

PayPal Express Checkout

Using Alternative Payment Services and the SCMP API

October 2019

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the power of payment

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Recent Revisions to This Document

Release	Changes
October 2019	Added updated information about PayPal customer billing addresses and check status service reply fields. See Appendix A, "API Fields," on page 29 .
September 2019	<p>Reorganized document structure:</p> <ul style="list-style-type: none"> ■ Merged content to create a single chapter, Chapter 3, "Check Status Service," on page 18. ■ Moved relevant SCMP API information to Appendix A, "API Fields," on page 29. ■ Consolidated service examples in Appendix B, "Service Examples," on page 62. ■ Consolidated check status examples in Appendix C, "Check Status Examples," on page 72. <p>Added new field, <code>client_metadata_id</code> in Appendix A, "API Fields," on page 29.</p>
August 2019	Added information about multibyte character strings. See "Working with Multibyte Character Strings," page 30 .
August 2018	Updated the URL to enable In-Context Express Checkout. See "PayPal Express Checkout In-Context Flow," page 11 .
July 2018	Initial public release.
February 2018	This revision contains only editorial changes and no technical updates.

About This Guide

Audience and Purpose

This guide is written for application developers who want to use the CyberSource SCMP API to integrate PayPal Express Checkout into their order management system.

Implementing PayPal Express Checkout services requires software development skills. You must write code that uses API request and reply fields to integrate PayPal Express Checkout services.

Conventions

Notes and Important Statements



A *Note* contains helpful suggestions or references to material not contained in the document.



An *Important* statement contains information essential to successfully completing a task or learning a concept.

Text and Command Conventions

Convention	Usage
Bold	<ul style="list-style-type: none"> Field and service names in text; for example: Include the ics_applications field. Items that you are instructed to act upon; for example: Click Save.
Screen text	<ul style="list-style-type: none"> XML elements. Code examples and samples. Text that you enter in an API environment; for example: Set the apSessions_run field to <code>true</code>.

Related Documents

- *Getting Started with CyberSource Advanced for the SCMP API* ([PDF](#) | [HTML](#)) describes how to get started using the SCMP API.
- [SCMP API Documentation and Downloads page](#).

Refer to the Support Center for complete CyberSource technical documentation:

http://www.cybersource.com/support_center/support_documentation

Customer Support

For support information about any CyberSource service, visit the Support Center:

<http://www.cybersource.com/support>

Introduction to PayPal Express Checkout

When you use the PayPal Express Checkout services:

- No additional security key management is required from you.
- You manage your PayPal Express Checkout payments in the CyberSource Business Center as you would other payment types. You can search for the payment and view its details.
- You use the Transaction Details Report and the Transaction Summary Report to manage your PayPal Express Checkout payments.

Benefits of Using PayPal Express Checkout

When you use PayPal Express Checkout, your customer completes the order on your web site rather than on the PayPal web site. You can:

- Receive real-time notification of successful payments.
- Enable your customers to be directed to your web site's final confirmation page.
- Receive notification from CyberSource that the customer's address has been confirmed and that you are eligible for coverage under the PayPal Seller Protection Policy (if you are enrolled). For more information, see "[Dispute and Chargeback Services](#)," page 16.

PayPal requires you to provide three ways for your customers to access PayPal Express Checkout. See [Table 1](#).

Table 1 PayPal Express Checkout Methods

Method	Description
Shortcut	Place the Checkout with PayPal button on your checkout page.
Payment	Place the PayPal button on your payment page or add <i>PayPal</i> as a choice in your payment drop-down list.
Credit	Place the PayPal Credit button on your checkout page.

Prerequisites

Before you process PayPal Express Checkout payments:

- Install a CyberSource client. See:
See *Getting Started with CyberSource Advanced for the SCMP API* ([PDF](#) | [HTML](#)).
- Contact CyberSource Customer Support to set up your CyberSource merchant account. For more information, see "PayPal Merchant Set Up," page 10.

PayPal Merchant Set Up

To process your PayPal Express Checkout payments through CyberSource, you must set up your merchant account by sharing the following information with CyberSource:

- PayPal sandbox account (facilitator email address)
- PayPal client ID (CID)
- PayPal secret
- PayPal merchant ID (MID)

To acquire this information and provide it to CyberSource:

Step 1 If you do not already have one, set up a PayPal business or premier account:

<https://www.paypal.com/us/webapps/mpp/merchant>

Step 2 If you do not already have one, set up a PayPal developer sandbox account:

<https://developer.paypal.com/docs/classic/lifecycle/sandbox/accounts/#create-and-manage-sandbox-accounts>

Step 3 As directed on the PayPal site, get your PayPal credentials by creating a PayPal app:

<https://developer.paypal.com/docs/api/overview/#get-credentials>

Step 4 Save the Sandbox account facilitator email address, the client ID, and the secret for future reference. For example:

- Sandbox account facilitator email address:
`merchantuser-facilitator@merchant.com`
- Client ID:
`AahnQzKLL2vvG_UI6YQy9xicyt5joMLVoPHW-1Bv8gCvPkTiNwQSRCvKIKXy8UZZguijwbJTTs_Cjhdz`

- **Secret:**
EOE3eqqeIBY4q8LhsON0-wp2zPb_0SOqPH3sopx_
uwuIMkCug7zw3aKDunstrXmcrGecmpeUJgsqTGO

Step 5 On the PayPal developer site, click **Profile** at the top right corner of the page.

Step 6 Navigate to **My business info** in the left navigation pane. Your merchant ID is displayed in the list of merchant information. Save the merchant ID for future reference. For example:

- Merchant ID: PP45KFYYH69KU

Step 7 Contact CyberSource merchant support and provide them with the information you have collected from PayPal: the sandbox facilitator email account, the client ID, the secret, and the merchant ID.

When your CyberSource account is set up, you can process PayPal Express Checkout payments.

PayPal Express Checkout In-Context Flow



Important

To enable PayPal Express Checkout, see:

<https://developer.paypal.com/docs/checkout/how-to/server-integration/>

When your customer is ready to pay for the products that they choose from your web site:

- 1 The customer clicks **Checkout with PayPal** on your checkout page or clicks **PayPal** on your payment page.
- 2 Your web site remains in view while a PayPal window appears.
- 3 The customer logs in and chooses a payment method and shipping address.
- 4 Customer confirms payment, and PayPal redirects the customer's browser to your web site. You can choose to display a payment confirmation page:

<https://developer.paypal.com/docs/integration/direct/express-checkout/integration-jsv4/script-options/#show-a-confirmation-page>

PayPal Express Order Processing

PayPal Express checkout provides two kinds of order processing:

- Standard orders
- Custom orders

The kind of order processing you use depends upon your business. CyberSource recommends using custom orders, because they can be more flexible than standard orders.

PayPal Express Standard Orders

Use a standard order when you meet one or more of these criteria:

- You do not usually run out of products.
- You do not usually have back orders.
- You do not accept advanced orders.

Standard Order Flow

Sequence of service requests for a standard 100.00 order:

- 1 Sessions Service 100.00
- 2 Check Status Service
- 3 Order Service for 100.00
- 4 Sale Service for 100.00

PayPal Express Custom Orders

A PayPal Express checkout custom order enables you to perform multiple authorizations and multiple captures for each authorization. Use a custom order when you meet one or more of these criteria:

- You often have split shipments.
- You accept advanced orders for products that are not currently available but will be available within the next 29 days.
- You often have back orders for which the customer waits longer than a week.
- You often reauthorize bank cards.

Custom Order Flows

Table 2 Sequence of Service Requests for Custom 100.00 Orders

Immediate Sale	Delayed Authorization	Delayed Capture
1 Sessions Service	1 Sessions Service	1 Sessions Service
2 Check Status Service	2 Check Status Service	2 Check Status Service
3 Order Service for 100.00	3 Order Service for 100.00	3 Order Service for 100.00
4 Sale Service for 100.00	4 Authorization Service for 70.00	4 Authorization Service for 70.00
	5 Capture Service for 70.00	5 Capture Service for 20.00
	6 Authorization Service for 30.00	6 Capture Service for 50.00
	7 Capture Service for 30.00	7 Authorization Service for 30.00
		8 Capture Service for 15.00
		9 Capture Service for 15.00

PayPal Billing Agreements

You can use a PayPal Express Checkout billing agreement to bill the customer without requiring an authorization for each payment. When you send a request to bill the customer, use the billing agreement to process the PayPal Express checkout order. A billing agreement is also referred to as a *reference transaction*.

If You Have a Production Account

Contact your PayPal account manager to configure your production account for processing billing agreements, or contact PayPal Business Support.

If You Have a Sandbox Account

If your PayPal sandbox account was created before December 15, 2015, contact your PayPal account manager or [PayPal merchant technical support](#) to configure your account to process billing agreements.

If your PayPal sandbox account was created on or after December 15, 2015, it is already configured to process billing agreements.

To request a billing agreement with payment:

- Step 1** Request the sessions service to receive the redirection URL that directs the customer to PayPal to confirm their billing agreement. See [Chapter 2, "Sessions Service," on page 17](#). No amount or currency value is required in the sessions service request when you create a billing agreement.
- Step 2** Request the billing agreement service and include the request ID field returned in the sessions service response. See [Chapter 11, "Billing Agreements Service," on page 28](#).
- Step 3** Request the check status service to receive customer details from PayPal for seller protection and other uses. This step is optional. See [Chapter 3, "Check Status Service," on page 18](#).
- Step 4** Request the sale service to process the customer's billing agreement. Use the billing agreement created in [Step 2](#). See [Chapter 8, "Sale Service," on page 25](#).
-

Using PayPal Express Credit



Note

PayPal Express Credit is supported only in the U.S.A.

The PayPal Express Credit button on your checkout page offers PayPal Express credit as a standalone option. Customers can defer payment by using the PayPal Express credit line included in their PayPal account. Do not display the PayPal Credit button on your shopping cart page if you require customers to log in before checking out.



Important

The PayPal Express credit supports standard order flow (see ["PayPal Express Standard Orders," page 12](#)) and custom order flows (see ["PayPal Express Custom Orders," page 12](#)). You must include the `ap_sessions_payment_option_id` request field in the sessions request and set it to `Credit`.

When your customers are ready to pay for your product, they follow these steps:

- 1 Click **PayPal Credit** on the checkout page.
- 2 Log in and enter a date of birth and Social Security number.
- 3 Agree to the PayPal credit terms and conditions.
- 4 Confirm the email address and credit line.

- 5 Confirm the credit amount. The customer is directed to the merchant web site.
- 6 Confirm order.

To add the PayPal Express Credit banner and button to your page:

Step 1 Add the PayPal banner to advertise and explain the benefits of PayPal credit:

https://financing.paypal.com/docs/Web_Step_By_Step_Guide.pdf

Step 2 Add the PayPal Credit button to your checkout page:

<https://www.paypal.com/us/webapps/mpp/logos-buttons>

Additional PayPal Express Checkout Services

Table 3 describes additional available services.

Table 3 Additional PayPal Express Checkout Services

Service	Description
Authorization reversal service (see page 23)	<p>Reverses an authorization or an order setup:</p> <ul style="list-style-type: none"> ■ If you performed multiple authorizations for an order and want to reverse one of them, you must specify which authorization to reverse by including the ap_auth_request_id field.
Refund service (see page 26)	<p>Refunds the capture amount to a customer. You can perform multiple partial refunds for each capture:</p> <ul style="list-style-type: none"> ■ To refund an immediate full or partial sale, request the refund service and include the ap_refund_request_id field. ■ To refund a delayed capture, you must specify which capture to credit by including the ap_refund_request_id field.

