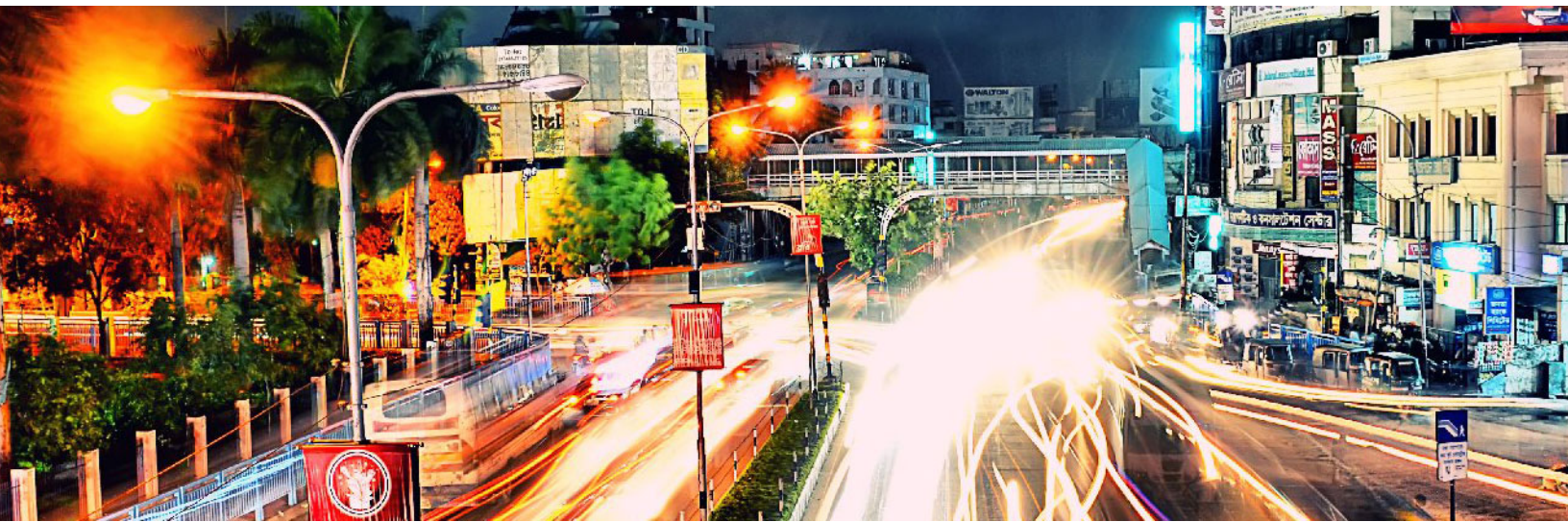


# Klarna Services

Using the SCMP API



**CyberSource®**  
A Visa Solution

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For sales questions about any CyberSource service, email [sales@cybersource.com](mailto:sales@cybersource.com) or call 650-432-7350 or 888-330-2300 (toll free in the United States).

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**Revision:** 22.02

# Contents

## **Recent Revisions to This Document** 5

### **About This Guide** 7

Audience and Purpose 7

Conventions 7

Note, Important, and Warning Statements 7

Text and Command Conventions 8

Related Documents 8

Customer Support 8

---

## **Chapter 1 Integrating with Klarna** 9

Merchant Accounts 9

Requirements 10

Supported Countries and Currencies 10

Klarna Review Process 10

Shipping Policies 11

Disputes and Fraud 11

Overview of a Klarna Transaction 11

Testing 14

---

## **Chapter 2 Creating and Updating a Session** 15

Creating a Session 15

Updating a Session 17

Coupons 19

Calculating the Grand Total 19

Tax Amounts 19

Grand Total without Coupons 20

Grand Total with Coupons 21

Examples 22

Name-Value Pair Examples 22

---

<b>Chapter 3</b>	<b>Authorizing a Payment</b>	<b>26</b>
	Examples	27

---

<b>Chapter 4</b>	<b>Checking Status</b>	<b>29</b>
	Examples	30

---

<b>Chapter 5</b>	<b>Reversing an Authorization</b>	<b>31</b>
	Examples	32

---

<b>Chapter 6</b>	<b>Capturing an Authorization</b>	<b>33</b>
	Examples	34

---

<b>Chapter 7</b>	<b>Refunding a Payment</b>	<b>35</b>
	Required Fields	35
	Recommended Fields	35
	Examples	36

---

<b>Appendix A</b>	<b>API Fields</b>	<b>37</b>
	Formatting Restrictions	37
	Data Type Definitions	37
	Working with Multibyte Character Strings	38
	Request-Level Fields	38
	Offer-Level Fields	46
	Reply Fields	48

---

<b>Appendix B</b>	<b>Reply Flags and Klarna Response Codes</b>	<b>55</b>
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<b>Appendix C</b>	<b>API Field Map</b>	<b>56</b>
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# Recent Revisions to This Document

