



Authorization & Capture Integration Guide

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

Last Updated: June 2006

*PayPal Authorization & Capture Integration
Guide*

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Preface

This Document

This release of the *PayPal Authorization & Capture Integration Guide* replaces the version released in December, 2005.

Intended Audience

This document is written for merchants and developers who use PayPal in their delayed order fulfillment processes.

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, "Overview,"](#) describes the general usage and life cycle of PayPal Authorization & Capture.

[Chapter 2, "Basic Authorization & Capture on the PayPal Website,"](#) explains the different actions that can be completed once a buyer has authorized payment.

[Chapter 3, "Authorization & Capture API,"](#) details the PayPal Authorization & Capture SOAP requests and responses and the data elements that make up those requests and responses.

[Chapter 4, "Basic Authorization & Capture Scenarios,"](#) presents common scenarios encountered when implementing Authorization & Capture basic authorizations.

[Chapter 5, "Order Authorizations Scenarios,"](#) presents common scenarios encountered when implementing Authorization & Capture order authorizations.

[Chapter 6, "Best Practices,"](#) offers recommendations on how to implement Authorization & Capture for maximum effect.

Chapter 7, “Testing PayPal Authorization & Capture,” provides information on how to test your web-based or API-based implementation of 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
<i>serif italics</i>	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.
<code>monospaced</code>	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 Profile page, click Email to confirm your email address.
<i>San-serif oblique</i>	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
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To contact Customer Service about documentation problems:

1. Go to <https://www.paypal.com/>.
2. Click **Help** in the upper left corner of the page.
3. Click **Contact Us** in the lower left of the page.
4. Click Contact PayPal Customer Service under Help by Email.
5. Complete the form.

Revision History

Revision history for *PayPal Authorization & Capture Integration Guide*.

TABLE P.1 Revision History

Date	Description
June 2006	Updated for minor error message changes and the removal of the USD-only restriction on Authorization & Capture.
January 2006	Additional error messages for Authorization & Capture APIs.

1

Overview

PayPal 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. PayPal 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 manual discusses the authorization and capture process and provides steps to help you authorize, capture, reauthorize, and void funds.

Types of Authorizations

You can make two types of authorizations:

- Basic authorizations
- Orders and order authorizations

Basic Authorizations and Orders: a Comparison

1. Both allow a delayed capture of funds and voids.
2. Both have an honor period and an authorization period, as described in [“Honor Period and Authorization Period” on page 16](#).
3. Both types of authorizations have a similar life cycle, as shown in [Figure 1.1, “High-Level Diagram of Authorization & Capture” on page 17](#), which illustrates the life cycle of the authorization period and the general processes for using Authorization & Capture.
4. A capture can have an associated invoice number.

Differences Between Basic Authorizations and Orders

The primary distinctions between basic and order are as follows:

1. An order is equivalent to a \$1 authorization at checkout. The order itself does not place the PayPal member’s balance on hold (as does a basic authorization). An order can be captured directly without an additional authorization, or it can be followed by an additional order authorization that changes the amount to capture, which you make with the `DoAuthorization` API.

2. You cannot reauthorize an order authorization.

Honor Period and Authorization Period

The honor period and authorization period for orders and basic authorizations differ slightly as described below. However, the following points are true for both types of authorizations:

- 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.

Order Authorizations

An order period is 29-days long. Within this period, you can request an authorization to ensure the availability of funds. You can request an authorization on an order up to 10 times, up to 115% of the originally authorized amount (not to exceed an increase of \$75 USD). Every successful authorization includes an honor period of 3 days.

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

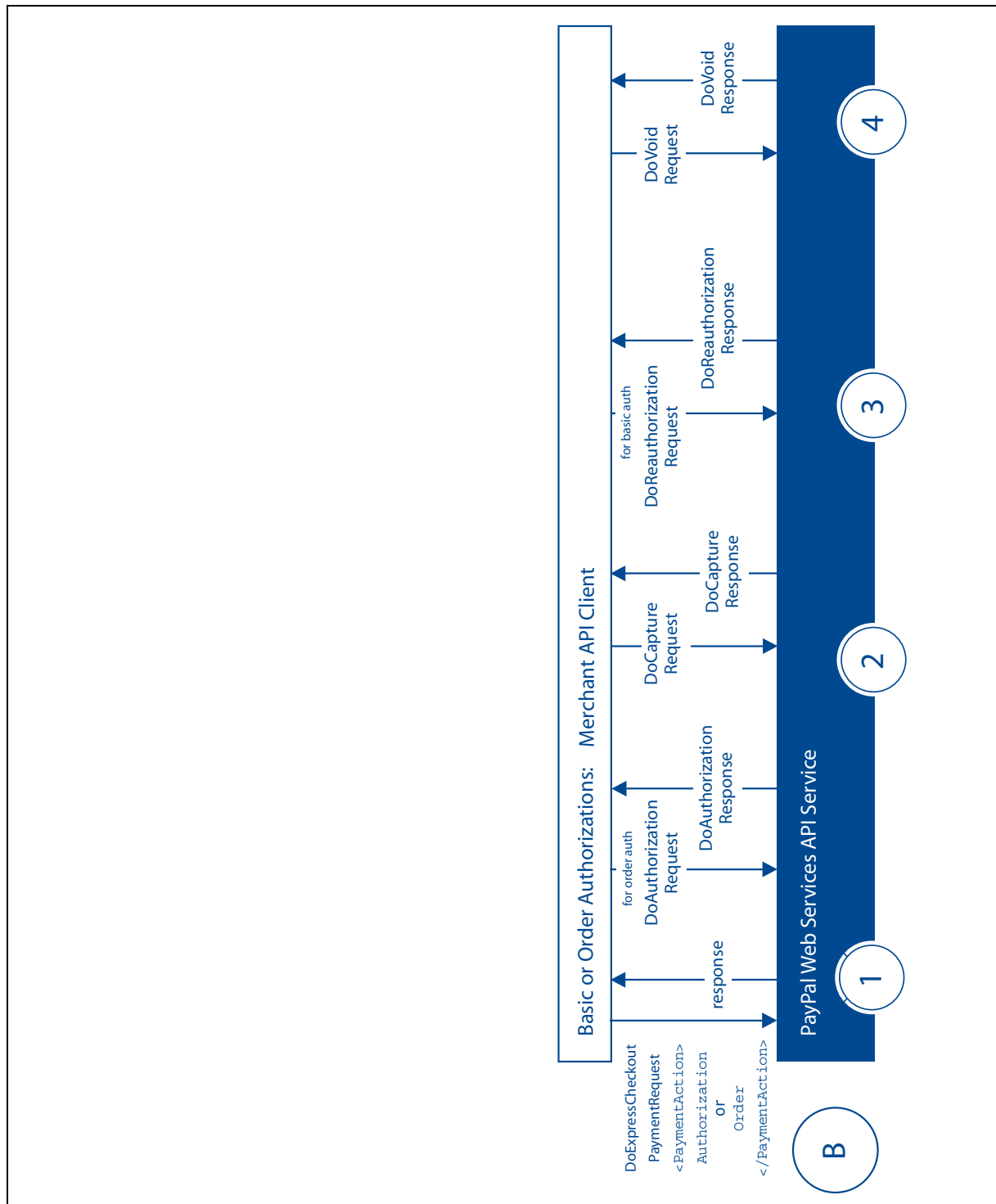
PayPal honors 100% of the authorization amount within this 3-day period. However, PayPal will not allow you to capture funds if the buyer's account is restricted, locked, or a fraudulent case occurs, or if your account has a high restriction level. You can use Authorization & Capture only when your account has a low restriction level.