Obtaining Transaction Information

The following table describes how to obtain information about your PayPal Express Checkout transactions.

Table 4 Obtaining Transaction Information

Method	Description
PayPal Express Checkout services	Use the check status service (see Chapter 3, "Check Status Service," on page 18).
Reply messages	After you send a request message for a PayPal Express Checkout service, CyberSource responds with a reply message that contains information about the status of your request, including errors and exceptions.
Reports	Use the Transaction Details Report and the Transaction Summary Report to manage your PayPal Express Checkout payments.
Transaction details	View the details of your PayPal Express Checkout transactions in the Business Center just as you can for other payment types. You can search for transactions by date, application type, customer name, and other transaction identifiers.

Dispute and Chargeback Services

The following table describes PayPal Express Checkout services related to disputes and chargebacks.

Table 5 Services for Disputes and Chargebacks

Service	Description
Chargeback dispute rights	When your customers choose a payment card as the funding source for the PayPal Express Checkout payment, they have chargeback dispute rights. If your customers dispute a charge, PayPal Express Checkout performs the initial chargeback processing and contacts you for documentation.
Buyer complaint process	PayPal Express Checkout offers a Buyer Complaint Process that applies to all purchases regardless of the funding source. When a customer files a complaint, PayPal investigates and contacts you for documentation. See http://www.paypal.com/cgi-bin/webscr?cmd=p/gen/buyer-complaint-outside .

Sessions Service

Requesting the Sessions Service

The **ics_ap_sessions** service:

- Creates a payment or billing agreement with PayPal, which sets up the customer order. See [Chapter 11, "Billing Agreements Service,"](#) on page 28.
- Returns a CyberSource request ID (**request_id**) and a PayPal transaction ID (**ap_sessions_transaction_id**).
- Returns a redirect URL (**ap_sessions_merchant_url**) that includes a sessions token. Use this redirect URL to direct the customer's browser to the PayPal web site. For example:

```
https://www.sandbox.paypal.com/cgi-bin/webscr?cmd=_express-checkout&token=EC-2HF65459FN270362N
```

For more information:

<https://developer.paypal.com/docs/integration/direct/express-checkout/integration-jsv4/>

For detailed descriptions of required and optional fields, [Appendix A, "API Fields,"](#) on page 29.

Check Status Service

The check status service is sent to check the status of an individual service request. For example, when your customer initiates a purchase, you send a sessions service request. You can then check the status of that sessions service request using the check status service (**ics_ap_check_status**).

The check status service is used to:

- Check the status of individual service requests. For a list of the services you can status check, see ["Checking the Status of a Request," page 19](#).
- Get the details of a billing agreement.

**Note**

To get the details of a customer's billing address from PayPal, you must have this feature enabled on your PayPal account. Contact your PayPal account manager.

Requesting the Check Status Service

Using the check status service:

- Requires the request ID value that was returned in the individual service reply.
- Returns information about the status of the requested service.

If you are using the check status service to create a billing agreement:

- Requires the billing agreement ID.
- Returns the billing agreement details.

**Note**

If your **ics_ap_sessions** request includes **offer-level** fields, the **ics_ap_check_status** service reply returns **offer-level** fields. To configure your account for **offer-level** fields, contact CyberSource customer support.

For detailed descriptions of required and optional fields, see [Appendix A, "API Fields," on page 29](#).

Checking the Status of a Request

To check the status of a specific service, you need to include the correct request ID. [Table 6](#) describes the request IDs used to check the status of a service.

For more information on the request IDs used by each PayPal Express service, see ["Request IDs in Request Messages," page 31](#).

To check the status of an individual service request:

Step 1 Set the `ics_applications` field to `ics_ap_check_status`.

Step 2 Include the following **required** fields in the request:

- `merchant_id`
- `merchant_ref_number`
- `ap_payment_type`—set to `PPL`.

Step 1 Set the `request_id` field based on the values described in [Table 6](#).

Table 6 Checking the Status of Individual Services

Service	Request ID Value
Authorization	<p>To check the status of an authorization service request, set the <code>ap_check_status_request_id</code> field to the value returned in the <code>request_id</code> field of the authorization service reply. See Example 23, "Check Status Request: Authorization," on page 74.</p> <p>The <code>ap_check_status_payment_status</code> field returns one of the following values:</p> <ul style="list-style-type: none"> ■ AUTHORIZED ■ EXPIRED ■ FAILED ■ PENDING
Billing Agreement	<p>To check the status of a billing agreement service request, set the <code>ap_sessions_status</code> field to the value returned in the <code>request_id</code> field of the sessions service reply.</p> <p>Also in the billing agreement service check status request, set the <code>ap_billing_agreement_id</code> field to the value returned in the <code>ap_billing_agreement_id</code> field in the billing agreement service reply. See Example 31, "Check Status Request: Billing Agreement," on page 78.</p> <p>The <code>ap_check_status_payment_status</code> field returns one of the following values:</p> <ul style="list-style-type: none"> ■ ACTIVE ■ CANCELLED ■ FAILED

Table 6 Checking the Status of Individual Services (Continued)

Service	Request ID Value
Capture	<p>To check the status of a capture service request, set the ap_check_status_request_id field to the value returned in the request_id field of the capture service reply. See Example 25, "Check Status Request: Capture," on page 75</p> <p>The ap_check_status_payment_status field returns one of the following values:</p> <ul style="list-style-type: none"> ■ DISPUTED ■ FAILED ■ PENDING ■ SETTLED
Order	<p>To check the status of an order service request, set the ap_check_status_request_id field to the value returned in the request_id field of the order service reply. See Example 21, "Check Status Request: Order," on page 73.</p> <p>The ap_check_status_payment_status field returns one of the following values:</p> <ul style="list-style-type: none"> ■ CANCELLED ■ CREATED ■ FAILED
Refund	<p>To check the status of a refund service request, set the ap_check_status_request_id field to the value returned in the request_id field of the refund service reply. See Example 29, "Check Status Request: Refund," on page 77.</p> <p>The ap_check_status_payment_status field returns one of the following values:</p> <ul style="list-style-type: none"> ■ FAILED ■ PENDING ■ REFUNDED
Sale	<p>To check the status of a sale service request, set the ap_check_status_request_id field to the value returned in the request_id field of the sale service reply. See Example 27, "Check Status Request: Sale," on page 76.</p> <p>The ap_check_status_payment_status field returns one of the following values:</p> <ul style="list-style-type: none"> ■ DISPUTED ■ FAILED ■ PENDING ■ SETTLED
Sessions	<p>To check the status of a sessions service request, set the ap_sessions_status field to the value returned in the request_id field of the sessions service reply. See Example 19, "Check Status Request: Sessions," on page 72.</p> <p>The ap_check_status_payment_status field returns one of these status values:</p> <ul style="list-style-type: none"> ■ CREATED ■ FAILED

Order Service

Requesting the Order Service

The order service:

- Requires the request ID value that was returned in the sessions response.
- Requires the payer ID value to complete the payment.
- Creates an order in anticipation of one or more authorizations.
- Returns a transaction ID.



Important

When any of the additional amount fields change, all of the amount fields should be included in the new request, and they must equal the grand total amount figure. The subtotal amount cannot be updated after a sessions request.



Note

When you are processing a standard order, the next service request is the sale service request. See "[Sale Service](#)," [page 25](#). When you are processing a custom order, the next service request is an authorization service request. See "[Authorization Service](#)," [page 22](#).

For detailed descriptions of the required and optional fields, see [Appendix A, "API Fields,"](#) on [page 29](#).

Authorization Service

The authorization service:

- Requires the request ID value that was returned in the order response.
- Obtains the authorization.
- Enables you to perform multiple partial authorizations.

The authorization service typically commits funds for three business days. If required, contact PayPal to increase the honor interval to more than three days. You can try to capture the authorization for a period of three days after the authorization, and if funds are available, the capture is successful.



If you are processing a custom order, the next service request is a capture service. See ["Capture Service," page 24](#).

For detailed descriptions of required and optional fields, see [Appendix A, "API Fields," on page 29](#).

Authorization Reversal Service

Requesting the Authorization Reversal Service

**Note**

Reversing an authorization that has been captured has no effect on the captured amount.

The authorization reversal service releases the hold on a customer's funds and requires the request ID value that was returned in the authorization response.

For detailed descriptions of required and optional fields, see [Appendix A, "API Fields,"](#) on [page 29](#).

Capture Service

Requesting the Capture Service

**Note**

A capture transfers the funds from the customer's account to your account.

The capture service:

- Requires the request ID value that was returned in the authorization response.
- Enables you to capture the entire authorized amount.
- Enables you to perform multiple partial captures, which are also called *split shipments*, of up to 115% of the authorized amount.

For detailed descriptions of required and optional fields, see [Appendix A, "API Fields,"](#) on [page 29](#).

Sale Service

Requesting the Sale Service

**Note**

When there is a single capture for the order, you must request the sale service. For multiple captures, you must request the authorization and capture services.

The sale service:

- Requires the request ID value returned in the order response. Include this value in the **ap_order_request_id** field.
- Requires the billing agreement ID value, if you are processing a billing agreement. Include this value in the **ap_billing_agreement_id** field. See "[Billing Agreements Service](#)," page 28.
- Obtains the authorization.
- Captures the authorized amount.
- Returns a transaction ID.

For detailed descriptions of required and optional fields, see [Appendix A, "API Fields,"](#) on page 29.

Refund Service

Requesting the Refund Service

The refund service:

- Requires the request ID value that was returned in the capture response or the sale response. Include this value in the **ap_refund_request_id** field.
- Enables you to perform a full refund or multiple partial refunds for an order.

For detailed descriptions of required and optional fields, see [Appendix A, "API Fields,"](#) on [page 29](#).

Cancel Service

Requesting the Cancel Order Service



Important

You cannot cancel an order that has been authorized or captured.

The cancel service:

- Voids or cancels the order.
- Requires the request ID value that was returned in the order response. Include the value in the **ap_order_request_id** field.
- When processing a billing agreement transaction, include the **ap_billing_agreement_id** field. See ["Billing Agreements Service," page 28](#).

For detailed descriptions of required and optional fields, see [Appendix A, "API Fields," on page 29](#).

Billing Agreements Service

**Important**

Your merchant account must be configured to process billing agreement transactions. See ["PayPal Billing Agreements," page 13](#).

Requesting a Billing Agreement

A billing agreement is set up between PayPal and your customer. When you log the billing agreement, you can easily bill your customer without gathering customer information every time.

The following sequence describes the services you use for a billing agreement.

- 1 Sessions service request—the service reply includes a merchant URL that redirects the customer to your website, where they confirm their billing information. See [Chapter 2, "Sessions Service," on page 17](#).
- 2 Billing agreement service request—creates the billing agreement. Requires the request ID value returned in the sessions service reply.
- 3 Check status service request—requires the request ID returned in the sessions reply and the billing agreement ID returned in the billing agreement reply. See [Chapter 3, "Check Status Service," on page 18](#).
- 4 Sale service—requires the billing agreement ID returned in the billing agreement response. See [Chapter 8, "Sale Service," on page 25](#).
- 5 Refund service—requires the request ID value returned in the sale response. See [Chapter 9, "Refund Service," on page 26](#).
- 6 Cancel service—requires the billing agreement ID returned in the billing agreement response. (See.)

For detailed descriptions of required and optional fields, see [Appendix A, "API Fields," on page 29](#).

