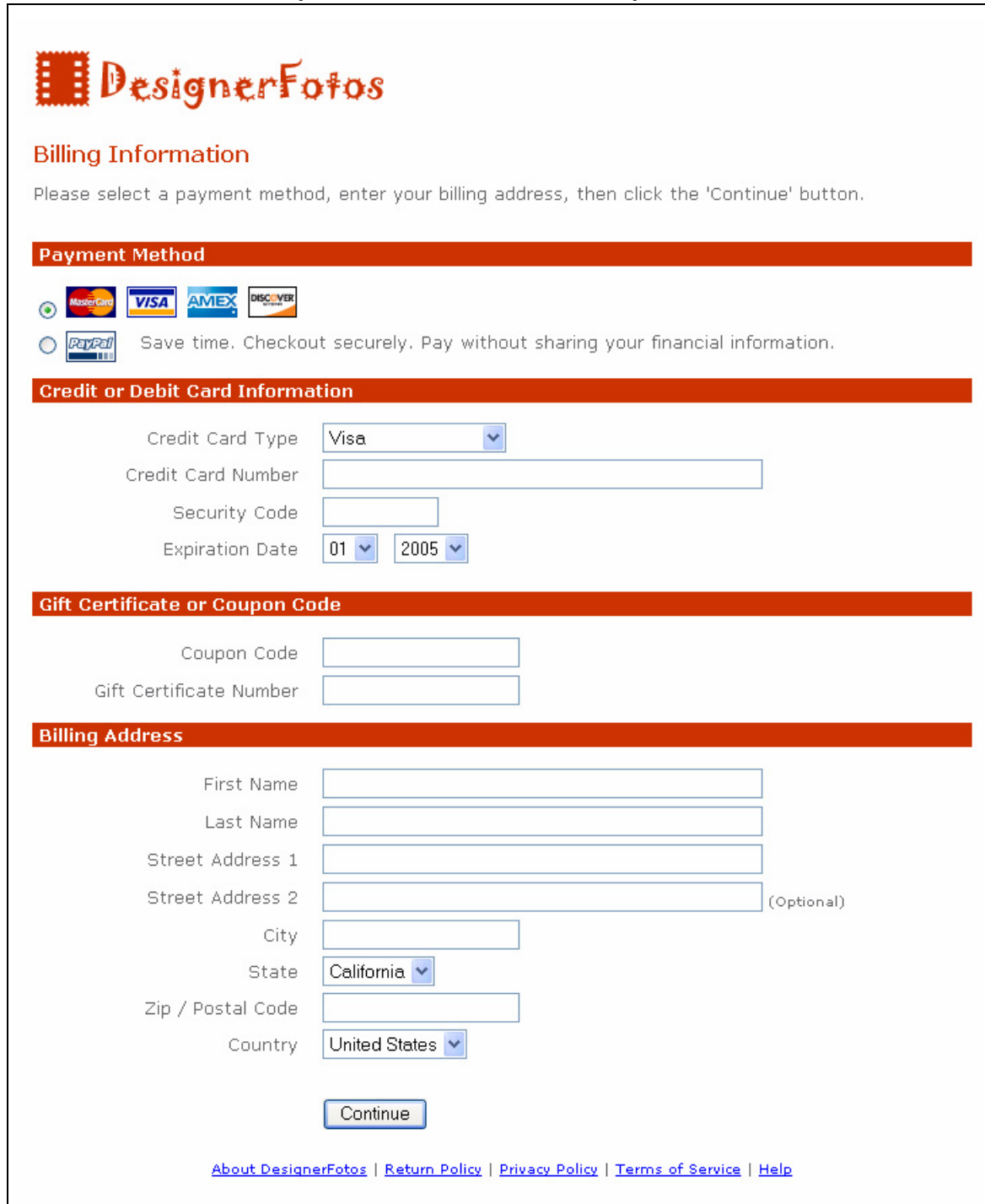
The Express Checkout Mark implementation is Step 1a in [Figure 5.3, “Placement of Express Checkout Mark Implementation.”](#) This is the point in the checkout process where PayPal can be placed with other payment methods.

**FIGURE 5.3 Placement of Express Checkout Mark Implementation**



An example of PayPal’s recommended placement of PayPal with other payment methods is shown in [Figure 5.4, “Example of Button Placement for Express Checkout Mark”](#) on page 61.

For background information about design considerations similar to this, see [“Step 1a: Customer Selects PayPal on Your Website”](#) on page 26. The primary difference is that the customer selects PayPal from a list of other payment methods. When the customer clicks the “Continue Checkout” button or hyperlink on your billing page, you must redirect the customer to PayPal according to the instructions described [“Step 1b: Integration Point 1”](#) on page 27.





**FIGURE 5.4 Example of Button Placement for Express Checkout Mark**


**DesignerFotos**

### Billing Information

Please select a payment method, enter your billing address, then click the 'Continue' button.

#### Payment Method

☒    

☐  Save time. Checkout securely. Pay without sharing your financial information.

#### Credit or Debit Card Information

Credit Card Type:

Credit Card Number:

Security Code:

Expiration Date:

#### Gift Certificate or Coupon Code

Coupon Code:

Gift Certificate Number:

#### Billing Address

First Name:

Last Name:

Street Address 1:

Street Address 2:  (Optional)

City:

State:

Zip / Postal Code:

Country:

[About DesignerFotos](#) | [Return Policy](#) | [Privacy Policy](#) | [Terms of Service](#) | [Help](#)

## Button Placement Business Rules for Express Checkout Mark

For the Express Checkout Mark implementation, when PayPal is positioned with other payment methods, PayPal recommends the following design:

**IMPORTANT:** *The positioning of Express Checkout according to these business rules is required if you are implementing PayPal Direct Payment.*

1. Display the options for payment methods *before* you ask the customer for billing address information.

Add the PayPal mark logo graphic



as one of the options.

**NOTE:** You can find this logo graphic in the PayPal logo center at the following location:

<https://www.paypal.com/logocenter>

Add the following message next to the PayPal mark logo:

Save time. Checkout securely. Pay without sharing your financial information.

Make a design choice for the display of PayPal with other payment methods. You have several designs to choose from:

- The treatment shown in “[Example of Button Placement for Express Checkout Mark](#)” on [page 61](#)
- Horizontal option fields shown in [Figure 5.5, “Payment Methods in Horizontal Design.”](#)
- A drop-down SELECT list shown in [Figure 5.6, “Payment Methods as Drop-Down SELECT List.”](#)

**FIGURE 5.5 Payment Methods in Horizontal Design**



**FIGURE 5.6 Payment Methods as Drop-Down SELECT List**



## Treatment When PayPal Is Selected

When your customer selects PayPal, you should:

Use JavaScript to hide or disable credit card fields and billing address fields. Customers will be confused if they are asked to enter this information after selecting PayPal.

If other fields such as coupon code or gift certificate are on the page, still display them so your customer may fill them out before being redirected to PayPal.

Change the function of the “Continue Checkout” button to send the customer to PayPal according to the instructions in “[Step 1b: Integration Point 1](#)” on page 27.

Near the “Continue” button or hyperlink, put an explanatory message such as the following to inform your customer what will occur when the “Continue” button or hyperlink is clicked. The text *Your Company Name* is the name of your business.

Clicking “Continue” will transfer you to PayPal. After you approve the use of PayPal, you will be returned to *Your Company Name* to complete your purchase.

[Figure 5.7, “Example of Billing Information Page with PayPal Selected” on page 63](#) shows what your billing page might look like after the customer selects PayPal.

**FIGURE 5.7 Example of Billing Information Page with PayPal Selected**



The screenshot shows the 'Billing Information' page for DesignerFotos. At the top is the DesignerFotos logo. Below it, the heading 'Billing Information' is followed by the instruction: 'Please select a payment method, enter your billing address, then click the 'Continue' button.' The 'Payment Method' section has a red header bar and contains radio buttons for MasterCard, VISA, AMEX, DISCOVER, and PayPal. The PayPal option is selected, and a message says 'Save time. Checkout securely. Pay without sharing your financial information.' Below this is a 'Gift Certificate or Coupon Code' section with two input fields: 'Coupon Code' and 'Gift Certificate Number'. The 'Billing Information' section has a red header bar and contains the text: 'Clicking "Continue" will transfer you to PayPal. After you approve the use of PayPal, you will be returned to DesignerFotos to complete your purchase.' At the bottom of this section is a 'Continue' button. At the very bottom of the page are links: 'About DesignerFotos | Return Policy | Privacy Policy | Terms of Service | Help'.

## Sending Shipping Address Information to PayPal

If you have already collected shipping address information from your customer, on the PayPal pages the customer should be able to see this shipping address information but not be able to change it. Follow these usage notes to send the shipping address to PayPal with `SetExpressCheckoutRequest`.

For complete details about `SetExpressCheckoutRequest`, see “[SetExpressCheckoutRequest](#)” on page 75.

**TABLE 5.1** *SetExpressCheckoutRequest Usage Notes: Shipping Address*

Element	Notes
Address	<p>Customer’s street address for shipping.</p> <p>Your sending the customer-entered shipping Address to PayPal allows PayPal to return the address confirmation status in the <code>AddressStatus</code> element of <code>GetExpressCheckoutDetailsResponse</code>. Be sure to include the <code>Country</code> element as part of Address.</p> <p><b>NOTE:</b> The address entered by the customer on your website must exactly match the customer’s confirmed PayPal address in order for PayPal to verify that the shipping address is confirmed. Your use of a <code>Confirmed</code> address is one of the requirements for you to be protected by PayPal’s Seller Protection Policy (SPP). For more information about the Seller Protection Policy, see the following: <a href="https://www.paypal.com/spp">https://www.paypal.com/spp</a></p>
Address Override	<p>If you set <code>AddressOverride</code>, the Address sent on <code>SetExpressCheckoutRequest</code> overrides the customer’s stored address. The customer is shown the passed-in address but cannot edit it.</p> <p><b>NOTE:</b> If the Address is not valid (such as missing required fields, including <code>Country</code>) or not included <code>SetExpressCheckoutRequest</code>, PayPal does not display any address to the customer.</p>



## Best Buying Experience in Shortcut Implementation

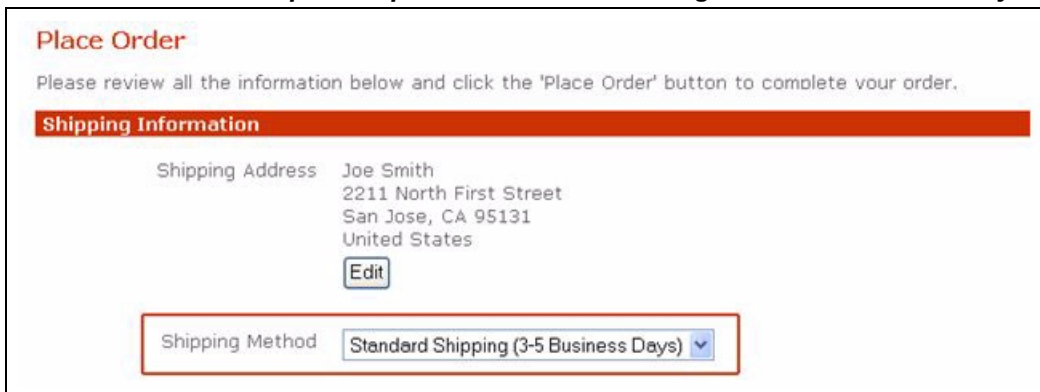
A key benefit of Express Checkout is that a customer can save time by skipping several checkout steps using the shipping and billing information stored on PayPal. You might have to adjust your checkout flow to avoid redundant information gathering from the customer, to make sure you gather other important information from the customer that PayPal does not supply, or to prevent “circular” pages.

This section details some best practices you should consider in implementing the Express Checkout Shortcut.

### Move Important Fields to End of Checkout

The pages your customer skips might ask for important information such as shipping method, delivery date, or coupon codes. In this case, PayPal recommends that you collect this information from your customer after the return to your website after Express Checkout Integration Point 2. For instance, if you ask for shipping method on your shipping address page, consider moving the fields to gather this information to your “Order Review” page. See [Figure 5.8, “Example of Optimal Order Review Page after Return from PayPal”](#) and [Figure 5.10, “Example of Optimal Billing Page”](#) on page 67.

**FIGURE 5.8** Example of Optimal Order Review Page after Return from PayPal



The screenshot shows a web form titled "Place Order" in red. Below the title is a grey instruction: "Please review all the information below and click the 'Place Order' button to complete your order." A red horizontal bar highlights the "Shipping Information" section. Under this bar, the "Shipping Address" is listed as "Joe Smith, 2211 North First Street, San Jose, CA 95131, United States." with an "Edit" button below it. At the bottom, a "Shipping Method" dropdown menu is shown, currently set to "Standard Shipping (3-5 Business Days)".

### Use the Information Returned by PayPal

If you prefer not to change your checkout flow as described in the previous section, PayPal recommends that you return your customer to the original page where your important information fields appear. Be sure to disable or hide your own shipping address, billing address, and payment method fields, and display the information that PayPal supplies you.

#### Example of Optimal Customer Experience

The following is a detailed example.

If you position the PayPal button at the top of your shipping address page, after the customer has clicked **Continue Checkout** on PayPal, return the customer to your shipping address page (this URL is the value of ReturnURL.).

On your shipping address page, display the shipping address PayPal has provided in `GetExpressCheckoutDetailsResponse` and display your shipping method input fields or SELECT list so your customer can select the method. See [Figure 5.9, “Example of Optimal Shipping Method Page.”](#)

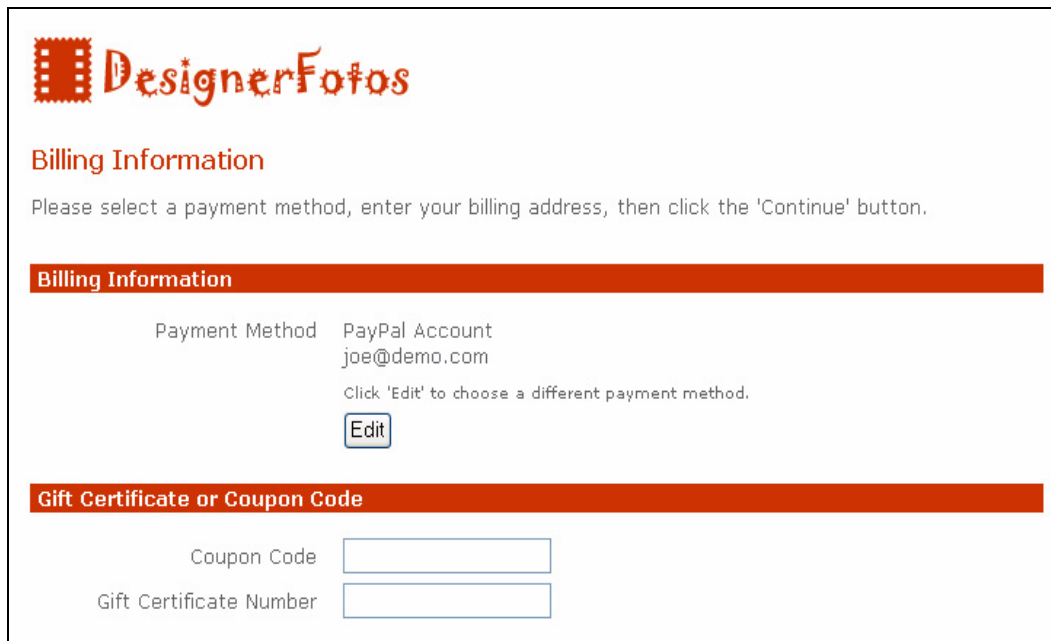
**FIGURE 5.9** Example of Optimal Shipping Method Page



The screenshot shows a web page for "DesignerFotos". At the top is the logo. Below it is a section titled "Shipping Information" with a message: "Please select a shipping method, then click the 'Continue' button." There are two main sections with orange headers: "Shipping Address" and "Shipping Method". The "Shipping Address" section displays the address: "Joe Smith", "2211 North First Street", "San Jose, CA 95131", "United States", and an "Edit" button. The "Shipping Method" section displays a dropdown menu with "Standard Shipping (3-5 Business Days)" selected, and a "Continue" button below it.

When your customer clicks “Continue,” display your billing page. Show the payment method as PayPal, and ask your customer to enter additional information, such as coupon codes. Do not ask the customer for billing address at this point because he has indicated he is using PayPal.

**FIGURE 5.10** Example of Optimal Billing Page



**DesignerFotos**

**Billing Information**

Please select a payment method, enter your billing address, then click the 'Continue' button.

**Billing Information**

Payment Method    PayPal Account  
joe@demo.com

Click 'Edit' to choose a different payment method.

[Edit](#)

**Gift Certificate or Coupon Code**

Coupon Code   

Gift Certificate Number

---

## Best Buying Experience in Shortcut or Mark Implementations

This section details some best practices you should consider in designing either the Express Checkout Shortcut implementation or the Express Checkout Mark Implementation. These practices apply to both implementations to give your customer the best shopping experience.

### Allow the Customer to Confirm Before Calling `DoExpressCheckoutPayment`

With Express Checkout, the customer completes the order and approves the payment on your website, not on PayPal.