Basic Authorizations

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.

FIGURE 1.1 High-Level Diagram of Authorization & Capture

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

1. Authorization & Capture can be used with different PayPal payment products. For more information, see “Supported PayPal Payment Products.”

For example, you can send your buyer through the Website Payments payment flow, passing in the paymentaction variable set to authorization or order. Likewise, 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.

- NOTE:** You must capture and void orders and order authorizations with 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.
2. After your buyer completes checkout, you can then use the payment’s transaction ID with Authorization & Capture in one of two ways:
 - A. For basic authorizations, you can use Authorization & Capture on the PayPal website (<https://www.paypal.com>). For more information, see Chapter 2, “Basic Authorization & Capture on the PayPal Website.”
 - B. For either basic authorizations and order authorizations, you can use Authorization & Capture programatically with its API. For more information, see Chapter 3, “Authorization & Capture API.”
 3. Regardless of the method used, the remaining processes are the same. 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.

Supported PayPal Payment Products

You can use Authorization & Capture with the PayPal products listed in Table 1.2, “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 1.2 PayPal Products Supporting Authorization & Capture

Product	Typical Usage	See Also
PayPal Express Checkout	<PaymentAction> Authorization or Order </PaymentAction>	Website Payments Pro Integration Guide
Direct Payment API	NOTE: Direct Payment can create only basic authorizations, not order authorizations. <PaymentAction> Authorization </PaymentAction>	Website Payments Pro Integration Guide
Website Payments	paymentaction="authorization"	<i>Website Payments Standard Checkout Integration Guide</i>
Buy Now	paymentaction="authorization"	<i>Website Payments Standard Checkout Integration Guide</i>
Donations	paymentaction="authorization"	<i>Website Payments Standard Checkout Integration Guide</i>
Shopping carts	paymentaction="authorization"	<i>Website Payments Standard Checkout Integration Guide</i>

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

2

Basic Authorization & Capture on the PayPal Website

Once your buyer has authorized payment, you can complete the following actions: Capture, Void, and Reauthorization. You can complete these actions either via the PayPal website (as described in this chapter) or through the PayPal Web Services API (see [Chapter 3, “Authorization & Capture API”](#)).

To complete these actions through the PayPal website (<https://www.paypal.com>), you can use one of three starting points: Account Overview, History, or Transaction Details.

Capturing Funds

This action transfers funds from your buyer’s account to your account. You can Capture Funds when the following conditions are met:

- Your buyer has authorized payment through Website Payments, shopping cart checkout, or another supported payment flow (see [“Supported PayPal Payment Products” on page 18](#)).

The authorization period of 29 days has not passed.

The authorization has a Pending status.

The sum of the captured amount and the requested capture is an amount up to 115% of the originally authorized amount (not to exceed an increase of \$75 USD).

Your buyer’s account is in good standing. You will be unable to Capture Funds on an authorization if there is a restriction on your buyer’s account.

There can be up to 10 captures for one authorization. A transaction is complete when funds have been transferred from your buyer’s account to your account.

To Capture Funds:

1. Click the **Capture** button of the desired open authorization.
2. Enter the Capture details on the following screen.

FIGURE 2.2 Capturing Funds Via the Web

Log Out | PayPal Home | Help | Security Center

PayPal

My Account | Send Money | Request Money | Merchant Services | Auction Tools | Products & Services

Overview | Add Funds | Withdraw | **History** | Resolution Center | Profile

Capture Funds

Enter the capture details below.