API Fields

Formatting Restrictions

Unless otherwise noted, all fields are order and case insensitive and the fields accept special characters such as @, #, and %.



Note

Values for request-level and offer-level fields must not contain carets (^) or colons (:). However, they can contain embedded spaces and any other printable characters. When you use more than one consecutive space, CyberSource removes the extra spaces.

Data Type Definitions

Table 7 Data Type Definitions

Data Type	Description
Date and time	Format is YYYY-MM-DDThhmmssZ, where: <ul style="list-style-type: none"> ■ T separates the date and the time ■ Z indicates Coordinated Universal Time (UTC), also known as Greenwich Mean Time (GMT) Example 2019-08-11T224757Z equals August 11, 2019, at 22:47:57 (10:47:57 p.m.)
Decimal	Number that includes a decimal point Example 23.45, -0.1, 4.0, 90809.0468
Integer	Whole number {..., -3, -2, -1, 0, 1, 2, 3, ...}
Nonnegative integer	Whole number greater than or equal to zero {0, 1, 2, 3, ...}
Positive integer	Whole number greater than zero {1, 2, 3, ...}
String	Sequence of letters, numbers, spaces, and special characters

Working with Multibyte Character Strings

Some languages—such as Korean, Chinese, and Russian—require more than one ASCII byte per character. Therefore, a string of multibyte characters can exceed the allotted string length of some CyberSource API fields.

In some languages, a short name that visually has only three or four characters might be equivalent to 10 or 15 bytes in UTF-8. Therefore, it is important to consider the overall length of a multibyte string to be sure it fits into the allotted ASCII string length.



For best success when working with languages, make sure the total length of a multibyte string does not exceed the ASCII string length for a specific API field.

Request IDs in Request Messages

The following table lists the request ID field names used in request messages. For the request ID field names used to check the status of an individual service, see "[Checking the Status of a Request](#)," page 19.

Table 8 Request IDs in Request Messages

Service Request	Request Field Names
Check Status (get pay details)	<ul style="list-style-type: none"> ■ ap_sessions_request_id—set to the value of the request_id field returned in the sessions service response. ■ ap_check_status_request_id—set to the value of the request_id field returned in the: <ul style="list-style-type: none"> • Order service response • Authorization service response • Capture service response • Sale service response • Refund service response • Billing agreement service response
Billing Agreement (reference transaction)	<ul style="list-style-type: none"> ■ ap_sessions_request_id—set to the value of the request_id field returned in the sessions service response. ■ ap_check_status_request_id—set to the value of the request_id field returned in the billing agreement service response.
Order	<ul style="list-style-type: none"> ■ ap_sessions_request_id—set to the value of the request_id field returned in the sessions service response. ■ ap_check_status_request_id—set to the value of the request_id field returned in the order service response.
Sale	<p>ap_order_request_id—set to the value of the request_id field returned in the order service response.</p> <p>or</p> <p>ap_billing_agreement_id—include this field if processing a billing agreement.</p>
Authorization	ap_order_request_id —set to the value of the request_id field returned in the order service response.
Capture	ap_auth_request_id —set to the value of the request_id field returned in the authorization service response.
Refund	<ul style="list-style-type: none"> ■ ap_refund_request_id—set to the value of the request_id field returned in the capture service response. ■ ap_refund_request_id—set to the value of the request_id field returned in the sale service response.

Table 8 Request IDs in Request Messages

Service Request	Request Field Names
Authorization Reversal	ap_auth_request_id —set to the value of the request_id field returned in the authorization service response.
Cancel	<ul style="list-style-type: none"> ■ ap_order_request_id—set to the value of the request_id field returned in the order service response. ■ ap_billing_agreement_id—set to the value of the returned in the billing agreement service response.

Request IDs in Reply Messages

For all PayPal Express Checkout services, the request ID is returned in the reply message in the **request_id** field.

Request Fields

Table 9 Request Fields

Field	Description	Required (R) / Optional (O)	Data Type & Length
ap_auth_request_id	Set to the value of the request_id field returned in the Authorization service response.	Auth Reversal (R) Capture (R)	String (26)
ap_billing_agreement_id	The identifier for the billing agreement. This field is required when checking the status of a billing agreement. Set to the value returned in the ap_billing_agreement_id field.	Billing Agreement (R) Cancel (O) Check Status (R) Sale (R for a reference transaction)	String (50)
ap_billing_agreement_indicator	Indicates whether the transaction is a billing agreement. Possible values: <ul style="list-style-type: none"> ■ Y ■ N (default) 	Sessions (O)	String (1)
ap_billing_agreement_description	Description of the billing agreement.	Sessions (O)	String (127)

Table 9 Request Fields (Continued)

Field	Description	Required (R) / Optional (O)	Data Type & Length
ap_capture_is_final	Indicates whether to release the authorization hold on the remaining funds. Possible values: <ul style="list-style-type: none"> ■ Y ■ N (default) 	Capture (O)	
ap_capture_request_id	Set to the value of the request_id field returned in the Capture service response.	Refund (R)	String (26)
ap_check_status_request_id	Request ID of the transaction whose status you want to verify.	Check Status (R)	String 26)
ap_funding_source	Payment method for the unit purchase. Possible values: <ul style="list-style-type: none"> ■ UNRESTRICTED (default)—this value is only available if configured by PayPal for the merchant. ■ INSTANT 	Refund (O) Sale (O) Sessions (O)	String (30)
ap_order_request_id	Set to the value of the request_id field returned in the Sessions service response.	Authorization (R) Cancel (R) Sale (R)	String (26)
ap_payer_id	The ID of the payer.	Order (R)	String(30)
ap_payment_type	Identifier for the payment type. Value: PPL	Authorization (R) Auth Reversal (R) Billing Agreement (R) Cancel (R) Capture (R) Check Status (R) Order (R) Refund (R) Sale (R) Sessions (R)	String (3)
ap_refund_reason	The reason for the refund.	Refund (O)	String (30)
ap_refund_request_id	Set to the value of the request_id field returned in the Sale or Capture service response.	Refund (R)	String (26)
ap_sessions_cancel_url	URL to which the customer is directed after cancelling the payment.	Sessions (O)	String (255)

Table 9 Request Fields (Continued)

Field	Description	Required (R) / Optional (O)	Data Type & Length
ap_sessions_payment_option_id	Identifier for a PayPal credit transaction. Value: <code>Credit</code>	Sessions (R for PayPal credit transaction only)	String (255)
ap_sessions_request_id	Set to the value of the request_id returned in the sessions service response.	Billing Agreement (R) Check Status (R) Order (R)	String (26)
ap_sessions_success_url	URL to which the customer is directed after completing the payment.	Sessions (O)	String (255)
client_metadata_id	Verifies that the payment is originating from a valid, user-approved application and device. Sending this field helps reduce fraud and declined transactions. Note The length is set for a hexadecimal representation of the GUID/UUID. This field accepts a 36-character string (with hyphens) or a 32-character string (without hyphens). Example 123e4567-e89b-12d3-a456-426655440000 Example 123e4567e89b12d3a456426655440000	Sale (R for reference transactions; otherwise O)	String (36)
currency	Currency for the transaction. Use the three-character <i>ISO Standard Currency Codes</i> . Note Do not include this field when creating a billing agreement. Important Decimal places are not supported for the HUF currency code.	Authorization (R) Capture (R) Refund (R) Sale (R when creating an order) Sessions (R when creating an order)	String (5)

Table 9 Request Fields (Continued)

Field	Description	Required (R) / Optional (O)	Data Type & Length
grand_total_amount	<p>Grand total for the transaction. This value cannot be negative. You can include a decimal point (.), but you cannot include any other special characters. CyberSource truncates the amount to the correct number of decimal places.</p> <p>Important You must include either grand_total_amount or offer0, the offer-level field amount and the offer-level field tax_amount in your request.</p> <p>The amount value must be a non-negative number containing 2 decimal places and limited to 7 digits before the decimal point.</p> <p>Note Do not include this field when creating a billing agreement.</p>	<p>Authorization (R)</p> <p>Capture (R)</p> <p>Order (R)</p> <p>Sale (R)</p> <p>Sessions (R when creating an order)</p>	Decimal (10)
ics_applications	<p>CyberSource services to process for the request.</p> <p>Possible values:</p> <ul style="list-style-type: none"> ▪ ics_ap_auth ▪ ics_ap_auth_reversal ▪ ics_ap_billing_agreement ▪ ics_ap_cancel ▪ ics_ap_capture ▪ ics_ap_check_status ▪ ics_ap_order ▪ ics_ap_refund ▪ ics_ap_sale ▪ ics_ap_sessions 	<p>Authorization (R)</p> <p>Auth Reversal (R)</p> <p>Billing Agreement (R)</p> <p>Cancel (R)</p> <p>Capture (R)</p> <p>Check Status (R)</p> <p>Order (R)</p> <p>Refund (R)</p> <p>Sale (R)</p> <p>Sessions (R)</p>	String (255)
merchant_descriptor	Merchant description on the customer's statement. When you include more than one consecutive space, extra spaces are removed.	Sale (O)	String (35)
merchant_id	Your CyberSource merchant ID. Use the same merchant ID for evaluation, testing, and production.	Required by all services	String (30)

Table 9 Request Fields (Continued)

Field	Description	Required (R) / Optional (O)	Data Type & Length
merchant_ref_no	Merchant-generated transaction number or tracking number. CyberSource recommends that you send a unique value for each transaction so that you can perform meaningful searches for the transaction. For information about tracking orders and transactions, see Getting Started with CyberSource Advanced for the SCMP API .	Required by all services	String (50)
note_to_payee	Note to the recipient of the funds in this transaction.	Sale (O) Sessions (O)	String (255)
note_to_payer	Free-form text field.	Sale (O) Sessions (O)	String (165)
ship_to_address1	First line of the shipping address. Note This field is optional and valid only for a billing agreement (reference transaction).	Sale (R for a reference transaction) Sessions (O)	String (100)
ship_to_address2	Second line of the shipping address. Note This field is optional and valid only for a billing agreement (reference transaction).	Sale (R for a reference transaction) Sessions (O)	String (100)
ship_to_city	City of the shipping address. Note This field is optional and valid only for a billing agreement (reference transaction).	Sale (R for a reference transaction) Sessions (O)	String (40)
ship_to_country	Country of the shipping address. Use the two-character ISO Standard Country Codes . Note This field is optional and valid only for a billing agreement (reference transaction).	Sale (R for a reference transaction) Sessions (O)	String (2)

Table 9 Request Fields (Continued)

Field	Description	Required (R) / Optional (O)	Data Type & Length
ship_to_firstname	<p>First name of the recipient.</p> <p>The two name fields, ship_to_firstname and ship_to_lastname, are concatenated. The maximum combined size is 32 characters. If the size exceeds 32 characters, the name is truncated.</p> <p>Note This field is optional and valid only for a billing agreement (reference transaction).</p> <p>In-Store Collection When processing an in-store collection transaction in which the customer orders online and picks up the order in the store, avoid PayPal fraud declines by including S2S as the first 3 characters. A blank space must also be included between S2S and the rest of the first name information.</p> <p>Example S2S John</p>	<p>Sale (R for a reference transaction)</p> <p>Sessions (O)</p>	String (see description)
ship_to_immutable	<p>Indicates whether the customer is permitted to edit the shipping address in their PayPal account. Possible values:</p> <ul style="list-style-type: none"> ■ Y: Customer cannot edit the shipping address. ■ N (default): Customer can edit the shipping address. 	<p>Sale (R for a reference transaction)</p> <p>Sessions (O)</p>	String (1)
ship_to_lastname	<p>Last name of the recipient.</p> <p>The two name fields, ship_to_firstname and ship_to_lastname, are concatenated. The maximum combined size is 32 characters. If the size exceeds 32 characters, the name is truncated.</p> <p>Note This field is optional and valid only for a billing agreement (reference transaction).</p>	<p>Sale (R for a reference transaction)</p> <p>Sessions (O)</p>	String (see description)
ship_to_not_applicable	<p>Indicates whether the shipping address is displayed to the customer in their PayPal account. Possible values:</p> <ul style="list-style-type: none"> ■ Y: Shipping address is not displayed. ■ N (default): Shipping address is displayed. <p>For example, for digital downloads and services in which a shipping address is not required, set the value to Y.</p>	<p>Sale (R for a reference transaction)</p> <p>Sessions (O)</p>	String (1)