Release	Changes
22.02	This revision contains only editorial changes and no technical updates.
22.01	This revision contains only editorial changes and no technical updates.
20.02	Indicated that the <b>Klarna.Credit.load</b> function enables the display of the Klarna widget in <a href="#">"Overview of a Klarna Transaction," page 11</a> . The Klarna SDK documentation refers to the <b>Klarna.Payments.load</b> function, which is not valid for CyberSource integration.
20.01	Added that a purchase authorization can be captured for up to 28 days.
19.04	Updated return values for <b>ap_capture_payment_status</b> and <b>ap_capture_status</b> . Added new information about test triggers and URL. See <a href="#">"Testing," page 14</a> .
19.03	Added information about multibyte character strings. See <a href="#">"Request-Level Fields," page 38</a> .
19.02	Added support for new currency, CHF (Switzerland). See <a href="#">"Requirements," page 10</a> . Added information to, <a href="#">"Overview of a Klarna Transaction," page 11</a> . Updated information about the sessions service. See <a href="#">Chapter 2, "Creating and Updating a Session," on page 15</a> . Updated descriptions for the <b>bill_country</b> and <b>bill_zip</b> request fields. See <a href="#">"Request-Level Fields," page 38</a> .
19.01	Added the following sections: <ul style="list-style-type: none"> <li>▪ <a href="#">"Merchant Accounts," page 9</a></li> <li>▪ <a href="#">"Requirements," page 10</a></li> <li>▪ <a href="#">"Klarna Review Process," page 10</a></li> <li>▪ <a href="#">"Shipping Policies," page 11</a></li> <li>▪ <a href="#">"Disputes and Fraud," page 11</a></li> </ul> Updated the transaction flow. See <a href="#">Figure 1, "Klarna Transaction," on page 11</a> . Updated information about the sessions service. See <a href="#">Chapter 2, "Creating and Updating a Session," on page 15</a> . Updated the sessions service examples. See <a href="#">"Examples," page 22</a> . Added the <b>ap_sessions_request_id</b> and <b>ap_sessions_type</b> request fields. See <a href="#">"Request-Level Fields," page 38</a> . Updated the description for the <b>customer_language</b> request field. See <a href="#">"Request-Level Fields," page 38</a> .

Release	Changes
18.01	<p>Added information about multiple captures. See <a href="#">Chapter 6, "Capturing an Authorization,"</a> on page 33.</p> <p>Added information about multiple refunds. See <a href="#">Chapter 7, "Refunding a Payment,"</a> on page 35.</p>
17.03	<p>Added information about Trusted Shops certification in Germany. See <a href="#">"Requirements,"</a> page 10.</p> <p>Added information to <a href="#">"Overview of a Klarna Transaction,"</a> page 11.</p> <p>Added support for coupons. See <a href="#">"Coupons,"</a> page 19.</p> <p>Added <a href="#">"Calculating the Grand Total,"</a> page 19.</p> <p>Updated information about tax amount fields. See <b>tax_amount</b> and <b>total_tax_amount</b> in <a href="#">Appendix A, "API Fields,"</a> on page 37.</p> <p>Changed many of the request fields for the authorization service from required to optional. See <a href="#">Chapter 3, "Authorizing a Payment,"</a> on page 26 and <a href="#">Appendix A, "API Fields,"</a> on page 37.</p>
17.02	<p>Added the <b>order_discount_amount</b> request field. See <a href="#">Chapter 2, "Creating and Updating a Session,"</a> on page 15 and <a href="#">Appendix A, "API Fields,"</a> on page 37.</p>
17.01	<p>Removed the <b>ap_api_key</b> request field.</p>

# About This Guide

## Audience and Purpose

---

This guide is written for merchants who want to offer Klarna 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. You must also integrate the Klarna SDK into your web site.

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

## Conventions

---

### Note, Important, and Warning 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
<b>bold</b>	Field and service names in text; for example: Include the <b>ics_applications</b> field.
Screen text	<ul style="list-style-type: none"><li>■ XML elements</li><li>■ Code examples</li><li>■ Values for API fields; for example: Set the <b>ics_applications</b> field to <code>ics_auth</code>.</li></ul>

## Related Documents

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

Refer to the Support Center for complete CyberSource technical documentation:

[http://www.cybersource.com/support\\_center/support\\_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 Klarna

Klarna payments is an in-line, real-time financing solution you can offer to your customers through CyberSource. Klarna optimizes financing for an offline environment, which improves customer choice and experience.

## Merchant Accounts

---

There are two types of CyberSource merchant accounts. For more information on each account type, contact your CyberSource sales representative.

- **CyberSource settlement services account**—this merchant account has no direct contract with a payment provider partner. The CyberSource Financial Settlement Partner (FSP) collects funds on your behalf and settles them to your merchant account.



