Affirm Services

Using the Simple Order API

September 2019
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Recent Revisions to This Document

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<tr>
<th>Release</th>
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<tr>
<td>September 2019</td>
<td>Added new information about Affirm, product benefits, and going live. See Chapter 1, &quot;Integrating with Affirm,&quot; on page 8.</td>
</tr>
<tr>
<td>April 2019</td>
<td>Initial generally available version.</td>
</tr>
<tr>
<td>December 2017</td>
<td>Initial beta release version.</td>
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About This Guide

Audience and Purpose

This guide is written for merchants who want to offer Affirm payments to customers.

Implementing CyberSource payment processing services requires software development skills. You must write code that uses the CyberSource API request and reply fields to integrate the services into your existing order management system.

This guide describes tasks you must complete to integrate the CyberSource services and Affirm into your existing order management system.

Conventions

Note 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

<table>
<thead>
<tr>
<th>Convention</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>bold</strong></td>
<td>Field and service names in text; for example: Include the <code>ccAuthService_run</code> field.</td>
</tr>
</tbody>
</table>
| Screen text| - XML elements  
|           | - Code examples  
|           | - Values for API fields; for example:  
|           | Set the `ccAuthService_run` field to `true`. |

Related Documents

- *Getting Started with CyberSource Advanced for the Simple Order API* (PDF | HTML)—describes how to start using your CyberSource advanced account.

- Simple Order API and SOAP Toolkit 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
Integrating with Affirm

Introduction

Affirm is a real-time financing solution that you can offer to your customers.

Affirm integrates seamlessly in your existing checkout flow, enabling your customers to split their purchases into easy monthly payments. Because there are no gimmicks or hidden fees, what your customers see at checkout is exactly what they will pay, on a payment schedule of their choosing.

Benefits

Affirm optimizes financing for an offline environment, with the following benefits:

- Improved customer choice and experience
- Transparent and flexible monthly payments
- Improved customer conversion, average return on value, and revenue per visitor
- Affirm takes on all risk of fraud and default after shipment
- Affirm supports payment authorization, capture and settlement, and refunds just like a credit card

Requirements

You must obtain an account ID from Affirm and provide it to CyberSource Customer Support.
Chapter 1  
Integrating with Affirm

Transaction Flow

Transaction Flow

1 When the customer chooses the Affirm payment method, send the sessions service request. CyberSource returns a redirection URL to the Affirm site. See Chapter 2, "Creating a Session," on page 11.

2 Using the redirection URL, redirect the customer to the Affirm site where the customer requests credit approval.

3 Affirm authorizes credit for the customer, creates a checkout token, and sends the customer back to the success URL that you sent in the sessions service request. This URL is appended with the checkout token that you extract and use in subsequent service requests.

4 Request the authorization service and include the checkout token in the request. See Chapter 3, "Authorizing a Payment," on page 16.

   To reverse an authorization, use the authorization reversal service. See Chapter 4, "Reversing an Authorization," on page 19.

5 Request the capture service. See Chapter 5, "Capturing an Authorization," on page 22.

   To request a refund, use the refund service. See Chapter 6, "Refunding a Payment," on page 25.

Testing

For test transactions, send requests to the CyberSource test server:

    https://ics2wstesta.ic3.com/commerce/1.x/transactionProcessor
To perform a test:

**Step 1** Request the sessions service to initiate a checkout.

**Step 2** Redirect the client using the redirection URL returned in sessions service response.

**Step 3** When you are redirected to Affirm checkout, use a valid U.S. phone number to go through the Affirm checkout.

**Step 4** Enter 1234 as the PIN. (For production, the PIN is sent to the customer’s phone number.)

**Step 5** Upon a successful credit confirmation, the checkout token is returned by the GET method to the success URL.

**Step 6** Loan declination can be simulated by clicking the x in the Affirm checkout flow to cancel the loan. Both cancellations and declinations are sent to the cancel URL.

**Step 7** Retrieve the checkout token from the front end, and send an authorization request.

**Step 8** Use the request ID from the authorization reply to send follow-on calls for authorization reversal and captures.

**Step 9** Use the request ID of the capture to send a partial or full refund.

---

**Going Live**

For information about going live, see *Getting Started with CyberSource Advanced for the Simple Order API* (PDF | HTML).

For information about endpoints, see the *Endpoints* document. For the Affirm services, use the Akamai endpoints.
Creating a Session

The sessions service:

- Creates a session.
- Responds with the redirection URL, the web page to which you redirect the customer where the customer applies for credit from Affirm.

Note
Affirm includes the values that you send for the item-level fields on the invoice that Affirm sends to the customer.

Include the following required fields:

- apPaymentType—set to AFM.
- apSessionsService_cancelURL—set to your web site URL that the customer is directed to after canceling the Affirm payment.
- apSessionsService_successURL—set to your web site URL that the customer is directed to after successfully completing the Affirm payment.
- apSessionsService_run—set to true.
- billTo_city
- billTo_country
- billTo_email
- billTo_firstName
- billTo_lastName
- billTo_phoneNumber
- billTo_postalCode
- billTo_state
CyberSource recommends that you include the `purchaseTotals_taxAmount` field when you request the sessions service.