Table 9 Request Fields (Continued)

Field	Description	Required (R) / Optional (O)	Data Type & Length
ship_to_phone	<p>Phone number for the shipping address.</p> <p>Note This field is optional and valid only for a billing agreement (reference transaction).</p>	<p>Sale (R for a reference transaction)</p> <p>Sessions (O)</p>	String (20)
ship_to_state	<p>State or province of the shipping address. Use the State, Province, and Territory Codes for the United States and Canada.</p> <p>Note This field is optional and valid only for a billing agreement (reference transaction).</p>	<p>Sale (R for a reference transaction)</p> <p>Sessions (O)</p>	String (40)
ship_to_zip	<p>Postal code for the shipping address. The postal code must consist of 5 to 9 digits.</p> <p>When the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</p> <p>Example 12345-6789</p> <p>When the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space] [numeric][alpha][numeric]</p> <p>Example A1B 2C3</p> <p>Note This field is optional and valid only for a billing agreement (reference transaction).</p>	<p>Sale (R for a reference transaction)</p> <p>Sessions (O)</p>	String (20)
sub_total_amount	<p>Subtotal amount of all the items.</p> <p>This amount (which is the value of all items in the cart, not including the additional amounts such as tax, shipping, etc.) cannot change after a sessions request. When there is a change to any of the additional amounts, this field should be resent in the order request. When the sub total amount changes, you must initiate a new transaction starting with a sessions request.</p> <p>Note The value must be a non-negative number containing 2 decimal places and limited to 7 digits before the decimal point. This value can not be changed after a sessions request.</p>	<p>Order (O)</p> <p>Sale (R for a reference transaction)</p> <p>Sessions (O)</p>	String (15)

Table 9 Request Fields (Continued)

Field	Description	Required (R) / Optional (O)	Data Type & Length
total_handling_amount	<p>Aggregate handling charges for the transaction.</p> <p>If this amount has changed since the initial sessions request, you must include the new value in the order request. You must also include all additional amount fields that apply to the order and ensure the total amount equals the grand_total_amount field value.</p> <p>Note The value must be a non-negative number containing 2 decimal places and limited to 7 digits before the decimal point.</p>	<p>Order (O)</p> <p>Sale (R for a reference transaction)</p> <p>Sessions (R when creating an order)</p>	String (15)
total_shipping_amount	<p>Aggregate shipping charges for the transaction.</p> <p>If this amount has changed since the initial sessions request, you must include the new value in the order request. You must also include all additional amount fields that apply to the order and ensure the total amount equals the grand_total_amount field value.</p> <p>Note The value must be a non-negative number containing 2 decimal places and limited to 7 digits before the decimal point.</p>	<p>Order (O)</p> <p>Sale (R for a reference transaction)</p> <p>Sessions (O)</p>	String (15)
total_shipping_discount_amount	<p>Shipping discount amount for the transaction.</p> <p>If this amount has changed since the initial sessions request, you must include the new value in the order request. You must also include all additional amount fields that apply to the order and ensure the total amount equals the grand_total_amount value.</p> <p>Note The value must be a negative number containing 2 decimal places and limited to 7 digits before the decimal point.</p>	<p>Order (O)</p> <p>Sale (O)</p> <p>Sessions (O)</p>	String (15)
total_tax_amount	<p>Total tax amount. When the total_tax_amount and sub_total_amount fields are included in the request, do not include the tax amount as part of the subtotal amount calculation.</p> <p>Note The value must be a non-negative number containing 2 decimal places and limited to 7 digits before the decimal point.</p>	<p>Order (O)</p> <p>Sessions (O)</p>	String (10)

Offer-Level Fields

Table 10 Offer-Level Fields

Field	Description	Used By: Required (R) or Optional (O)	Data Type & Length
amount	<p>Per-item price of the product. This value cannot be negative. You can include a decimal point (.), but you cannot include any other special characters. CyberSource truncates the amount to the correct number of decimal places.</p> <p>Note The amount value must be a non-negative number containing 2 decimal places and limited to 7 digits before the decimal point.</p> <p>Note Do not include this field when creating a billing agreement.</p>	<p>Sale (O for a reference transaction)</p> <p>Sessions (O when creating an order; otherwise not used)</p>	Decimal (15)
merchant_product_sku	<p>Identification code for the product.</p> <p>This field is required when product_code is not <code>default</code> or one of the values related to shipping and handling.</p> <p>Note Do not include this field when creating a billing agreement.</p>	<p>Sale (O for a reference transaction)</p> <p>Sessions (O when creating an order; otherwise not used)</p>	String (255)
product_code	<p>Type of product. This value is used to determine the category that the product is in: <code>electronic</code>, <code>handling</code>, <code>physical</code>, <code>service</code>, or <code>shipping</code>. The default value is <code>default</code>.</p>	<p>Sale (O for a reference transaction)</p> <p>Sessions (O when creating an order; otherwise not used)</p>	String (255)
product_description	<p>Description of the product.</p> <p>Note Do not include this field when creating a billing agreement.</p>	<p>Sale (O for a reference transaction)</p> <p>Sessions (O when creating an order; otherwise not used)</p>	String (255)

Table 10 Offer-Level Fields (Continued)

Field	Description	Used By: Required (R) or Optional (O)	Data Type & Length
product_name	<p>Name of the product.</p> <p>This field is required when product_code is not <code>default</code> or one of the values related to shipping and handling.</p> <p>Note Do not include this field when creating a billing agreement.</p>	<p>Sale (O for a reference transaction)</p> <p>Sessions (O when creating an order; otherwise not used)</p>	String (255)
quantity	<p>The default is 1.</p> <p>This field is required when product_code is not <code>default</code> or one of the values related to shipping and handling.</p> <p>Note Do not include this field when creating a billing agreement.</p>	<p>Sale (O for a reference transaction)</p> <p>Sessions (O when creating an order; otherwise not used)</p>	Nonnegative integer (10)
tax_amount	<p>Total tax to apply to the product. This value cannot be negative. The tax amount and the offer amount must be in the same currency.</p> <p>The tax amount field is additive. The following example uses a two-exponent currency such as USD:</p> <p>1 You include the following offer lines in your request:</p> <pre>offer0=amount:10.00^quantity:1^tax_amount:0.80 offer1=amount:20.00^quantity:1^tax_amount:1.60</pre> <p>2 The total amount authorized will be 32.40, not 30.00 with 2.40 of tax included.</p>	<p>Sale (O for reference transactions)</p>	Decimal (15)
unit_tax_amount	<p>Per-item tax amount of the product.</p> <p>Note The amount value must be a non-negative number containing 2 decimal places and limited to 7 digits before the decimal point.</p> <p>Note Do not include this field when creating a billing agreement.</p>	<p>Sessions (O when creating an order; otherwise not used)</p>	Decimal (10)