---

CyberSource requests the export compliance service for every transaction using the CyberSource settlement services account. The export compliance service compares customer information to export control lists maintained by government agencies. If a customer's name appears on any government list, the transaction is declined.

---

To facilitate compliance checks for CyberSource settlement services accounts, you must send the following fields in your sale service requests:

- customer\_firstname
- customer\_lastname
- bill\_address1
- bill\_city
- bill\_country

If you do not send these fields, you might not receive errors in the CyberSource test environment but you will receive errors in the production environment.

- **Processor direct contract account**—this merchant account must use the payment provider selected by CyberSource. If you have existing direct contracts, you must inform your sales representative.

## Requirements

- You must obtain a CyberSource merchant ID and a Klarna API key for each country in which you process transactions.



You must provide CyberSource Customer Support with the API key that you receive from Klarna.

- If you have the Trusted Shops certification in Germany, you must update the Terms and Conditions page on your web site:
  - Add information about the Klarna payment method.
  - Include a link to the Klarna Terms and Conditions page.

For details about this requirement, see:

<https://developers.klarna.com/en/no/kco-v2/country-specific/germany>

## Supported Countries and Currencies

**Table 1** Supported Countries and Currencies

Country	Currency
Austria	EUR
Canada	CAD
Denmark	DKK
Finland	EUR
Germany	EUR
Netherlands	EUR
Norway	NOK
Sweden	SEK
Switzerland	CHF
United Kingdom	GBP
United States	USD

## Klarna Review Process

Before you launch Klarna payments, Klarna reviews your front-end and back-end integrations. For more information about Klarna's pre-launch review process, contact your CyberSource technical account manager or customer support.

## Shipping Policies

Always follow the shipping policies for each country as outlined by Klarna to ensure that Klarna assumes liability for fraudulent transactions. For Klarna's shipping policy, go to:

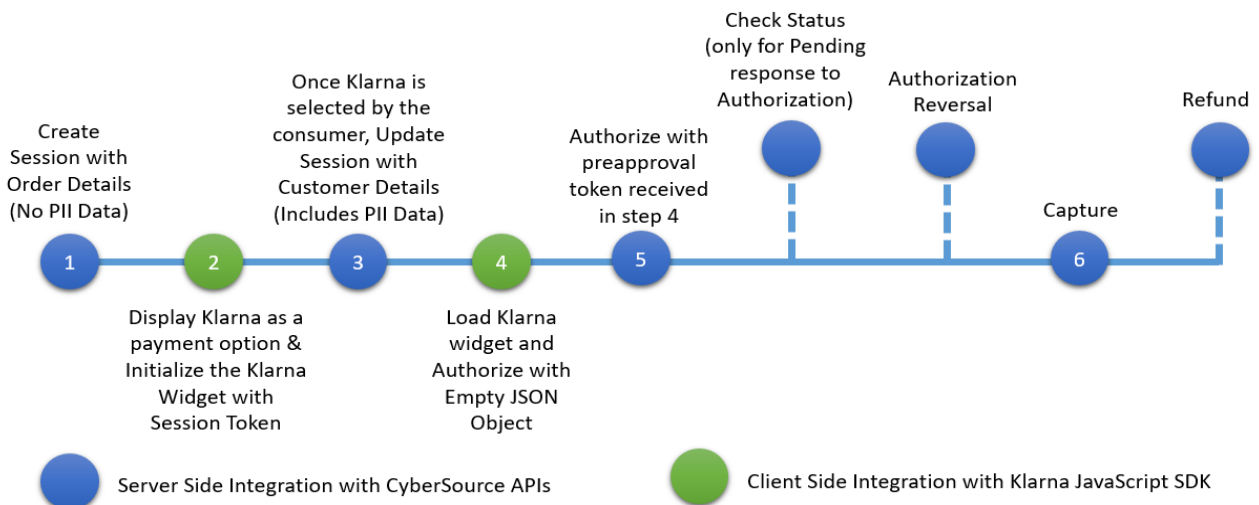
<https://www.klarna.com/international/shipping-policies/>

## Disputes and Fraud

Klarna has a standard process for handling disputes and risky transactions between you and your customers. For more information, contact your CyberSource technical account manager or customer support.

## Overview of a Klarna Transaction

**Figure 1** Klarna Transaction



- 1 Add the container for the Klarna widget to the HTML for your checkout page. This is a one-time operation and provides an iFrame for the Klarna widget to be dynamically loaded into when the Klarna widget is initialized.

### Example 1 Adding the Klarna Container to Your Checkout Page

```
<div id=#klarna_container"></div>
```

- 2 When the customer displays your checkout page, send a create session request to CyberSource. The sessions service creates a unique customer session and returns a processor token. (Also called a *session token*.) See [Chapter 2, "Creating and Updating a Session,"](#) on page 15.