For descriptions of these fields, see Appendix A, "API Fields," on page 28.
XML Example

Example 1  Sessions Request

```xml
<requestMessage xmlns="urn:schemas-cybersource-com:transaction-data-1.142">
  <merchantID>mid12345</merchantID>
  <merchantReferenceCode>ref1234</merchantReferenceCode>
  <billTo>
    <firstName>Jane</firstName>
    <lastName>Smith</lastName>
    <street1>123 Main Street</street1>
    <street2>#1060</street2>
    <city>Small Town</city>
    <state>CA</state>
    <country>US</country>
    <postalCode>98765</postalCode>
    <email>jsmith@example.com</email>
  </billTo>
  <shipTo>
    <firstName>Jane</firstName>
    <lastName>Smith</lastName>
    <street1>123 Main Street</street1>
    <street2>Apt 123</street2>
    <city>Small Town</city>
    <state>CA</state>
    <country>US</country>
    <postalCode>98765</postalCode>
    <email>jsmith@example.com</email>
  </shipTo>
  <purchaseTotals>
    <currency>USD</currency>
  </purchaseTotals>
  <item>
    <totalAmount>52.00</totalAmount>
    <quantity>5</quantity>
    <unitPrice>10.00</unitPrice>
    <productName>Skirt on the sky</productName>
    <productSKU>skirtonsky$bluegreen</productSKU>
  </item>
  <apSessionsService run="true">
    <cancelURL>http://cancel.example.com</cancelURL>
    <successURL>http://success.example.com</successURL>
  </apSessionsService>
  <apPaymentType>AFM</apPaymentType>
</requestMessage>
```
Example 2 Sessions Reply

```xml
<c:replyMessage xmlns:c="urn:schemas-cybersource-com:transaction-data-1.142">
  <c:requestID>5064077031526017003012</c:requestID>
  <c:requestToken>AhjnrwSTEoYvvYr63+4EwhjWjlM29VxBptJqXDSDae08gv6D</c:requestToken>
  <c:apSessionsReply>
    <c:merchantURL>https://sandbox.affirm.com/checkout/GVFEH5P3AKUH1RRU/new/2QCH8HLF3JBGRT6</c:merchantURL>
    <c:reasonCode>100</c:reasonCode>
    <c:status>COMPLETED</c:status>
    <c:responseCode>00000</c:responseCode>
    <c:amount>52.00</c:amount>
  </c:apSessionsReply>
  <c:decision>ACCEPT</c:decision>
  <c:reasonCode>100</c:reasonCode>
</c:replyMessage>
```
Name-Value Pair Example

Example 3   Sessions Request

merchantID=mid12345
merchantReferenceCode=ref1234
billTo_firstName=Jane
billTo_lastName=Smith
billTo_street1=123 Main Street
billTo_street2=#1060
billTo_city=Small Town
billTo_state=CA
billTo_country=US
billTo_postalCode=98765
billTo_email=jsmith@example.com
billTo_phoneNumber=19876543210
shipTo_firstName=Jane
shipTo_lastName=Smith
shipTo_street1=123 Main Street
shipTo_street2=Apt 123
shipTo_city=Small Town
shipTo_state=CA
shipTo_country=US
shipTo_postalCode=98765
shipTo_email=jsmith@example.com
shipTo_phoneNumber=19876543210
purchaseTotals_currency=USD
item_0_totalAmount=52.00
item_0_quantity=5
item_0_unitPrice=10.00
item_0_productName=Skirt on the sky
item_0_productSKU=skirtonsky$bluegreen
ap_sessions_cancel_url=http://cancel.example.com
ap_sessions_success_url=http://success.example.com
ap_payment_type=AFM
apSessionsService_run=true

Example 4   Sessions Reply

merchantReferenceCode=ref1234
requestID=504077031526017003012
requestToken=AhjnwrSTEOyvvYr63+4EwhjWjLmR29VxBptJqXDsbas08gv6DjJD
apSessionsReply_reasonCode=100
apSessionsReply_status=COMPLETED
apSessionsReply_responseCode=00000
apSessionsReply_merchantURL=https://sandbox.affirm.com/checkout/GVFEH5P3AKUH1RRU/new/2QCH8HLF3JBKGR76/
decision=ACCEPT
reasonCode=100
apSessionsReply_amount=52.00
The authorization service responds with an Affirm URL that you direct the customer to after the transaction is completed.

Include the following required fields:

- `apAuthService_preapprovalToken`—set to the checkout token generated by Affirm. When Affirm authorizes credit, Affirm generates the checkout token and sends it to the browser.
- `apAuthService_run`—set to `true`.
- `apPaymentType`—set to `AFM`.
- `billTo_city`
- `billTo_country`
- `billTo_email`
- `billTo_firstName`
- `billTo_lastName`
- `billTo_phoneNumber`
- `billTo_postalCode`
- `billTo_state`
- `billTo_street1`
- `merchantID`
- `merchantReferenceCode`
- `purchaseTotals_currency`
- `purchaseTotals_grandTotalAmount`—set to the same grand total amount that was used in the sessions request.
XML Example

Example 5  Authorization Request

```xml
<requestMessage xmlns="urn:schemas-cybersource-com:transaction-data-1.142">
  <merchantID>mid12345</merchantID>
  <merchantReferenceCode>ref1234</merchantReferenceCode>
  <billTo>
    <firstName>Jane</firstName>
    <lastName>Smith</lastName>
    <street1>123 Main Street</street1>
    <city>Small Town</city>
    <state>CA</state>
    <country>US</country>
    <postalCode>98765</postalCode>
    <email>jsmith@example.com</email>
    <phoneNumber>19876543210</phoneNumber>
  </billTo>
  <purchaseTotals>
    <currency>USD</currency>
    <grandTotalAmount>52.00</grandTotalAmount>
  </purchaseTotals>
  <apAuthService run="true">
    <preapprovalToken>QVA6DL4OFY7EJM26</preapprovalToken>
  </apAuthService>
  <apPaymentType>AFM</apPaymentType>
</requestMessage>
```

Example 6  Authorization Reply

```xml
<replyMessage xmlns:c="urn:schemas-cybersource-com:transaction-data-1.142">
  <c:requestID>5022171547236631601541</c:requestID>
  <c:requestToken>AhjnrwSTEoYvvYr63+4EwhjWjlM29VxBptJqXDsBae08gv6D</c:requestToken>
  <c:apAuthReply>
    <c:reasonCode>100</c:reasonCode>
    <c:status>AUTHORIZED</c:status>
    <c:responseCode>00003</c:responseCode>
    <c:processorTransactionID>A8S0G2N3V5I1ESMD</c:processorTransactionID>
    <c:amount>52.00</c:amount>
  </c:apAuthReply>
  <c:decision>ACCEPT</c:decision>
  <c:reasonCode>100</c:reasonCode>
</replyMessage>
```