Reply Fields

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_auth_date_time	<p>Date and time at which the service was requested.</p> <p>Format is YYYY-MM-DDThhmmssZ, where:</p> <ul style="list-style-type: none"> ■ T separates the date and the time ■ Z indicates Coordinated Universal Time (UTC), also known as Greenwich Mean Time (GMT) <p>Example 2019-08-11T224757Z equals August 11, 2016, at 22:47:57 (10:47:57 p.m.)</p>	Authorization	String (18)
ap_auth_payment_status	<p>Payment status from the processor.</p> <p>Possible values:</p> <ul style="list-style-type: none"> ■ Pending ■ Authorized ■ Expired ■ Failed 	Authorization	String (15)
ap_auth_processor_response	<p>The processor code that describes why the transaction state is pending or reversed.</p> <p>Note The returned value can also include the processor response values. See Appendix D, "Reply Flags," on page 79.</p>	Authorization	String (60)
ap_auth_processor_transaction_id	Identifier of the order transaction.	Authorization	String (50)
ap_auth_rcode	<p>One-digit reply code that indicates whether the authorization request was successful. Possible values:</p> <ul style="list-style-type: none"> ■ -1: An error occurred ■ 0: The request was declined ■ 1: The request was successful 	Authorization	Integer (1)
ap_auth_response_code	Response code from the processor.	Authorization	Integer (5)
ap_auth_reversal_amount	The authorized amount that was reversed.	Auth Reversal	Decimal (15)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_auth_reversal_date_time	Date and time at which the service was requested. Format is YYYY-MM-DDThhmmssZ, where: <ul style="list-style-type: none"> ■ T separates the date and the time ■ Z indicates Coordinated Universal Time (UTC), also known as Greenwich Mean Time (GMT) Example 2019-08-11T224757Z equals August 11, 2019, at 22:47:57 (10:47:57 p.m.)	Auth Reversal	String (18)
ap_auth_reversal_payment_status	The payment status returned from the payment processor. Possible values: <ul style="list-style-type: none"> ■ Pending ■ Auth_reversed ■ Failed 	Auth Reversal	String (15)
ap_auth_reversal_processor_response	The processor code that describes why the transaction state is pending or reversed. Note The returned value can also include the processor response values. See Appendix D, "Reply Flags," on page 79.	Auth Reversal	String (60)
ap_auth_reversal_processor_transaction_id	Identifier of the order transaction.	Auth Reversal	String (50)
ap_auth_reversal_rcode	One-digit reply code that indicates whether the authorization reversal request was successful. Possible values: <ul style="list-style-type: none"> ■ -1: An error occurred ■ 0: The request was declined ■ 1: The request was successful 	Auth Reversal	Integer (1)
ap_auth_reversal_response_code	The processor response code. Possible values 00000 to 99999.	Auth Reversal	Numeric (5)
ap_auth_reversal_rflag	One-word description of the result of the auth reversal request. See Appendix D, "Reply Flags," on page 79.	Auth Reversal	String (50)
ap_auth_reversal_rmsg	Message explaining the reply code ap_auth_reversal_rflag .	Auth Reversal	String (255)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_auth_reversal_trans_ref_no	Reference number that you use to reconcile your CyberSource reports with your business reports. For more information about tracking orders, see <i>Getting Started with CyberSource Advanced for the SCMP API</i> (PDF HTML).	Auth Reversal	String (60)
ap_auth_rflag	One-word description of the result of the authorization request. See Appendix D, "Reply Flags," on page 79 .	Authorization	String (50)
ap_auth_rmsg	Message explaining the reply code.	Authorization	String (255)
ap_auth_trans_ref_no	Reference number that you use to reconcile your CyberSource reports with your business reports. For more information about tracking orders, see <i>Getting Started with CyberSource Advanced for the SCMP API</i> (PDF HTML).	Authorization	String (60)
ap_billing_agreement_amount	Total amount charged from the payer to the payee. 10 characters max with support for 2 decimal places.	Billing Agreement	String(15)
ap_billing_agreement_date_time	Date and time at which the service was requested. Format is YYYY-MM-DDThhmmssZ, where: <ul style="list-style-type: none"> ■ T separates the date and the time ■ Z indicates Coordinated Universal Time (UTC), also known as Greenwich Mean Time (GMT) Example 2019-08-11T224757Z equals August 11, 2019, at 22:47:57 (10:47:57 p.m.)	Billing Agreement	String (18)
ap_billing_agreement_id	The Billing Agreement Id returned by processor (PayPal).	Billing Agreement	String(50)
ap_billing_agreement_processor_response	The processor response code. Possible values 00000 to 99999. Note The returned value can also include the processor response values. See Appendix D, "Reply Flags," on page 79 .	Billing Agreement	String(60)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_billing_agreement_rcode	One-digit reply code that indicates whether the authorization request was successful. Possible values: <ul style="list-style-type: none"> ■ -1: An error occurred ■ 0: The request was declined ■ 1: The request was successful 	Billing Agreement	Integer (1)
ap_billing_agreement_rflag	One-word description of the result of the authorization request.	Billing Agreement	String (50)
ap_billing_agreement_rmsg	Message explaining the reply code.	Billing Agreement	String (255)
ap_billing_agreement_status	State of the order transaction. Possible values: <ul style="list-style-type: none"> ■ Active ■ Inactive ■ Failed 	Billing Agreement	String(60)
ap_cancel_date_time	Date and time at which the service was requested. Format is YYYY-MM-DDThhmmssZ, where: <ul style="list-style-type: none"> ■ T separates the date and the time ■ Z indicates Coordinated Universal Time (UTC), also known as Greenwich Mean Time (GMT) <p>Example 2019-08-11T224757Z equals August 11, 2019, at 22:47:57 (10:47:57 p.m.)</p>	Cancel	String (18)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_cancel_processor_response	<p>The reason for when the transaction status is pending or reversed.</p> <p>Possible values:</p> <ul style="list-style-type: none"> ■ PAYER_SHIPPING_UNCONFIRMED ■ MULTI_CURRENCY ■ RISK_REVIEW ■ REGULATORY_REVIEW ■ VERIFICATION_REQUIRED ■ ORDER ■ OTHER <p>Note The returned value can also include the processor response values. See Appendix D, "Reply Flags," on page 79.</p>	Cancel	String (60)
ap_cancel_processor_transaction_id	Identifier of the order transaction.	Cancel	String (50)
ap_cancel_rcode	<p>One-digit reply code that indicates whether the cancel request was successful. Possible values:</p> <ul style="list-style-type: none"> ■ -1: An error occurred ■ 0: The request was declined ■ 1: The request was successful 	Cancel	Integer (1)
ap_cancel_rflag	<p>One-word description of the result of the cancel request.</p> <p>See Appendix D, "Reply Flags," on page 79.</p>	Cancel	String (50)
ap_cancel_rmsg	Message explaining the reply code.	Cancel	String (255)
ap_cancel_status	<p>The status of the cancel request.</p> <p>Possible Values:</p> <ul style="list-style-type: none"> ■ Cancelled ■ Failed 	Cancel	String (60)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_capture_date_time	<p>Date and time at which the service was requested.</p> <p>Format is YYYY-MM-DDThhmmssZ, where:</p> <ul style="list-style-type: none"> ■ T separates the date and the time ■ Z indicates Coordinated Universal Time (UTC), also known as Greenwich Mean Time (GMT) <p>Example 2019-08-11T224757Z equals August 11, 2019, at 22:47:57 (10:47:57 p.m.)</p>	Capture	String (18)
ap_capture_payment_status	<p>Payment status from the processor.</p> <p>Possible values:</p> <ul style="list-style-type: none"> ■ Pending ■ Settled ■ Failed 	Capture	String (15)
ap_capture_processor_response	<p>The processor code that describes why the transaction state is pending or reversed. See Appendix D, "Reply Flags," on page 79.</p> <p>Possible values when the payment status is <i>pending</i>:</p> <ul style="list-style-type: none"> ■ UNCONFIRMED_SHIPPING_ADDRESS ■ INTERNATIONAL_WITHDRAWAL ■ RECEIVING_PREFERENCE_MANDATES_MANUAL_ACTION ■ PAYMENT_REVIEW ■ REGULATORY_REVIEW ■ VERIFICATION_REQUIRED ■ TRANSACTION_APPROVED_AWAITING_FUNDING <p>Note The returned value can also include the processor response values. See Appendix D, "Reply Flags," on page 79.</p>	Capture	String (60)
ap_capture_processor_transaction_fee	<p>Amount up to N digit after the decimals separator as defined in ISO 4217 for the appropriate currency code.</p>	Capture	String (15)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_capture_processor_transaction_id	Identifier of the order transaction.	Capture	String (50)
ap_capture_rcode	One-digit reply code that indicates whether the capture request was successful. Possible values: <ul style="list-style-type: none"> ■ -1: An error occurred ■ 0: The request was declined ■ 1: The request was successful 	Capture	Integer (1)
ap_capture_rflag	One-word description of the result of the auth reversal request. See Appendix D, "Reply Flags," on page 79.	Capture	String (50)
ap_capture_rmsg	Message explaining the reply code ap_capture_rflag .	Capture	String (255)
ap_check_status_date_time	Date and time at which the service was requested. Format is YYYY-MM-DDThhmssZ, where: <ul style="list-style-type: none"> ■ T separates the date and the time ■ Z indicates Coordinated Universal Time (UTC), also known as Greenwich Mean Time (GMT) Example 2019-08-11T224757Z equals August 11, 2019, at 22:47:57 (10:47:57 p.m.)	Check Status	String (18)
ap_check_status_payment_status	Description of the payment status. Possible values: <ul style="list-style-type: none"> ■ Created ■ Failed 	Check Status	String (15)
ap_check_status_processor_response	This field is set to the value of failure reason returned by the processor. Note The returned value can also include the processor response values. See Appendix D, "Reply Flags," on page 79.	Check Status	String (60)
ap_check_status_processor_transaction_id	Identifier of the order transaction.	Check Status	String (50)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_check_status_rcode	One-digit reply code that indicates whether the check status request was successful. Possible values: <ul style="list-style-type: none"> ■ -1: An error occurred ■ 0: The request was declined ■ 1: The request was successful 	Check Status	Integer (1)
ap_check_status_response_code	Response code from the processor. Processor-defined response code on the status of the service request.	Check Status	Integer (5)
ap_check_status_rflag	One-word description of the result of the check status request. Se Appendix D, "Reply Flags," on page 79	Check Status	String (50)
ap_check_status_rmsg	Message explaining the reply code ap_check_status_rflag .	Check Status	String (255)
ap_check_status_trans_ref_no	Reference number that you use to reconcile your CyberSource reports with your business reports. For more information about tracking orders, see <i>Getting Started with CyberSource Advanced for the SCMP API</i> (PDF HTML).	Check Status	String (60)
ap_funding_source	Payment mode for the transaction. Possible values: <ul style="list-style-type: none"> ■ INSTANT_TRANSFER ■ MANUAL_BANK_TRANSFER ■ DELAYED_TRANSFER ■ ECHECK 	Authorization Check Status Order Sale Sessions	String (30)
ap_order_amount	Total amount charged from the payer to the payee. In case of a refund, this is the refunded amount to the original payer from the payee. 10 characters max with support for 2 decimal places.	Order	Decimal (10)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_order_date_time	<p>Date and time at which the service was requested.</p> <p>Format is YYYY-MM-DDThhmmssZ, where:</p> <ul style="list-style-type: none"> ■ T separates the date and the time ■ Z indicates Coordinated Universal Time (UTC), also known as Greenwich Mean Time (GMT) <p>Example 2019-08-11T224757Z equals August 11, 2019, at 22:47:57 (10:47:57 p.m.)</p>	Order	String (18)
ap_order_id	Identifier for the order.	Order	String (20)
ap_order_processor_response	<p>Processor-defined response for the payment failure.</p> <p>Possible values:</p> <ul style="list-style-type: none"> ■ UNABLE_TO_COMPLETE_TRANSACTION ■ INVALID_PAYMENT_METHOD ■ PAYER_CANNOT_PAY ■ CANNOT_PAY_THIS_PAYEE ■ REDIRECT_REQUIRED ■ PAYEE_FILTER_RESTRICTIONS ■ PAYER_SHIPPING_UNCONFIRMED ■ MULTI_CURRENCY ■ RISK_REVIEW ■ REGULATORY_REVIEW ■ VERIFICATION_REQUIRED ■ ORDER ■ OTHER <p>See Appendix D, "Reply Flags," on page 79.</p>	Order	String (60)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_order_rcode	One-digit reply code that indicates whether the order request was successful. Possible values: <ul style="list-style-type: none"> ■ -1: An error occurred ■ 0: The request was declined ■ 1: The request was successful 	Order	Integer (1)
ap_order_rflag	One-word description of the result of the order request. See Appendix D, "Reply Flags," on page 79.	Order	String (50)
ap_order_rmsg	Message explaining the reply code.	Order	String (255)