Authorization ID: 9X024263C2709715F
Name: Chitral Geanekos
Email: qs76-usbus_buyer1@paypal.com
Authorization Amount: \$5.00 USD
Capture Amount:

Additional Capture Possible: ☐ Yes (option to capture additional funds on this authorization if needed)
☒ No (no additional capture needed; close authorization after this capture)

Note to merchant: Your buyer Chitral Geanekos authorized a payment of \$5.00 USD. If you capture an amount different than this, you should notify your buyer of this change.

PayPal strongly recommends that you explain any unique circumstances (e.g. multiple captures, changes in item availability) to your buyer in detail below. Your buyer will see this note in their Transaction Details and in an email notification from PayPal.

Note to Buyer: (Optional)

255 characters left

[Mobile](#) | [Mass Pay](#) | [Money Market](#) | [ATM/Debit Card](#) | [BillPay](#) | [Referrals](#) | [About Us](#) | [Account Types](#) | [Fees](#) | [Privacy](#) | [Buyer Credit](#) | [Security Center](#) | [Contact Us](#) | [User Agreement](#) | [Developers](#) | [Shops](#) | [Gift Certificates/Points](#)

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IMPORTANT: *If you capture an amount different than the amount your buyer originally authorized, PayPal recommends that you explain any unique circumstances in the Note to Buyer field.*

- On the following page, verify that the information is correct and click **Capture Funds**. An email notification will be sent to your buyer with the capture details.

You can also Capture Funds using the PayPal Web Services API. For instructions on how to do this, refer to [Chapter 3, “Authorization & Capture API.”](#)

Partial Capture

If you complete a Partial Capture on an authorization, selecting the **Yes** radio button in the **Additional Capture Possible** field keeps the uncaptured amount of the authorization in a Pending status. The amount remaining on the authorization is available for capture as long as the authorization period does not expire.

Additional Capture

You can capture funds and automatically void any remaining amount on the authorization by selecting the **No** radio button in the **Additional Capture Possible** field. Choosing this option moves the authorization into a Complete status.

Partial Refunds

After you capture funds, the funds are classified as a “payment.” You can issue partial refunds on captured funds just as you can for regular PayPal transactions. For an example involving a partial refund, see [“One Authorization, Multiple Captures, and a Refund” on page 40](#).

Voiding an Authorization

This action cancels an authorization. Once you void an authorization, you are unable to capture any funds remaining on the authorization and you will return funds to the buyer, if applicable. You can initiate a Void when the following conditions are met:

- The authorization has a Pending status.
- The authorized amount was captured at less than 100%. If a partial capture was completed, the remaining amount of the authorization will be voided.

To void an authorization:

1. Click the **Void** button of the desired pending authorization.
2. Enter the Void details on the following screen. PayPal recommends that you explain any unique circumstances to your buyer in the **Note to Buyer** field.

NOTE: You cannot partially void a transaction. All voids cancel the entire open authorization amount.

3. Confirm the Void details on the following page and click **Void**. An email notification will be sent to your buyer with the Void details.

FIGURE 2.3 Voiding an Authorization Via the Web

PayPal [Log Out](#) | [Help](#)

My Account | **Send Money** | **Request Money** | **Merchant Services** | **Auction Tools**

Overview | **Add Funds** | **Withdraw** | **History** | **Resolution Center** | **Profile**

Void Authorization

By initiating this void, you are canceling this authorization and will be unable to capture any funds remaining on the authorization.

Note: You will not be able to submit a partial void. Any submitted voids will void the entire open authorization amount.

PayPal strongly recommends that you explain any unique circumstances (e.g. multiple captures, changes in item availability) to your buyer in detail below. Your buyer will see this note in Transaction Details and in an email notification from PayPal.

Authorization ID: 9X024263C2709715F
Name: Chitral Geanekos
Email: qa76-usbus_buyer1@paypal.com
Amount to Void: \$5.00 USD

Note to Buyer: (Optional)

255 characters left

[Continue](#)

[Mobile](#) | [Mass Pay](#) | [Money Market](#) | [ATM/Debit Card](#) | [BillPay](#) | [Referrals](#) | [About Us](#) | [Account Types](#) | [Fees](#) | [Privacy](#) | [Buyer Credit](#) | [Security Center](#) | [Contact Us](#) | [User Agreement](#) | [Developers](#) | [Shops](#) | [Gift Certificates/Points](#)

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You can also Void using the PayPal Web Services API. For instructions on how to do this, refer to [Chapter 3, “Authorization & Capture API.”](#)

Reauthorizing Payment

This action initiates a reauthorization for payment. You can initiate a reauthorization if all the following are true:

- Reauthorization is attempted from day 4 to 29 of the authorization period.

You have not yet completed a successful reauthorization on the original authorization.

The authorization has a Pending status.

The sum of the previously captured amount and the reauthorization amount is an amount 115% of the originally authorized amount (not to exceed an increase of \$75 USD).

Your reauthorization amount is at least \$1.00 USD.

IMPORTANT: *Only one successful reauthorization is allowed per authorization.*

If you reauthorize a payment, you can capture funds as many times as needed, up to a limit of 10 captures for one authorization.

To reauthorize a payment:

1. Click the **Reauthorize** button of the desired pending authorization.

2. Enter the reauthorization amount on the following screen and click **Continue**.

FIGURE 2.4 Reauthorizing Funds Via the Web

PayPal [Log Out](#) | [Help](#)

My Account | **Send Money** | **Request Money** | **Merchant Services** | **Auction Tools**

Overview | **Add Funds** | **Withdraw** | **History** | **Resolution Center** | **Profile**

Reauthorize

Enter the reauthorization amount below and click Continue.