- 3 Present the available payment methods to the customer. When the customer chooses the Klarna payment method on your checkout page, install the Klarna SDK and initialize it by calling **Klarna.Credit.init**. In the request, set the client token field to the value of the processor token returned by CyberSource.

### Example 2 Initializing the Klarna SDK

---

```
Klarna.Credit.init({client_token: '<%=processorToken%>'})
  if (count < 3)
  {
    setTimeout(initializeKlarna.bind(null, count), 3000);
  }
  else
  {
    showError()
  }
}
```

---



Initializing the Klarna SDK can take up to 10 seconds. CyberSource recommends that you try to initialize the SDK every three seconds, up to a maximum of three attempts.

---

For additional information about initializing the Klarna SDK, see:

<https://developers.klarna.com/en/us/kco-v3/klarna-payment-methods/klarna-credit/2-present-the-klarna-widget>



The function that enables the display of the Klarna widget is **Klarna.Credit.load**, as documented in the next step. The Klarna SDK documentation refers to the **Klarna.Payments.load** function, which is not valid for CyberSource integration. CyberSource does not support the use of the **payment\_method\_catagory** field.

---

- 4 Load the Klarna widget into the Klarna container by calling **Klarna.Credit.load** and specifying the Klarna container.

### Example 3 Loading the Klarna Widget

---

```
Klarna.Credit.load({
  container: "#klarna_container",
  (...)
})
```

---

- 5 Display the Klarna payment options on your checkout page. The **show\_form = true** statement dynamically updates the payment options in the Klarna widget.

#### Example 4 Displaying the Klarna Payment Options

---

```
if (res["show_form"] == true)
{
    logging("Klarna Available Payment Option");

    document.getElementById("auth_button").innerHTML =
    "<br><button type=\"button\" name=\"buy\"
    onclick=\"authorizeKlarnaOrder();\">Pay</button>"
}
else
{
    logging("Klarna Not Available As A Payment Option");
}
```

---

- 6 When the customer chooses one of the Klarna payment options:
  - Send an update session request to CyberSource with available customer information. See [Chapter 2, "Creating and Updating a Session," on page 15](#).
  - Call **Klarna.Credit.authorize** to authorize the order with Klarna. In the call, include an empty JSON object. For additional information about Klarna authorizations, see:

<https://developers.klarna.com/en/us/kco-v3/klarna-payment-methods/klarna-credit/3-authorize>

#### Example 5 Authorizing the Order

---

```
Klarna.Credit.authorize({}, function(res) {
    var auth_token = res["authorization_token"];
    var isApproved = res["approved"];
    var show_form = res["show_form"];
}))
```

---

- 7 Klarna validates the customer's information and determines whether to authorize the order. When Klarna authorizes the order, Klarna returns an authorization token.
- 8 Send an authorization request to CyberSource. Set the preapproval token field to the value of the authorization token returned by Klarna. See [Chapter 3, "Authorizing a Payment," on page 26](#).
- 9 When CyberSource approves the authorization, send a capture request to complete the purchase. See [Chapter 6, "Capturing an Authorization," on page 33](#).



When the authorization reply indicates that the purchase is pending, send a check status request every hour until the payment status changes. See [Chapter 4, "Checking Status," on page 29](#).

---

# Testing

---

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

<http://ics2test.ic3.com>

Use the Klarna test triggers, which consist of email addresses. For more information, see:

<https://developers.klarna.com/documentation/testing-environment/#klarna-payments-test-triggers>

# Creating and Updating a Session

The sessions service:

- 1 Creates a new customer session.
- 2 Requires an offer-level shipping amount. The following fields are required:
  - amount
  - product\_name—set to `shipping`.
  - quantity
  - total\_amount
- 3 Returns a processor token from Klarna. Use this token when initializing the Klarna SDK on your checkout page. See ["Overview of a Klarna Transaction," page 11](#).
- 4 Updates the existing session after the customer approves the purchase and consents to sharing their data with Klarna.



Klarna includes the values that you send for the offer-level fields on the invoice that Klarna sends to the customer.

---

## Creating a Session



Do not send any personally identifiable information (PII) data about the customer in the request to create a session.

---

Send the following required fields in the request to create a new session:

- ap\_payment\_type—set to `KLI`.
- ap\_sessions\_cancel\_url—set to the URL to which the customer is directed after canceling the Klarna payment.

- `ap_sessions_failure_url`—set to the URL to which the customer is directed after the Klarna payment fails.
- `ap_sessions_success_url`—set to the URL to which the customer is directed after successfully completing the Klarna payment.
- `bill_country`—the value you set for this field must be the same value when you update the session.
- `currency`
- `grand_total_amount`
- `ics_applications`—set to `ics_ap_sessions`.
- `merchant_id`
- `merchant_ref_number`
- `offer:amount`
- `offer:product_name`
- `offer:quantity`
- `offer:total_amount`

Send the following optional fields in the request to create a new session:

- `ap_sessions_type`—set to `N`. CyberSource uses this default value when you do not include the session type in the request.
- `order_discount_amount`

In the U.S., CyberSource recommends that you include the **total\_tax\_amount** field when you request the sessions service.