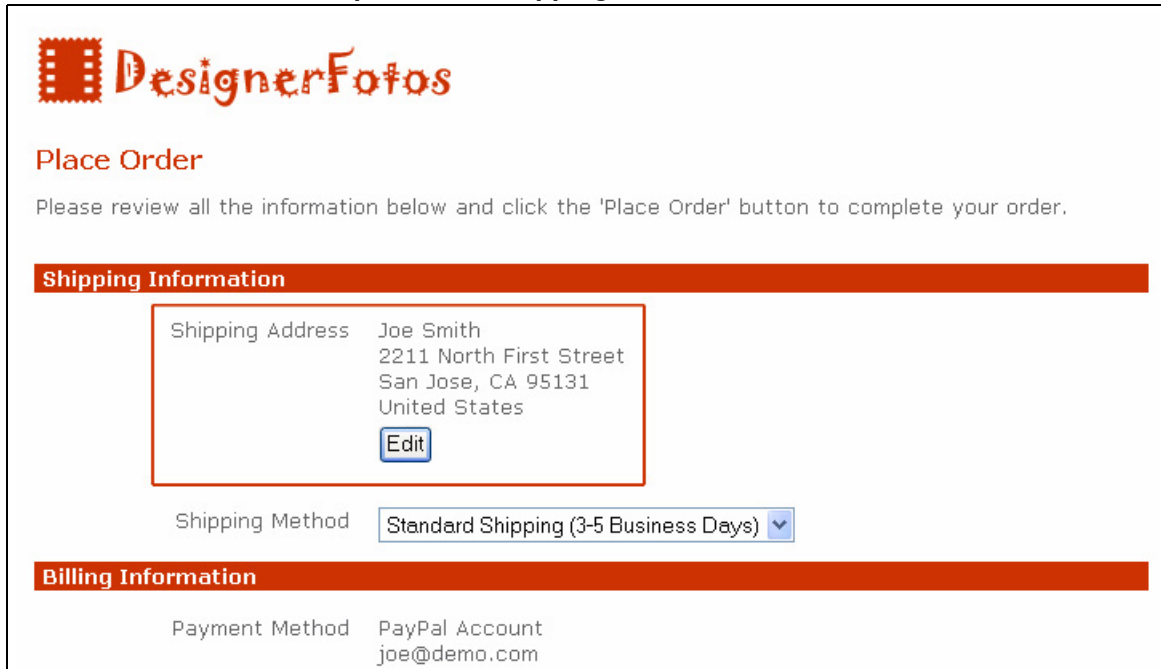
**IMPORTANT:** *You must allow the customer to confirm the payment on your website.*

Between the response from `SetExpressCheckout` and calling `DoExpressCheckoutPayment`, you must allow the PayPal user to confirm the order. On your website, display a button labelled “Place Order” or “Pay” that the customer must click and that calls `DoExpressCheckoutPayment`.

### Edit Shipping

[Figure 5.11, “Example of Edit Shipping Button Treatment,”](#) shows the recommended way to implement an “Edit Shipping” button with Express Checkout.

**FIGURE 5.11** Example of Edit Shipping Button Treatment



**DesignerFotos**

**Place Order**

Please review all the information below and click the 'Place Order' button to complete your order.

**Shipping Information**

Shipping Address Joe Smith  
2211 North First Street  
San Jose, CA 95131  
United States

[Edit](#)

Shipping Method Standard Shipping (3-5 Business Days) ▼

**Billing Information**

Payment Method PayPal Account  
joe@demo.com

If your customer selected a shipping address from his PayPal account, PayPal recommends that you create an “Edit Shipping” button or hyperlink to return your customer to PayPal to change that shipping address information. This button or hyperlink allows the customer to quickly select a different address already on file with PayPal or to enter a new address. An “Edit Shipping” button or hyperlink also ensures that PayPal can provide you with the updated AddressStatus about the new, edited shipping address. For details about AddressStatus, see [“GetExpressCheckoutDetailsResponse” on page 84](#).

The “Edit Shipping” button or hyperlink follows the same integration instructions as Integration Point 1 [“Step 1b: Integration Point 1” on page 27](#):

- The customer clicks the “Edit Shipping” button or hyperlink on your order review page.
- You send `SetExpressCheckoutRequest` to PayPal.
- PayPal returns `SetExpressCheckoutResponse`.
- You redirect your customer’s browser to PayPal.

**NOTE:** Your customers are not asked to log in again if they have logged in to PayPal within the last five minutes.

The following are special considerations about implementing “Edit Shipping” function. For complete details about `SetExpressCheckoutRequest`, see [“SetExpressCheckoutRequest” on page 75](#).

**TABLE 5.2** *SetExpressCheckoutRequest Usage Notes for “Edit Shipping”*

Element	Required or Optional?	Notes
Token	Optional	To identify this request as part of the same checkout session, use the Token value PayPal originally returned in SetExpressCheckoutResponse after your first invocation of SetExpressCheckoutRequest.
OrderTotal	Required	The total estimated cost of the order to the customer. Because your program should know the shipping and tax charges at this point, be sure to send an updated OrderTotal that includes those charges.
MaxAmount	Optional	The expected maximum total amount of the complete order, including shipping and tax charges. You should set MaxAmount at least equal to the updated OrderTotal.
ReturnURL	Required	URL to which the customer’s browser is returned after approving use of PayPal. Set ReturnURL to your order review page or the page on which the customer clicked the “Edit Shipping” button or hyperlink.
CancelURL	Required	URL to which the customer is returned if he decides not to use PayPal. Set CancelURL to your order review page or the page on which the customer clicked the “Edit Shipping” button or hyperlink. It is likely that at this point if the customer clicks <b>Cancel</b> on PayPal, the customer is trying to cancel the editing of the shipping address, not the approval of the use of PayPal.

## Reapproving PayPal at Integration Point 3

If the customer-selected funding sources are no longer applicable when you call DoExpressCheckoutPaymentRequest to PayPal, PayPal returns error code 10422. This error can occur if the final OrderTotal is significantly higher than the original OrderTotal on SetExpressCheckoutRequest.

If you receive this error message, PayPal recommends that you return your customer to PayPal to review and approve new, valid funding sources. Although this error is rare, you should consider trapping the error to display a message to the customer describing what happened, along with a button or hyperlink to return to PayPal.

Consider displaying an error page like that shown in [“Example Message for Reapproving PayPal” on page 71](#).

**FIGURE 5.12** Example Message for Reapproving PayPal



For the **Return to PayPal** button or hyperlink, the programming is the same as for Integration Point 1:

- Your customer clicks the “Return to PayPal” button on your error page.
- You send `SetExpressCheckoutRequest` to PayPal.
- PayPal returns the `SetExpressCheckoutResponse`.
- You redirect the customer’s browser to PayPal.

**NOTE:** If this redirection occurs within five minutes of the customer’s last login to PayPal, the customer is not asked to log in again.

Special considerations for the **Return to PayPal** function are the same as for “[Edit Shipping](#)” on page 68.

If your customer clicks “Cancel use of PayPal,” redirect the customer’s browser to a page where he can select a new payment method.



## Design Choices for Best Buying Experience

*Best Buying Experience in Shortcut or Mark Implementations*



# 6

## Express Checkout API

The Express Checkout API is the Website Payments Pro alternative to standard PayPal shopping cart processing.

The Express Checkout API consists of three distinct SOAP requests that you make at the three integration points during a customer checkout:

1. `SetExpressCheckout`
2. `GetExpressCheckoutDetails`
3. `DoExpressCheckoutPayment`

---

### PayPal-supported Currencies

The following currencies are supported by PayPal.

**TABLE 6.1** *PayPal-supported Currencies and Currency Codes*

Code	Currency
AUD	Australian Dollar
CAD	Canadian Dollar
EUR	Euro
GBP	Pound Sterling
JPY	Japanese Yen
USD	US Dollar

**IMPORTANT:** *All currency amount fields in the three Express Checkout APIs require that the `currencyID` attribute be set to one of the supported currency codes. For any one particular buyer's checkout session, do not mix currencies either in any single SOAP request or across SOAP requests. For example, do not set `currencyID` to `USD` in one request and then to `GBP` in a later request for the same buyer.*

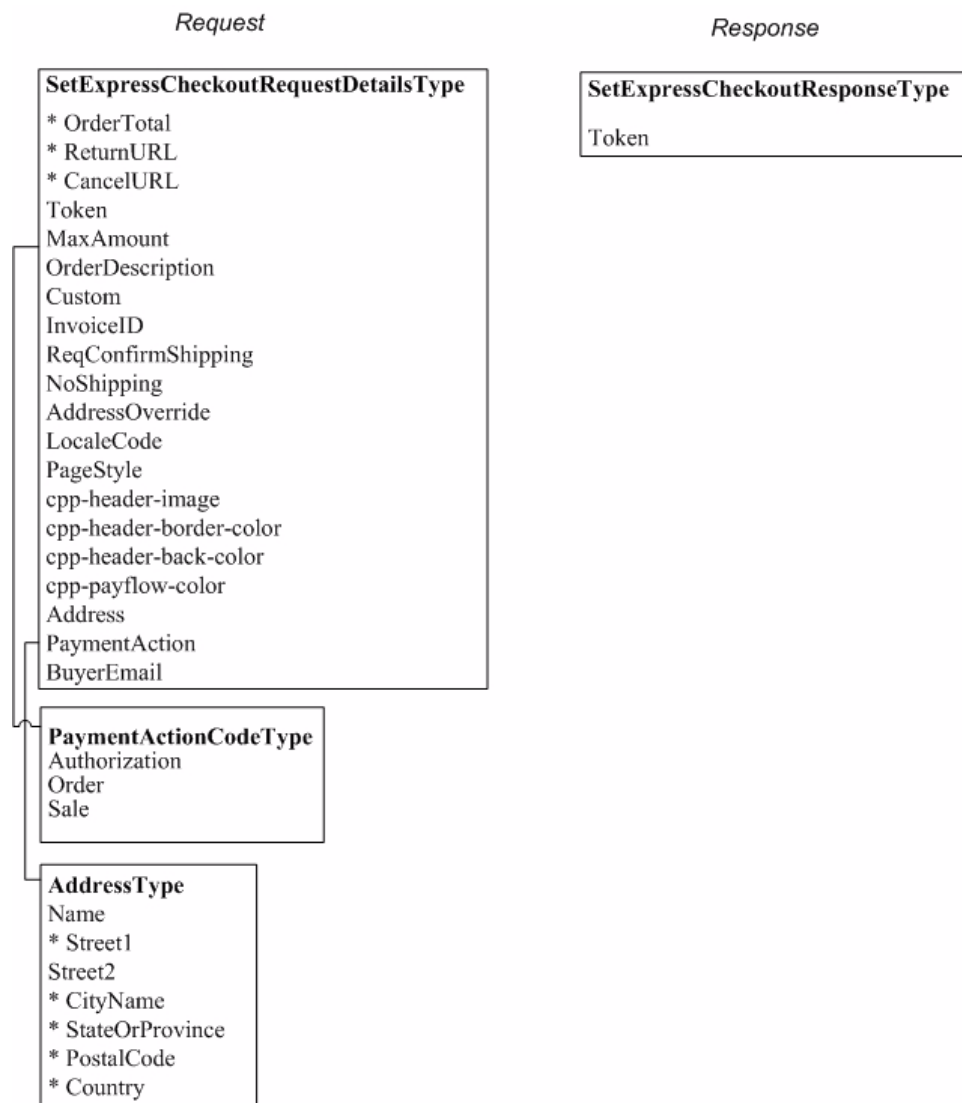
## SetExpressCheckout

SetExpressCheckout indicates to PayPal that you are using Express Checkout to obtain payment from your customer.

### Diagram of Set ExpressCheckout Types

The following diagram represents the composition of the SetExpressCheckoutRequestType and SetExpressCheckoutResponseType elements. Elements required in the request are indicated with an asterisk.

**FIGURE 6.1** SetExpressCheckout Types



## SetExpressCheckoutRequest

Request to use PayPal Express Checkout to obtain payment.

**IMPORTANT:** Any fields in the WSDL or XSD files that are not described here are ignored. For example, do not set CountryName.

### Fields

**TABLE 6.2** SetExpressCheckoutRequest Fields

Element	Description	Data Type	Allowable Values	Required ?
Token	A timestamped token, the value of which was returned by SetExpressCheckout response. Character length and limitations: 20 single-byte characters	ebl:ExpressCheckoutTokenType	See the description of “Token” on page 82.	No
OrderTotal	The total cost of the order to the customer. If shipping cost and tax charges are known, include them in this value; if not, this value should be the current sub-total of the order.	cc:BasicAmountType	See description.	Yes
<p><b>NOTE:</b> Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator must be a comma (,). Equivalent to nine characters maximum for USD.</p> <p><b>IMPORTANT:</b> You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.</p>				

TABLE 6.2 SetExpressCheckoutRequest Fields

Element	Description	Data Type	Allowable Values	Required ?
MaxAmount	<p>The expected maximum total amount of the complete order, including shipping cost and tax charges.</p> <p><b>NOTE:</b> Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator must be a comma (,). Equivalent to nine characters maximum for USD.</p> <p><b>IMPORTANT:</b> <i>You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.</i></p>	cc:BasicAmount Type	See description.	No
Order Description	Description of items the customer is purchasing. Character length and limitations: 127 single-byte alphanumeric characters	xs:string	See description.	No
Custom	<p>A free-form field for your own use, such as a tracking number or other value you want PayPal to return on GetExpressCheckoutDetails response and DoExpressCheckoutPayment response.</p> <p>Character length and limitations: 256 single-byte alphanumeric characters</p>	xs:string	See description.	No
InvoiceID	<p>Your own unique invoice or tracking number. PayPal returns this value to you on DoExpressCheckoutPayment response.</p> <p>Character length and limitations: 127 single-byte alphanumeric characters</p>	xs:string	See description.	No

**TABLE 6.2 SetExpressCheckoutRequest Fields**

Element	Description	Data Type	Allowable Values	Required ?
ReturnURL	URL to which the customer's browser is returned after choosing to pay with PayPal.  <b>IMPORTANT:</b> <i>PayPal recommends that the value be the final review page on which the customer confirms the order and payment.</i>  Character length and limitations: no limit.	xs:string	See description.	Yes
CancelURL	URL to which the customer is returned if he does not approve the use of PayPal to pay you.  <b>IMPORTANT:</b> <i>PayPal recommends that the value be the original page on which the customer chose to pay with PayPal.</i>  Character length and limitations: no limit	xs:string	See description.	Yes
Address	Customer's shipping address. <b>NOTE:</b> If you include a shipping address and set the AddressOverride element on the request, PayPal returns this same address in GetExpressCheckoutDetailsResponse.	ebl:AddressType	See Table 6.3 on page 81.	No

**TABLE 6.2 SetExpressCheckoutRequest Fields**

Element	Description	Data Type	Allowable Values	Required ?
ReqConfirmShipping	<p>The value 1 indicates that you require that the customer's shipping address on file with PayPal be a confirmed address.</p> <p><b>IMPORTANT:</b> <i>Setting this element overrides the setting you have specified in your Merchant Account Profile.</i></p> <p>Character length and limitations: One single-byte numeric character.</p>	xs:string	0 1	No
NoShipping	<p>The value 1 indicates that on the PayPal pages, no shipping address fields should be displayed whatsoever.</p> <p>Character length and limitations: Four single-byte numeric character.</p>	xs:string	0 1	No
AddressOverride	<p>The value 1 indicates that the PayPal pages should display the shipping address set by you in this SetExpressCheckout request, not the shipping address on file with PayPal for this customer.</p> <p><b>IMPORTANT:</b> <i>Displaying the PayPal street address on file does not allow the customer to edit that address.</i></p> <p>Character length and limitations: Four single-byte numeric character.</p>	xs:string	0 1	No
LocaleCode	<p>Locale of pages displayed by PayPal during Express Checkout.</p> <p>Character length and limitations: Five single-byte alphabetic characters, upper- or lowercase.</p>	xs:string	AU or en_AU DE or de_DE FR or fr_FR GB or en_GB IT or it_IT JP or ja_JP US or en_US	No

**TABLE 6.2 SetExpressCheckoutRequest Fields**

Element	Description	Data Type	Allowable Values	Required ?
PageStyle	Sets the Custom Payment Page Style for payment pages associated with this button/link. This value corresponds to the HTML variable <code>page_style</code> for customizing payment pages. The value is the same as the Page Style Name you chose when adding or editing the page style from the <b>Profile</b> subtab of the <b>My Account</b> tab of your PayPal account. Character length and limitations: 30 single-byte alphabetic characters.	xs:string	See description.	No
cpp-header-image	A URL for the image you want to appear at the top left of the payment page. The image has a maximum size of 750 pixels wide by 90 pixels high. PayPal recommends that you provide an image that is stored on a secure (https) server. Character length and limitations: 127	xs:string	See description.	No
cpp-header-border-color	Sets the border color around the header of the payment page. The border is a 2-pixel perimeter around the header space, which is 750 pixels wide by 90 pixels high. Character length and limitations: Six character HTML hexadecimal color code in ASCII	xs:string	See description.	No
cpp-header-back-color	Sets the background color for the header of the payment page. Character length and limitation: Six character HTML hexadecimal color code in ASCII	xs:string	See description.	No
cpp-payflow-color	Sets the background color for the payment page. Character length and limitation: Six character HTML hexadecimal color code in ASCII	xs:string	See description.	No

**TABLE 6.2 SetExpressCheckoutRequest Fields**

Element	Description	Data Type	Allowable Values	Required ?
PaymentAction	<p>How you want to obtain payment:</p> <ul style="list-style-type: none"> <li>• <code>Authorization</code> indicates that this payment is a basic authorization subject to settlement with PayPal Authorization &amp; Capture.</li> <li>• <code>Order</code> indicates that this payment is an order authorization subject to settlement with PayPal Authorization &amp; Capture.</li> <li>• <code>Sale</code> indicates that this is a final sale for which you are requesting payment.</li> </ul> <p><b>IMPORTANT:</b> You cannot set this value to <code>Sale</code> on <code>SetExpressCheckout</code> request and then change this value to <code>Authorization</code> on the final <code>API DoExpressCheckoutPayment</code> request.</p> <p>Character length and limit: Up to 13 single-byte alphabetic characters</p>	<code>ebl:PaymentAction</code> <code>CodeType</code> <code>xs:token</code>	<p>Default: The transaction resulting from <code>DoExpressCheckoutPayment</code> Request will be a final sale.</p> <p><code>Authorization</code></p> <p><code>Order</code></p> <p><code>Sale</code></p>	No
BuyerEmail	<p>Email address of the buyer as entered during checkout. PayPal uses this value to pre-fill the PayPal membership sign-up portion of the PayPal login page.</p> <p>Character length and limit: 127 single-byte alphanumeric characters</p>	<code>ebl:EmailAddress</code> <code>Type</code>	See description.	No

**NOTE:** The `AddressType` elements are required only if you include the `Address` element in the SOAP request.

**IMPORTANT:** Any fields in the WSDL or XSD files that are not described here are ignored. For example, do not set `CountryName`.