For descriptions of these fields, see Appendix A, "API Fields," on page 28.
Name-Value Pair Example

Example 7  Authorization Request

```text
apAuthService_run=true
merchantID=mid12345
merchantReferenceCode=ref1234
billTo_firstName=Jane
billTo_lastName=Smith
billTo_street1=123 Main Street
billTo_city=Small Town
billTo_state=CA
billTo_country=US
billTo_postalCode=98765
billTo_email=jsmith@example.com
billTo_phoneNumber=19876543210
purchaseTotals_currency=USD
purchaseTotals_grandTotalAmount=52.00
apAuthService_preapprovalToken=QVA6DL4OFY7EJM26
apPaymentType=AFM
```

Example 8  Authorization Reply

```text
merchantReferenceCode=ref1234
requestID=502217154723631601541
requestToken=Ahjn7wSTEEChj2tBWGGFjxFSG4aMWDBinUvA+kEsNP3DSGTb
apAuthReply_reasonCode=100
apAuthReply_status=AUTHORIZED
apAuthReply_responseCode=00003
apAuthReply_amount=52.00
apAuthReply_processorTransactionID=A8S0G2N3V5I1ESMD
decision=ACCEPT
reasonCode=100
```
Reversing an Authorization

The authorization reversal service enables you to reverse the amount that was authorized.

Include the following required fields:

- `apAuthReversalService_authRequestID`—set to the request ID that was included in the authorization reply message.
- `apAuthReversalService_run`—set to `true`.
- `apPaymentType`—set to `AFM`.
- `merchantID`
- `merchantReferenceCode`

For descriptions of these fields, see Appendix A, "API Fields," on page 28.
XML Example

Example 9  Authorization Reversal Request

```xml
:requestMessage xmlns="urn:schemas-cybersource-com:transaction-data-1.142">
  <merchantID>mid12345</merchantID>
  <merchantReferenceCode>ref1234</merchantReferenceCode>
  <apAuthReversalService run="true">
    <authRequestID>5022171254726545401541</authRequestID>
  </apAuthReversalService>
  <apPaymentType>AFM</apPaymentType>
</requestMessage>
```

Example 10  Authorization Reversal Reply

```xml
<replyMessage xmlns:c="urn:schemas-cybersource-com:transaction-data-1.142">
  <c:requestID>5022171547236631601541</c:requestID>
  <c:requestToken>AhjnrwSTEoYvvYr63+4EwhjWjlmR29VxBptJqXDSBae08gv6D</c:requestToken>
  <c:apAuthReversalReply>
    <c:reasonCode>100</c:reasonCode>
    <c:status>AUTH_REVERSED</c:status>
    <c:reconciliationID>A8S0G2N3V5I1ESMD</c:reconciliationID>
  </c:apAuthReversalReply>
  <c:decision>ACCEPT</c:decision>
  <c:reasonCode>100</c:reasonCode>
</replyMessage>
```
Name-Value Pair Example

Example 11  Authorization Reversal Request

merchantID=mid12345
merchantReferenceCode=ref1234
apAuthReversalService_authRequestID=5022171254726545401541
apPaymentType=AFM
apAuthReversalService_run=true

Example 12  Authorization Reversal Reply

merchantReferenceCode=ref1234
requestID=502217154723631601541
decision=ACCEPT
reasonCode=100
requestToken=Ahjn7wSTEEChjZtBWGGFjxFSG4aMWDBinUvA+kEsNP3DSGTb
apAuthReversalReply_status=AUTH_REVERSED
apAuthReversalReply_responseCode=00007
apAuthReversalReply_reconciliationID=A8S0G2N3V5I1ESMD
Capturing an Authorization

The capture service enables you to capture only the entire authorized amount. Partial and multiple captures are not supported.

Include the following required fields:

- `apCaptureService_authRequestID`—set to the request ID that was included in the authorization reply message.
- `apCaptureService_run`—set to `true`.
- `apPaymentType`—set to `AFM`.
- `merchantID`
- `merchantReferenceCode`
- `purchaseTotals_currency`
- `purchaseTotals_grandTotalAmount`

CyberSource recommends that you include the following optional fields when you request the capture service:

- `item_#_productName`
- `item_#_quantity`
- `item_#_totalAmount`
- `item_#_unitPrice`

For descriptions of these fields, see Appendix A, "API Fields," on page 28.
XML Example

Example 13  
Capture Request

```xml
<requestMessage xmlns="urn:schemas-cybersource-com:transaction-data-1.142">
  <merchantID>mid12345</merchantID>
  <merchantReferenceCode>ref1234</merchantReferenceCode>
  <purchaseTotals>
    <currency>USD</currency>
    <grandTotalAmount>52.00</grandTotalAmount>
  </purchaseTotals>
  <apCaptureService run="true">
    <authRequestID>509027915776055601540</authRequestID>
  </apCaptureService>
  <apPaymentType>AFM</apPaymentType>
</requestMessage>
```

Example 14  
Capture Reply

```xml
<replyMessage xmlns:c="urn:schemas-cybersource-com:transaction-data-1.142">
  <c:requestID>5022171547236631601541</c:requestID>
  <c:requestToken>AhjnrwSTEoYvvYr63+4EwhjWjlImR29VxBptJqXDSBae08gv6D</c:requestToken>
  <c:apCaptureReply>
    <c:reasonCode>100</c:reasonCode>
    <c:status>SETTLED</c:status>
    <c:responseCode>00004</c:responseCode>
    <c:amount>52.00</c:amount>
  </c:apCaptureReply>
  <c:decision>ACCEPT</c:decision>
  <c:reasonCode>100</c:reasonCode>
</replyMessage>
```
Name-Value Pair Example