In countries other than the U.S., CyberSource recommends that you include the offer-level **tax\_amount** field when you request the sessions service.

For descriptions of these fields see [Appendix A, "API Fields," on page 37](#).



## Updating a Session

---

You can update the session for 48 hours after creating it. You can update Offer-level details and amounts in the request to update the session.

The session update service enables you to update items in the cart, with or without sending customer billing details. However, when you send customer billing details in the session update request, send as many billing details as possible for the best customer checkout experience.



PII data about a customer should be sent only after the customer chooses the Klarna payment option on your checkout page and consents to sharing their data with Klarna.

---

After the customer consents to share their data with Klarna, send the following required fields in the request to update the session:

- `ap_payment_type`—set to `KLI`.
- `ap_sessions_cancel_url`—set to the URL to which the customer is directed after canceling the Klarna payment.
- `ap_sessions_failure_url`—set to the URL that the customer is directed to after the Klarna payment fails.
- `ap_sessions_request_id`
- `ap_sessions_success_url`—set to the URL to which the customer is directed after successfully completing the Klarna payment.
- `bill_address1`
- `bill_address2`
- `bill_city`
- `bill_country`—the value of this field must match the value you set when you created the session.
- `bill_district`—set to the same value as **`bill_state`**.
- `bill_state`—set to the same value as **`bill_district`**.
- `bill_zip`
- `currency`
- `customer_email`

- `customer_firstname`
- `customer_language`
- `customer_lastname`
- `grand_total_amount`
- `ics_applications`—set to `ics_ap_sessions`.
- `merchant_id`
- `merchant_ref_number`
- `offer:amount`
- `offer:product_name`
- `offer:quantity`
- `offer:total_amount`
- `ship_to_address1`
- `ship_to_address2`
- `ship_to_city`
- `ship_to_country`
- `ship_to_district`
- `ship_to_email`
- `ship_to_firstname`
- `ship_to_lastname`
- `ship_to_state`
- `ship_to_zip`

Send the following optional fields in the request to update the session:

- `ap_sessions_type`—set to `U`. If you do not include this field in the request, CyberSource uses the default value of `N`.
- `order_discount_amount`

In the U.S., CyberSource recommends that you include the **total\_tax\_amount** field when you request the sessions service.

In countries other than the U.S., CyberSource recommends that you include the offer-level **tax\_amount** field when you request the sessions service.

For descriptions of these fields see [Appendix A, "API Fields," on page 37](#).

## Coupons

---

Klarna supports coupons. To include a coupon in a request, include the following required fields:

- amount
- merchant\_product\_sku
- product\_code—set to coupon.
- product\_name
- quantity

For descriptions of these fields see [Appendix A, "API Fields," on page 37](#). For details about coupon processing, see [Getting Started with CyberSource Advanced for the SCMP API](#).

## Calculating the Grand Total

---

### Tax Amounts

For the U.S., send the tax amount in the order-level field **total\_tax\_amount**. Do not use the offer-level tax amount field.

For countries other than the U.S., send the tax amount in the offer-level field **tax\_amount**. Do not use the order-level tax amount field.

## Grand Total without Coupons

For the U.S., use this formula to calculate the value for the **grand\_total\_amount** field:

sum of (amount x quantity) for all offers + order-level tax amount – order-level discount amount

With API field names, the formula looks like this:

sum of (**amount** x **quantity**) for all offers + **total\_tax\_amount** – **order\_discount\_amount**

### Example 6 Grand Total without Coupons in the U.S.

---

```
offer0=amount:100^quantity:1^total_amount:100
offer1=amount:75^quantity:2^total_amount:150
total_tax_amount=40
order_discount_amount=10
grand_total_amount=280
```

---

For countries other than the U.S., use this formula to calculate the value for the **grand\_total\_amount** field:

sum of (amount x quantity) for all offers + sum of (offer-level tax amount) for all offers – order-level discount amount

With API field names, the formula looks like this:

sum of (**amount** x **quantity**) for all offers + sum of (**tax\_amount**) for all offers fl  
**order\_discount\_amount**

**Example 7 Grand Total without Coupons in Countries Other than the U.S.**


---

```
offer0=amount:100^quantity:1^tax_amount:20^total_amount:120
offer1=amount:75^quantity:2^tax_amount:20^total_amount:170
order_discount_amount=10
grand_total_amount=280
```

---

**Grand Total with Coupons**

For the U.S., use this formula to calculate the value for the **grand\_total\_amount** field:

sum of (amount x quantity) for all offers + order-level tax amount – sum of (coupon amount x quantity) for all offers – order-level discount amount