**TABLE 6.3 Address (Shipping Address): AddressType Elements**

Element	Descriptions	Data Type	Allowable Values	Required?
Name	Person's name associated with this shipping address. Character length and limitations: 32 single-byte characters	xs:string	See description.	Yes
Street1	First street address. Character length and limitations: 100 single-byte characters	xs:string	See description.	Yes
Street2	Second street address. Character length and limitations: 100 single-byte characters	xs:string	See description.	No
CityName	Name of city. Character length and limitations: 40 single-byte characters	xs:string	See description.	Yes
StateOrProvince	State or province. Character length and limitations: 40 single-byte characters	xs:string	See description.	Yes
PostalCode	U.S. Zip code or other country-specific postal code. Character length and limitations: 20 single-byte characters	xs:string	See description.	Yes
Country	Country code. Character limit: Two single-byte characters.	eb1:CountryCode Type xs:string	See <a href="#">Appendix B</a> .	Yes
Phone	Phone number. Character length and limit: 20 single-byte characters	xs:string	See description.	No

## SetExpressCheckoutResponse

Response to SetExpressCheckoutRequest.

## Fields

**TABLE 6.4** SetExpressCheckoutResponse Fields

Element	Description	Data Type	Value
Token	<p>A timestamped token by which you identify to PayPal that you are processing this payment with Express Checkout.</p> <p><b>IMPORTANT:</b> <i>The token expires after three hours.</i></p> <p>If you set the token in the SetExpressCheckout request, the value of the token in the response is identical to the value in the request.</p> <p>Character length and limitations: 20 single-byte characters</p>	xs:string	See description.

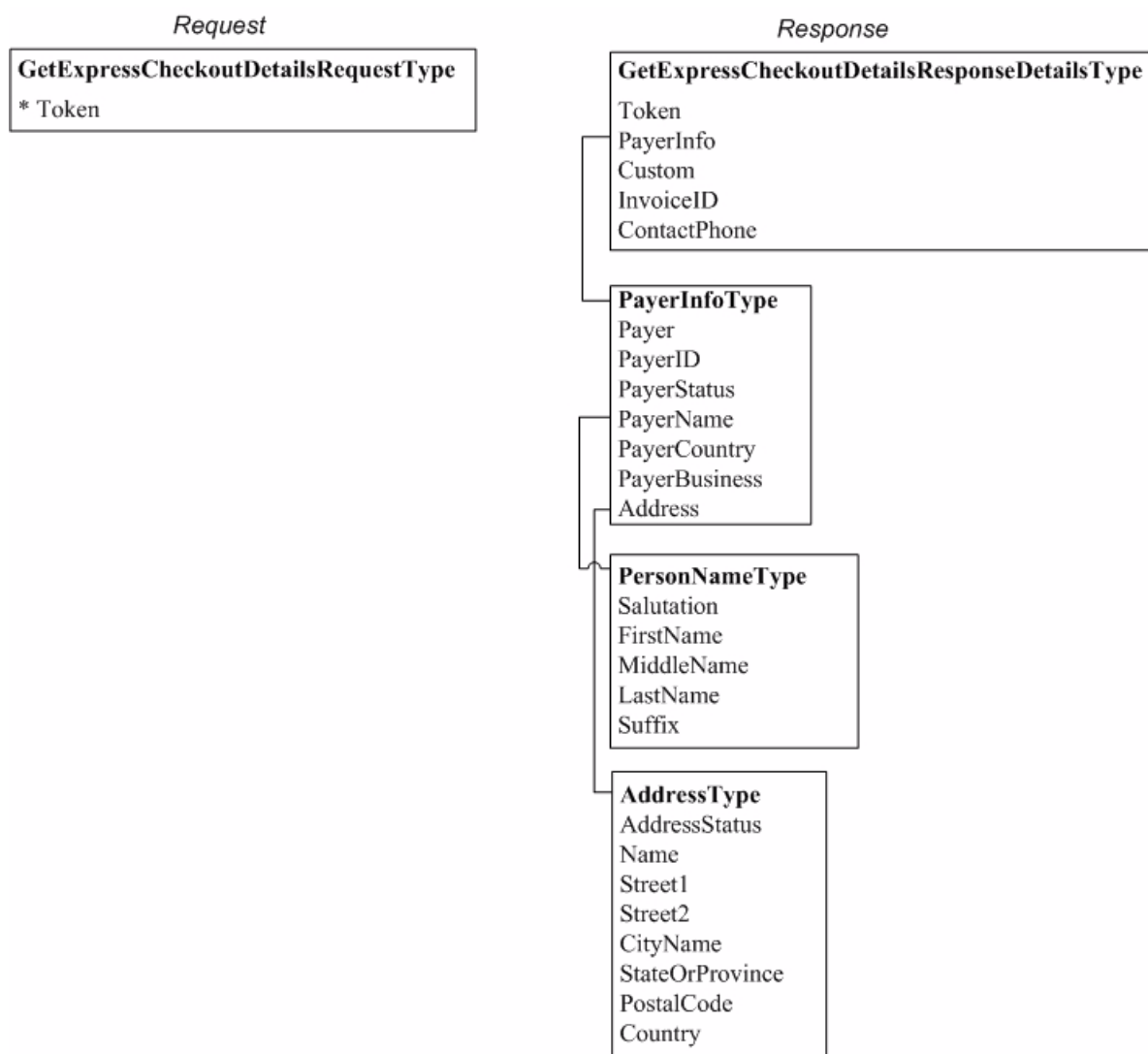
## GetExpressCheckoutDetails

GetExpressCheckoutDetails returns information about the customer, including name and address on file with PayPal.

### Diagram of GetExpressCheckoutDetails Types

The following diagram represents the composition of the GetExpressCheckoutDetailsRequestType and GetExpressCheckoutDetailsResponseType elements. Elements required in the request are indicated with an asterisk.

**FIGURE 6.2** GetExpressCheckout Types



## GetExpressCheckoutDetailsRequest

Obtain details about a payment to be processed by PayPal Express Checkout.

### Fields

**TABLE 6.5** *GetExpressCheckoutDetailsRequest Fields*

Element	Description	Data Type	Allowable Values	Required ?
Token	A timestamped token, the value of which was returned by SetExpressCheckout response. Character length and limitations: 20 single-byte characters	xs:string	An unexpired token	Yes

## GetExpressCheckoutDetailsResponse

Response to GetExpressCheckoutDetailsRequest.

### Fields

**TABLE 6.6** *GetExpressCheckoutDetailsResponse Fields*

Element	Description	Data Type	Possible Values
Token	The timestamped token value that was returned by SetExpressCheckout response and passed on GetExpressCheckoutDetails request. Character length and limitations: 20 single-byte characters	xs:string	See the description of “Token” on <a href="#">page 82</a> .
PayerInfo	Information about the payer.	ebl:PayerInfoType	See Table 6.7 on <a href="#">page 85</a> .
Custom	A free-form field for your own use, as set by you in the Custom element of SetExpressCheckout request. Character length and limitations: 256 single-byte alphanumeric characters	xs:string	See description.
InvoiceID	Your own invoice or tracking number, as set by you in the element of the same name in SetExpressCheckout request. Character length and limitations: 127 single-byte alphanumeric characters	xs:string	See description.

**TABLE 6.6 GetExpressCheckoutDetailsResponse Fields**

Element	Description	Data Type	Possible Values
ContactPhone	Payer's contact telephone number.	xs:string	See description.
<p><b>IMPORTANT:</b> PayPal returns a contact telephone number only if your Merchant account profile settings require that the buyer enter one.</p> <p>Character length and limitations: Field mask is XXX-XXX-XXXX (for US numbers) or +XXX XXXXXXXXX (for international numbers)</p>			

**NOTE:** Empty elements are returned if there is no representative data for the customer. For example, if the customer does not represent a business (and therefore has no business name on file with PayPal), the returned element has no value, like this:  
<PayerBusiness/>.

**NOTE:**

**TABLE 6.7 Response: PayerInfoType Elements**

Element	Description	Data Type	Possible Values
Payer	Email address of payer. Character length and limitations: 127 single-byte characters	ebl:EmailAddressType	See description.
PayerID	Unique PayPal customer account number. Character length and limitations: 17 single-byte characters maximum.	ebl:UserIDType	See description.
PayerStatus	Status of payer. Character length and limitations: 10 single-byte alphabetic characters.	ebl:PayPalUserStatusCodeType	verified unverified
PayerName	First and last name of payer	ebl:PersonNameType	See Table 6.8 on page 86.
PayerCountry	Payer's country of residence in the form of ISO standard 3166 two-character country codes. Character length and limitations: Two single-byte characters	ebl:CountryCodeType	See <a href="#">Appendix B</a> .

**TABLE 6.7 Response: PayerInfoType Elements**

Element	Description	Data Type	Possible Values
PayerBusiness	Payer's business name. Character length and limitations: 127 single-byte characters	xs:string	See description.
Address	Payer's shipping address address information.	xs:string	See Table 6.9 on page 86.

**TABLE 6.8 Response: PayerName Elements**

Element	Description	Data Type	Possible Values
Salutation	Payer's salutation. Character length and limitations: 20 single-byte characters	xs:string	See description.
FirstName	Payer's first name. Character length and limitations: 25 single-byte characters	ebl:PersonNameType	See description.
MiddleName	Payer's middle name. Character length and limitations: 25 single-byte characters	ebl:NameType	See description.
LastName	Payer's last name. Character length and limitations: 25 single-byte characters	ebl:NameType	See description.
Suffix	Payer's suffix. Character length and limitations: 12 single-byte characters	ebl:SuffixType	See description.

**TABLE 6.9 Response: AddressType Fields**

Element	Descriptions	Data Type	Possible Values
AddressStatus	Status of street address on file with PayPal	ebl:AddressStatus TypeCode	none Confirmed Unconfirmed
Name	Person's name associated with this address. Character length and limitations: 32 single-byte characters	xs:string	See description.

**TABLE 6.9 Response: AddressType Fields**

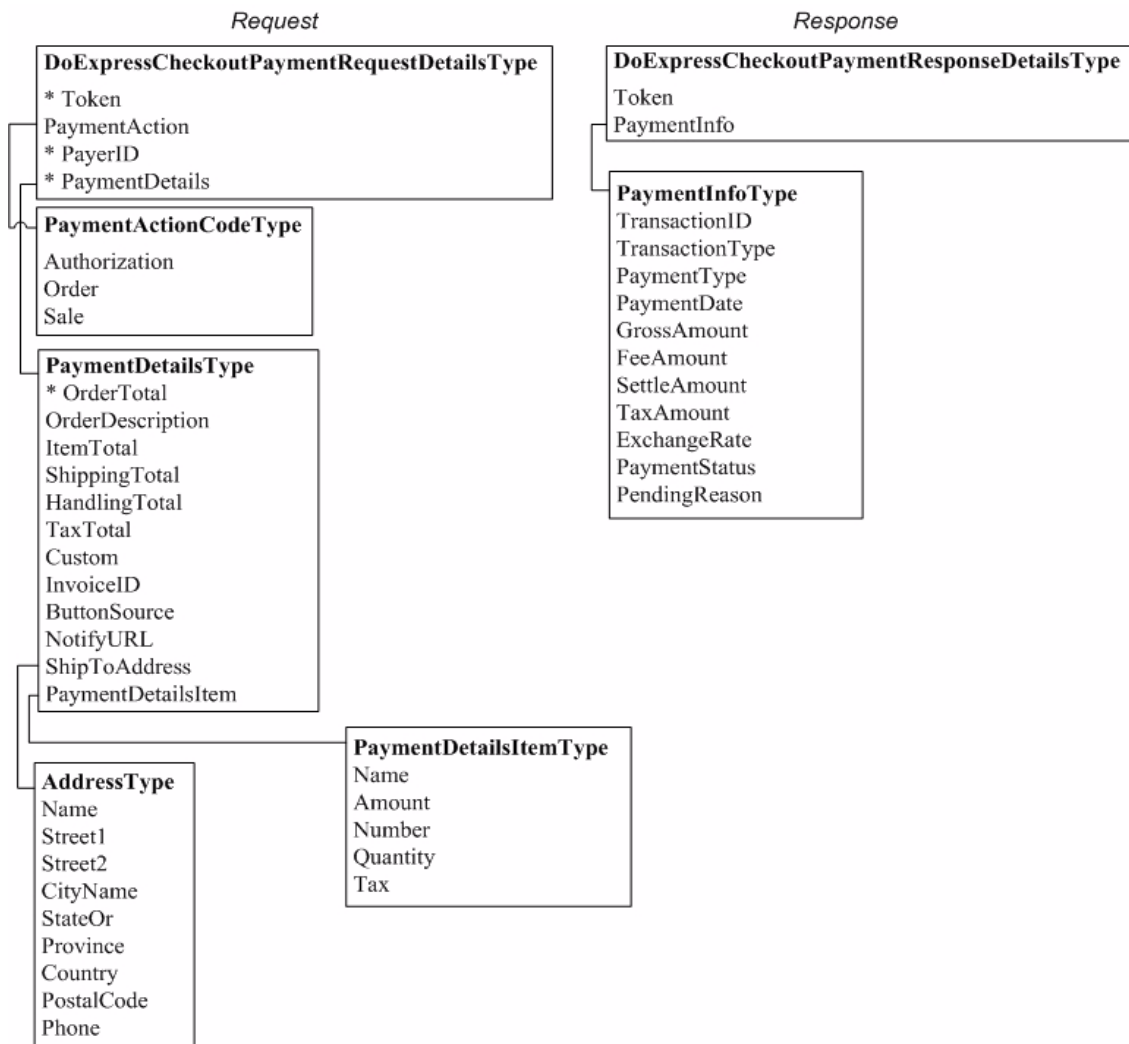
Element	Descriptions	Data Type	Possible Values
Street1	First street address. Character length and limitations: 100 single-byte characters	xs:string	See description.
Street2	Second street address. Character length and limitations: 100 single-byte characters	xs:string	See description.
CityName	Name of city. Character length and limitations: 40 single-byte characters	xs:string	See description.
StateOrProvince	State or province Character length and limitations: 40 single-byte characters	xs:string	See description.
PostalCode	U.S. Zip code or other country-specific postal code. Character length and limitations: 20 single-byte characters	xs:string	See description.
Country	Country code. Character limit: Two single-byte characters.	eb1:CountryCode Type xs:string	See <a href="#">Appendix B</a> .

## DoExpressCheckoutPayment

With DoExpressCheckoutPayment, you either obtain payment through Express Checkout for a final sale or request authorization for later capture of payment.

### Diagram of DoExpressCheckoutPayment Types

The following diagram represents the composition of the DoExpressCheckoutPaymentRequestType and DoExpressCheckoutPaymentResponseType elements. Elements required in the request are indicated with an asterisk.

**FIGURE 6.3 DoExpressCheckoutPayment Types**



## DoExpressCheckoutPaymentRequest

Request to obtain payment with PayPal Express Checkout.

**IMPORTANT:** PayPal requires that a merchant using Express Checkout display to the customer the same exact amount that the merchant sends to PayPal in the OrderTotal element with the DoExpressCheckoutPaymentRequest API.