Example 15  Capture Request

merchantID=mid12345
merchantReferenceCode=ref1234
purchaseTotals_currency=USD
purchaseTotals_grandTotalAmount=52.00
apCaptureService_authRequestID=5090279157766055601540
apPaymentType=AFM
apCaptureService_run=true

Example 16  Capture Reply

merchantReferenceCode=ref1234
requestID=5022171547236631601541
requestToken=Ahjn7wSTECHjZtBWGGFjxFSG4aMWDBnUvAXkE5Np3DSGTb
apCaptureReply_reasonCode=100
apCaptureReply_status=SETTLED
apCaptureReply_responseCode=00004
apCaptureReply_amount=52.00
decision=ACCEPT
reasonCode=100
Refunding a Payment

The refund service enables you to refund the entire captured amount or part of the captured amount. Partial and multiple refunds are supported when the sum of all refunds is less than or equal to the total captured amount.

Include the following required fields:

- apPaymentType—set to AFM.
- apRefundService_refundRequestID—set to the request ID that was included in the capture reply message.
- apRefundService_run—set to true.
- merchantID
- merchantReferenceCode
- purchaseTotals_currency
- purchaseTotals_grandTotalAmount

CyberSource recommends that you include the following fields when you request the refund service:

- billTo_email
- billTo_firstName
- billTo_lastName
- item_#_productName
- item_#_quantity
- item_#_totalAmount
- item_#_unitPrice

For descriptions of these fields, see Appendix A, "API Fields," on page 28.
Example 17  Refund Request

```xml
<requestMessage xmlns="urn:schemas-cybersource-com:transaction-data-1.142">
  <merchantID>mid12345</merchantID>
  <merchantReferenceCode>ref1234</merchantReferenceCode>
  <purchaseTotals>
    <currency>USD</currency>
    <grandTotalAmount>52.00</grandTotalAmount>
  </purchaseTotals>
  <apRefundService run="true">
    <refundRequestID>5090279157766055601540</refundRequestID>
  </apRefundService>
  <apPaymentType>AFM</apPaymentType>
</requestMessage>
```

Example 18  Refund Reply

```xml
<c:replyMessage xmlns:c="urn:schemas-cybersource-com:transaction-data-1.142">
  <c:requestID>5022171547236631601541</c:requestID>
  <c:requestToken>AhjnrwSTEoYvvYr63+4EwhjWjlMr29VxBptJqXDsBae08gv6D</c:requestToken>
  <c:apRefundReply>
    <c:reasonCode>100</c:reasonCode>
    <c:status>REFUNDED</c:status>
    <c:responseCode>00006</c:responseCode>
    <c:transactionID>6IWYH3XH5XR7DP2A</c:transactionID>
  </c:apRefundReply>
  <c:decision>ACCEPT</c:decision>
  <c:reasonCode>100</c:reasonCode>
</c:replyMessage>
```
Name-Value Pair Example

Example 19  Refund Request

```
merchantID=mid12345
merchantReferenceCode=ref1234
purchaseTotals_currency=USD
purchaseTotals_grandTotalAmount=52.00
apRefundService_refundRequestID=5090279157766055601540
apPaymentType=AFM
apRefundService_run=true
```

Example 20  Refund Reply

```
merchantReferenceCode=ref1234
requestID=502217154723631601541
requestToken=Ahjn7wSTEEChj2tBWGGFjxFSG4aMWDBinUvA+kEsNP3DSGTb
apRefundReply_reasonCode=100
apRefundReply_status=REFUNDED
apRefundReply_responseCode=00006
apRefundReply_transactionID=6IWYH3XH5XR7DP2A
decision=ACCEPT
reasonCode=100
```
Formatting Restrictions

Unless otherwise noted, all field names are case sensitive and all fields accept special characters such as @, #, and %.

Note

The values of the item_#_ fields must not contain carets (^) or colons (:), because these characters are reserved for use by the CyberSource services. Values for request-level and item-level fields must not contain new lines or carriage returns. However, they can contain embedded spaces and any other printable characters. CyberSource removes all leading and trailing spaces.

Data Type Definitions

For more information about these data types, see the World Wide Web Consortium (W3C) XML Schema Part 2: Datatypes Second Edition.

Table 1 Data Type Definitions

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date and time</td>
<td>Format is YYYY-MM-DDTh:mm:ssZ, where:</td>
</tr>
<tr>
<td></td>
<td>▪ T separates the date and the time</td>
</tr>
<tr>
<td></td>
<td>▪ Z indicates Coordinated Universal Time (UTC), also known as Greenwich</td>
</tr>
<tr>
<td></td>
<td>Mean Time (GMT)</td>
</tr>
<tr>
<td></td>
<td>(10:47:57 p.m.).</td>
</tr>
<tr>
<td>Integer</td>
<td>Whole number {..., -3, -2, -1, 0, 1, 2, 3, ...}</td>
</tr>
<tr>
<td>String</td>
<td>Sequence of letters, numbers, spaces, and special characters</td>
</tr>
</tbody>
</table>
Numbered Elements

The CyberSource XML schema includes several numbered elements. You can include these complex elements more than once in a request. For example, when a customer order includes more than one item, you must include multiple `<item>` elements in your request. Each item is numbered, starting with 0. The XML schema uses an `id` attribute in the item's opening tag to indicate the number. For example:

```xml
<item id="0">
</item>
```

As a name-value pair field name, this tag is called `item_0`. In this portion of the field name, the underscore before the number does not indicate hierarchy in the XML schema. The item fields are generically referred to as `item_<element name>` in the documentation.

Below is an example of the numbered `<item>` element and the corresponding name-value pair field names. If you are using the Simple Object Access Protocol (SOAP), the client contains a corresponding `Item` class.