Authorization ID: 9X024263C2709715F
Name: Chitral Geanekos
Email: qa76-usbus_buyer1@paypal.com
Original Authorization Amount: \$5.00 USD
Reauthorization Amount:

[Continue](#)

[Mobile](#) | [Mass Pay](#) | [Money Market](#) | [ATM/Debit Card](#) | [BillPay](#) | [Referrals](#) | [About Us](#) | [Account Types](#) | [Fees](#) | [Privacy](#) | [Buyer Credit](#) | [Security Center](#) | [Contact Us](#) | [User Agreement](#) | [Developers](#) | [Shops](#) | [Gift Certificates/Points](#)

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3. Confirm the reauthorization details on the following page and click the **Reauthorize** button.

You can also complete a reauthorization using the PayPal Web Services API. For instructions on how to do this, refer to [Chapter 3, “Authorization & Capture API.”](#)

3

Authorization & Capture API

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

TABLE 3.3 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

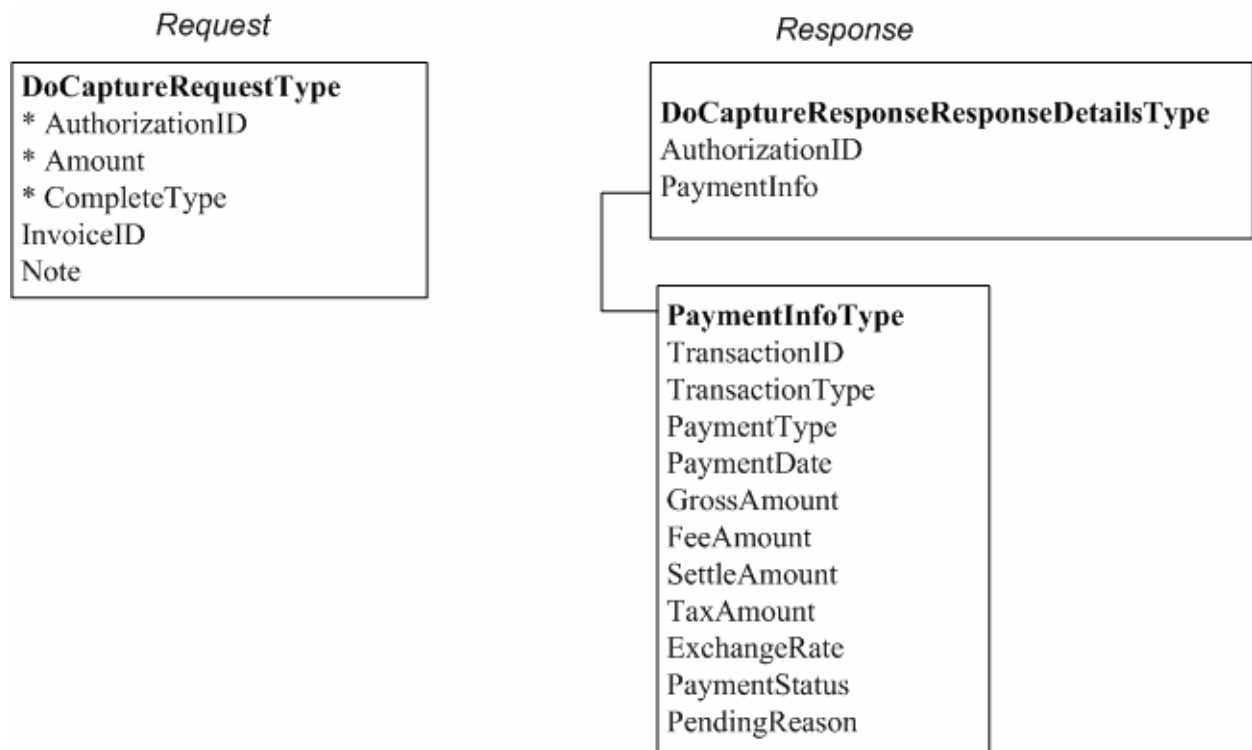
DoCaptureRequest is your request to completely or partially settle an order, an authorization, or reauthorization.

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 3.5 DoCapture Types



DoCaptureRequest

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

Fields

TABLE 3.4 DoCaptureRequest Fields

Element	Description	Data Type	Allowable Values	Required?
Authorization ID	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. Character length and limits: 19 single-byte characters maximum	xs:string	See description.	Yes
Amount	Amount to capture. 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.	Yes
CompleteType	Indicates if this capture is the last capture you intend to make. The default is Complete. NOTE: If CompleteType is Complete, any remaining amount of the original reauthorized transaction is automatically voided. Character length and limits: 12 single-byte alphanumeric characters	eb1:Complete CodeType	Default: Complete NotComplete	Yes
InvoiceID	Your invoice number or other identification number. NOTE: The InvoiceID value is recorded only if the authorization you are capturing is an order authorization, not a basic authorization. Character length and limits: 127 single-byte alphanumeric characters	xs:string	See description.	No
Note	An informational note about this settlement that is displayed to the payer in email and in his transaction history. Character length and limits: 255 single-byte characters	xs:string	See description.	No

DoCaptureResponse

Response to DoCaptureRequest.

Fields

TABLE 3.5 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:PaymentInfoType	See Table 3.6 on page 30.

TABLE 3.6 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
TransactionType	The type of transaction Character length and limitations: 15 single-byte characters	ns:PaymentTransactionCodeType	cart express-checkout
PaymentType	Indicates whether the payment is instant or delayed. Character length and limitations: Seven single-byte characters	ebl:PaymentCodeType 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 3.6 Response: PaymentInfoType Elements

Element	Description	Data Type	Possible Values
TaxAmount	Tax charged on the transaction	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 element 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 element. 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 3.6 Response: PaymentInfoType Elements

Element	Description	Data Type	Possible Values
PendingReason	<p>NOTE: 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 Preferences section of your Profile.</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 Account Overview.</p> <p>multi-currency: You do not have a balance in the currency sent, and you do not have your Payment Receiving Preferences 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.