### Fields

**TABLE 6.10** DoExpressCheckoutPaymentRequest Fields

Element	Description	Data Type	Allowable Values	Required ?
Token	The timestamped token value that was returned by SetExpressCheckout response and passed on GetExpressCheckoutDetails request. Character length and limitations: 20 single-byte characters	xs:string	See description.	Yes
PaymentAction	<p>How you want to obtain payment:</p> <ul style="list-style-type: none"> <li>• <code>Authorization</code> indicates that this payment is a basic authorization subject to settlement with PayPal Authorization &amp; Capture.</li> <li>• <code>Order</code> indicates that this payment is an order authorization subject to settlement with PayPal Authorization &amp; Capture.</li> <li>• <code>Sale</code> indicates that this is a final sale for which you are requesting payment.</li> </ul> <p><b>IMPORTANT:</b> You cannot set this value to <code>Sale</code> on SetExpressCheckout request and then change this value to <code>Authorization</code> on the final PayPal Express Checkout API DoExpressCheckoutPayment request.</p> <p>Character length and limit: Up to 13 single-byte alphabetic characters</p>	ebl:PaymentAction CodeType xs:token	Default: The transaction resulting from DoExpress Checkout Payment Request will be a final sale. Authorization Order Sale	No
PayerID	Encrypted PayPal customer account identification number as returned by GetExpressCheckoutDetails response. Character length and limitations: 127 single-byte characters.	ebl:UserIDType	See description.	Yes
PaymentDetails	Information about the payment	ebl:PaymentDetails Type	See Table 6.11 on page 90.	Yes

**TABLE 6.11 Request: PaymentDetailsType Fields**

Element	Description	Data Type	Allowable Values	Required ?
OrderTotal	<p>Total of order, including shipping, handling, and tax.</p> <p><b>NOTE:</b> Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator must be a comma (,). Equivalent to nine characters maximum for USD.</p> <p><b>IMPORTANT:</b> <i>You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.</i></p>	ebl:BasicAmount Type	See description.	Yes
ItemTotal	<p>Sum of cost of all items in this order.</p> <p>Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).</p>	ebl:BasicAmount Type	See description.	No

**TABLE 6.11 Request: PaymentDetailsType Fields**

Element	Description	Data Type	Allowable Values	Required ?
Shipping Total	Total shipping costs for this order.  <b>NOTE:</b> Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator must be a comma (,). Equivalent to nine characters maximum for USD.  <b>IMPORTANT:</b> <i>You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.</i>	eb1:BasicAmount Type	See description.	No

**TABLE 6.11 Request: PaymentDetailsType Fields**

Element	Description	Data Type	Allowable Values	Required ?
Handling Total	Total handling costs for this order.  <b>NOTE:</b> Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator must be a comma (,). Equivalent to nine characters maximum for USD.  <b>IMPORTANT:</b> <i>You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.</i>	eb1:BasicAmount Type	See description.	No

**TABLE 6.11 Request: PaymentDetailsType Fields**

Element	Description	Data Type	Allowable Values	Required ?
TaxTotal	Sum of tax for all items in this order.  <b>NOTE:</b> Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator must be a comma (,). Equivalent to nine characters maximum for USD.  <b>IMPORTANT:</b> <i>You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.</i>  Currency code must be set the same as for OrderTotal.	eb1:BasicAmount Type	See description.	No
Order Description	Description of items the customer is purchasing. Character length and limitations: 127 single-byte alphanumeric characters	xs:string	See description.	No
Custom	A free-form field for your own use. Character length and limitations: 256 single-byte alphanumeric characters	xs:string	See description.	No
InvoiceID	Your own invoice or tracking number. Character length and limitations: 127 single-byte alphanumeric characters	xs:string	See description.	No
ButtonSource	An identification code for use by third-party applications to identify transactions. Character length and limitations: 32 single-byte alphanumeric characters	xs:string	See description.	No

**TABLE 6.11 Request: PaymentDetailsType Fields**

Element	Description	Data Type	Allowable Values	Required ?
NotifyURL	Your URL for receiving Instant Payment Notification (IPN) about this transaction.	xs:string	See description.	No
<p><b>IMPORTANT:</b> <i>If you do not specify this value in the request, the notification URL from your Merchant Profile is used, if one exists.</i></p> <p>Character length and limitations: 2,048 single-byte alphanumeric characters</p>				
ShipToAddress	Address the order will be shipped to.	ebl:AddressType	See Table 6.12 on page 94.	No
PaymentDetailsItem	Details about each individual item included in the order	ebl:PaymentDetailsItemType	See Table 6.13 on page 95.	No

**NOTE:** The AddressType elements are required only if you include the Address element in the SOAP request.

**IMPORTANT:** *Any fields in the WSDL or XSD files that are not described here are ignored. For example, do not set CountryName.*

**TABLE 6.12 Request: ShipToAddress: AddressType Fields**

Element	Descriptions	Data Type	Allowable Values	Required ?
Name	Person's name associated with this address. Character length and limitations: 32 single-byte characters	xs:string	See description.	Yes
Street1	First street address. Character length and limitations: 100 single-byte characters	xs:string	See description.	Yes
Street2	Second street address. Character length and limitations: 100 single-byte characters	xs:string	See description.	No

**TABLE 6.12 Request: ShipToAddress: AddressType Fields**

Element	Descriptions	Data Type	Allowable Values	Required ?
CityName	Name of city. Character length and limitations: 40 single-byte characters	xs:string	See description.	Yes
StateOrProvince	State or province. Character length and limitations: 40 single-byte characters	xs:string	See description.	Yes
PostalCode	U.S. ZIP code or other country-specific postal code. Character length and limitations: 20 single-byte characters	xs:string	See description.	Yes
Country	Country code. Character limit: Two single-byte characters	eb1:CountryCode Type xs:string	See <a href="#">Appendix B</a> .	Yes
Phone	Phone number. Character length and limit: 20 single-byte characters	xs:string	See description.	No

**TABLE 6.13 Request: PaymentDetailsItem Type Fields**

Element	Description	Data Type	Allowable Values	Required ?
Name	Item name. Character length and limitations: 127 single-byte characters	xs:string	See description.	No

**TABLE 6.13 Request: PaymentDetailsItemType Fields**

Element	Description	Data Type	Allowable Values	Required ?
Amount	Cost of item  <b>NOTE:</b> Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator must be a comma (,). Equivalent to nine characters maximum for USD.  <b>IMPORTANT:</b> <i>You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.</i>	eb1:BasicAmount Type	See description.	No
Number	Item number. Character length and limitations: 127 single-byte characters	xs:string	See description.	No
Quantity	Item quantity. Character length and limitations: Any positive integer	xs:string	See description.	No



**TABLE 6.13 Request: PaymentDetailsItemType Fields**

Element	Description	Data Type	Allowable Values	Required ?
Tax	Item sales tax.  <b>NOTE:</b> Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator must be a comma (,). Equivalent to nine characters maximum for USD.  <b>IMPORTANT:</b> <i>You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.</i>	ebl:BasicAmount Type	See description.	No

## DoExpressCheckoutPaymentResponse

Response to DoExpressCheckoutPaymentRequest.

### Fields

**TABLE 6.14 DoExpressCheckoutPaymentResponse Fields**

Element	Description	Data Type	Possible Values
Token	The timestamped token value that was returned by SetExpressCheckout response and passed on GetExpressCheckoutDetails request. Character length and limitations: 20 single-byte characters	xs:string	See the description of “Token” on page 82.
PaymentInfo	Information about the payment.	ebl:PaymentInfo Type	See Table 6.15 on page 98.

**TABLE 6.15 Response: PaymentInfoType Elements**

Element	Description	Data Type	Possible Values
TransactionID	<p>Unique transaction ID of the payment.</p> <p><b>IMPORTANT:</b> <i>If the PaymentAction of the request was Authorization or Order, this value is your AuthorizationID for use with the Authorization &amp; Capture APIs.</i></p> <p>Character length and limitations: 19 single-byte characters</p>	xs:string	Transaction-specific
Transaction Type	<p>The type of transaction</p> <p>Character length and limitations: 15 single-byte characters</p>	ns:Payment TransactionCode Type	cart express-checkout
PaymentType	<p>Indicates whether the payment is instant or delayed.</p> <p>Character length and limitations: Seven single-byte characters</p>	ebl:PaymentCode Type xs:string	none echeck instant
PaymentDate	Time/date stamp of payment	xs:dateTime	Transaction-specific
GrossAmount	<p>The final amount charged, including any shipping and taxes from your Merchant Profile.</p> <p>Character length and limitations: Does not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator is a period (.), and the thousands separator is a comma (,). Equivalent to nine characters maximum for USD.</p>	ebl:BasicAmount Type	Transaction-specific
FeeAmount	<p>PayPal fee amount charged for the transaction</p> <p>Character length and limitations: Does not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator is a period (.), and the thousands separator is a comma (,). Equivalent to nine characters maximum for USD.</p>	ebl:BasicAmount Type	Transaction-specific

**TABLE 6.15 Response: PaymentInfoType Elements**

Element	Description	Data Type	Possible Values
SettleAmount	Amount deposited in your PayPal account after a currency conversion.	ebl:BasicAmount Type	Transaction-specific
TaxAmount	Tax charged on the transaction. Character length and limitations: Does not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator is a period (.), and the thousands separator is a comma (,). Equivalent to nine characters maximum for USD.	ebl:BasicAmount Type xs:string	Transaction-specific
ExchangeRate	Exchange rate if a currency conversion occurred. Relevant only if your are billing in their non-primary currency. If the customer chooses to pay with a currency other than the non-primary currency, the conversion occurs in the customer's account. Character length and limitations: a decimal that does not exceed 17 characters, including decimal point	xs:string	Transaction-specific
PaymentStatus	Status of the payment: Completed: The payment has been completed, and the funds have been added successfully to your account balance. Pending: The payment is pending. See the PendingReason element for more information.	ebl:PaymentStatus CodeType xs:token	Completed Pending

**TABLE 6.15 Response: PaymentInfoType Elements**

Element	Description	Data Type	Possible Values
PendingReason	<p>The reason the payment is pending:</p> <p>none: No pending reason</p> <p>address: The payment is pending because your customer did not include a confirmed shipping address and your Payment Receiving Preferences is set such that you want to manually accept or deny each of these payments. To change your preference, go to the <b>Preferences</b> section of your <b>Profile</b>.</p> <p>echeck: The payment is pending because it was made by an eCheck that has not yet cleared.</p> <p>intl: The payment is pending because you hold a non-U.S. account and do not have a withdrawal mechanism. You must manually accept or deny this payment from your <b>Account Overview</b>.</p> <p>multi-currency: You do not have a balance in the currency sent, and you do not have your <b>Payment Receiving Preferences</b> set to automatically convert and accept this payment. You must manually accept or deny this payment.</p> <p>verify: The payment is pending because you are not yet verified. You must verify your account before you can accept this payment.</p> <p>other: The payment is pending for a reason other than those listed above. For more information, contact PayPal customer service.</p>	<p>ebl:PendingStatus</p> <p>CodeType</p> <p>xs:token</p>	<p>none</p> <p>address</p> <p>echeck</p> <p>intl</p> <p>multi-currency</p> <p>verify</p> <p>other</p>

# 7

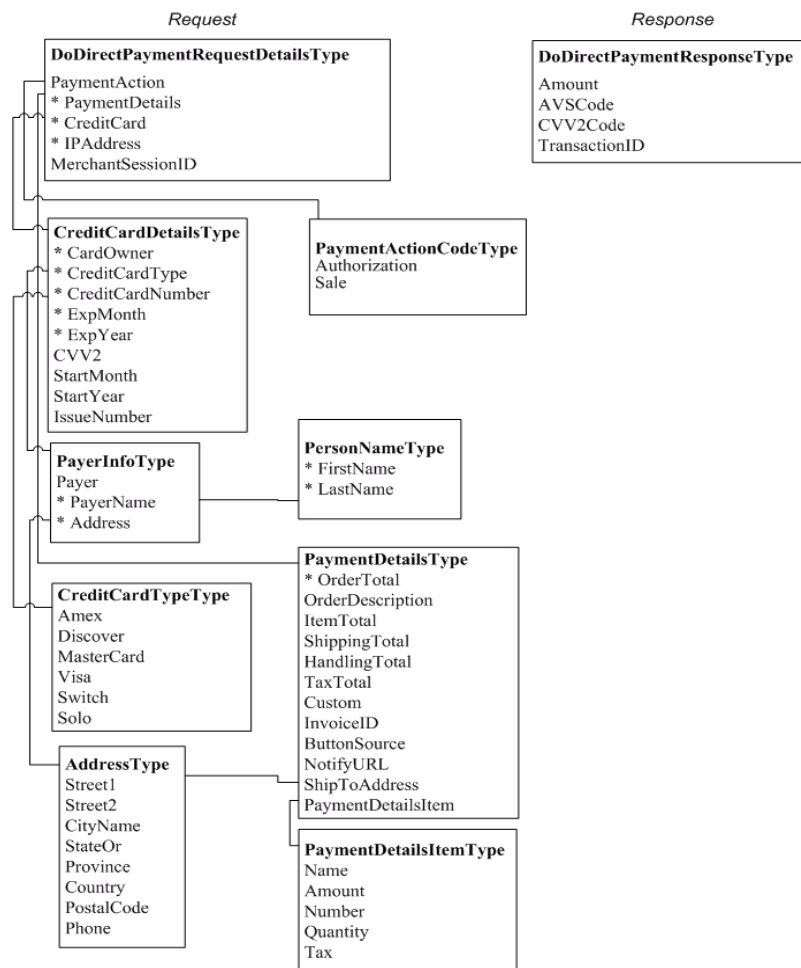
## Direct Payment API

With the Direct Payment API, you can obtain payment through PayPal directly from a buyer's credit card without the buyer logging into PayPal.

### Diagram of DoDirectPayment Types

The following diagram represents the composition of the DoDirectPaymentRequestType and DoDirectPaymentResponseType elements. Elements required in the request are indicated with an asterisk.

**FIGURE 7.1 DoDirectPayment Types**



## DoDirectPaymentRequest

Request to use PayPal Direct Payment to obtain payment.

You must include the `PaymentAction` element in `DoDirectPaymentRequest`. Allowable values for the `PaymentAction` element are `Sale` or `Authorization`:

- Set `PaymentAction` to `Sale` if the buyer's order is final (for example, if the total cost of the order is complete with shipping, handling and tax charges). This transaction is your payment, and you expect no additional charge to the buyer.
- Set `PaymentAction` to `Authorization` if the total cost of the order at point of sale is not complete for some reason (such as unknown shipping charges) and you expect to capture funds after checkout is complete. You can then use PayPal Authorization & Capture to obtain payment.

In either case, besides the `PaymentAction` element, `DoDirectPaymentRequest` requires additional elements, such as the amount of the transaction, IP address of the buyer's browser, credit card number, type, and expiration date, and information about both the payer and the payment.

## Fields

**TABLE 7.1** *DoDirectPaymentRequest Fields*

Element	Description	Data Type	Allowable Values	Required ?
<code>PaymentAction</code>	<p>How you want to obtain payment:</p> <ul style="list-style-type: none"> <li>• <code>Authorization</code> indicates that this payment is a basic authorization subject to settlement with PayPal Authorization &amp; Capture.</li> <li>• <code>Sale</code> indicates that this is a final sale for which you are requesting payment.</li> </ul> <p>Character length and limit: Up to 13 single-byte alphabetic characters</p>	<code>ebl:PaymentAction</code> <code>CodeType</code> <code>xs:token</code>	<p>Default: The transaction resulting from <code>DoDirectPaymentRequest</code> will be a final sale.</p> <p><code>Authorization</code></p> <p><code>Sale</code></p> <p><b>NOTE:</b> Order is not allowed for Direct Payment.</p>	No
<code>CreditCard</code>	Information about the credit card to be charged.	<code>ebl:CreditCardDetailsType</code>	See Table 7.2 on page 103.	Yes
<code>PaymentDetails</code>	Information about the payment	<code>ebl:PaymentDetailsType</code>	See Table 7.3 on page 105.	Yes

**TABLE 7.1 DoDirectPaymentRequest Fields**

Element	Description	Data Type	Allowable Values	Required ?
IPAddress	<p>IP address of the payer's browser as recorded in its HTTP request to your website.</p> <p><b>IMPORTANT:</b> <i>PayPal records this IP addresses as a means to detect possible fraud.</i></p> <p>Character length and limitations: 15 single-byte characters, including periods, in dotted-quad format: ????.????.???.</p>	xs:string	Any valid Internet Protocol address.	Yes
Merchant SessionId	<p>Your customer session identification token.</p> <p><b>IMPORTANT:</b> <i>PayPal records this optional session identification token as an additional means to detect possible fraud.</i></p> <p>Character length and limitations: 64 single-byte numeric characters</p>	xs:string		No

**TABLE 7.2 CreditCardDetailsType Fields**

Element	Description	Data Type	Allowable Values	Required ?
CreditCardType	<p>Type of credit card.</p> <p>Character length and limitations: Up to ten single-byte alphabetic characters.</p> <p>If the credit card type is Switch or Solo:</p> <ol style="list-style-type: none"> <li>1. The value of PaymentAction must be Authorization.</li> <li>2. The currencyId must be GBP.</li> </ol>	ebl:CreditCardType Type	<p>Visa</p> <p>MasterCard</p> <p>Discover</p> <p>Amex</p> <p>Switch. See important note in description.</p> <p>Solo. See important note in description.</p>	Yes

**TABLE 7.2 CreditCardDetailsType Fields**

Element	Description	Data Type	Allowable Values	Required ?
CreditCard Number	Credit card number Character length and limitations: numeric characters only. No spaces or punctuation. Must conform with modulo and length required by each credit card type.	xs:string	See description.	Yes
ExpMonth	Credit card expiration month Character length and limitations: Two single-byte numeric characters, including leading zero.	xs:int	See description.	Yes
ExpYear	Credit card expiration year Character length and limitations: Four single-byte numeric characters.	xs:int	See description.	Yes
CVV2	Card Verification Value, version 2. <b>NOTE:</b> You must include a CVV2 value for those credit cards that use CVV2. Required for Visa, MasterCard, American Express, and Discover cards. Other card types might not require a CVV2 value. Character length for Visa, MasterCard, and Discover: exactly three digits. Character length for American Express: exactly four digits. <b>IMPORTANT:</b> To comply with credit card processing regulations, once a transaction has been completed, you must not store the value of CVV2.	xs:string	See description.	No. See note in description.
CardOwner	Details about the owner of the credit card.	ns:PayerInfoType	See Table 7.7 on page 112.	Yes
StartMonth	Month that Switch or Solo card was issued. Character length: two-digit, zero-filled if necessary.	xs:int	See description.	No.
StartYear	Year that Switch or Solo card was issued. Character length: four digits.	xs:int	See description.	No.
IssueNumber	Issue number of Switch or Solo card. Character length: two numeric digits maximum.	xs:int	See description.	No.