**Example 21 Numbered XML Schema Element Names and Name-Value Pair Field Names**

<table>
<thead>
<tr>
<th>XML Schema Element Names</th>
<th>Corresponding Name-Value Pair Field Names</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;item id=&quot;0&quot;&gt;</code></td>
<td>item_0_unitPrice</td>
</tr>
<tr>
<td><code>&lt;/item&gt;</code></td>
<td>item_0_quantity</td>
</tr>
<tr>
<td><code>&lt;item id=&quot;1&quot;&gt;</code></td>
<td>item_1_unitPrice</td>
</tr>
<tr>
<td><code>&lt;/item&gt;</code></td>
<td>item_1_quantity</td>
</tr>
</tbody>
</table>

**Important** When a request is in XML format and includes an `<item>` element, the element must include an `id` attribute. For example: `<item id="0">`. 
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 Fields

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
<th>Required (R) / Optional (O)</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>apAuthReversalService_authRequestID</td>
<td>Request ID of the authorization that you want to reverse. Set the value of this field to the value of the request ID that was returned in the authorization reply message.</td>
<td>Authorization Reversal (R)</td>
<td>String (26)</td>
</tr>
</tbody>
</table>
| apAuthReversalService_run | Whether to include `apAuthReversalService` in the request. Possible values:  
  - `true`: Include the service in the request.  
  - `false` (default): Do not include the service in the request. | Authorization Reversal (R) | String (5) |
| apAuthService_preapprovalToken | Token generated by Affirm. When Affirm authorizes the order, Affirm generates a preapproval token and sends it to the browser. See "Transaction Flow," page 9. | Authorization (R) | String (60) |
| apAuthService_run | Whether to include `apAuthService` in the request. Possible values:  
  - `true`: Include the service in the request.  
  - `false` (default): Do not include the service in the request. | Authorization (R) | String (5) |
### Table 2  Request Fields (Continued)

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
<th>Required (R) / Optional (O)</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>apCaptureService_authRequestID</td>
<td>Request ID of the authorization that you want to capture. Set the value of this field to the value of the request ID that was returned in the authorization reply message.</td>
<td>Capture (R)</td>
<td>String (26)</td>
</tr>
<tr>
<td>apCaptureService_run</td>
<td>Whether to include <strong>apCaptureService</strong> in the request. Possible values:</td>
<td>Capture (R)</td>
<td>String (5)</td>
</tr>
<tr>
<td></td>
<td>- <strong>true</strong>: Include the service in the request.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <strong>false</strong>(default): Do not include the service in the request.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>apPaymentType</td>
<td>Identifier for the payment type. Set the value for this field to <strong>AFM</strong>.</td>
<td>Required for all services.</td>
<td>String (3)</td>
</tr>
<tr>
<td>apRefundService_refundRequestID</td>
<td>Request ID of the capture that you want to refund. Set the value of this field to the value of the request ID that was returned in the capture reply message.</td>
<td>Refund (R)</td>
<td>String (26)</td>
</tr>
<tr>
<td>apRefundService_run</td>
<td>Whether to include <strong>apRefundService</strong> in the request. Possible values:</td>
<td>Refund (R)</td>
<td>String (5)</td>
</tr>
<tr>
<td></td>
<td>- <strong>true</strong>: Include the service in the request.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <strong>false</strong>(default): Do not include the service in the request.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| apSessionsService_cancelURL  | Your web site URL that the customer is directed to after canceling the Affirm payment:  
  1 You direct the customer to the Affirm URL that is included in the authorization response.  
  2 If the customer cancels the payment, Affirm directs the customer to this cancel URL. | Sessions (R)               | String (255)      |
| apSessionsService_run        | Whether to include **apsService** in the request. Possible values:         | Sessions (R)               | String (5)        |
|                              |   - **true**: Include the service in the request.                          |                            |                   |
|                              |   - **false**(default): Do not include the service in the request.         |                            |                   |
| apSessionsService_successURL | Your web site URL that the customer is directed to after successfully completing the Affirm payment:  
  1 You direct the customer to the Affirm URL that is included in the authorization request.  
  2 If the customer successfully completes the payment, Affirm directs the customer to this success URL. | Sessions (R)               | String (255)      |
<p>| billTo_city                  | City of the billing address.                                               | Authorization (R)          | String (50)       |</p>
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
<th>Required (R) / Optional (O)</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>billTo_country</td>
<td>Country of the billing address. Use the two-character <em>ISO Standard Country Codes</em>.</td>
<td>Authorization (R)</td>
<td>String (2)</td>
</tr>
<tr>
<td></td>
<td><strong>Authorizations</strong></td>
<td>Sessions (R)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The value for this field must be the same value that was used for the request.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>billTo_email</td>
<td>Customer's email address.</td>
<td>Authorization (R)</td>
<td>String (255)</td>
</tr>
<tr>
<td></td>
<td>Refund (O but recommended)</td>
<td>Sessions (R)</td>
<td></td>
</tr>
<tr>
<td>billTo_firstName</td>
<td>Customer's first name.</td>
<td>Authorization (R)</td>
<td>String (60)</td>
</tr>
<tr>
<td></td>
<td>Refund (O but recommended)</td>
<td>Sessions (R)</td>
<td></td>
</tr>
<tr>
<td>billTo_lastName</td>
<td>Customer's last name.</td>
<td>Authorization (R)</td>
<td>String (60)</td>
</tr>
<tr>
<td></td>
<td>Refund (O but recommended)</td>
<td>Sessions (R)</td>
<td></td>
</tr>
<tr>
<td>billTo_phoneNumber</td>
<td>Customer’s phone number. CyberSource recommends that you include the country code when the order is from outside the U.S.</td>
<td>Authorization (R)</td>
<td>String (15)</td>
</tr>
<tr>
<td></td>
<td>Sessions (R)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>billTo_postalCode</td>
<td>Postal code for the billing address. The postal code must consist of 5 to 9 digits.</td>
<td>Authorization (R)</td>
<td>String (10)</td>
</tr>
<tr>
<td></td>
<td>When the billing country is the U.S., the 9-digit postal code must follow this format:</td>
<td>Sessions (R)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[5 digits][dash][4 digits]</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong> 12345-6789</td>
<td></td>
<td></td>
</tr>
<tr>
<td>billTo_state</td>
<td>State of the billing address. Use the <em>State, Province, and Territory Codes for the United States and Canada</em>.</td>
<td>Authorization (R)</td>
<td>String (2)</td>
</tr>
<tr>
<td></td>
<td>Sessions (R)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>billTo_street1</td>
<td>First line of the billing street address.</td>
<td>Authorization (R)</td>
<td>String (60)</td>
</tr>
<tr>
<td></td>
<td>Sessions (R)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>billTo_street2</td>
<td>Additional address information.</td>
<td>Authorization (O)</td>
<td>String (60)</td>
</tr>
<tr>
<td></td>
<td>Example Attention: Accounts Payable</td>
<td>Sessions (R)</td>
<td></td>
</tr>
<tr>
<td>item_#_discountAmount</td>
<td>Item-level discount amount. If the item quantity is 1, then this value is the discount for the item. If the item quantity is more than 1, then this value is the discount for the entire quantity of the item.</td>
<td>Authorization (O)</td>
<td>String (15)</td>
</tr>
<tr>
<td></td>
<td>See &quot;Numbered Elements,&quot; page 29.</td>
<td>Sessions (O)</td>
<td></td>
</tr>
</tbody>
</table>
### Table 2  Request Fields (Continued)