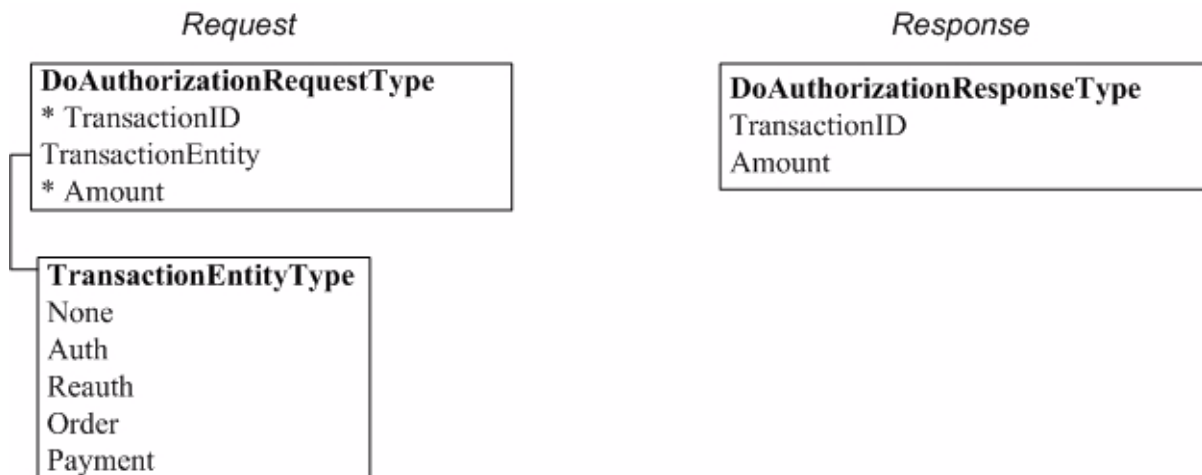


FIGURE 3.6 DoAuthorization Types

DoAuthorizationRequest

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

Fields

TABLE 3.7 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 Order, 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 3.8 DoAuthorizationResponse Fields

Element	Description	Data Type	Possible Values
TransactionID	An authorization identification number. Character length and limits: 17 single-byte characters	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 3.7 *DoVoid Types*



DoVoidRequest

Request to void a prior authorization.

Fields

TABLE 3.9 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>IMPORTANT: 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 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

DoVoidResponse

Response to DoVoidRequest.

Fields

TABLE 3.10 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 3.8 DoReauthorization Types



DoReauthorizationRequest

Request to use Authorization & Capture to reauthorize a transaction.

Fields

TABLE 3.11 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>NOTE: You can obtain a buyer's transaction number from the TransactionID element of the PayerInfo structure returned by GetTransactionDetailsResponse.</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:BasicAmountType	See description.	Yes

DoReauthorizationResponse

Response to DoReauthorizationRequest.

Fields

TABLE 3.12 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.

4

Basic Authorization & Capture Scenarios

This chapter includes examples of some common scenarios you might encounter when implementing basic authorizations and captures.

Capture Within 3 Days

1. Your buyer orders a camera from your website.
2. Your buyer enters payment information and authorizes payment.
3. Send your buyer to PayPal using a hosted flow, specifying the variable `paymentaction=authorization`
4. PayPal initiates the authorization.
5. On day 3, you ship the camera and capture funds.

After you have captured funds, your Transaction Details shows the transaction with a Completed status.

FIGURE 4.9 Transaction Details: Completed Transaction



The screenshot shows the PayPal 'Transaction Details' page. At the top, there's a navigation bar with links like 'My Account', 'Send Money', 'Request Money', 'Merchant Services', and 'Auction Tools'. Below this is a sub-navigation bar with 'Overview', 'Add Funds', 'Withdraw', 'History', 'Resolution Center', and 'Profile'. The main content area is titled 'Transaction Details' and shows a 'Web Accept Payment Received' (ID # 6P775734WM9600006). It lists an 'Original Authorization' on Aug. 1, 2011, with a status of 'Completed' and a gross amount of \$100.00 USD. Below this, a 'Related Transaction' is shown for Aug. 3, 2011, with a status of 'Completed', a gross amount of \$100.00 USD, a fee of -\$3.20 USD, and a net amount of \$96.80 USD. The total funds captured are listed as \$100.00 USD.

Date	Type	Status	Details	Gross	Fee	Net
Aug. 1, 2011	Authorization From bus	Completed	Details	\$100.00 USD	...	...

Date	Type	Status	Details	Gross	Fee	Net
Aug. 3, 2011	Payment From bus	Completed	...	\$100.00 USD	-\$3.20 USD	\$96.80 USD

Total Funds Captured: \$100.00 USD

Capture From 4 - 29 Days

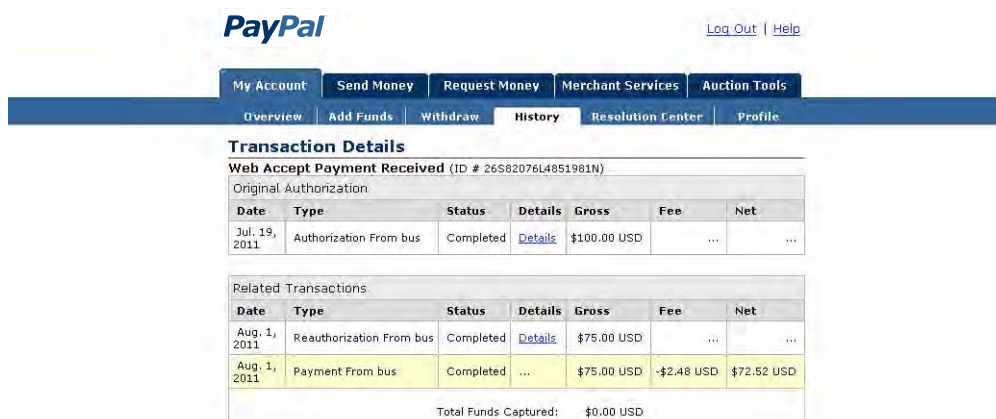
Your buyer orders a DVD player from your website.