ap_order_status	State of the order transaction. Possible values: <ul style="list-style-type: none"> ■ Created ■ Cancelled ■ Failed 	Order	String (60)
ap_order_trans_ref_no	Invoice number to track this payment Maximum length: 127.	Order	String (127)
ap_payer_id	The ID of the payer, passed in the return_url by PayPal after customer approval.	Billing Agreement Check Status Order	String(30)
ap_processor_fraud_decision	Fraud analysis made by the processor. Possible values: <ul style="list-style-type: none"> ■ ACCEPT ■ PENDING ■ DENY ■ REPORT 	Authorization Order Sale	String (60)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_processor_fraud_decision_reason	<p>The processor's reason for the fraud analysis decision.</p> <p>Possible values:</p> <ul style="list-style-type: none"> ■ AVS_NO_MATCH ■ AVS_PARTIAL_MATCH ■ AVS_UNAVAILABLE_OR_UNSUPPORTED ■ CARD_SECURITY_CODE_MISMATCH ■ MAXIMUM_TRANSACTION_AMOUNT ■ UNCONFIRMED_ADDRESS ■ COUNTRY_MONITOR ■ LARGE_ORDER_NUMBER ■ BILLING_OR_SHIPPING_ADDRESS_MISMATCH ■ RISKY_ZIP_CODE ■ SUSPECTED_FREIGHT_FORWARDER_CHECK ■ TOTAL_PURCHASE_PRICE_MINIMUM ■ IP_ADDRESS_VELOCITY ■ RISKY_EMAIL_ADDRESS_DOMAIN_CHECK ■ RISKY_BANK_IDENTIFICATION_NUMBER_CHECK ■ RISKY_IP_ADDRESS_RANGE ■ PAYPAL_FRAUD_MODEL 	<p>Authorization</p> <p>Order</p> <p>Sale</p>	String (60)
ap_refund_date_time	<p>Date and time at which the service was requested.</p> <p>Format is YYYY-MM-DDThhmmssZ, where:</p> <ul style="list-style-type: none"> ■ T separates the date and the time ■ Z indicates Coordinated Universal Time (UTC), also known as Greenwich Mean Time (GMT) <p>Example 2019-08-11T224757Z equals August 11, 2019, at 22:47:57 (10:47:57 p.m.)</p>	Refund	String (18)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_refund_payment_status	Refund status from the processor. Possible values: <ul style="list-style-type: none"> ■ Pending ■ Refunded ■ Failed 	Refund	String (15)
ap_refund_processor_response	The processor code that describes why the transaction state is pending or reversed. Note The returned value can also include the processor response values. See Appendix D, "Reply Flags," on page 79.	Refund	String (60)
ap_refund_processor_transaction_id	Identifier of the order transaction.	Refund	String (50)
ap_refund_rcode	One-digit reply code that indicates whether the refund request was successful. Possible values: <ul style="list-style-type: none"> ■ -1: An error occurred ■ 0: The request was declined ■ 1: The request was successful 	Refund	Integer (1)
ap_refund_response_code	Response code from the processor. See Appendix D, "Reply Flags," on page 79.	Refund	Integer (5)
ap_refund_rflag	One-word description of the result of the refund request. See Appendix D, "Reply Flags," on page 79.	Refund	String (50)
ap_refund_rmsg	Message explaining the reply code.	Refund	String (255)
ap_refund_trans_ref_no	Reference number that you use to reconcile your CyberSource reports with your business reports. For more information about tracking orders, see <i>Getting Started with CyberSource Advanced for the SCMP API</i> (PDF HTML).	Refund	String (60)
ap_sale_amount	Total amount charged from the payer to the payee. 10 characters max with support for 2 decimal places.	Sale	String (15)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_sale_date_time	<p>Date and time at which the service was requested.</p> <p>Format is YYYY-MM-DDThhmmssZ, where:</p> <ul style="list-style-type: none"> ■ T separates the date and the time ■ Z indicates Coordinated Universal Time (UTC), also known as Greenwich Mean Time (GMT) <p>Example 2019-08-11T224757Z equals August 11, 2019, at 22:47:57 (10:47:57 p.m.)</p>	Sale	String (18)
ap_sale_payment_status	<p>Description of the payment status.</p> <p>Possible values:</p> <ul style="list-style-type: none"> ■ Pending ■ Settled ■ Failed 	Sale	String (15)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_sale_processor_response	<p>The processor code that describes why the transaction state is pending or reversed.</p> <p>Possible values:</p> <ul style="list-style-type: none"> ■ CHARGEBACK ■ GUARANTEE ■ BUYER_COMPLAINT ■ REFUND ■ UNCONFIRMED_SHIPPING_ADDRESS ■ ECHECK ■ INTERNATIONAL_WITHDRAWAL ■ RECEIVING_PREFERENCE_MANDATES_MANUAL_ACTION ■ PAYMENT_REVIEW ■ REGULATORY_REVIEW ■ UNILATERAL ■ VERIFICATION_REQUIRED ■ TRANSACTION_APPROVED_AWAITING_FUNDING. <p>Note The returned value can also include the processor response values. See Appendix D, "Reply Flags," on page 79.</p>	Sale	String (60)
ap_sale_processor_transaction_fee	Amount up to N digit after the decimals separator as defined in ISO 4217 for the appropriate currency code.	Sale	String (15)
ap_sale_processor_transaction_id	Identifier of the order transaction.	Sale	String (50)
ap_sale_rcode	<p>Indicates whether the sale request was successful. Possible values:</p> <ul style="list-style-type: none"> ■ -1: An error occurred. ■ 0: The request was declined. ■ 1: The request was successful. 	Sale	Integer (1)
ap_sale_response_code	Response code from the processor.	Sale	Integer (5)
ap_sale_rflag	If ics_ap_sale is unsuccessful, this field contains a one-word description of the error.	Sale	String (50)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_sale_rmsg	Message explaining the reply code ap_sale_rcode .	Sale	String (255)
ap_sale_trans_ref_no	Transaction reference number that was used for the transaction.	Sale	String (60)
ap_seller_protection_eligibility	The level of seller protection for the transaction. Possible values: <ul style="list-style-type: none"> ■ ELIGIBLE ■ PARTIALLY_ELIGIBLE ■ INELIGIBLE 	Authorization Order Sale	String (60)
ap_seller_protection_type	The type of seller protection for the transaction. This property is returned only when the seller protection eligibility value is ELIGIBLE or PARTIALLY_ELIGIBLE. Possible values: <ul style="list-style-type: none"> ■ ITEM_NOT_RECEIVED_ELIGIBLE: Seller is protected against claims for items not received. ■ UNAUTHORIZED_PAYMENT_ELIGIBLE: Seller is protected against claims for unauthorized payments. One or both values are returned.	Authorization Order Sale	String (60)
ap_sessions_amount	Total amount charged from the payer to the payee. In case of a refund, this is the refunded amount to the original payer from the payee. 10 characters max with support for 2 decimal places.	Sessions	String (15)
ap_sessions_merchant_url	Redirect URL to PayPal web site.	Sessions	
ap_sessions_payment_status	Status of the payment request. Possible values: <ul style="list-style-type: none"> ■ Created ■ Failed 	Sessions	String (15)
ap_sessions_processor_transaction_id	ID of the created payment. Value assigned by PayPal.	Sessions	String (50)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ap_sessions_rcode	Indicates whether the sessions request was successful. Possible values: <ul style="list-style-type: none"> ■ -1: An error occurred. ■ 0: The request was declined. ■ 1: The request was successful. 	Sessions	Integer (1)
ap_sessions_response_code	The transaction response code received from the processor.	Sessions	String (5)
ap_sessions_rflag	If the sessions request is unsuccessful, this field contains a one-word description of the error.	Sessions	String (50)
ap_sessions_rmsg	Message explaining the reply code ap_sessions_rcode .	Sessions	String (255)
ap_sessions_status	Status of the sessions request. Possible values: <ul style="list-style-type: none"> ■ Created ■ Failed 	Sessions	String (15)
ap_sessions_trans_ref_no	Reference number that you use to reconcile your CyberSource reports with your business reports. For more information about tracking orders, see <i>Getting Started with CyberSource Advanced for the SCMP API</i> (PDF HTML).	Sessions	String (127)
bill_address1	Customer's billing address. Note To get the details of a customer's billing address from PayPal using the check status service, you must have this feature enabled on your PayPal account. Contact your PayPal account manager.	Billing Agreement Check Status Order	String (60)
bill_address2	Additional information in the customer's billing address. Note To get the details of a customer's billing address from PayPal using the check status service, you must have this feature enabled on your PayPal account. Contact your PayPal account manager.	Billing Agreement Check Status Order	String (60)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
bill_city	<p>Customer's billing city.</p> <p>Note To get the details of a customer's billing address from PayPal using the check status service, you must have this feature enabled on your PayPal account. Contact your PayPal account manager.</p>	<p>Billing Agreement</p> <p>Check Status</p> <p>Order</p>	String (50)
bill_country	<p>Customer's billing country. Use the two-character <i>ISO Standard Country Codes</i>.</p> <p>Note To get the details of a customer's billing address from PayPal using the check status service, you must have this feature enabled on your PayPal account. Contact your PayPal account manager.</p>	<p>Billing Agreement</p> <p>Check Status</p> <p>Order</p>	String (2)
bill_state	<p>State or province of the billing address. For an address in the U.S. or Canada, use the <i>State, Province, and Territory Codes for the United States and Canada</i>.</p> <p>Note To get the details of a customer's billing address from PayPal using the check status service, you must have this feature enabled on your PayPal account. Contact your PayPal account manager.</p>	<p>Billing Agreement</p> <p>Check Status</p> <p>Order</p>	String (2)
bill_zip	<p>Postal code for the billing address. The postal code must consist of 5 to 9 digits.</p> <p>When the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</p> <p>Example Example: 12345-6789</p> <p>When the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space][numeric][alpha][numeric]</p> <p>Example Example: A1B 2C3</p> <p>Note To get the details of a customer's billing address from PayPal using the check status service, you must have this feature enabled on your PayPal account. Contact your PayPal account manager.</p>	<p>Billing Agreement</p> <p>Check Status</p> <p>Order</p>	String (10)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
customer_email	Customer's email address, including the full domain name. Note To get the details of a customer's billing address from PayPal using the check status service, you must have this feature enabled on your PayPal account. Contact your PayPal account manager.	Billing Agreement Check Status Order	String (255)
customer_firstname	Customer's first name. For a credit card transaction, this name must match the name on the card. Note To get the details of a customer's billing address from PayPal using the check status service, you must have this feature enabled on your PayPal account. Contact your PayPal account manager.	Billing Agreement Check Status Order	String (60)
customer_lastname	Customer's last name. For a credit card transaction, this name must match the name on the card. Note To get the details of a customer's billing address from PayPal using the check status service, you must have this feature enabled on your PayPal account. Contact your PayPal account manager.	Billing Agreement Check Status Order	String (60)
customer_verification_status	Possible values are VERIFIED or UNVERIFIED, depending on whether buyer has verified their identity. Used in case of Paypal transactions.	Check Status	String (60)
ics_rcode	Indicates whether the service request was successful. Possible values: <ul style="list-style-type: none"> ■ -1: An error occurred. ■ 0: The request was declined. ■ 1: The request was successful. 	Authorization Auth Reversal Billing Agreement Cancel Capture Check Status Order Refund Sale Sessions	Integer (1)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ics_rflag	One-word description of the result of the entire request. See Appendix D, "Reply Flags," on page 79.	Authorization Auth Reversal Billing Agreement Cancel Capture Check Status Order Refund Sale Sessions	String (50)
ics_rmsg	Message that explains the reply flag ics_rflag . Do not display this message to the customer, and do not use this field to write an error handler.	Authorization Auth Reversal Billing Agreement Cancel Capture Check Status Order Refund Sale Sessions	String (255)
merchant_ref_no	Merchant-generated transaction number or tracking number. CyberSource recommends that you send a unique value for each transaction so that you can perform meaningful searches for the transaction. For information about tracking orders and transactions, see Getting Started with CyberSource Advanced for the SCMP API .	Billing Agreement Cancel Capture Refund Sale Sessions	String (50)
request_id	Identifier for the request generated by the client.	All PayPal Express Checkout services	String (26)
ship_to_address1	First line of the shipping address.	Billing Agreement Check Status Order	String (100)
ship_to_address2	Second line of the shipping address.	Billing Agreement Check Status Order	String (100)