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
<th>Required (R) / Optional (O)</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>item_#_productCode</td>
<td>Type of product. This value is used to determine the category that the product is in: electronic, handling, physical, service, or shipping. The default value is default. See Table 4, &quot;Product Codes,&quot; on page 39, for a list of valid values. See &quot;Numbered Elements,&quot; page 29.</td>
<td>Authorization (O) Sessions (O)</td>
<td>String (255)</td>
</tr>
<tr>
<td>item_#_productName</td>
<td>Product name. <strong>Note</strong> To include a shipping amount in a request, set the value of this field to shipping and include the item_#<em>unitPrice, item</em>#<em>totalAmount, and item</em>#_quantity fields for the shipping item. See &quot;Numbered Elements,&quot; page 29.</td>
<td>Authorization (O) Capture (O but recommended) Refund (O but recommended) Sessions (R)</td>
<td>String (255)</td>
</tr>
<tr>
<td>item_#_quantity</td>
<td>The default is 1. See &quot;Numbered Elements,&quot; page 29.</td>
<td>Authorization (O) Capture (O but recommended) Refund (O but recommended) Sessions (R)</td>
<td>Integer (10)</td>
</tr>
<tr>
<td>item_#_taxRate</td>
<td>Tax rate for the item. See &quot;Numbered Elements,&quot; page 29.</td>
<td>Authorization (O) Sessions (O)</td>
<td>String (15)</td>
</tr>
<tr>
<td>item_#_totalAmount</td>
<td>Item-level total amount. If the item quantity is 1, then this value is the total amount for the item. If the item quantity is more than 1, then this value is the total amount for the entire quantity of the item. See &quot;Numbered Elements,&quot; page 29.</td>
<td>Authorization (O) Capture (O but recommended) Refund (O but recommended) Sessions (R)</td>
<td>String (15)</td>
</tr>
</tbody>
</table>
### Table 2  Request Fields (Continued)

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
<th>Required (R) / Optional (O)</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>item.#.unitPrice</td>
<td>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. <strong>Authorization and Sessions</strong> If a discount applies to the cost of the item, this value includes the discount amount. For example, if the original (pre-discount) price is 10.00 and the discount amount is 5.00, the price of the item is 15.00. Do not include the tax amount in this value. See &quot;Numbered Elements,&quot; page 29.</td>
<td>Authorization (O) Capture (O but recommended) Refund (O but recommended) Sessions (R)</td>
<td>String (15)</td>
</tr>
<tr>
<td>merchantID</td>
<td>Your CyberSource merchant ID. Use the same merchant ID for evaluation, testing, and production. Required for all services.</td>
<td>Required for all services.</td>
<td>String (30)</td>
</tr>
<tr>
<td>merchantReferenceCode</td>
<td>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 Simple Order API. Required for all services.</td>
<td>String (50)</td>
<td></td>
</tr>
<tr>
<td>purchaseTotals_currency</td>
<td>Currency for the transaction. Use the three-character ISO Standard Currency Codes. Authorization (R) Authorization reversal (O) Capture (O) Refund (R) Sessions (R)</td>
<td>String (5)</td>
<td></td>
</tr>
<tr>
<td>purchaseTotals_discountAmount</td>
<td>Total discount for the entire order. Sessions (O)</td>
<td>String (15)</td>
<td></td>
</tr>
<tr>
<td>purchaseTotals_grandTotalAmount</td>
<td>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. Authorization (R) Authorization reversal (O) Capture (O but recommended) Refund (O but recommended) Sessions (O)</td>
<td>String (15)</td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
<td>Required (R) / Optional (O)</td>
<td>Data Type &amp; Length</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>purchaseTotals_taxAmount</td>
<td>Total tax amount for the order.</td>
<td>Authorization (O)</td>
<td>String (15)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sessions (O but recommended)</td>
<td></td>
</tr>
<tr>
<td>shipTo_city</td>
<td>City of the shipping address.</td>
<td>Authorization (O)</td>
<td>String (40)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sessions (R)</td>
<td></td>
</tr>
<tr>
<td>shipTo_country</td>
<td>Country of the shipping address. Use the two-character ISO Standard Country Codes.</td>
<td>Authorization (O)</td>
<td>String (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sessions (R)</td>
<td></td>
</tr>
<tr>
<td>shipTo_email</td>
<td>Email of the recipient.</td>
<td>Authorization (O)</td>
<td>String (255)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sessions (R)</td>
<td></td>
</tr>
<tr>
<td>shipTo_firstName</td>
<td>First name of the recipient.</td>
<td>Authorization (O)</td>
<td>String (60)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sessions (R)</td>
<td></td>
</tr>
<tr>
<td>shipTo_lastName</td>
<td>Last name of the recipient.</td>
<td>Authorization (O)</td>
<td>String (60)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sessions (R)</td>
<td></td>
</tr>
<tr>
<td>shipTo_phoneNumber</td>
<td>Phone number for the shipping address.</td>
<td>Authorization (O)</td>
<td>String (20)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sessions (O)</td>
<td></td>
</tr>
<tr>
<td>shipTo_postalCode</td>
<td>Postal code for the shipping address. The postal code must consist of 5 to 9 digits.</td>
<td>Authorization (O)</td>
<td>String (20)</td>
</tr>
<tr>
<td></td>
<td>When the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</td>
<td>Sessions (R)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong> 12345-6789</td>
<td></td>
<td></td>
</tr>
<tr>
<td>shipTo_state</td>
<td>State of the shipping address. Use the State, Province, and Territory Codes for the United States and Canada.</td>
<td>Authorization (O)</td>
<td>String (40)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sessions (R)</td>
<td></td>
</tr>
<tr>
<td>shipTo_street1</td>
<td>First line of the shipping address.</td>
<td>Authorization (O)</td>
<td>String (100)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sessions (R)</td>
<td></td>
</tr>
<tr>
<td>shipTo_street2</td>
<td>Second line of the shipping address.</td>
<td>Authorization (O)</td>
<td>String (100)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sessions (R)</td>
<td></td>
</tr>
</tbody>
</table>
## Reply Fields