1. Send your buyer to PayPal using a hosted flow, specifying the variable `paymentaction=authorization`.

2. Your buyer enters payment information and authorizes payment.
3. PayPal initiates the authorization.
4. The DVD player is discontinued. You order a different DVD player from your vendor and notify your buyer of the change.
5. On day 14, the DVD player arrives from your vendor. Because the honor period has passed, you complete a reauthorization for payment. You ship the DVD player and complete the final capture.

Your Transaction Details shows that the transaction has been completed.

FIGURE 4.10 Transaction Details: Reauthorization, Final Capture



The screenshot shows the PayPal 'Transaction Details' page. At the top, there's a navigation bar with links like 'My Account', 'Send Money', 'Request Money', 'Merchant Services', and 'Auction Tools'. Below this is a sub-navigation bar with 'Overview', 'Add Funds', 'Withdraw', 'History', 'Resolution Center', and 'Profile'. The main content area is titled 'Transaction Details' and shows 'Web Accept Payment Received (ID # 26S82076L4851981N)'. It includes a table for 'Original Authorization' and a table for 'Related Transactions'. The 'Original Authorization' table has one row for 'Jul. 19, 2011' with status 'Completed'. The 'Related Transactions' table has two rows: 'Aug. 1, 2011' for 'Reauthorization From bus' and 'Aug. 1, 2011' for 'Payment From bus'. A summary at the bottom shows 'Total Funds Captured: \$0.00 USD'.

Date	Type	Status	Details	Gross	Fee	Net
Jul. 19, 2011	Authorization From bus	Completed	Details	\$100.00 USD	...	...

Date	Type	Status	Details	Gross	Fee	Net
Aug. 1, 2011	Reauthorization From bus	Completed	Details	\$75.00 USD	...	...
Aug. 1, 2011	Payment From bus	Completed	...	\$75.00 USD	-\$2.48 USD	\$72.52 USD

Total Funds Captured: \$0.00 USD

One Authorization, Multiple Captures, and a Refund

1. Your buyer orders two textbooks and a keyboard from your website.
2. Your buyer enters payment information and authorizes payment.
3. Send your buyer to PayPal using a hosted flow, specifying the variable `paymentaction=authorization`.
4. PayPal initiates the authorization.
5. One textbook and the keyboard are out of stock. You order additional inventory from your vendors. You ship the in-stock textbook and capture the first partial capture on day 6.
6. You receive the second textbook from the vendor. You ship the textbook and capture the second partial capture on day 11.
7. You receive the keyboard from the vendor. You reauthorize for payment on day 19.
8. Your buyer files a complaint that the textbook from the first shipment is damaged. You issue a partial refund for the first capture.

Your Transaction Details shows the following:

FIGURE 4.11 Transaction Details: Partial Capture, Reauthorization, Refund



The screenshot shows the PayPal 'Transaction Details' page for an authorization with ID # 48W34161GT1537504. The page includes a navigation bar with links like 'My Account', 'Send Money', 'Request Money', 'Merchant Services', and 'Auction Tools'. Below the navigation bar, the 'Transaction Details' section shows the 'Original Authorization' with a table of transactions. The table has columns for Date, Type, Status, Details, Gross, Fee, and Net. The first transaction is an 'Authorization From bus' on Jan 21, 2012, with a status of 'Pending' and a gross amount of \$100.00 USD. Below this, the 'Related Transactions' section shows a list of transactions including payments, reauthorizations, and refunds. The total funds captured are \$41.25 USD.

Date	Type	Status	Details	Gross	Fee	Net
Jan. 21, 2012	Authorization From bus	Pending	...	\$100.00 USD	...	...

Date	Type	Status	Details	Gross	Fee	Net
Jan. 26, 2012	Payment From bus	Completed	Details	\$25.50 USD	-\$1.04 USD	\$24.46 USD
Jan. 31, 2012	Payment From bus	Completed	Details	\$15.75 USD	-\$0.76 USD	\$14.99 USD
Feb. 8, 2012	Reauthorization From bus	Pending	Details	\$55.25 USD	...	...
Feb. 8, 2012	Payment From bus	Refunded	Details	\$25.25 USD	-\$1.03 USD	\$24.22 USD
Feb. 8, 2012	Refund To bus	Completed	Details	-\$20.00 USD	\$0.58 USD	-\$19.42 USD

Total Funds Captured: \$41.25 USD

Lower Capture Amount

1. Your buyer orders a laser printer and a USB cable from your website.
Your buyer enters payment information and authorizes payment.
2. Send your buyer to PayPal using a hosted flow, specifying the variable `paymentaction=authorization`.
3. PayPal initiates the authorization.
4. Before you process the transaction, your buyer contacts you and requests to cancel the USB cable from the order.
5. On day 6, you ship the laser printer and complete a partial capture for an amount less than the original authorization amount.
6. You complete a void on the funds remaining on the authorization.