**Example 8 Grand Total with Coupons in the U.S.**


---

```
offer0=amount:100^quantity:1^total_amount:100
offer1=amount:75^quantity:2^total_amount:150
offer2=amount:30^quantity:1^product_code:coupon^product_name:First-time
      customer^merchant_product_sku:12345
total_tax_amount=40
order_discount_amount=10
grand_total_amount=250
```

---

For countries other than the U.S., use this formula to calculate the value for the **grand\_total\_amount** field:

sum of (amount x quantity) for all offers + sum of (offer-level tax amount) for all offers – sum of (coupon amount x quantity) for all offers – order-level discount amount

**Example 9 Grand Total with Coupons in Countries Other than the U.S.**


---

```
offer0=amount:100^quantity:1^tax_amount:20^total_amount:120
offer1=amount:75^quantity:2^tax_amount:20^total_amount:170
offer2=amount:30^quantity:1^product_code:coupon^product_name:First-time
      customer^merchant_product_sku:12345
order_discount_amount=10
grand_total_amount=250
```

---

## Examples

### Name-Value Pair Examples

**Example 10 Create Session Request**

This example might include optional fields.

---

```
ap_payment_type=KLI
ap_sessions_success_url=http://test.com:8081/Klarna/Reply.jsp
ap_sessions_cancel_url=http://test.com:8081/Klarna/Reply.jsp
ap_sessions_failure_url=http://test.com:8081/Klarna/Reply.jsp
ap_sessions_type=N
currency=EUR
bill_country=DE
ics_applications=ics_ap_sessions
offer0=amount:19.99^product_name:Green Bookend^tax_amount:1.00^total_
amount:20.99^quantity:1
offer1=amount:10.00^product_name:Blue Bookend^tax_amount:2.00^total_
amount:22.00^quantity:2
offer2=amount:5.00^product_name:shipping^total_amount:5.00^quantity:1
grand_total_amount=44.99
order_discount_amount=3.00
merchant_id=mid123
merchant_ref_number=ref1234
```

---

**Example 11 Create Session Reply**

---

```
ap_sessions_response_code=00000
ap_sessions_rflag=SOK
ap_sessions_rcode=1
ap_sessions_rmsg=Request was processed successfully.
ap_sessions_processor_token=eyJhbGciOiJub251In0.ewogICJzZXNzaW9uX2lkIiA6ICl4ZTQ0ZjcyMi1lZWU3LTRhOGItOGM1MS0wNTYxODM1MTdjZjAiLAogICJiYXNlX3VybiCgOiAiaHR0cHM6Ly9jcmVkaXQtbmEucGxheWdyb3VuZC5rbGFybmEuY29tIiwKICAiZGVzaWduIiA6ICJrbGFybmEiLAogICJsYW5ndWFnZSIgOiAiZW4iLAogICJwdXJjaGFzZV9jb3VudHJ5IiA6ICJlYUyIsCiAgInRyYWNlX2Zsb3ciIDogZmFsc2UKfQ.
currency=EUR
ics_rcode=1
ics_rmsg=Request was processed successfully.
ics_rflag=SOK
merchant_ref_number=ref1234
request_id=4865699224970179113680
```

---

**Example 12 Update Session Request**

This example might include optional fields.

---

```

ap_payment_type=KLI
ap_sessions_success_url=http://test.com:8081/Klarna/Reply.jsp
ap_sessions_cancel_url=http://test.com:8081/Klarna/Reply.jsp
ap_sessions_failure_url=http://test.com:8081/Klarna/Reply.jsp
ap_sessions_type=U
ap_sessions_request_id=4865699224970179113680
bill_address1=Leopoldstrasse 4
bill_address2=Apt 2
bill_city=Lichtenberg
bill_district=Berlin
bill_state=Berlin
bill_zip=10318
bill_country=DE
customer_email=schmidt@example.com
customer_firstname=Anna
customer_lastname=Schmidt
customer_language=DE-DE
currency=EUR
ics_applications=ics_ap_sessions
offer0=amount:19.99^product_name:Green Bookend^tax_amount:1.00^total_
amount:20.99^quantity:1
offer1=amount:10.00^product_name:Blue Bookend^tax_amount:2.00^total_
amount:22.00^quantity:2
offer2=amount:5.00^product_name:shipping^total_amount:5.00^quantity:1
ship_to_firstname=Anne
ship_to_lastname=Schmidt
ship_to_address1=Leopoldstrasse 4
ship_to_address2=Apt 2
ship_to_city=Lichtenberg
ship_to_email=schmidt@example.com
ship_to_district=Berlin
ship_to_state=Berlin
ship_to_zip=10318
ship_to_country=DE
grand_total_amount=44.99
order_discount_amount=3.00
merchant_id=mid123
merchant_ref_number=ref1234

```

---



**Example 13 Update Session Reply**

---

```
ap_sessions_response_code=00000
ap_sessions_rflag=SOK
ap_sessions_rcode=1
ap_sessions_rmsg=Request was processed successfully.
currency=EUR
ics_rcode=1
ics_rmsg=Request was processed successfully.
ics_rflag=SOK
merchant_ref_number=ref1234
request_id=4865699224970179113680
```

---

# Authorizing a Payment

The authorization service responds with a Klarna URL to which you direct the customer after the transaction is complete. The Klarna URL is returned in the **ap\_auth\_merchant\_url** field.