**TABLE 7.3 Request: PaymentDetailsType Fields**

Element	Description	Data Type	Allowable Values	Required?
OrderTotal	<p>Total of order, including shipping, handling, and tax.</p> <p>Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).</p> <p><b>IMPORTANT:</b> <i>You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.</i></p>	<p>ebl:BasicAmount Type</p>	See description.	Yes
ItemTotal	<p>Sum of cost of all items in this order.</p> <p>Character length and limitations: 127 single-byte characters</p>	<p>ebl:BasicAmount Type</p>	See description.	No
ShippingTotal	<p>Total shipping costs for this order.</p> <p>Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).</p> <p><b>IMPORTANT:</b> <i>You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.</i></p>	<p>ebl:BasicAmount Type</p>	See description.	No

**TABLE 7.3 Request: PaymentDetailsType Fields**

Element	Description	Data Type	Allowable Values	Required?
HandlingTotal	<p>Total handling costs for this order.</p> <p>Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).</p> <p><b>IMPORTANT:</b> <i>You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.</i></p>	ebl:BasicAmount Type	See description.	No
TaxTotal	<p>Sum of tax for all items in this order.</p> <p>Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).</p> <p><b>IMPORTANT:</b> <i>You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.</i></p>	ebl:BasicAmount Type	See description.	No
Order Description	<p>Description of items the customer is purchasing.</p> <p>Character length and limitations: 127 single-byte alphanumeric characters</p>	xs:string	See description.	No
Custom	<p>A free-form field for your own use.</p> <p>Character length and limitations: 256 single-byte alphanumeric characters</p>	xs:string	See description.	No
InvoiceID	<p>Your own invoice or tracking number, as set by you in field of the same name in SetExpressCheckout request.</p> <p>Character length and limitations: 127 single-byte alphanumeric characters</p>	xs:string	See description.	No

**TABLE 7.3 Request: PaymentDetailsType Fields**

Element	Description	Data Type	Allowable Values	Required?
ButtonSource	An identification code for use by third-party applications to identify transactions. Character length and limitations: 32 single-byte alphanumeric characters	xs:string	See description.	No
NotifyURL	Your URL for receiving Instant Payment Notification (IPN) about this transaction.	xs:string	See description.	No
<p><b>IMPORTANT:</b> <i>If you do not specify this URL in the request, the notification URL from your Merchant Profile is used, if one exists.</i></p> <p>Character length and limitations: 2,048 single-byte alphanumeric characters</p>				
ShipToAddress	Address the order will be shipped to.	ebl:AddressType	See Table 7.4 on page 107.	No
PaymentDetailsItem	Details about each individual item included in the order	ebl:PaymentDetailsItemType	See Table 7.6 on page 111.	No

**IMPORTANT:** *Any fields in the WSDL or XSD files that are not described here are ignored. For example, do not set CountryName.*

**TABLE 7.4 Request: ShipToAddress: AddressType Fields**

Element	Descriptions	Data Type	Allowable Values	Required ?
Name	Person's name associated with this address. Character length and limitations: 32 single-byte characters	xs:string	See description.	Yes
Street1	First street address. Character length and limitations: 100 single-byte characters	xs:string	See description.	Yes
Street2	Second street address. Character length and limitations: 100 single-byte characters	xs:string	See description.	No

**TABLE 7.4 Request: ShipToAddress: AddressType Fields**

Element	Descriptions	Data Type	Allowable Values	Required ?
CityName	Name of city. Character length and limitations: 40 single-byte characters	xs:string	See description.	Yes
StateOrProvince	State or province. Character length and limitations: 40 single-byte characters	xs:string	See Table 7.5 on page 103	No
PostalCode	U.S. ZIP code or other country-specific postal code. Character length and limitations: 20 single-byte characters	xs:string	See description.	No
Country	Country code. Character limit: Two single-byte characters	eb1:CountryCode Type xs:string	See <a href="#">Appendix B</a> .	Yes
Phone	Phone number. Character length and limit: 20 single-byte characters	xs:string	See description	No

**TABLE 7.5 Abbreviations for Canadian Provinces and U.S. States**

Canadian Province or U.S. State	Abbreviation
Alberta	AB
British Columbia	BC
Manitoba	MB
New Brunswick	NB
Newfoundland and Labrador	NF
Northwest_Territories	NT
Nova_Scotia	NS
Nunavut	NU
Ontario	ON
Prince_Edward_Island	PE
Quebec	QC
Saskatchewan	SK
Yukon	YK



**TABLE 7.5 Abbreviations for Canadian Provinces and U.S. States**

Canadian Province or U.S. State	Abbreviation
Alabama	AL
Alaska	AK
American_Samoa	AS
Arizona	AZ
Arkansas	AR
California	CA
Colorado	CO
Connecticut	CT
Delaware	DE
District Of Columbia	DC
Federated States Of Micronesia	FM
Florida	FL
Georgia	GA
Guam	GU
Hawaii	HI
Idaho	ID
Illinois	IL
Indiana	IN
Iowa	IA
Kansas	KS
Kentucky	KY
Louisiana	LA
Maine	ME
Marshall_Islands	MH
Maryland	MD
Massachusetts	MA
Michigan	MI
Minnesota	MN

**TABLE 7.5 Abbreviations for Canadian Provinces and U.S. States**

Canadian Province or U.S. State	Abbreviation
Mississippi	MS
Missouri	MO
Montana	MT
Nebraska	NE
Nevada	NV
New Hampshire	NH
New Jersey	NJ
New Mexico	NM
New York	NY
North Carolina	NC
North Dakota	ND
Northern Mariana Islands	MP
Ohio	OH
Oklahoma	OK
Oregon	OR
Palau	PW
Pennsylvania	PA
Puerto Rico	PR
Rhode Island	RI
South Carolina	SC
South Dakota	SD
Tennessee	TN
Texas	TX
Utah	UT
Vermont	VT
Virgin_Islands	VI
Virginia	VA
Washington	WA



**TABLE 7.5 Abbreviations for Canadian Provinces and U.S. States**

Canadian Province or U.S. State	Abbreviation
West_Virginia	WV
Wisconsin	WI
Wyoming	WY
Armed_Forces_Americas	AA
Armed_Forces	AE
Armed_Forces_Pacific	AP

**TABLE 7.6 Request: PaymentDetailsItemType Fields**

Element	Description	Data Type	Allowable Values	Required ?
Name	Item name. Character length and limitations: 127 single-byte characters	xs:string	See description.	No
Amount	Cost of item Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).	eb1:BasicAmount Type	See description.	No
<p><b>IMPORTANT:</b> <i>You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.</i></p>				
Number	Item number. Character length and limitations: 127 single-byte characters	xs:string	See description.	No
Quantity	Item quantity. Character length and limitations: Any positive integer	xs:string	See description.	No

**TABLE 7.6 Request: PaymentDetailsItemType Fields**

Element	Description	Data Type	Allowable Values	Required ?
Tax	Item sales tax. Character length and limitations: any valid currency amount. Currency code is set the same as for OrderTotal.	eb1:BasicAmount Type	See description.	No

**TABLE 7.7 CardOwner: PayerInfoType Fields**

Element	Description	DataType	Allowable Values	Required ?
Payer	Email address of payer. Character length and limitations: 127 single-byte characters	ns:EmailAddress Type	See description.	No
FirstName	Payer's first name. Character length and limitations: 25 single-byte characters	ns:PersonName Type	See description.	Yes
LastName	Payer's last name. Character length and limitations: 25 single-byte characters	ns:PersonName Type	See description.	Yes
Address	Payer's billing address information	ns:AddressType	See Table 7.8 on page 112.	Yes

**TABLE 7.8 CardOwner: AddressType Fields**

Element	Description	DataType	Allowable Values	Required ?
Street1	First street address. Character length and limitations: 100 single-byte characters	xs:string	See description.	Yes
Street2	Second street address. Character length and limitations: 100 single-byte characters	xs:string	See description.	No
CityName	Name of city. Character length and limitations: 40 single-byte characters	xs:string	See description.	Yes





**TABLE 7.8 CardOwner: AddressType Fields**

Element	Description	DataType	Allowable Values	Required ?
StateOr Province	State or province. Character length and limitations: 40 single-byte characters	xs:string	See description.	Yes
Country	Country code. Character limit: Two single-byte characters	eb1:CountryCode Type xs:string	See <a href="#">Appendix 1</a> .	Yes
PostalCode	U.S. ZIP code or other country-specific postal code. Character length and limitations: 20 single-byte characters	xs:string	See description.	Yes
Phone	Phone number. Character length and limit: 20 single-byte characters	xs:string	See description.	No

## DoDirectPaymentResponse

Response to DoDirectPaymentRequest.

The Direct Payment API response contains the TransactionID element. In the case of a final Sale, TransactionID is your record of the transaction processed with PayPal. In the case of an Authorization, TransactionID is your key to capturing funds with PayPal Authorization & Capture.

DoDirectPaymentResponse also returns the result of checking the buyer's postal address and credit card number (as submitted by you with DoDirectPaymentRequest) against the U.S. banking industry standard Address Verification System (AVS) and Credit Card Verification (CVV2) system.

## Fields

**TABLE 7.9 DoDirectPaymentResponse Fields**

Element	Description	Data Type	Possible Values
TransactionID	<p>Unique transaction ID of the payment.</p> <p><b>NOTE:</b> If the PaymentAction of the request was Authorization, the value of TransactionID is your AuthorizationID for use with the Authorization &amp; Capture APIs.</p> <p>Character length and limitations: 19 single-byte characters</p>	xs:string	See description.
Amount	The amount of the payment as specified by you on DoDirectPaymentRequest.	ebl:BasicAmountType	See description.
AVSCode	<p>Address Verification System response code.</p> <p>Character limit: One single-byte alphanumeric character</p>	xs:string	See <a href="#">Table 7.10, "AVS Response Codes"</a> on page 108.
CVV2Code	Result of the CVV2 check by PayPal.	xs:string	See <a href="#">Table 7.11, "CVV2 Response Codes"</a> on page 109.

**TABLE 7.10 AVS Response Codes**

<b>AVS Code</b>	<b>Meaning</b>	<b>Matched Details</b>
A	Address	Address only (no ZIP)
B	International “A”	Address only (no ZIP)
C	International “N”	None
D	International “X”	Address and Postal Code
E	Not allowed for MOTO (Internet/Phone) transactions	Not applicable
F	UK-specific “X”	Address and Postal Code
G	Global Unavailable	Not applicable
I	International Unavailable	Not applicable
N	No	None
P	Postal (International “Z”)	Postal Code only (no Address)
R	Retry	Not applicable
S	Service not Supported	Not applicable
U	Unavailable	Not applicable
W	Whole ZIP	Nine-digit ZIP code (no Address)
X	Exact match	Address and nine-digit ZIP code
Y	Yes	Address and five-digit ZIP
Z	ZIP	Five-digit ZIP code (no Address)
All others	Error	Not applicable

**TABLE 7.11 CVV2 Response Codes**

<b>CVV2 Code</b>	<b>Meaning</b>	<b>Matched Details</b>
M	Match	CVV2
N	No match	None

**TABLE 7.11 CVV2 Response Codes**

<b>CVV2 Code</b>	<b>Meaning</b>	<b>Matched Details</b>
P	Not Processed	Not applicable
S	Service not Supported	Not applicable
U	Unavailable	Not applicable
X	No response	Not applicable
All others	Error	Not applicable





# 8

## Authorization & Capture API

The Authorization & Capture API consists of individual requests and responses, as shown below.

**TABLE 8.1** *Authorization & Capture API Names, Purposes, and Types of Authorization*

API	Purpose	Used With Type of Authorization
1. DoCapture	Settle an order or previously authorized transaction and obtain payment for either the complete amount or any portion of it.	Order and Basic
2. DoAuthorization	Authorize an order that can be fulfilled over 29 days.	Order only
3. DoVoid	Void an original authorization or order	Order and Basic
4. DoReauthorization	Reauthorize a previously authorized transaction	Basic only

### Funds Availability

Both DoAuthorization and DoReauthorization check the availability of a PayPal member's funds to obtain another honor period or to make a payment higher than you originally authorized, up to 115% of the originally authorized amount (not to exceed an increase of \$75 USD).

## DoCapture

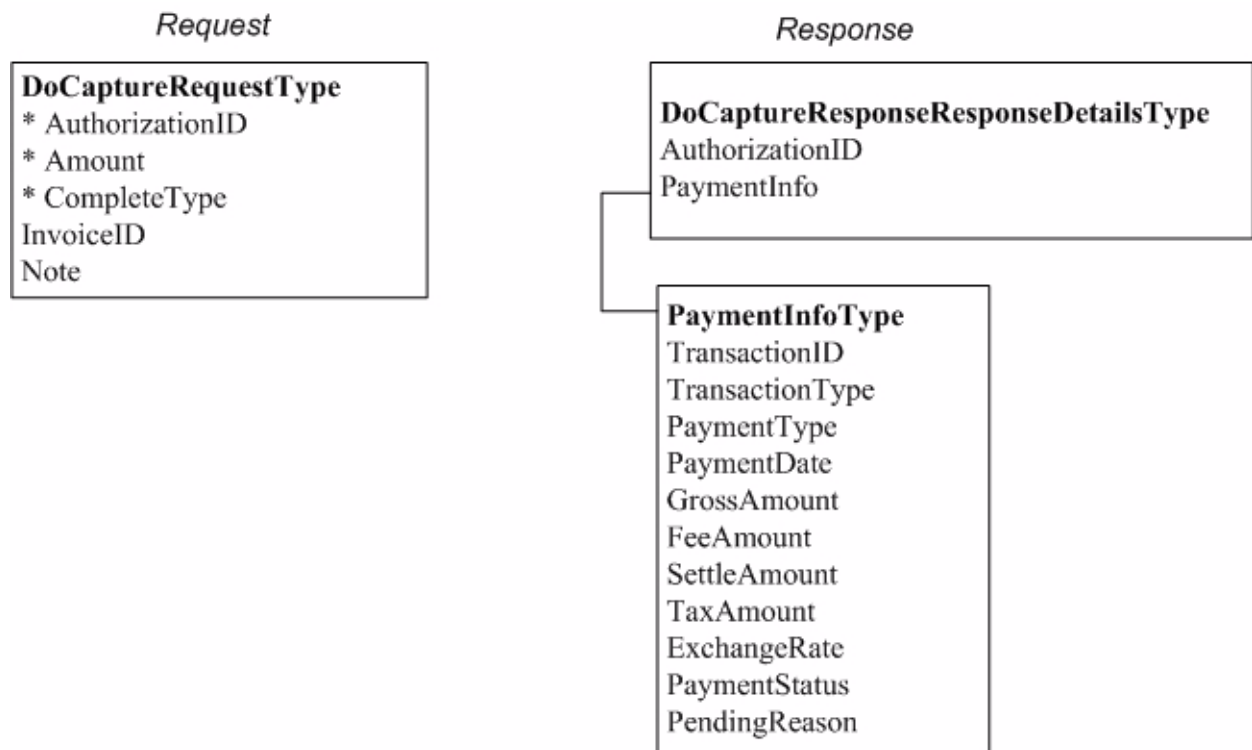
DoCaptureRequest is your request to completely or partially settle an order, an authorization, or reauthorization.

**NOTE:** DoCaptureRequest is for use with both basic and order authorizations.

### Diagram of DoCapture Types

The following diagram represents the composition of the DoCaptureRequestType and DoCaptureResponseType elements. Elements required in the request are marked with an asterisk.

**FIGURE 8.1** DoCapture Types





## DoCaptureRequest

Request to capture funds from a PayPal member's account.

### Fields

**TABLE 8.2 DoCaptureRequest Fields**

Element	Description	Data Type	Allowable Values	Required?
Authorization ID	<p>The authorization identification number of the payment you want to capture. This can be an order number, an order authorization number, or a reauthorization number.</p> <p>Character length and limits: 19 single-byte characters maximum.</p>	xs:string	See description.	Yes
Amount	<p>Amount to capture.</p> <p>Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).</p>	ebl:BasicAmount Type	See description.	Yes
CompleteType	<p>The default is Complete, which indicates if this capture is the last capture you intend to make. Otherwise, set to NotComplete</p> <p><b>IMPORTANT:</b> <i>If Complete, any remaining amount of the original reauthorized transaction is automatically voided.</i></p> <p>Character length and limits: 12 single-byte alphanumeric characters</p>	ebl:Complete CodeType	Default: Complete NotComplete	Yes

**TABLE 8.2 DoCaptureRequest Fields**

Element	Description	Data Type	Allowable Values	Required?
InvoiceID	<p>Your invoice number or other identification number.</p> <p><b>IMPORTANT:</b> <i>The InvoiceID value is recorded only if the authorization you are capturing is an order authorization, not a basic authorization.</i></p> <p>Character length and limits: 127 single-byte alphanumeric characters</p>	xs:string	See description.	No
Note	<p>An informational note about this settlement that is displayed to the payer in email and in his transaction history.</p> <p>Character length and limits: 255 single-byte characters</p>	xs:string	See description.	No

## DoCaptureResponse

Response to DoCaptureRequest.

### Fields

**TABLE 8.3 DoCaptureResponse Fields**

Element	Description	Data Type	Possible Values
AuthorizationID	The authorization identification number you specified in the request. Character length and limits: 19 single-byte characters maximum	xs:string	See description.
PaymentInfo	Information about the payment.	ebl:PaymentInfo Type	See Table 8.4 on page 123.