Table 11 Reply Fields

Field	Description	Returned By	Data Type & Length
ship_to_city	City of the shipping address.	Billing Agreement Check Status Order	String (40)
ship_to_country	Country of the shipping address. Use the two-character <i>ISO Standard Country Codes</i> .	Billing Agreement Check Status Order	String (2)
ship_to_name	Name of the person receiving the product. The two name fields, ship_to_firstname and ship_to_lastname , are concatenated. The maximum combined size is 32 characters. If the size exceeds 32 characters, the name is truncated.	Billing Agreement Check Status Order	String (32)
ship_to_phone	Phone number for the shipping address.	Billing Agreement Check Status Order	String (20)
ship_to_state	State or province of the shipping address. Use the <i>State, Province, and Territory Codes for the United States and Canada</i> .	Billing Agreement Check Status Order	String (40)
ship_to_zip	Postal code for the shipping address. The postal code must consist of 5 to 9 digits. When the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] Example 12345-6789 When the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space] [numeric][alpha][numeric] Example A1B 2C3	Billing Agreement Check Status Order	String (20)

Service Examples

Sessions Service

Example 1 Sessions Request

```
merchant_id=mid123
merchant_ref_number=1234
ap_payment_type=PPL
ics_applications=ics_ap_sessions
ap_sessions_success_url=http://www.example.com
ap_sessions_cancel_url=http://www.example.com
ship_to_firstname=Jane
ship_to_lastname=Smith
ship_to_address1=123 Main Street
ship_to_address2=Mailbox A
ship_to_city=Small Town
ship_to_state=CA
ship_to_zip=98765
ship_to_country=US
ship_to_phone=9876543210
currency=USD
total_shipping_amount=5.00
total_shipping_discount_amount=5.00
total_handling_amount=3.00
sub_total_amount=90.00
total_tax_amount=2.00
grand_total_amount=95.00
offer0=amount:45.00^offer_id:0^merchant_product_sku:TestSKU^product_
name:TestProduct^quantity:2^unit_tax_amount:1^product_
code:default^product_description:TestDesc
```

Example 2 Sessions Reply

```

ap_sessions_currency=USD
ap_sessions_processor_transaction_id=PAY-8CK05691AS473025TLFJWGVA
ap_sessions_merchant_url=https://www.sandbox.paypal.com/cgi-bin/
webscr?cmd=_express-checkout&token=EC-0F93368875071503X
ap_sessions_amount=95.00
ap_sessions_status=CREATED
ap_sessions_rflag=SOK
ap_sessions_rcode=1
ap_sessions_rmsg=Request was processed successfully.
ap_sessions_transaction_id=PAY-8CK05691AS473025TLFJWGVA
ap_sessions_trans_ref_no=489TGJL60000000000000000000J45CF2IM
currency=USD
request_id=4980896424596224104012
ics_rmsg=Request was processed successfully.
ics_rflag=SOK
ics_rcode=1
merchant_ref_number=007

```

Order Service

Example 3 Order Request

```

merchant_id=mid123
merchant_ref_number=1234
ap_payment_type=PPL
ics_applications=ics_ap_order
ap_payer_id=7FUDAXBNR5KSC
ap_sessions_request_id=4980396424596224104012
sub_total_amount=90.00
total_shipping_amount=3.00
currency=USD
grand_total_amount=95.00
total_tax_amount=2.00
total_handling_amount=3.00
offer0=amount:45.00^offer_id:0^merchant_product_sku:TestSKU^product_
name:TestProduct^quantity:2^unit_tax_amount:1^product_
code:default^product_description:TestDesc

```

Authorization Service

Example 5 Authorization Request

```
currency=USD
ap_order_request_id=4980405898776291704008
ics_applications=ics_ap_auth
grand_total_amount=95.00
merchant_ref_number=1234
ap_payment_type=PPL
merchant_id=mid123
```

Example 6 Authorization Reply

```
ap_auth_payment_status=AUTHORIZED
ap_auth_rflag=SOK
ap_auth_rcode=1
ap_auth_rmsg=Request was processed successfully.
ap_auth_currency=USD
ap_auth_transaction_id=7GY936406D044425X
ap_auth_processor_transaction_id=7GY936406D044425X
ap_auth_amount=95.00
ics_rcode=1
ics_rmsg=Request was processed successfully.
ics_rflag=SOK
request_id=4896155375886014701200
currency=USD
merchant_ref_number=1234
```

Authorization Reversal Service

Example 7 Authorization Reversal Request

```
ap_auth_request_id=4896155375886014701200
ap_payment_type=PPL
ics_applications=ics_ap_auth_reversal
merchant_id=mid123
merchant_ref_number=1234
```

Example 8 Authorization Reversal Reply

```
ap_auth_reversal_amount=95.00
ap_auth_reversal_currency=USD
ap_auth_reversal_payment_status=AUTH_REVERSED
ap_auth_reversal_processor_transaction_id=0-3FJ60259H1693494U
ap_auth_reversal_rcode=1
ap_auth_reversal_rflag=SOK
ap_auth_reversal_rmsg=Request was processed successfully.
ap_auth_reversal_trans_ref_no=061DI33L00000000000000000000J0318URS
ap_auth_reversal_transaction_id=0-3FJ60259H1693494U
currency=USD
ics_rcode=1
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
merchant_ref_number=1234
request_id=4891044702126202201540
```

Capture Service

Example 9 Capture Request

```
currency=USD
ics_applications=ics_ap_capture
grand_total_amount=95.00
merchant_id=mid123
merchant_ref_number=1234
ap_auth_request_id=4896155375886014701200
ap_payment_type=PPL
```

Example 10 Capture Reply

```
ap_capture_processor_response=None
ap_capture_rmsg=Request was processed successfully.
ap_capture_processor_transaction_id=8X013457PC2290547
ap_capture_rflag=SOK
ap_capture_trans_ref_no=489TENFL00000000000000000000J45CF0Q1
ap_capture_processor_transaction_fee=0.76
ap_capture_amount=95.00
ap_capture_rcode=1
ap_capture_currency=USD
ap_capture_payment_status=SETTLED
ap_capture_transaction_id=8X013457PC2290547
currency=USD
request_id=4986381533990170561911
ics_rmsg=Request was processed successfully.
ics_rcode=1
ics_rflag=SOK
merchant_ref_number=1234
```

Sale Service

Example 11 Sale Request

```
currency=USD
ap_order_request_id=4986378480380170561911
ics_applications=ics_ap_sale
grand_total_amount=95.00
ap_payment_type=PPL
merchant_id=mid123
merchant_ref_number=1234
```

Example 12 Sale Reply

```
ap_sale_amount=95.00
ap_sale_rcode=1
ap_sale_processor_transaction_id=13N02928ME610273T
ap_sale_trans_ref_no=489TGJL60000000000000000000J45CF2IY
ap_sale_processor_transaction_fee=0.76
ap_sale_rmsg=Request was processed successfully.
ap_sale_payment_status=SETTLED
ap_sale_processor_response=None
ap_sale_rflag=SOK
request_id=4986017056191144634637
currency=USD
ics_rcode=1
ics_rmsg=Request was processed successfully.
ics_rflag=SOK
merchant_ref_number=1234
```

Refund Service

Example 13 Refund Request

```
currency=USD
ap_refund_request_id=4986017056191144634637
ics_applications=ics_ap_refund
grand_total_amount=95.00
ap_payment_type=PPL
merchant_id=mid123
merchant_ref_number=1234
```

Example 14 Refund Reply

```
ap_refund_payment_status=REFUNDED
ap_refund_trans_ref_no=4IBDBJIA00000000000000000000J4FDYX1Q
ap_refund_transaction_id=1CJ708402E8883535
ap_refund_rmsg=Request was processed successfully.
ap_refund_rcode=1
ap_refund_processor_transaction_id=1CJ708402E8883535
ap_refund_rflag=SOK
ap_refund_amount=95.00
ap_refund_currency=USD
ics_rcode=1
ics_rmsg=Request was processed successfully.
ics_rflag=SOK
currency=USD
request_id=4986383229080170561911
merchant_ref_number=1234
```

Cancel Service

Example 15 Cancel Request

```
ap_order_request_id=4986017056191144634637
ap_payment_type=PPL
ics_applications=ics_ap_cancel
merchant_id=mid123
merchant_ref_number=1234
```

Example 16 Cancel Reply

```
ap_cancel_amount=95.00
ap_cancel_currency=USD
ap_cancel_processor_transaction_id=0-3FJ60259H1693494U
ap_cancel_rcode=1
ap_cancel_rflag=SOK
ap_cancel_rmsg=Request was processed successfully.
ap_cancel_status=CANCELLED
ap_cancel_trans_ref_no=061DI33L0000000000000000000J0318UQU
ap_cancel_transaction_id=0-3FJ60259H1693494U
currency=USD
ics_rcode=1
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
merchant_ref_number=1234
request_id=4891044306756198401540
```

Billing Agreement Service

Example 17 Billing Agreement Service Request

```
ap_payment_type=PPL
ap_sessions_request_id=4980896424596224104012
ics_applications=ics_ap_billing_agreement
merchant_id=mid123
merchant_ref_number=1234
```

Example 18 Billing Agreement Service Reply

```
merchant_ref_number=1234
request_id=4951322388236009001540
customer_firstname=Jane
customer_lastname=Smith
bill_address1=123 Main St
bill_city=Small Town
bill_zip=98765
bill_state=CA
bill_country=US
customer_email=jsmith@example.com
ship_to_firstname=Jane
ship_to_lastname=Smith
ship_to_address1=123 Main Street
ship_to_address2=Mailbox A
ship_to_city=Small Town
ship_to_state=CA
ship_to_zip=98765
ship_to_country=US
ics_rmsg=Request was processed successfully.
ics_rflag=SOK
ics_rcode=1
ap_payer_id=7FUDAXBNR5KSC
ap_billing_agreement_rflag=SOK
ap_billing_agreement_id=B-54941083GY4736715
ap_billing_agreement_rcode=1
ap_billing_agreement_status=ACTIVE
ap_billing_agreement_transaction_id=B-54941083GY4736715
ap_billing_agreement_rmsg=Request was processed successfully.
```

Check Status Examples

Sessions Service

Example 19 Check Status Request: Sessions

```
ap_check_status_request_id=4980896424596224104012
ap_payment_type=PPL
ics_applications=ics_ap_check_status
merchant_id=mid123
merchant_ref_number=1234
```

Example 20 Check Status Reply: Sessions

```
ap_check_status_payment_status=CREATED
ap_check_status_processor_transaction_id=PAY-0R555158DK731234HLDE777Q
ap_check_status_rcode=1
ap_check_status_rflag=SOK
ap_check_status_rmsg=Request was processed successfully.
ap_check_status_trans_ref_no=0ELJXCHZ0000000000000000000J0BLF9SV
ap_payer_id=7FUDAXBNR5KSC
bill_address1=123 Main St
bill_city=Small Town
bill_country=US
bill_state=CA
bill_zip=98765
customer_email=jsmith@example.com
customer_firstname=Jane
customer_lastname=Smith
customer_verification_status=UNVERIFIED
ics_rcode=1
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
merchant_ref_number=ref456
request_id=4896334543256000801540
ship_to_address1=123 Main Street
ship_to_address2=Mailbox A
ship_to_city=Small Town
ship_to_country=US
ship_to_firstname=Jane
ship_to_lastname=Smith
ship_to_phone=9876543210
ship_to_state=CA
ship_to_zip=98765
```

Order Service

Example 21 Check Status Request: Order

```
ap_check_status_request_id=4986378480380170561911
ap_payment_type=PPL
ics_applications=ics_ap_check_status
merchant_id=mid123
merchant_ref_number=1234
```

Example 22 Check Status Reply: Order

```
ap_check_status_payment_status=CREATED
ap_check_status_processor_response=ORDER
ap_check_status_processor_transaction_id=0-5TD10988AD299315S
ap_check_status_rcode=1
ap_check_status_response_code=ORDER
ap_check_status_rflag=SOK
ap_check_status_rmsg=Request was processed successfully.
ics_rcode=1
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
merchant_ref_number=1234
request_id=4896340284906001001540
```

Authorization Service

Example 23 Check Status Request: Authorization

```
ap_check_status_request_id=4896155375886014701200
ap_payment_type=PPL
ics_applications=ics_ap_check_status
merchant_id=mid123
merchant_ref_number=1234
```

Example 24 Check Status Reply: Authorization

```
ap_check_status_payment_status=ACTIVE
ap_check_status_processor_transaction_id=B-9EF75519WU0589818
ap_check_status_rcode=1
ap_check_status_rflag=SOK
ap_check_status_rmsg=Request was processed successfully.
ap_check_status_response_code=AUTHORIZATION
ap_payer_id=3N53BA8B3MCU4
ics_rcode=1
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
merchant_ref_number=1234
request_id=4930650124116026401540
```

Capture Service

Example 25 Check Status Request: Capture

```
ap_check_status_request_id=4986381533990170561911
ap_payment_type=PPL
ics_applications=ics_ap_check_status
merchant_id=mid123
merchant_ref_number=1234
```