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
<th>Returned By</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>apAuthReply_amount</td>
<td>Authorized amount.</td>
<td>Authorization</td>
<td>String (15)</td>
</tr>
<tr>
<td>apAuthReply_dateTime</td>
<td>Date and time when the service was requested.</td>
<td>Authorization</td>
<td>String (20)</td>
</tr>
<tr>
<td>apAuthReply_processorTransactionID</td>
<td>Affirm-generated transaction identifier.</td>
<td>Authorization</td>
<td>String (15)</td>
</tr>
<tr>
<td>apAuthReply_reasonCode</td>
<td>Numeric value corresponding to the result of the authorization request.</td>
<td>Authorization</td>
<td>Integer (5)</td>
</tr>
<tr>
<td>apAuthReply_status</td>
<td>Affirm authorization status. Possible values:</td>
<td>Authorization</td>
<td>String (15)</td>
</tr>
<tr>
<td></td>
<td>- AUTHORIZED: Payment successfully authorized.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- FAILED: Request failed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>apAuthReversalReply_dateTime</td>
<td>Date and time when the service was requested.</td>
<td>Authorization Reversal</td>
<td>String (20)</td>
</tr>
<tr>
<td>apAuthReversalReply_reasonCode</td>
<td>Numeric value corresponding to the result of the authorization reversal request.</td>
<td>Authorization Reversal</td>
<td>Integer (5)</td>
</tr>
<tr>
<td>apAuthReversalReply_reconciliationID</td>
<td>CyberSource-generated reference number. You can use this value to reconcile your transactions with information from Affirm and information in CyberSource reports.</td>
<td>Authorization Reversal</td>
<td>String (60)</td>
</tr>
<tr>
<td>apAuthReversalReply_status</td>
<td>Affirm authorization reversal status. Possible values:</td>
<td>Authorization Reversal</td>
<td>String (15)</td>
</tr>
<tr>
<td></td>
<td>- AUTH_REVERSED: Authorization successfully reversed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- FAILED: Request failed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>apCaptureReply_amount</td>
<td>Amount that was captured.</td>
<td>Capture</td>
<td>String (15)</td>
</tr>
<tr>
<td>apCaptureReply_dateTime</td>
<td>Date and time when the service was requested.</td>
<td>Capture</td>
<td>String (20)</td>
</tr>
<tr>
<td>apCaptureReply_reasonCode</td>
<td>Numeric value corresponding to the result of the capture request.</td>
<td>Capture</td>
<td>Integer (5)</td>
</tr>
</tbody>
</table>
### Table 3  Reply Fields (Continued)