**TABLE 8.4 Response: PaymentInfoType Elements**

Element	Description	Data Type	Possible Values
TransactionID	Unique transaction ID of the payment. Character length and limitations: 17 single-byte characters	xs:string	Transaction-specific

**TABLE 8.4 Response: PaymentInfoType Elements**

Element	Description	Data Type	Possible Values
Parent TransactionID	Parent or related transaction identification number. This field is populated for the following transaction types: Reversal Capture of an authorized transaction. Reversal Reauthorization of a transaction. Capture of an order. The value of ParentTransactionID is the original OrderID. Authorization of an order. The value of ParentTransactionID is the original OrderID. Capture of an order authorization. Void of an order. The value of ParentTransactionID is the original OrderID. Character length and limits: 16 digits in xxxx-xxxx-xxxx-xxxx format		
ReceiptID	Receipt identification number Character length and limits: 16 digits in xxxx-xxxx-xxxx-xxxx format	xs:string	See description
Transaction Type	The type of transaction cart express-checkout Character length and limitations: 15 single-byte characters	ns:Payment TransactionCode Type	cart express-checkout
PaymentType	Indicates whether the payment is instant or delayed. Character length and limitations: Seven single-byte characters	ebl:PaymentCode Type xs:string	none echeck instant
PaymentDate	Time/date stamp of payment	xs:dateTime	Transaction-specific
GrossAmount	The final amount charged, including any shipping and taxes from your Merchant Profile.	ebl:BasicAmountType	Transaction-specific
FeeAmount	PayPal fee amount charged for the transaction	ebl:BasicAmountType	Transaction-specific
SettleAmount	Amount deposited in your PayPal account after a currency conversion.	ebl:BasicAmountType	Transaction-specific

**TABLE 8.4 Response: PaymentInfoType Elements**

Element	Description	Data Type	Possible Values
TaxAmount	Tax charged on the transaction, if any	eb1:BasicAmount Type xs:string	Transaction-specific
ExchangeRate	Exchange rate if a currency conversion occurred. Relevant only if you are billing in the customer's non-primary currency. If the customer chooses to pay with a currency other than the non-primary currency, the conversion occurs in the customer's account.  Character length and limitations: a decimal multiplier	xs:string	Transaction-specific
PaymentStatus	Status of the payment. The status of the payment:  None: No status  Canceled-Reversal: This means a reversal has been canceled. For example, you won a dispute with the customer, and the funds for the transaction that was reversed have been returned to you.  Completed: The payment has been completed, and the funds have been added successfully to your account balance.  Denied: You denied the payment. This happens only if the payment was previously pending because of possible reasons described for the PendingReason element.  Expired: the authorization period for this payment has been reached.  Failed: The payment has failed. This happens only if the payment was made from your customer's bank account.  Pending: The payment is pending. See the PendingReason field for more information.  Refunded: You refunded the payment.  Reversed: A payment was reversed due to a chargeback or other type of reversal. The funds have been removed from your account balance and returned to the buyer. The reason for the reversal is specified in the ReasonCode field.  Processed: A payment has been accepted.  Voided: An authorization for this transaction has been voided.	eb1:PaymentStatus CodeType xs:token	None Canceled-Reversal Completed Denied Expired Failed Pending Refunded Reversed Processed Voided

**TABLE 8.4 Response: PaymentInfoType Elements**

Element	Description	Data Type	Possible Values
PendingReason	<p><b>NOTE:</b> PendingReason is returned in the response only if PaymentStatus is Pending.</p> <p>The reason the payment is pending:</p> <p>none: No pending reason</p> <p>address: The payment is pending because your customer did not include a confirmed shipping address and your Payment Receiving Preferences is set such that you want to manually accept or deny each of these payments. To change your preference, go to the <b>Preferences</b> section of your <b>Profile</b>.</p> <p>echeck: The payment is pending because it was made by an eCheck that has not yet cleared.</p> <p>intl: The payment is pending because you hold a non-U.S. account and do not have a withdrawal mechanism. You must manually accept or deny this payment from your <b>Account Overview</b>.</p> <p>multi-currency: You do not have a balance in the currency sent, and you do not have your <b>Payment Receiving Preferences</b> set to automatically convert and accept this payment. You must manually accept or deny this payment.</p> <p>verify: The payment is pending because you are not yet verified. You must verify your account before you can accept this payment.</p> <p>other: The payment is pending for a reason other than those listed above. For more information, contact PayPal Customer Service.</p>	ebl:PendingStatus CodeType xs:token	none address echeck intl multi-currency verify other

## DoAuthorization

DoAuthorizationRequest is your request to authorize a customer order that can be fulfilled within 29 days. You use DoAuthorizationRequest when you are ready to ship goods to your customer. After you ship, you can capture funds with DoCapture.

**NOTE:** DoAuthorizationRequest is for use only with order authorizations, not basic authorizations.

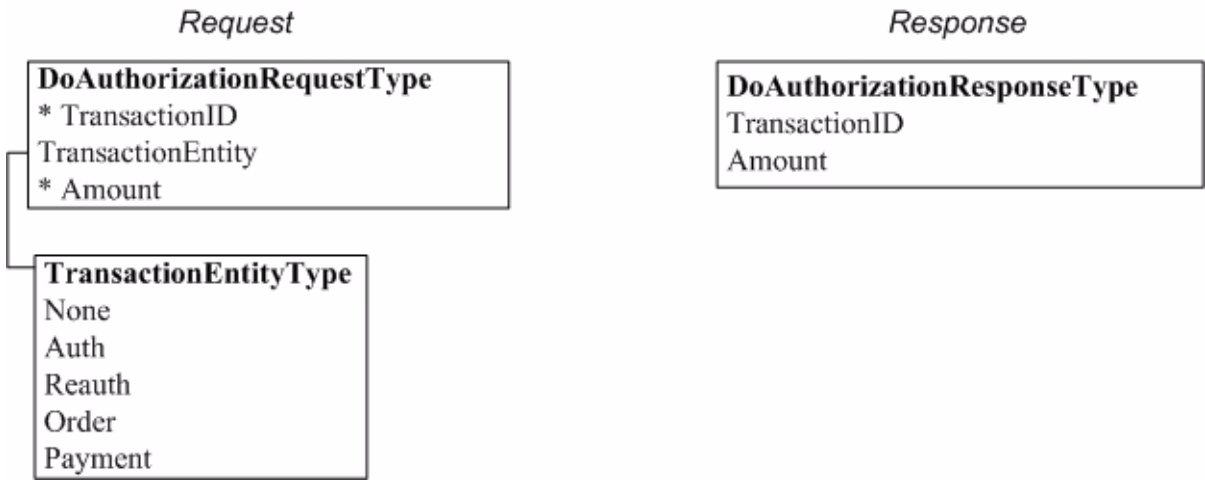
To use DoAuthorization you must have previously created a customer order. You can create an order in several ways:

- With the DoExpressCheckoutPaymentRequest or DoDirectPaymentRequest PaymentAction element set to Order.
- With a shopping cart or PayPal Website Payments transaction with the paymentaction HTML variable set to order.

### Diagram of DoAuthorization Types

The following diagram represents the composition of the DoAuthorizationRequestType and DoAuthorizationResponseType elements. Elements required in the request are marked with an asterisk.

**FIGURE 8.2** DoAuthorization Types



## DoAuthorizationRequest

Request to authorize all or part of a customer order amount.

### Fields

**TABLE 8.5 DoAuthorizationRequest Fields**

Element	Description	Data Type	Allowable Values	Required?
TransactionID	The value of the order's transaction identification number returned by a PayPal product. Character length and limits: 19 single-byte characters maximum	xs:string	See description.	Yes
Amount	Amount to authorize. Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).	ebl:BasicAmount Type	See description.	Yes
TransactionEntity	Type of transaction to authorize. The only allowable value is <code>Order</code> , which means that the transaction represents a customer order that can be fulfilled over 29 days.	ebl:Transaction EntityType	Order	No

## DoAuthorizationResponse

Response to DoAuthorizationRequest.

### Fields

**TABLE 8.6 DoAuthorizationResponse Fields**

Element	Description	Data Type	Possible Values
TransactionID		xs:string	See description.
Amount	The amount you specified in the request.	ebl:BasicAmount Type	See description.



## DoVoid

DoVoidRequest voids an order or an authorization.

**IMPORTANT:** *The AuthorizationID value on DoVoidRequest must be the original authorization identification number, not the value of AuthorizationID returned by DoReauthorizationResponse.*

By definition, when the authorization period expires, the authorization or reauthorization of a transaction is implicitly voided.

**NOTE:** DoVoidRequest is for use with both basic and order authorizations.

### Diagram of DoVoid Types

The following diagram represents the composition of the DoVoidRequestType and DoVoidResponseType elements. Elements required in the request are marked with an asterisk.

**FIGURE 8.3** DoVoid Types



## DoVoidRequest

Request to void a prior authorization.

### Fields

**TABLE 8.7 DoVoidRequest Fields**

Element	Description	Data Type	Allowable Values	Required?
AuthorizationID	<p>The value of the original authorization identification number returned by a PayPal product.</p> <p><b>IMPORTANT:</b> If you are voiding a transaction that has been reauthorized, use the ID from the original authorization, and not the reauthorization.</p> <p>Character length and limits: 19 single-byte characters</p>	xs:string	See description.	Yes
Note	<p>An informational note about this void that is displayed to the payer in email and in his transaction history.</p> <p>Character length and limits: 255 single-byte characters</p>	xs:string	See description.	No

## DoVoidResponse

Response to DoVoidRequest.

### Fields

**TABLE 8.8 DoVoidResponse Fields**

Element	Description	Data Type	Possible Values
AuthorizationID	<p>The authorization identification number you specified in the request.</p> <p>Character length and limits: 19 single-byte characters</p>	xs:string	See description.

## DoReauthorization

To use DoReauthorization you must have previously authorized a transaction. You can authorize a transaction in several ways:

- From the **Merchant Services** tab of your PayPal merchant account.
- With the DoExpressCheckoutPaymentRequest PaymentAction element set to Authorization.
- With a shopping cart transaction (such as one that uses PayPal Website Payments) with the paymentaction HTML variable set to authorization.

You can invoke DoReauthorizationRequest as many times as necessary to obtain one successful reauthorization. When DoReauthorizationResponse returns success, the settlement period restarts, you can capture funds, but you can no longer reauthorize.

**NOTE:** DoReauthorizationRequest is for use only with basic authorizations, not order authorizations.

### Diagram of DoReauthorization Types

The following diagram represents the composition of the DoReauthorizationRequestType and DoReauthorizationResponseType elements. Elements required in the request are marked with an asterisk.

**FIGURE 8.4** DoReauthorization Types



## DoReauthorizationRequest

Request to use Authorization & Capture to reauthorize a transaction.

### Fields

**TABLE 8.9 DoReauthorizationRequest Fields**

Element	Description	Data Type	Allowable Values	Required?
Authorization ID	<p>The value of a previously authorized transaction identification number returned by a PayPal product.</p> <p><b>IMPORTANT:</b> <i>You can obtain a buyer's transaction number from the TransactionID field returned by GetTransactionDetails.</i></p> <p>Character length and limits: 19 single-byte characters maximum</p>	xs:string	Any previously authorized PayPal transaction identification number.	Yes
Amount	<p>Amount to reauthorize.</p> <p>Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).</p>	cc:BasicAmount Type	See description.	Yes

## DoReauthorizationResponse

Response to DoReauthorizationRequest.

### Fields

**TABLE 8.10 DoReauthorizationResponse Fields**

Element	Description	Data Type	Possible Values
Authorization ID	<p>A new authorization identification number.</p> <p>Character length and limits: 19 single-byte characters</p>	xs:string	See description.

























# Express Checkout API Error Codes, Short Message, and Long Messages

## Express Checkout API Errors

**TABLE A.1** *SetExpressCheckout API Errors*

Error Code	Short Message	Long Message	Correcting This Error...
10001	Internal Error	Internal Error	
10001	Internal Error	Transaction failed due to internal error	
10001	ButtonSource value truncated.	The transaction could not be loaded	
10001	Internal Error	Internal Error	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Transaction refused because of an invalid argument. See additional error messages for details.	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The transaction id is not valid	
10007	Permission denied	You do not have permissions to make this API call	
10102	PaymentAction of Order Temporarily Unavailable	PaymentAction of Order is temporarily unavailable. Please try later or use other PaymentAction.	

**TABLE A.1** *SetExpressCheckout API Errors*

Error Code	Short Message	Long Message	Correcting This Error...
10402	Authorization only is not allowed for merchant.	This merchant account is not permitted to set PaymentAction to Authorization. Please contact Customer Service.	
10404	Transaction refused because of an invalid argument. See additional error messages for details.	ReturnURL is missing.	
10405	Transaction refused because of an invalid argument. See additional error messages for details.	CancelURL is missing.	
10407	Transaction refused because of an invalid argument. See additional error messages for details.	Invalid buyer email address (BuyerEmail).	
10409	You're not authorized to access this info.	Express Checkout token was issued for a merchant account other than yours.	
10410	Invalid token	Invalid token.	



**TABLE A.1** *SetExpressCheckout API Errors*

Error Code	Short Message	Long Message	Correcting This Error...
10411	This Express Checkout session has expired.	This Express Checkout session has expired. Token value is no longer valid.	<p>The token returned by <code>SetExpressCheckout</code> response expires after three hours. If you attempt to send the <code>DoExpressCheckoutPayment</code> after that time, you will receive error code 10411 in the <code>DoExpressCheckoutPayment</code> response.</p> <p>If you receive this error, you must return your customer to PayPal to approve the use of PayPal again. Display an error message to inform the customer that the transaction expired, and provide a button to return to PayPal. In this situation, you are effectively restarting the entire checkout process. (Do not reuse the expired token value on <code>SetExpressCheckout</code> request.) However, because you already know the final <code>OrderTotal</code>, be sure to update the value for that element if appropriate. You might also want to update the values for <code>ReturnURL</code> and <code>CancelURL</code>, if necessary.</p>
10412	Duplicate invoice	Payment has already been made for this <code>InvoiceID</code> .	<p>PayPal checks that <code>InvoiceID</code> values are unique for any particular merchant. If you send an <code>InvoiceID</code> value already associated with another transaction in the PayPal system, PayPal returns error code 10412.</p> <p>You might not be able to correct this error during an actual checkout. If you get this error, research why might occur and modify your implementation of Express Checkout to ensure that you generate unique invoice identification numbers.</p>
10415	Transaction refused because of an invalid argument. See additional error messages for details.	A successful transaction has already been completed for this token.	<p>PayPal allows a token only once for a successful transaction.</p> <p>Handling this error</p> <p>If you determine that your customers are clicking your “Place Order” button twice, PayPal recommends that you disable the button after your customer has clicked it.</p>
10425	Express Checkout has been disabled for this merchant.	Express Checkout has been disabled for this merchant. Please contact Customer Service.	

**TABLE A.1** *SetExpressCheckout API Errors*

<b>Error Code</b>	<b>Short Message</b>	<b>Long Message</b>	<b>Correcting This Error...</b>
10432	Transaction refused because of an invalid argument. See additional error messages for details.	Invoice ID value exceeds maximum allowable length.	
10433	Transaction refused because of an invalid argument. See additional error messages for details.	Value of OrderDescription element has been truncated.	
10434	Transaction refused because of an invalid argument. See additional error messages for details.	Value of Custom element has been truncated.	
10436	Transaction refused because of an invalid argument. See additional error messages for details.	PageStyle value exceeds maximum allowable length.	
10437	Transaction refused because of an invalid argument. See additional error messages for details.	cpp-header-image value exceeds maximum allowable length.	

**TABLE A.1** *SetExpressCheckout API Errors*

Error Code	Short Message	Long Message	Correcting This Error...
10438	Transaction refused because of an invalid argument. See additional error messages for details.	cpp-header-image value exceeds maximum allowable length.	
10439	Transaction refused because of an invalid argument. See additional error messages for details.	cpp-header-image value exceeds maximum allowable length.	
10440	Transaction refused because of an invalid argument. See additional error messages for details.	cpp-header-image value exceeds maximum allowable length.	
10537	Risk Control Country Filter Failure	The transaction was refused because the country was prohibited as a result of your Country Monitor Risk Control Settings.	
10538	Risk Control Max Amount Failure	The transaction was refused because the maximum amount was exceeded as a result of your Maximum Amount Risk Control Settings.	
10539	Payment declined by your Risk Controls settings: PayPal Risk Model.	Payment declined by your Risk Controls settings: PayPal Risk Model.	

**TABLE A.1 SetExpressCheckout API Errors**

Error Code	Short Message	Long Message	Correcting This Error...
10725	Shipping Address Country Error	There was an error in the Shipping Address Country field	
10727	Shipping Address1 Empty	The field Shipping Address1 is required	
10728	Shipping Address City Empty	The field Shipping Address City is required	
10729	Shipping Address State Empty	The field Shipping Address State is required	
10730	Shipping Address Postal Code Empty	The field Shipping Address Postal Code is required	
10731	Shipping Address Country Empty	The field Shipping Address Country is required	
10736	Shipping Address Invalid City State Postal Code	A match of the Shipping Address City, State, and Postal Code failed.	

**TABLE A.2 GetExpressCheckoutDetails API Errors**

Error Code	Short Message	Long Message	Correcting This Error...
10001	Internal Error	Internal Error	
10001	Internal Error	Transaction failed due to internal error	
10001	ButtonSource value truncated.	The transaction could not be loaded	
10001	ButtonSource value truncated.	The transaction could not be loaded	

**TABLE A.2** *GetExpressCheckoutDetails API Errors*

Error Code	Short Message	Long Message	Correcting This Error...
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Transaction refused because of an invalid argument. See additional error messages for details.	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The transaction id is not valid	
10004	Invalid transaction type	You can not get the details for this type of transaction	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The transaction could not be loaded	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The transaction id is not valid	
10007	Permission denied	You do not have permissions to make this API call	
10007	Permission denied	You do not have permission to get the details of this transaction	
10007	Permission denied	You do not have permissions to make this API call	

**TABLE A.2** *GetExpressCheckoutDetails API Errors*

Error Code	Short Message	Long Message	Correcting This Error...
10408	Express Checkout token is missing.	Express Checkout token is missing.	
10409	You're not authorized to access this info.	Express Checkout token was issued for a merchant account other than yours.	
10410	Invalid token	Invalid token.	
10411	This Express Checkout session has expired.	This Express Checkout session has expired. Token value is no longer valid.	