The following fields are required when you request the authorization service:

- **ap\_auth\_preapproval\_token**—set to the token generated by Klarna. When Klarna authorizes the order, Klarna generates a preapproval token and sends it to the browser.
- **ap\_payment\_type**—set to `KLI`.
- **bill\_address1**
- **bill\_city**
- **bill\_country**—set to the same billing country that was used in the sessions request.
- **bill\_state**—required only when the billing country is the U.S. or Canada.
- **bill\_zip**—required only when the billing country is the U.S. or Canada.
- **currency**
- **customer\_email**
- **customer\_firstname**
- **customer\_lastname**
- **grand\_total\_amount**—set to the same grand total that was used in the latest sessions update request.
- **ics\_applications**—set to `ics_ap_auth`.
- **merchant\_id**
- **merchant\_ref\_number**

In the U.S., CyberSource recommends that you include the **total\_tax\_amount** field when you request the authorization service.

In countries other than the U.S., CyberSource recommends that you include the offer-level **tax\_amount** field when you request the authorization service.

You can capture an authorization for up to 28 days after a payment is authorized.

For descriptions of these fields see [Appendix A, "API Fields," on page 37](#).

## Examples

---

### Example 14 Authorization Request

This example might include optional fields.

---

```
ap_payment_type=KLI
ap_auth_preapproval_token=ca322c34-6f2d-5421-b29f-0d10ebadc3bb
bill_address1=Leopoldstrasse 4
bill_city=Lichtenstein
bill_state=DE
bill_zip=10318
bill_country=DE
customer_email=schmidt@example.com
customer_firstname=Anna
customer_lastname=Schmidt
currency=EUR
grand_total_amount=19.99
ics_applications=ics_ap_auth
merchant_id=mid123
merchant_ref_number=ref1234
```

---

**Example 15 Authorization Reply**

---

```
ap_auth_amount=19.99
ap_auth_date_time=2017-01-19T16:51:26Z
ap_auth_merchant_url=https://credit-na.playground.klarna.com/v1
    /sessions/9896d517-14bd-4f32-bc4a-184924632747/redirect
ap_auth_payment_status=AUTHORIZED
ap_auth_processor_transaction_id=1a2a3706-cc17-4fd9-a9d6-b437fc064d8f
ap_auth_rflag=SOK
ap_auth_rcode=1
ap_auth_rmsg=Request was processed successfully.
ap_auth_response_code=00000
ap_auth_trans_ref_no=6LBP2Y395ISZ
currency=EUR
ics_rcode=1
ics_rmsg=Request was processed successfully.
ics_rflag=SOK
merchant_ref_number=ref1234
request_token=AhjnrwSTB8UkMYfw//LQohjhgxN7LODLcVqaswikhjD+H/5aAAAygtN
request_id=4865699224970179113680
```

---

# Checking Status

Request the check status service when the authorization status is *pending*. A *pending* status is returned by Klarna in a small number of cases when Klarna reviews an authorization. CyberSource recommends that you request the check status service hourly until the payment status changes.

The following fields are required when you request the check status service:

- `ap_check_status_request_id`—set to the request ID that was included in the authorization reply message.
- `ap_payment_type`—set to `KLI`.
- `ics_applications`—set to `ics_ap_check_status`.
- `merchant_id`
- `merchant_ref_number`

For descriptions of these fields see [Appendix A, "API Fields,"](#) on page 37.

# Examples

---

## Example 16 Check Status Request

---

```
ap_check_status_request_id=4865699224970179113680
ap_payment_type=KLI
ics_applications=ics_ap_check_status
merchant_id=mid12345
merchant_ref_number=ref1234
```

---

## Example 17 Check Status Reply

---

```
ap_check_status_payment_status=SETTLED
ap_check_status_rcode=1
ap_check_status_response_code=00004
ap_check_status_rflag=SOK
ap_check_status_rmsg=Request was processed successfully.
ap_check_status_trans_ref_no=TC20000C
ics_rcode=1
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
merchant_ref_number=ref1234
request_id=4865699224970179113680
request_token=AhjnrwSR8oc9Xks3f77JHGENP93fNRxNIJYafR58Mm3AAA8hZW
```

---

# Reversing an Authorization

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

The following fields are required when you request the authorization reversal service:

- `ap_auth_request_id`—set to the request ID that was included in the authorization reply message.
- `ap_payment_type`—set to `KLI`.
- `ics_applications`—set to `ics_ap_auth_reversal`.
- `merchant_id`
- `merchant_ref_number`

For descriptions of these fields see [Appendix A, "API Fields," on page 37](#).