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
<th>Returned By</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>apCaptureReply_status</td>
<td>Affirm capture status. Possible values:</td>
<td>Capture</td>
<td>String (15)</td>
</tr>
<tr>
<td></td>
<td>- <strong>CAPTURED:</strong> Payment successfully captured.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <strong>FAILED:</strong> Request failed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>apRefundReply_dateTime</td>
<td>Date and time when the service was requested.</td>
<td>Refund</td>
<td>String (20)</td>
</tr>
<tr>
<td>apRefundReply_transactionID</td>
<td>Affirm identifier of the refund transaction.</td>
<td>Refund</td>
<td>String (50)</td>
</tr>
<tr>
<td>apRefundReply_reasonCode</td>
<td>Numeric value corresponding to the result of the refund request. See &quot;Reason Codes and Affirm Response Codes,&quot; page 40.</td>
<td>Refund</td>
<td>Integer (5)</td>
</tr>
<tr>
<td>apRefundReply_responseCode</td>
<td>Affirm response code. See &quot;Reason Codes and Affirm Response Codes,&quot; page 40.</td>
<td>Refund</td>
<td>String (5)</td>
</tr>
<tr>
<td>apRefundReply_status</td>
<td>Affirm refund status. Possible values:</td>
<td>Refund</td>
<td>String (15)</td>
</tr>
<tr>
<td></td>
<td>- <strong>REFUNDED:</strong> Payment successfully refunded.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <strong>FAILED:</strong> Request failed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>apSessionsReply_amount</td>
<td>Total amount charged from the payer to the payee. Ten characters max with support for two decimal places.</td>
<td>Sessions</td>
<td>String (15)</td>
</tr>
<tr>
<td>apSessionsReply_merchantURL</td>
<td>Affirm URL. Direct the customer to this URL after the transaction is completed.</td>
<td>Sessions</td>
<td>String (2048)</td>
</tr>
<tr>
<td>apSessionsReply_reasonCode</td>
<td>Numeric value corresponding to the result of the Sessions request. See &quot;Reason Codes and Affirm Response Codes,&quot; page 40.</td>
<td>Sessions</td>
<td>Integer (5)</td>
</tr>
<tr>
<td>apSessionsReply_status</td>
<td>Status of the sessions request. Possible values:</td>
<td>Sessions</td>
<td>String (15)</td>
</tr>
<tr>
<td></td>
<td>- <strong>COMPLETED:</strong> Sessions request successfully completed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <strong>FAILED:</strong> Request failed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
<td>Returned By</td>
<td>Data Type &amp; Length</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>decision</td>
<td>Summarizes the result of the overall request. Possible values:</td>
<td>All services</td>
<td>String (6)</td>
</tr>
<tr>
<td></td>
<td>■ ACCEPT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>■ ERROR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>■ REJECT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>For details about these values, see the information about handling replies in Getting Started with CyberSource Advanced for the Simple Order API.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>merchantReferenceCode</td>
<td>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 Simple Order API.</td>
<td>All services</td>
<td>String (50)</td>
</tr>
<tr>
<td>(reasonCode)</td>
<td>Numeric value corresponding to the result of the overall request. See &quot;Reason Codes and Affirm Response Codes,&quot; page 40.</td>
<td>All services</td>
<td>Integer (5)</td>
</tr>
<tr>
<td>requestID</td>
<td>Identifier for the request.</td>
<td>All services</td>
<td>String (26)</td>
</tr>
<tr>
<td>requestToken</td>
<td>Request token data created by CyberSource for each reply. The field is an encoded string that contains no confidential information such as an account or card verification number. The string can contain a maximum of 256 characters.</td>
<td>All services</td>
<td>String (256)</td>
</tr>
</tbody>
</table>
The following table lists the values you can use for the product code in the `item_number.productCode` request field.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>adult_content</td>
<td>Adult content.</td>
</tr>
<tr>
<td>coupon</td>
<td>Coupon applied to the entire order.</td>
</tr>
<tr>
<td>default</td>
<td>Default value for the product code. CyberSource uses <code>default</code> when a request message does not include a value for the product code.</td>
</tr>
<tr>
<td>electronic_good</td>
<td>Electronic product other than software.</td>
</tr>
<tr>
<td>electronic_software</td>
<td>Software distributed electronically rather than on disks or other media.</td>
</tr>
<tr>
<td>gift_certificate</td>
<td>Gift certificate.</td>
</tr>
<tr>
<td>handling_only</td>
<td>Fee that you charge your customer to cover your administrative selling costs.</td>
</tr>
<tr>
<td>service</td>
<td>Service that you perform for your customer.</td>
</tr>
<tr>
<td>shipping_and_handling</td>
<td>The shipping portion is the charge for shipping the product to your customer. The handling portion is the fee you charge your customer to cover your administrative selling costs.</td>
</tr>
<tr>
<td>shipping_only</td>
<td>Charge for transporting tangible personal property from your location to your customer. You must maintain documentation that clearly establishes the location where the title to the property passed from you to your customer.</td>
</tr>
<tr>
<td>subscription</td>
<td>Subscription to a web site or other content.</td>
</tr>
</tbody>
</table>
## Reason Codes and Affirm Response Codes

CyberSource recommends using the reason code value and the Affirm response code to determine the transaction result.

### Table 5 Reason Codes and Affirm Response Codes

<table>
<thead>
<tr>
<th>Reason Code</th>
<th>Affirm Response Codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>00000—status: completed.</td>
<td>Successful transaction.</td>
</tr>
<tr>
<td></td>
<td>00001—status: pending.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>00002—status: abandoned.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>00003—status: authorized.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>00004—status: settled.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>00006—status: refunded.</td>
<td></td>
</tr>
<tr>
<td>102</td>
<td>10000—status: failed.</td>
<td>One or more fields in the request contain invalid data.</td>
</tr>
<tr>
<td>150</td>
<td>20000—status: failed.</td>
<td>Possible reasons:</td>
</tr>
<tr>
<td></td>
<td>20001—status: failed.</td>
<td>■ The signature was not included in the HTTP header.</td>
</tr>
<tr>
<td></td>
<td>20002—status: failed.</td>
<td>■ The signature in the HTTP header has expired, or is not a valid signature.</td>
</tr>
<tr>
<td></td>
<td>30000—status: failed.</td>
<td>■ The API version in the HTTP header was missing or is not supported.</td>
</tr>
<tr>
<td></td>
<td>30100—status: failed.</td>
<td></td>
</tr>
<tr>
<td>203</td>
<td>30200—status: failed.</td>
<td>Affirm declined the transaction because of funding source problems, or the transaction was flagged as high risk.</td>
</tr>
<tr>
<td></td>
<td>30400—status: failed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30500—status: failed.</td>
<td></td>
</tr>
<tr>
<td>204</td>
<td>30350—status: failed.</td>
<td>Payment declined because of insufficient funds in the account.</td>
</tr>
<tr>
<td>233</td>
<td>30600—status: failed.</td>
<td>Affirm declined the transaction because of tax errors or government compliance errors.</td>
</tr>
<tr>
<td></td>
<td>30700—status: failed.</td>
<td></td>
</tr>
</tbody>
</table>