**TABLE A.3** *DoExpressCheckoutPayment API Errors*

Error Code	Short Message	Long Message	Correcting This Error...
10001	Internal Error	Transaction failed due to internal error	
10001	Internal Error	Warning an internal error has occurred. The transaction id may not be correct	
10001	ButtonSource value truncated.	The transaction could not be loaded	
10001	Internal Error	Internal Error	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Transaction refused because of an invalid argument. See additional error messages for details.	

**TABLE A.3 DoExpressCheckoutPayment API Errors**

Error Code	Short Message	Long Message	Correcting This Error...
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The transaction id is not valid	
10007	Permission denied	You do not have permissions to make this API call	
10406	Transaction refused because of an invalid argument. See additional error messages for details.	The PayerID value is invalid.	
10408	Express Checkout token is missing.	Express Checkout token is missing.	
10409	You're not authorized to access this info.	Express Checkout token was issued for a merchant account other than yours.	
10410	Invalid token	Invalid token.	
10411	This Express Checkout session has expired.	This Express Checkout session has expired. Token value is no longer valid.	
10412	Duplicate invoice	Payment has already been made for this InvoiceID.	

**TABLE A.3 DoExpressCheckoutPayment API Errors**

Error Code	Short Message	Long Message	Correcting This Error...
10413	Transaction refused because of an invalid argument. See additional error messages for details.	The totals of the cart item amounts do not match order amounts.	<p>If you include any of the following element values with DoExpressCheckoutPayment, the sum of their values must equal the value of OrderTotal.</p> <ul style="list-style-type: none"> <li>• ItemTotal</li> <li>• ShippingTotal</li> <li>• HandlingTotal</li> <li>• TaxTotal</li> </ul> <p>If you get this error, research why it might have occurred and modify your implementation of Express Checkout to ensure proper addition of the values.</p>
10414	Transaction refused because of an invalid argument. See additional error messages for details.	The amount exceeds the maximum amount for a single transaction.	
10415	Transaction refused because of an invalid argument. See additional error messages for details.	A successful transaction has already been completed for this token.	
10416	Transaction refused because of an invalid argument. See additional error messages for details.	You have exceeded the maximum number of payment attempts for this token.	You can send a maximum of 10 DoExpressCheckoutPayment API calls for any single token value, after which the token becomes invalid.



**TABLE A.3 DoExpressCheckoutPayment API Errors**

Error Code	Short Message	Long Message	Correcting This Error...
10417	Transaction cannot complete.	The transaction cannot complete successfully. Instruct the customer to use an alternative payment method.	<p>It is possible that the payment method the customer chooses on PayPal might not succeed when you send <code>DoExpressCheckoutPayment</code>. The most likely cause is that the customer's credit card failed bank authorization. Another possible, though rare, cause is that the final <code>OrderTotal</code> is significantly higher than the original estimated <code>OrderTotal</code> you sent with <code>SetExpressCheckout</code> at Integration Point 1, and the final <code>OrderTotal</code> does not pass PayPal's risk model analysis.</p> <p>If the customer has no other PayPal funding source that is likely to succeed, <code>DoExpressCheckoutPayment</code> response returns error code 10417.</p> <p>Instruct the customer that PayPal is unable to process the payment and redisplay alternative payment methods with which the customer can pay.</p>
10418	Transaction refused because of an invalid argument. See additional error messages for details.	The currencies of the shopping cart amounts must be the same.	
10419	Express Checkout PayerID is missing.	Express Checkout PayerID is missing.	
10420	Transaction refused because of an invalid argument. See additional error messages for details.	Express Checkout PaymentAction is missing.	

**TABLE A.3 DoExpressCheckoutPayment API Errors**

Error Code	Short Message	Long Message	Correcting This Error...
10421	This Express Checkout session belongs to a different customer.	This Express Checkout session belongs to a different customer. Token value mismatch.	When your customer logs into PayPal, the PayPal PayerID is associated with the Express Checkout token. This error is caused by mixing tokens for two different PayerIDs. The Token and PayerID returned for any particular customer by GetExpressCheckoutDetails response must be the same ones you send with DoExpressCheckoutPayment. Verify that your programs are properly associating the Tokens and PayerIDs.
10422	Customer must choose new funding sources.	The customer must return to PayPal to select new funding sources.	It is possible that the payment method the customer chooses on PayPal might not succeed when you send DoExpressCheckoutPayment request. If the customer has a different PayPal funding source that is likely to succeed, DoExpressCheckoutPayment response returns error code 10422 so you can redirect the customer back to PayPal.
10423	Transaction refused because of an invalid argument. See additional error messages for details.	This transaction cannot be completed with PaymentAction of Authorization.	This error occurs if at Integration Point 1, you set PaymentAction to Sale with SetExpressCheckout request but at Integration Point 3, you set PaymentAction to Authorization with DoExpressCheckoutPayment. PayPal does not allow this switch from Sale to Authorization in a single checkout session. PayPal does allow the reverse, however. You can set PaymentAction to Authorization with SetExpressCheckout at Integration Point 1 and switch PaymentAction to Sale with DoExpressCheckoutPayment at Integration Point 3.
10424	Transaction refused because of an invalid argument. See additional error messages for details.	Shipping address is invalid.	If you receive this error message, PayPal recommends that you return your customer to PayPal to review and approve new valid funding sources. Although this error is rare, you should consider trapping the error to display a message to the customer describing what happened, along with a button or hyperlink to return to PayPal. the chapter about best practices in
10431	Item amount is invalid.	Item amount is invalid.	

**TABLE A.3 DoExpressCheckoutPayment API Errors**

Error Code	Short Message	Long Message	Correcting This Error...
10432	Transaction refused because of an invalid argument. See additional error messages for details.	Invoice ID value exceeds maximum allowable length.	
10433	Transaction refused because of an invalid argument. See additional error messages for details.	Value of OrderDescription element has been truncated.	
10434	Transaction refused because of an invalid argument. See additional error messages for details.	Value of Custom element has been truncated.	
10435	Transaction refused because of an invalid argument. See additional error messages for details.	The customer has not yet confirmed payment for this Express Checkout session.	
10441	Transaction refused because of an invalid argument. See additional error messages for details.	The NotifyURL element value exceeds maximum allowable length.	
10442	ButtonSource value truncated.	The ButtonSource element value exceeds maximum allowable length.	

**TABLE A.3 DoExpressCheckoutPayment API Errors**

Error Code	Short Message	Long Message	Correcting This Error...
10443	Transaction refused because of an invalid argument. See additional error messages for details.	This transaction cannot be completed with PaymentAction of Order.	
10444	Transaction refused because of an invalid argument. See additional error messages for details.	The transaction currency specified must be the same as previously specified.	
10445	This transaction cannot be processed at this time. Please try again later.	This transaction cannot be processed at this time. Please try again later.	
10446	Unconfirmed email	A confirmed email is required to make this API call.	
10537	Risk Control Country Filter Failure	The transaction was refused because the country was prohibited as a result of your Country Monitor Risk Control Settings.	
10538	Risk Control Max Amount Failure	The transaction was refused because the maximum amount was exceeded as a result of your Maximum Amount Risk Control Settings.	
10539	Payment declined by your Risk Controls settings: PayPal Risk Model.	Payment declined by your Risk Controls settings: PayPal Risk Model.	

**TABLE A.3 DoExpressCheckoutPayment API Errors**

<b>Error Code</b>	<b>Short Message</b>	<b>Long Message</b>	<b>Correcting This Error...</b>
10725	Shipping Address Country Error	There was an error in the Shipping Address Country field	
10727	Shipping Address1 Empty	The field Shipping Address1 is required	
10728	Shipping Address City Empty	The field Shipping Address City is required	
10729	Shipping Address State Empty	The field Shipping Address State is required	
10730	Shipping Address Postal Code Empty	The field Shipping Address Postal Code is required	
10731	Shipping Address Country Empty	The field Shipping Address Country is required	
10736	Shipping Address Invalid City State Postal Code	A match of the Shipping Address City, State, and Postal Code failed.	



# B

## Direct Payment API Error Codes, Short Message, and Long Messages

### Direct Payment API Errors

**TABLE B.1** *Direct Payment API Errors*

Error Code	Short Message	Long Message	Corrective Action
10500	Invalid Configuration	This transaction cannot be processed due to an invalid merchant configuration.	Occurs when you have not agreed to the billing agreement
10501	Invalid Configuration	This transaction cannot be processed due to an invalid merchant configuration.	Occurs when the billing agreement is disabled or inactive.
10502	Invalid Data	This transaction cannot be processed. Please use a valid credit card.	The credit card used is expired
10504	Invalid Data	This transaction cannot be processed. Please enter a valid Credit Card Verification Number.	The CVV provide is invalid. The CVV is between 3-4 digits long
10505	Gateway Decline	This transaction cannot be processed.	The transaction was refused because the AVS response returned the value of N, and the merchant account is not able to accept such transactions.
10507	Invalid Configuration	This transaction cannot be processed. Please contact PayPal Customer Service.	Your PayPal account is restricted - contact PayPal for more information
10508	Invalid Data	This transaction cannot be processed. Please enter a valid credit card expiration date.	The expiration date must be a two-digit month and four-digit year.
10509	Invalid Data	This transaction cannot be processed.	You must submit an IP address of the buyer with each API call
10510	Invalid Data	The credit card type is not supported. Try another card type.	The credit card type entered is not currently supported by PayPal
10511	Invalid Data	This transaction cannot be processed.	The merchant selected an value for the PaymentAction field that is not supported

**TABLE B.1 Direct Payment API Errors**

Error Code	Short Message	Long Message	Corrective Action
10512	Invalid Data	This transaction cannot be processed. Please enter a first name.	The first name of the buyer is required for this merchant
10513	Invalid Data	This transaction cannot be processed. Please enter a last name.	The last name of the buyer is required for this merchant
10519	Invalid Data	Please enter a credit card.	The credit card field was blank
10520	Invalid Data	This transaction cannot be processed.	The total amount and item amounts do not match
10521	Invalid Data	This transaction cannot be processed. Please enter a valid credit card.	The credit card entered is invalid
10523	Internal Error	This transaction cannot be processed.	None - this is a PayPal internal error
10525	Invalid Data	This transaction cannot be processed. The amount to be charged is zero.	The merchant entered a amount of zero
10526	Invalid Data	This transaction cannot be processed. The currency is not supported at this time.	The currency code entered is not supported
10527	Invalid Data	This transaction cannot be processed. Please enter a valid credit card number and type.	The credit card entered is invalid
10534	Gateway Decline	This transaction cannot be processed. Please enter a valid credit card number and type.	The credit card entered is currently restricted by PayPal. Contact PayPal for more information
10535	Gateway Decline	This transaction cannot be processed. Please enter a valid credit card number and type.	The credit card entered is invalid
10536	Invalid Data	This transaction cannot be processed.	The merchant entered an invoice ID that is already associated with a transaction by the same merchant. By default, the invoice ID must be unique for all transactions. To change this setting, log into PayPal or contact customer service
10537	Filter Decline	This transaction cannot be processed.	The transaction was declined by the country filter managed by the merchant. To accept this transaction, change your risk settings on PayPal.



**TABLE B.1 Direct Payment API Errors**

<b>Error Code</b>	<b>Short Message</b>	<b>Long Message</b>	<b>Corrective Action</b>
10538	Filter Decline	This transaction cannot be processed.	The transaction was declined by the maximum amount filter managed by the merchant. To accept this transaction, change your risk settings on PayPal.
10539	Filter Decline	This transaction cannot be processed.	The transaction was declined by PayPal. Contact PayPal for more information
10540	Invalid Data	The transaction cannot be processed due to an invalid address.	The transaction was declined by PayPal because of an invalid address.
10541	Gateway Decline	This transaction cannot be processed. Please enter a valid credit card number and type.	The credit card entered is currently restricted by PayPal. Contact PayPal for more information
10542	Invalid Data	This transaction cannot be processed. Please enter a valid email address.	The email address provided by the buyer is in an invalid format
10544	Gateway Decline	This transaction cannot be processed.	The transaction was declined by PayPal. Contact PayPal for more information
10545	Gateway Decline	This transaction cannot be processed.	The transaction was declined by PayPal because of possible fraudulent activity. Contact PayPal for more information
10546	Gateway Decline	This transaction cannot be processed.	The transaction was declined by PayPal because of possible fraudulent activity on the IP address. Contact PayPal for more information
10547	Internal Error	This transaction cannot be processed.	None - this is a PayPal internal error
10548	Invalid Configuration	This transaction cannot be processed. The merchant's account is not able to process transactions.	The merchant account attempting the transaction is not a business account at PayPal. Check your account settings
10549	Invalid Configuration	This transaction cannot be processed. The merchant's account is not able to process transactions.	The merchant account attempting the transaction is not able to process Direct Payment transactions. Contact PayPal for more information.
10550	Invalid Configuration	This transaction cannot be processed.	Access to Direct Payment was disabled for your account. Contact PayPal for more information.
10552	Invalid Configuration	This transaction cannot be processed.	The merchant account attempting the transaction does not have a confirmed email address with PayPal. Check your account settings

**TABLE B.1 Direct Payment API Errors**

<b>Error Code</b>	<b>Short Message</b>	<b>Long Message</b>	<b>Corrective Action</b>
10553	Gateway Decline	This transaction cannot be processed.	The merchant attempted a transaction where the amount exceeded the upper limit for that merchant
10554	Filter Decline	This transaction cannot be processed.	The transaction was declined because of a merchant risk filter for AVS. Specifically, the merchant has set to decline transaction when the AVS returned a no match (AVS = N)
10555	Filter Decline	This transaction cannot be processed.	The transaction was declined because of a merchant risk filter for AVS. Specifically, the merchant has set to decline transaction when the AVS returned a partial match
10556	Filter Decline	This transaction cannot be processed.	The transaction was declined because of a merchant risk filter for AVS. Specifically, the merchant has set to decline transaction when the AVS was unsupported
10701	Invalid Data	There's an error with this transaction. Please enter a valid billing address.	The billing address entered is invalid.
10702	Invalid Data	There's an error with this transaction. Please enter a valid address1 in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10703	Invalid Data	There's an error with this transaction. Please enter a valid address2 in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10704	Invalid Data	There's an error with this transaction. Please enter a valid city in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10705	Invalid Data	There's an error with this transaction. Please enter a valid state in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10706	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10707	Invalid Data	There's an error with this transaction. Please enter a valid country in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10708	Invalid Data	There's an error with this transaction. Please enter a complete billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid

**TABLE B.1 Direct Payment API Errors**

<b>Error Code</b>	<b>Short Message</b>	<b>Long Message</b>	<b>Corrective Action</b>
10709	Invalid Data	There's an error with this transaction. Please enter an address1 in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10709	Invalid Data	There's an error with this transaction. Please enter an address1 in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10710	Invalid Data	There's an error with this transaction. Please enter a city in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10710	Invalid Data	There's an error with this transaction. Please enter a city in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10711	Invalid Data	There's an error with this transaction. Please enter your state in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10712	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10713	Invalid Data	There's an error with this transaction. Please enter a country in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10713	Invalid Data	There's an error with this transaction. Please enter a country in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10714	Invalid Data	There's an error with this transaction. Please enter a valid billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10715	Invalid Data	There's an error with this transaction. Please enter a valid state in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10716	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10717	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid

**TABLE B.1 Direct Payment API Errors**

<b>Error Code</b>	<b>Short Message</b>	<b>Long Message</b>	<b>Corrective Action</b>
10718	Invalid Data	There's an error with this transaction. Please enter a valid city and state in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10719	Invalid Data	There's an error with this transaction. Please enter a valid shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10720	Invalid Data	There's an error with this transaction. Please enter a valid address1 in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10721	Invalid Data	There's an error with this transaction. Please enter a valid address2 in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10722	Invalid Data	There's an error with this transaction. Please enter a valid city in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10723	Invalid Data	There's an error with this transaction. Please enter a valid state in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10724	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10725	Invalid Data	There's an error with this transaction. Please enter a valid country in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10726	Invalid Data	There's an error with this transaction. Please enter a complete shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10726	Invalid Data	There's an error with this transaction. Please enter a complete shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10727	Invalid Data	There's an error with this transaction. Please enter an address1 in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10727	Invalid Data	There's an error with this transaction. Please enter an address1 in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid

**TABLE B.1 Direct Payment API Errors**

<b>Error Code</b>	<b>Short Message</b>	<b>Long Message</b>	<b>Corrective Action</b>
10728	Invalid Data	There's an error with this transaction. Please enter a city in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10728	Invalid Data	There's an error with this transaction. Please enter a city in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10729	Invalid Data	There's an error with this transaction. Please enter your state in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10730	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10731	Invalid Data	There's an error with this transaction. Please enter a country in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10731	Invalid Data	There's an error with this transaction. Please enter a country in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10732	Invalid Data	There's an error with this transaction. Please enter a valid shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10733	Invalid Data	There's an error with this transaction. Please enter a valid state in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10734	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10735	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10736	Invalid Data	There's an error with this transaction. Please enter a valid city and state in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid

**TABLE B.1 Direct Payment API Errors**

Error Code	Short Message	Long Message	Corrective Action
10744	Invalid Data	This transaction cannot be processed. Please enter a valid country code in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10745	Invalid Data	This transaction cannot be processed. Please enter a valid country code in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10746	Invalid Data	This transaction cannot be processed. Please use a valid country on the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10747	Invalid Data	This transaction cannot be processed.	The merchant entered an IP address that was in an invalid format. The IP address must be in a format such as 123.456.123.456
10748	Invalid Data	This transaction cannot be processed without a Credit Card Verification number.	The merchant's configuration requires a CVV to be entered, but no CVV was provided with this transaction. Contact PayPal if you wish to change this setting
10750	Invalid Data	There's an error with this transaction. Please enter a valid state in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10751	Invalid Data	There's an error with this transaction. Please enter a valid state in the billing address.	The merchant provided an address either in the United States or Canada, but the state provided is not a valid state in either country
10752	Gateway Decline	This transaction cannot be processed.	The transaction was declined by the issuing bank, not PayPal. The merchant should attempt another card
10754	Gateway Decline	This transaction cannot be processed.	The transaction was declined by PayPal. Contact PayPal for more information
10755	Invalid Data	This transaction cannot be processed due to an unsupported currency.	The currency code entered by the merchant is not supported
10756	Gateway Decline	The transaction cannot be processed. The country and billing address associated with this credit card do not match.	None - this is a PayPal internal error
10758	Invalid Configuration	There's been an error due to invalid API username and/or password.	The API username or password is incorrect for this merchant

**TABLE B.1 Direct Payment API Errors**

<b>Error Code</b>	<b>Short Message</b>	<b>Long Message</b>	<b>Corrective Action</b>
10759	Gateway Decline	This transaction cannot be processed. Please enter a valid credit card number and type.	The transaction was declined by PayPal. Contact PayPal for more information
10760	Invalid Configuration	This transaction cannot be processed. The country listed for your business address is not currently supported.	The merchant's country of residence listed in their PayPal account is not currently supported to allow Direct Payment transactions
10761	Gateway Decline	This transaction cannot be processed. Please check the status of your first transaction before placing another order.	The transaction was declined because PayPal is currently processing a transaction by the same buyer for the same amount. Can occur when a buyer submits multiple, identical transactions in quick succession
10762	Gateway Decline	This transaction cannot be processed.	The CVV provide is invalid. The CVV is between 3-4 digits long
10763	Invalid Data	This transaction cannot be processed.	None - this is a PayPal internal error
15001	Gateway Decline	This transaction cannot be processed.	The transaction was rejected by PayPal because of excessive failures over a short period of time for this credit card. Contact PayPal for more information
15002	Gateway Decline	This transaction cannot be processed.	The transaction was declined by PayPal. Contact PayPal for more information
15003	Invalid Configuration	This transaction cannot be processed.	The transaction was declined because the merchant does not have a valid commercial entity agreement on file with PayPal. Contact PayPal for more information.
15004	Gateway Decline	This transaction cannot be processed. Please enter a valid Credit Card Verification Number.	The transaction was declined because the CVV entered does not match the credit card.
15005	Processor Decline	This transaction cannot be processed.	The transaction was declined by the issuing bank, not PayPal. The merchant should attempt another card
15006	Processor Decline	This transaction cannot be processed. Please enter a valid credit card number and type.	The transaction was declined by the issuing bank, not PayPal. The merchant should attempt another card
15007	Processor Decline	This transaction cannot be processed. Please use a valid credit card.	The transaction was declined by the issuing bank because of an expired credit card. The merchant should attempt another card







## Authorization & Capture API Error Codes, Short Message, and Long Messages

**TABLE C.1** *Authorization & Capture API Error Messages*

Error Code	Short Message	Long Message	Returned By API Call...	Correcting This Error...
10001	Internal Error	Internal Error		
10001	Internal Error	Transaction failed due to internal error		
10004	Internal Error	Invalid argument		
10007	Permission denied	You do not have permissions to make this API call		
10009	Transaction refused	Account is locked or inactive		Retry the request at a later time or close order.
10010	Transaction refused because of an invalid argument. See additional error messages for details.	Invalid argument		
10600	Authorization voided.	Authorization is voided.	DoAuthorization DoCapture DoReauthorization DoVoid	Close the order or authorization.
10601	Authorization expired.	Authorization has expired.	DoAuthorization DoCapture DoReauthorization DoVoid	Close the order or authorization.
10602	Authorization completed.	Authorization has already been completed.	DoAuthorization DoCapture DoReauthorization DoVoid	Close the order or authorization.

**TABLE C.1 Authorization & Capture API Error Messages**

Error Code	Short Message	Long Message	Returned By API Call...	Correcting This Error...
10603	The buyer is restricted.	The buyer account is restricted.	DoAuthorization DoCapture DoReauthorization DoVoid	Contact the buyer.
10604	Authorization must include both buyer and seller.	Authorization transaction cannot be unilateral. It must include both buyer and seller to make an auth.	DoAuthorization	Review the order to ensure customer and seller are both PayPal members.
10605	Unsupported currency.	Currency is not supported.	DoAuthorization DoCapture	Retry the request with a PayPal-supported currency.
10606	Buyer cannot pay.	Transaction rejected, please contact the buyer.	DoAuthorization DoCapture DoReauthorization	Contact the buyer.
10607	Auth&Capture unavailable.	Authorization & Capture feature unavailable.	DoAuthorization DoCapture DoReauthorization DoVoid	Contact PayPal Customer Service
10608	Funding source missing.	The funding source is missing.	DoAuthorization DoCapture DoReauthorization	Contact the buyer.
10609	Invalid transactionID.	Transaction id is invalid.	DoAuthorization DoCapture DoReauthorization DoVoid	Check the validity of the authorization ID and reattempt the request.
10610	Amount limit exceeded.	Amount specified exceeds allowable limit.	DoAuthorization DoCapture DoReauthorization	Reattempt the request with a lower amount.
10611	Not enabled.	Authorization & Capture feature is not enabled for the merchant. Contact customer service.	DoAuthorization DoCapture DoReauthorization	Contact PayPal Customer Service.
10612	No more settlement.	Maximum number of allowable settlements has been reached. No more settlement for the authorization.	DoCapture	Close the order.

**TABLE C.1 Authorization & Capture API Error Messages**

Error Code	Short Message	Long Message	Returned By API Call...	Correcting This Error...
10613	Currency mismatch.	Currency of capture must be the same as currency of authorization.	DoCapture	Ensure that the currencies are the same, and retry the request.
10614	Cannot void reauth.	You can void only the original authorization, not a reauthorization.	DoVoid	Void the authorization.
10615	Cannot reauth reauth.	You can reauthorize only the original authorization, not a reauthorization.	DoReauthorization	Capture the reauthorization.
10616	Maximum number of reauthorization allowed for the auth is reached.	Maximum number of reauthorization allowed for the auth is reached.	DoReauthorization	Capture or close the authorization
10617	Reauthorization not allowed.	Reauthorization is not allowed inside honor period.	DoReauthorization	Capture the authorization to reauthorize outside of honor period.
10618	Transaction already voided or expired.	Transaction has already been voided or expired.	DoAuthorization DoCapture DoReauthorization DoVoid	Close the order or authorization.
10619	Invoice ID value exceeds maximum allowable length.	Invoice ID value exceeds maximum allowable length.	DoCapture	Check the length of the invoice ID and reattempt the request.
10620	Order has already been voided, expired or completed.	Order has already been voided, expired or completed.	DoAuthorization DoCapture DoVoid	Close this order.
10621	Order has expired.	Order has expired.	DoAuthorization DoCapture DoVoid	Close this order.
10622	Order is voided.	Order is voided.	DoAuthorization DoCapture DoVoid	Close this order.

**TABLE C.1 Authorization & Capture API Error Messages**

Error Code	Short Message	Long Message	Returned By API Call...	Correcting This Error...
10623	Maximum number of authorization allowed for the order is reached.	Maximum number of authorization allowed for the order is reached.	DoAuthorization DoCapture DoReauthorization DoVoid	Capture this order.
10624	Duplicate invoice	Payment has already been made for this InvoiceID.	DoAuthorization	Review the invoice ID and reattempt the request.
10625	Transaction refused because of an invalid argument. See additional error messages for details.	The amount exceeds the maximum amount for a single transaction.	DoAuthorization DoCapture DoReauthorization	Reattempt the request with a lower amount.
10626	Risk	Transaction refused due to risk model	DoAuthorization DoCapture DoReauthorization	Contact the buyer.
10627	Transaction refused because of an invalid argument. See additional error messages for details.	The invoice ID field is not supported for basic authorizations	DoAuthorization DoReauthorization DoVoid	The Invoice ID field can only be used with DoCapture.
10628	This transaction cannot be processed at this time. Please try again later.	This transaction cannot be processed at this time. Please try again later.	DoAuthorization DoCapture DoReauthorization DoVoid	Retry the request at a later time.
10629	Reauthorization not allowed.	Reauthorization is not allowed for this type of authorization.	DoReauthorization	Use DoAuthorization to authorize the an order.
10630	Item amount is invalid.	Item amount is invalid.	DoAuthorization DoCapture	Check the item amount to ensure that it is not zero or negative.

**TABLE C.1 Authorization & Capture API Error Messages**

<b>Error Code</b>	<b>Short Message</b>	<b>Long Message</b>	<b>Returned By API Call...</b>	<b>Correcting This Error...</b>
11094	This authorization cannot be voided, reauthorized, or captured against.	This authorization can only be handled through the marketplace which created it. It cannot directly be voided, reauthorized, or captured against.		





## Country Codes

Country	Code	Country	Code
AFGHANISTAN	AF	BERMUDA	BM
ÅLAND ISLANDS	AX	BHUTAN	BT
ALBANIA	AL	BOLIVIA	BO
ALGERIA	DZ	BOSNIA AND HERZEGOVINA	BA
AMERICAN SAMOA	AS	BOTSWANA	BW
ANDORRA	AD	BOUVET ISLAND	BV
ANGOLA	AO	BRAZIL	BR
ANGUILLA	AI	BRITISH INDIAN OCEAN TERRITORY	IO
ANTARCTICA	AQ	BRUNEI DARUSSALAM	BN
ANTIGUA AND BARBUDA	AG	BULGARIA	BG
ARGENTINA	AR	BURKINA FASO	BF
ARMENIA	AM	BURUNDI	BI
ARUBA	AW	CAMBODIA	KH
AUSTRALIA	AU	CAMEROON	CM
AUSTRIA	AT	CANADA	CA
AZERBAIJAN	AZ	CAPE VERDE	CV
BAHAMAS	BS	CAYMAN ISLANDS	KY
BAHRAIN	BH	CENTRAL AFRICAN REPUBLIC	CF
BANGLADESH	BD	CHAD	TD
BARBADOS	BB	CHILE	CL
BELARUS	BY	CHINA	CN
BELGIUM	BE	CHRISTMAS ISLAND	CX
BELIZE	BZ	COCOS (KEELING) ISLANDS	CC
BENIN	BJ	COLOMBIA	CO

Country	Code	Country	Code
COMOROS	KM	FRENCH SOUTHERN TERRITORIES	TF
CONGO	CG	GABON	GA
CONGO, THE DEMOCRATIC REPUBLIC OF THE	CD	GAMBIA	GM
COOK ISLANDS	CK	GEORGIA	GE
COSTA RICA	CR	GERMANY	DE
COTE D'IVOIRE	CI	GHANA	GH
CROATIA	HR	GIBRALTAR	GI
CUBA	CU	GREECE	GR
CYPRUS	CY	GREENLAND	GL
CZECH REPUBLIC	CZ	GRENADA	GD
DENMARK	DK	GUADELOUPE	GP
DJIBOUTI	DJ	GUAM	GU
DOMINICA	DM	GUATEMALA	GT
DOMINICAN REPUBLIC	DO	GUERNSEY	GG
ECUADOR	EC	GUINEA	GN
EGYPT	EG	GUINEA-BISSAU	GW
EL SALVADOR	SV	GUYANA	GY
EQUATORIAL GUINEA	GQ	HAITI	HT
ERITREA	ER	HEARD ISLAND AND MCDONALD ISLANDS	HM
ESTONIA	EE	HOLY SEE (VATICAN CITY STATE)	VA
ETHIOPIA	ET	HONDURAS	HN
FALKLAND ISLANDS (MALVINAS)	FK	HONG KONG	HK
FAROE ISLANDS	FO	HUNGARY	HU
FIJI	FJ	ICELAND	IS
FINLAND	FI	INDIA	IN
FRANCE	FR	INDONESIA	ID
FRENCH GUIANA	GF	IRAN, ISLAMIC REPUBLIC OF	IR
FRENCH POLYNESIA	PF		



Country	Code
IRAQ	IQ
IRELAND	IE
ISLE OF MAN	IM
ISRAEL	IL
ITALY	IT
JAMAICA	JM
JAPAN	JP
JERSEY	JE
JORDAN	JO
KAZAKHSTAN	KZ
KENYA	KE
KIRIBATI	KI
KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF	KP
KOREA, REPUBLIC OF	KR
KUWAIT	KW
KYRGYZSTAN	KG
LAO PEOPLE'S DEMOCRATIC REPUBLIC	LA
LATVIA	LV
LEBANON	LB
LESOTHO	LS
LIBERIA	LR
LIBYAN ARAB JAMAHIRIYA	LY
LIECHTENSTEIN	LI
LITHUANIA	LT
LUXEMBOURG	LU
MACAO	MO
MACEDONIA, THE FORMER YUGOSLAV REPUBLIC OF	MK

Country	Code
MADAGASCAR	MG
MALAWI	MW
MALAYSIA	MY
MALDIVES	MV
MALI	ML
MALTA	MT
MARSHALL ISLANDS	MH
MARTINIQUE	MQ
MAURITANIA	MR
MAURITIUS	MU
MAYOTTE	YT
MEXICO	MX
MICRONESIA, FEDERATED STATES OF	FM
MOLDOVA, REPUBLIC OF	MD
MONACO	MC
MONGOLIA	MN
MONTSERRAT	MS
MOROCCO	MA
MOZAMBIQUE	MZ
MYANMAR	MM
NAMIBIA	NA
NAURU	NR
NEPAL	NP
NETHERLANDS	NL
NETHERLANDS ANTILLES	AN
NEW CALEDONIA	NC
NEW ZEALAND	NZ
NICARAGUA	NI
NIGER	NE

Country	Code	Country	Code
NIGERIA	NG	SAINT VINCENT AND THE GRENADINES	VC
NIUE	NU	SAMOA	WS
NORFOLK ISLAND	NF	SAN MARINO	SM
NORTHERN MARIANA ISLANDS	MP	SAO TOME AND PRINCIPE	ST
NORWAY	NO	SAUDI ARABIA	SA
OMAN	OM	SENEGAL	SN
PAKISTAN	PK	SERBIA AND MONTENEGRO	CS
PALAU	PW	SEYCHELLES	SC
PALESTINIAN TERRITORY, OCCUPIED	PS	SIERRA LEONE	SL
PANAMA	PA	SINGAPORE	SG
PAPUA NEW GUINEA	PG	SLOVAKIA	SK
PARAGUAY	PY	SLOVENIA	SI
PERU	PE	SOLOMON ISLANDS	SB
PHILIPPINES	PH	SOMALIA	SO
PITCAIRN	PN	SOUTH AFRICA	ZA
POLAND	PL	SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS	GS
PORTUGAL	PT	SPAIN	ES
PUERTO RICO	PR	SRI LANKA	LK
QATAR	QA	SUDAN	SD
REUNION	RE	SURINAME	SR
ROMANIA	RO	SVALBARD AND JAN MAYEN	SJ
RUSSIAN FEDERATION	RU	SWAZILAND	SZ
RWANDA	RW	SWEDEN	SE
SAINT HELENA	SH	SWITZERLAND	CH
SAINT KITTS AND NEVIS	KN	SYRIAN ARAB REPUBLIC	SY
SAINT LUCIA	LC	TAIWAN, PROVINCE OF CHINA	TW
SAINT PIERRE AND MIQUELON	PM	TAJIKISTAN	TJ

Country	Code
TANZANIA, UNITED REPUBLIC OF	TZ
THAILAND	TH
TIMOR-LESTE	TL
TOGO	TG
TOKELAU	TK
TONGA	TO
TRINIDAD AND TOBAGO	TT
TUNISIA	TN
TURKEY	TR
TURKMENISTAN	TM
TURKS AND CAICOS ISLANDS	TC
TUVALU	TV
UGANDA	UG
UKRAINE	UA
UNITED ARAB EMIRATES	AE
UNITED KINGDOM	GB
UNITED STATES	US
UNITED STATES MINOR OUTLYING ISLANDS	UM
URUGUAY	UY
UZBEKISTAN	UZ
VANUATU	VU
VENEZUELA	VE
VIET NAM	VN
VIRGIN ISLANDS, BRITISH	VG
VIRGIN ISLANDS, U.S.	VI
WALLIS AND FUTUNA	WF
WESTERN SAHARA	EH

Country	Code
YEMEN	YE
ZAMBIA	ZM
ZIMBABWE	ZW





# Glossary

## **AVS**

Address Verification System. A U.S. banking industry standard for confirming the postal address or telephone number associated with a credit card.

## **auth**

Short for “authorization.” In U.S. banking industry terminology, to electronically check the validity of a credit card number.

With Authorization & Capture, an auth is your means to verify that a PayPal member has sufficient funds to meet a payment obligation.

## **capture**

The request for settlement.

## **checkout**

The process that takes place on your website in which a buyer selects a method of payment for an order.

*PayPal Standard Checkout* refers to all PayPal products for use during buyer checkout except for PayPal Express Checkout.

## **CVV2**

Card Verification Value, version 2. In U.S. credit card industry terminology, a three-digit code printed on the back of a credit card to enhance fraud protection when the credit card number is used over the Internet or telephone.

## **order**

An end result of a checkout. An accounting description of the purchase of one or more items the buyer has agreed to pay for.

## **reauth**

An initially authorized transaction amount must be *reauthorized* if the amount of the transaction increases more than 115% of the original authorization.

## **settle**

Short for “settlement.” Strictly defined, the settlement is the actual movement of funds from the buyer’s account to the merchant’s account.

**void**

In the context of payment processing with Authorization & Capture, to cancel a prior reauthorization of a settlement amount.