Your Transaction Details shows the following:

FIGURE 4.12 Transaction Details: Partial Capture, Voided Transaction



The screenshot shows the PayPal 'Transaction Details' page. At the top, there's a navigation bar with links like 'My Account', 'Send Money', 'Request Money', 'Merchant Services', and 'Auction Tools'. Below this, a sub-navigation bar includes 'Overview', 'Add Funds', 'Withdraw', 'History', 'Resolution Center', and 'Profile'. The main content area is titled 'Transaction Details' and shows a 'Web Accept Payment Received' with ID # 5G110511NP137493W. It details an 'Original Authorization' from Feb. 19, 2011, which was 'Voided' with a gross of \$100.00 USD. Below this, a 'Related Transaction' from Feb. 24, 2011, is shown as 'Completed' with a gross of \$75.00 USD, a fee of -\$2.48 USD, and a net of \$72.52 USD. The total funds captured are listed as \$75.00 USD.

Transaction Details						
Web Accept Payment Received (ID # 5G110511NP137493W)						
Original Authorization						
Date	Type	Status	Details	Gross	Fee	Net
Feb. 19, 2011	Authorization From bus	Voided	Details	\$100.00 USD	...	...

Related Transaction						
Date	Type	Status	Details	Gross	Fee	Net
Feb. 24, 2011	Payment From bus	Completed	...	\$75.00 USD	-\$2.48 USD	\$72.52 USD

Total Funds Captured: \$75.00 USD

Capture Up to 115%

1. Your buyer places an order from your website.
2. Your buyer enters payment information and authorizes payment.
3. Send your buyer to PayPal using a hosted flow, specifying the variable `paymentaction=authorization`.
4. PayPal initiates the authorization.
5. You add shipping charges to the order and capture funds on day 1.

Your Transaction Details shows the completed transaction. The capture results in a total not greater than 115% of the original authorization.

FIGURE 4.13 Transaction Details: Capture up to 115%

The screenshot shows the PayPal 'Transaction Details' page. At the top, there's a navigation bar with links like 'Log Out' and 'Help'. Below that is a menu with 'My Account', 'Send Money', 'Request Money', 'Merchant Services', and 'Auction Tools'. Under 'My Account', there are sub-links: 'Overview', 'Add Funds', 'Withdraw', 'History', 'Resolution Center', and 'Profile'. The main content area is titled 'Transaction Details' and shows a 'Web Accept Payment Received' transaction with ID # 30N56883AP381802P. It lists an 'Original Authorization' and a 'Related Transaction'.

Original Authorization						
Date	Type	Status	Details	Gross	Fee	Net
Apr. 10, 2011	Authorization From bus	Completed	Details	\$100.00 USD	...	...

Related Transaction						
Date	Type	Status	Details	Gross	Fee	Net
Apr. 10, 2011	Payment From bus	Completed	...	\$115.00 USD	-\$3.64 USD	\$111.36 USD

Total Funds Captured: \$115.00 USD

Authorization Expires

1. Your buyer orders a desktop computer from your website.
2. Your buyer enters payment information and authorizes payment.
3. Send your buyer to PayPal using a hosted flow, specifying the variable `paymentaction=authorization`.
4. PayPal initiates the authorization.
5. Before you process the transaction, your buyer contacts you to cancel the order.
6. You do not capture funds for the transaction.
7. The authorization expires.

Your Transaction Details shows the authorization with an Expired status.

FIGURE 4.14 Transaction Details: Expired Authorization


The screenshot shows the PayPal 'Transaction Details' page. At the top is the PayPal logo and a 'Log Out | Help' link. Below is a navigation bar with tabs: My Account, Send Money, Request Money, Merchant Services, Auction Tools, Overview, Add Funds, Withdraw, History, Resolution Center, and Profile. The 'Transaction Details' section is active, showing 'Web Accept Payment Received (ID # 9C144809Y43476015)' and 'Original Authorization'. A table below lists the transaction details.

Date	Type	Status	Details	Gross	Fee	Net
Mar. 3, 2010	Authorization From Nguyen Cleaners	Expired	Details	\$100.00 USD	\$0.00 USD	\$100.00 USD

Void

1. Your buyer orders a stereo system from your website.
2. Your buyer enters payment information and authorizes payment.
3. Send your buyer to PayPal using a hosted flow, specifying the variable `paymentaction=authorization`.
4. PayPal initiates the authorization.
5. Before you process the transaction, your buyer contacts you to cancel the order.
6. You void the transaction.

Your History shows the transaction with a Voided status.

FIGURE 4.15History: Voiced Transaction

The screenshot shows the PayPal 'History' page. At the top, there's a navigation bar with links like 'My Account', 'Send Money', 'Request Money', 'Merchant Services', and 'Auction Tools'. Below this is a sub-navigation bar with 'Overview', 'Add Funds', 'Withdraw', 'History' (selected), 'Resolution Center', and 'Profile'. The main content area is titled 'History' and includes a section for 'Monthly Account Statements' with a button to 'Get Monthly Account Statements'. There's also a 'Reporting Tools' sidebar with links like 'Download My History', 'Merchant Sales Report', 'Learn More', 'Advanced Search', and 'Transaction Disputes'. A search section allows filtering by 'Show' (All Activity - Advanced View), 'In' (All Currencies), and 'Within' (The Past Day). Date filters are set for 'From: 01 / 28 / 2005' and 'To: 02 / 27 / 2005'. A search button is present. Below the search filters, a table titled 'All Activity - Advanced View from Jan. 28, 2005 to Feb. 27, 2005' displays transaction details.