Example 26 Check Status Reply: Capture

```
ap_check_status_payment_status=SETTLED
ap_check_status_processor_transaction_id=68769626F32580414
ap_check_status_rcode=1
ap_check_status_rflag=SOK
ap_check_status_rmsg=Request was processed successfully.
ics_rcode=1
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
merchant_ref_number=1234
request_id=4897061555550146015409
```

Sale Service

Example 27 Check Status Request: Sale

```
ap_check_status_request_id=4986017056191144634637
ap_payment_type=PPL
ics_applications=ics_ap_check_status
merchant_id=mid123
merchant_ref_number=1234
```

Example 28 Check Status Reply: Sale

```
ap_check_status_payment_status=CREATED
ap_check_status_processor_response=ORDER
ap_check_status_processor_transaction_id=0-5TD10988AD299315S
ap_check_status_rcode=1
ap_check_status_response_code=ORDER
ap_check_status_rflag=SOK
ap_check_status_rmsg=Request was processed successfully.
ics_rcode=1
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
merchant_ref_number=ref456
request_id=489634028490777754033
```

Refund Service

Example 29 Check Status Request: Refund

```
ap_check_status_request_id=4986017056191144634637
ap_payment_type=PPL
ics_applications=ics_ap_check_status
merchant_id=mid123
merchant_ref_number=1234
```

Example 30 Check Status Reply: Refund

```
ap_check_status_payment_status=SETTLED
ap_check_status_processor_transaction_id=68769626F32580414
ap_check_status_rcode=1
ap_check_status_rflag=SOK
ap_check_status_rmsg=Request was processed successfully.
ics_rcode=1
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
merchant_ref_number=123
request_id=489706183333301460154
```

Billing Agreement Service

Example 31 Check Status Request: Billing Agreement

```

ap_billing_agreement_id=SOK-3FJ6025
ap_payment_type=PPL
ics_applications=ics_ap_check_status
merchant_id=mid123
merchant_ref_number=1234
request_id=4951322388236009001540

```

Example 32 Check Status Reply: Billing Agreement

```

ap_check_status_payment_status=ACTIVE
ap_check_status_processor_transaction_id=B-9EF75519WU0589818
ap_check_status_rcode=1
ap_check_status_rflag=SOK
ap_check_status_rmsg=Request was processed successfully.
ap_payer_id=3N53BA8B3MCU4
bill_address1=123 Main St
bill_city=Small Town
bill_country=US
bill_state=CA
bill_zip=98765
customer_email=jsmith@example.com
customer_firstname=Jane
customer_lastname=Smith
ics_rcode=1
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
merchant_ref_number=1234
request_id=4930650124116026401540
ship_to_address1=123 Main Street
ship_to_address2=Suite 1
ship_to_city=any Town
ship_to_country=US
ship_to_firstname=Jane
ship_to_lastname=Smith
ship_to_state=CA
ship_to_zip=98765

```

Reply Flags

[Table 12](#) describes the reply flags returned by the SCMP API for the PayPal services. See *Getting Started with CyberSource Advanced for the SCMP API* ([PDF](#) | [HTML](#)) for a discussion of replies and reply flags.



Important

Because CyberSource can add reply fields, reply codes, and reply flags at any time:

- You must parse the reply data according to the names of the fields instead of the field order in the reply. For more information about parsing reply fields, see the documentation for your client.
- Your error handler should be able to process new reply codes and reply flags without problems.
- Your error handler should use the **ics_rcode** field to determine the result if it receives a reply flag that it does not recognize.

For a description of each processor response, see:

<https://developer.paypal.com/docs/api/payments/#errors>

Table 12 Reply Flags and Processor Responses

Reply Flag	Description	Processor Response
SOK	Successful transaction.	
ESYSTEM	General system failure. See the documentation for your CyberSource client for information about handling retries in the case of system errors.	DATA_RETRIEVAL DUPLICATE_REQUEST_ID INTERNAL_SERVICE_ERROR PAYMENT_REQUEST_ID_INVALID
DCARDEXPIRED	Expired card. You might also receive this value if the expiration date you provided does not match the date the issuing bank has on file. Possible action: Request a different card or other form of payment.	EXPIRED_CREDIT_CARD

Table 12 Reply Flags and Processor Responses (Continued)

Reply Flag	Description	Processor Response
DCARDREFUSED	<p>General decline of the card. No other information was provided by the issuing bank.</p> <p>Possible action: Request a different card or other form of payment.</p>	<p>CREDIT_CARD_CVV_CHECK_FAILED</p> <p>CREDIT_CARD_REFUSED</p>
DPAYMENTREFUSED	<p>Possible reasons:</p> <ul style="list-style-type: none"> ■ Merchant account or payer's account is not set up to process such transactions. ■ Insufficient funds in the payer's funding source associated with the account, or transaction declined by bank. ■ A particular action is not permitted, for example: capture refused, or the authorization has already been captured. ■ Fraud setting for the seller is blocking such payments. ■ Payment approval by the buyer/payer has expired, and the merchant must restart the payment flow starting from payment creation and direct the customer back to PayPal. <p>Important If an order or authorization returns an INSTRUMENT_DECLINED response, direct the customer to their PayPal login to select a different funding option and resubmit the order. Possible reasons for the INSTRUMENT_DECLINED response can include:</p> <ul style="list-style-type: none"> ■ The billing address associated with the financial instrument could not be confirmed. ■ The transaction exceeds the card limit. ■ The transaction was denied by the card issuer. 	<p>BUYER_NOT_SET</p> <p>CANNOT_PAY_SELF</p> <p>CANNOT_REAUTH_CHILD_AUTHORIZATION</p> <p>CANNOT_REAUTH_INSIDE_HONOR_PERIOD</p> <p>CREDIT_PAYMENT_NOT_ALLOWED</p> <p>EXPIRED_CREDIT_CARD_TOKEN</p> <p>FAILED_TO_CHARGE_CC</p> <p>FEATURE_UNSUPPORTED_FOR_PAYEE</p> <p>FULL_REFUND_NOT_ALLOWED_AFTER_PARTIAL_REFUND</p> <p>IMMEDIATE_PAY_NOT_SUPPORTED</p> <p>INSTRUMENT_DECLINED</p> <p>INSUFFICIENT_FUNDS</p> <p>INVALID_FACILITATOR_CONFIGURATION</p> <p>MAXIMUM_ALLOWED_AUTHORIZATION_REACHED_FOR_ORDER</p> <p>MERCHANT_NOT_ENABLED_FOR_CHANNEL_INITIATED_BILLING</p> <p>MERCHANT_NOT_ENABLED_FOR_REFERENCE_TRANSACTION</p> <p>NEED_CREDIT_CARD</p> <p>NEED_CREDIT_CARD_OR_BANK_ACCOUNT</p> <p>NOT_IMPLEMENTED</p> <p>NO_EXTERNAL_FUNDING_DETAILS_FOUND</p> <p>ORDER_ALREADY_COMPLETED</p> <p>ORDER_VOIDED</p>

Table 12 Reply Flags and Processor Responses (Continued)

Reply Flag	Description	Processor Response
		PAYEE_ACCOUNT_LOCKED_OR_CLOSED
		PAYEE_ACCOUNT_NO_CONFIRMED_EMAIL
		PAYEE_ACCOUNT_RESTRICTED
		PAYEE_BLOCKED_TRANSACTION
		PAYEE_COUNTRY_NOT_ENABLED
		PAYER_ACCOUNT_RESTRICTED
		PAYER_ACTION_REQUIRED
		PAYER_AUTHENTICATION_REQUIRED
		PAYER_CANNOT_PAY
		PAYER_COUNTRY_NOT_ENABLED
		PAYMENT_ALREADY_DONE
		PAYMENT_APPROVAL_EXPIRED
		PAYMENT_CANNOT_BE_INITIATED
		PAYMENT_DENIED
		PAYMENT_EXPIRED
		PAYMENT_METHOD_UNUSABLE
		PAYMENT_NOT_APPROVED_FOR_EXECUTION
		PAYMENT_STATE_INVALID
		REDIRECT_PAYER_FOR_ALTERNATE_FUNDING
		REFUND_EXCEEDED_TRANSACTION_AMOUNT
		REFUND_TIME_LIMIT_EXCEEDED
		REQUIRED_SCOPE_MISSING
		SENDING_LIMIT_EXCEEDED
		TOO_MANY_REAUTHORIZATIONS
		TRANSACTION_ALREADY_REFUNDED
		TRANSACTION_LIMIT_EXCEEDED
		TRANSACTION_REFUSED
		TRANSACTION_REFUSED_BY_PAYPAL_RISK

Table 12 Reply Flags and Processor Responses (Continued)

Reply Flag	Description	Processor Response
		TRANSACTION_REFUSED_ PAYEE_PREFERENCE
		UNSUPPORTED_PAYEE_ COUNTRY
		UNSUPPORTED_PAYEE_ CURRENCY
		UNSUPPORTED_SEPA_BANK
DINVALIDDATA	Invalid account number. Possible action: Request a different card or other form of payment.	BANK_ACCOUNT_VALIDATION_ FAILED

Table 12 Reply Flags and Processor Responses (Continued)

Reply Flag	Description	Processor Response
DINVALIDDATA	General decline by the processor.	AMOUNT_MISMATCH AGREEMENT_ALREADY_CANCELLED BATOKEN_MISMATCH BANK_MRN_MISMATCH BUYER_COUNTRY_NOT_ENABLED CURRENCY_MISMATCH CURRENCY_NOT_ALLOWED EXECUTE_AGREEMENT_BUYER_NOT_ACCEPTED EXECUTE_AGREEMENT_ALREADY_CREATED EXECUTE_AGREEMENT_DOES_NOT_OWN_TOKEN INVALID_ARGUMENT INVALID_CITY_STATE_ZIP INVALID_EXPERIENCE_PROFILE_ID INVALID_PAYER_ID MERCHANT_COUNTRY_NOT_ENABLED REFUSED_MARK_REF_TXN_NOT_ENABLED PAYER_INFO_NULL PAYER_EMPTY_BILLING_ADDRESS PAYER_ID_MISSING_FOR_CARD_TOKEN PHONE_NUMBER_REQUIRED RT_AGREEMENT_ALREADY_CANCELED SELECTED_PLAN_NOT_AVAILABLE SHIPPING_ADDRESS_INVALID
DINVALIDDATA	The requested capture amount exceeds the originally authorized amount. Possible action: Issue a new authorization and capture request for the new amount.	CAPTURE_AMOUNT_LIMIT_EXCEEDED

Table 12 Reply Flags and Processor Responses (Continued)

Reply Flag	Description	Processor Response
DINVALIDDATA	The authorization has already been reversed. Possible action: No action required.	AUTHORIZATION_VOIDED
DNOAUTH	You requested a capture, but there is no corresponding, unused authorization record. Occurs if there was not a previously successful authorization request or if the previously successful authorization has already been used by another capture request. Possible action: Request a new authorization, and if successful, proceed with the capture.	AUTHORIZATION_EXPIRED AUTHORIZATION_ID_DOES_NOT_EXIST
DNOTVOIDABLE	One of the following: <ul style="list-style-type: none"> ■ The capture is not voidable because the capture information has already been submitted to your processor. <p>- or -</p> <ul style="list-style-type: none"> ■ You requested a void for a type of transaction that cannot be voided. Possible action: No action required.	AUTHORIZATION_CANNOT_BE_VOIDED ORDER_CANNOT_BE_VOIDED