Date	Type	To/From	Name/Email	Status	Details	Action	Gross	Fee	Net Amount	Balance
Feb. 27, 2005	Authorization	From:	Nguyen, Clesters	Voided	Details		\$10.00 USD	\$0.00 USD	\$10.00 USD	\$242.52 USD

Reattempted Capture

1. Your buyer orders two sweatshirts from your website.
2. Your buyer enters payment information and authorizes payment.
3. Send your buyer to PayPal using a hosted flow, specifying the variable `paymentaction=authorization`.
4. PayPal initiates the authorization.
5. On day 3, you attempt to capture funds, but the capture fails. You receive an error message similar to the following:

FIGURE 4.16A Capture Error

PayPal [Log Out](#) | [Help](#)

My Account | **Send Money** | **Request Money** | **Merchant Services** | **Auction Tools**

Overview | **Add Funds** | **Withdraw** | **History** | **Resolution Center** | **Profile**

We are sorry, we cannot process this settlement at this time.

Capture Funds
Enter the capture details below.

Authorization ID: 7KN421336L156840R
Name: Hachigoro Bayul
Email: qa76-usbuser1_bal@paypal.com
Authorization Amount: \$75.00 USD
Capture Amount:

Additional Capture Possible: ☐ Yes (option to capture additional funds on this authorization if needed)
☒ No (no additional capture needed; close authorization after this capture)

Note to merchant: Your buyer Hachigoro Bayul authorized a payment of \$75.00 USD. If you capture an amount different than this, you should notify your buyer of this change.

PayPal strongly recommends that you explain any unique circumstances (e.g. multiple captures, changes in item availability) to your buyer in detail below. Your buyer will see this note in their Transaction Details and in an email notification from PayPal.

Note to Buyer: (Optional)

255 characters left

[Continue](#)

6. There was a restriction on the buyer's account. You contact the buyer to resolve the problem.
7. Your buyer resolves the account problem.
8. You reattempt and successfully capture funds. You ship the order to your buyer.

NOTE: The reauthorization scenario is similar to the Reattempted Capture scenario as detailed above.

5

Order Authorizations Scenarios

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

Simple Order

TABLE 5.13 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 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 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 5.14 Complex Order Scenario

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

Order Authorizations Scenarios

Concurrent Authorizations

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 accomodate 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 5.15 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>	

Action	API Call	Running Balance
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>
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 5.16 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

Order Authorizations Scenarios

Void Authorizations

Action	API Call	Running Balance
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 5.17 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 5.18 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>
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 5.19 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>

Order Authorizations Scenarios

Complete Capture

Action	API Call	Running Balance
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.

6

Best Practices

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 and/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.

7

Testing PayPal Authorization & Capture

You can test your web- or API-based implementation of PayPal Authorization & Capture in the PayPal Sandbox. The PayPal Sandbox supports the `paymentaction=order` variable in payment flows, the Merchant Services functions, and the Authorization & Capture APIs.

To test your implementation of PayPal Authorization & Capture on the PayPal Sandbox, go through the payment flow on <https://www.sandbox.paypal.com> and pass the variable `paymentaction=order`. Then log in to your PayPal Sandbox account and proceed as you would on the live site to test your flows, or use the Authorization & Capture API to reauthorize, void, and capture.

For more information on the Sandbox, see the *PayPal Sandbox User Guide*.

Features Not Supported in the PayPal Sandbox

Authorizations do not expire on the PayPal Sandbox. As with the live PayPal Web Services API, after 29 days, funds cannot be captured. However, in the Sandbox the status displayed in Transaction History for expired authorizations does not change, and any unused balance on hold is not released.



Testing PayPal Authorization & Capture

Features Not Supported in the PayPal Sandbox



PayPal Authorization & Capture Statuses

An authorization can only have one status at a time. Any status change will overwrite the prior status.

Status	Description
Complete	An authorization has a Complete status when the captured amount is at least 100% of the authorization or has been specified “Marked Complete.”
Expired	The authorization period of 29 days has passed. The authorization had a Pending status when the authorization period was exceeded.
Order	An order has a Complete status when the captured amount is at least 100% of the authorization or has been specified “Marked Complete.”
Pending	Funds are available for capture within the authorization period of 29 days, provided they do not have a Voided status. An authorization is Pending after your buyer has authorized payment. While an authorization is Pending, you can Capture or Void funds.
Voided	The authorization has been canceled by you or a PayPal Customer Service representative. Only authorizations with a Pending status can be voided.



PayPal Authorization & Capture API Error Codes, Short Messages, and Long Messages

Authorization & Capture API Errors

TABLE B.20 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 B.20 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 B.20 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 B.20 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 B.20 Authorization & Capture API Error Messages

Error Code	Short Message	Long Message	Returned By API Call...	Correcting This Error...
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.		



IPN and PayPal Authorization & Capture

For details on how to set up and verify IPN, refer to the Order Management Integration Guide.

IPN Notifications

You will receive IPN notifications when you complete the following transaction activities:

- Authorization
- Capture
- Void

The following table contains Authorization & Capture variables returned through IPN.

TABLE C.21 IPN Variables for PayPal Authorization & Capture

Variable	Value	Description	Character Limit	Sent With Authorization	Sent With Capture	Sent With Void
txn_id	transaction-specific	Unique ID of the authorization	20	x	x	x
auth_id	transaction-specific	Unique ID of the authorization	20	x	x	x
auth_amount	transaction-specific	Amount of original authorization	20	x	x	
auth_exp	transaction-specific	Authorization expiration date and time	20	x	x	
remaining_settle	0-10	Number of remaining settlements allowed		x	x	

TABLE C.21 IPN Variables for PayPal Authorization & Capture

Variable	Value	Description	Character Limit	Sent With Authorization	Sent With Capture	Sent With Void
auth_status	Pending	Open Auth > 0			x	
	Completed	Funds have been captured and Open Auth = 0		x		x
	Expired	Authorization has expired				
	Voided	Authorization has been voided				

NOTE: “Open Auth” refers to an authorization that has remaining funds available to capture or void.



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.