# Examples

---

## Example 18 Authorization Reversal Request

---

```
ap_auth_request_id=4865699224970179113680
ap_payment_type=KLI
ics_applications=ics_ap_auth_reversal
merchant_id=mid12345
merchant_ref_number=ref1234
```

---

## Example 19 Authorization Reversal Reply

---

```
ap_auth_reversal_amount=19.99
ap_auth_reversal_payment_status=AUTH_REVERSED
ap_auth_reversal_processor_response=00007
ap_auth_reversal_rflag=SOK
ap_auth_reversal_rcode=1
ap_auth_reversal_rmsg=Request was processed successfully.
ap_auth_reversal_response_code=00007
ap_auth_reversal_trans_ref_no=6LBP2Y395ISZ
ics_rcode=1
ics_rmsg=Request was processed successfully.
ics_rflag=SOK
merchant_ref_number=ref1234
request_token=AhjnrwSTB8UkMYfw//LQohjhgxN7LODLcVqaswikhjD+H/5aAAAAygTN
request_id=4865699224970179113680
```

---



# Capturing an Authorization

The capture service enables you to capture the entire authorized amount or part of the authorized amount. Klarna supports multiple capture requests when the total amount of all captures is less than the authorized amount.

You can capture an authorization for up to 28 days after a payment is authorized.

The following fields are required when you request the capture service:

- `ap_auth_request_id`—set to the request ID that was included in the authorization reply message.
- `ap_payment_type`—set to `KLI`.
- `currency`
- `grand_total_amount`
- `ics_applications`—set to `ics_ap_capture`.
- `merchant_id`
- `merchant_ref_number`

The following fields are optional but recommended when you request the capture service:

- `offer:amount`
- `offer:product_name`
- `offer:quantity`
- `offer:total_amount`

For descriptions of these fields see [Appendix A, "API Fields,"](#) on page 37.

# Examples

---

## Example 20 Capture Request

---

```
ap_payment_type=KLI
ap_auth_request_id=4865699224970179113680
currency=EUR
grand_total_amount=19.99
ics_applications=ics_ap_capture
merchant_id=mid123
merchant_ref_number=ref1234
```

---

## Example 21 Capture Reply

---

```
ap_capture_amount=19.99
ap_capture_status=SETTLED
ap_capture_payment_status=SETTLED
ap_capture_rflag=SOK
ap_capture_rcode=1
ap_capture_rmsg=Request was processed successfully.
ap_capture_response_code=00007
ap_capture_trans_ref_no=6LBP2Y395ISZ
ap_capture_processor_response=00004
ap_capture_processor_transaction_id=1211697c-fc8a-4fcc-a13d-20fa83
dbce44
currency=EUR
ics_rcode=1
ics_rmsg=Request was processed successfully.
ics_rflag=SOK
merchant_ref_number=ref1234
request_token=AhjnrwSTB8UkMYfw//LQohjhgxN7LODLcVqaswikhjD+H/5aAAAAygTN
request_id=4865699224970179113680
```

---

# Refunding a Payment

The refund service enables you to refund the entire captured amount or part of the captured amount. Klarna supports multiple refund requests when the total amount of all refunds is less than the captured amount.

## Required Fields

---

The following fields are required when you request the refund service:

- `ap_payment_type`—set to `KLI`.
- `ap_refund_request_id`—set to the request ID that was included in the capture reply message.
- `currency`
- `grand_total_amount`
- `ics_applications`—set to `ics_ap_refund`.
- `merchant_id`
- `merchant_ref_number`

## Recommended Fields

---

The following fields are optional but recommended when you request the refund service:

- `customer_email`
- `customer_firstname`
- `customer_lastname`
- `offer:amount`
- `offer:product_name`

- offer:quantity
- offer:total\_amount

For descriptions of these fields see [Appendix A, "API Fields,"](#) on page 37.

## Examples

### Example 22 Refund Request

This example might contain optional fields

---

```
ap_payment_type=KLI
ap_refund_request_id=4865699224970179113680
customer_email=schmidt@example.com
customer_firstname=Anna
customer_lastname=Schmidt
currency=EUR
grand_total_amount=19.99
ics_applications=ics_ap_refund
merchant_id=mid123
merchant_ref_number=ref1234
```

---

### Example 23 Refund Reply

---

```
ap_refund_amount=100.00
ap_refund_date_time=2017-01-19T16:51:26Z
ap_refund_payment_status=SETTLED
ap_refund_processor_transaction_id=4cbe83f2-5deb-4535-b534-de9b7099
dd50
ap_refund_rflag=SOK
ap_refund_rcode=1
ap_refund_rmsg=Request was processed successfully.
ap_refund_response_code=00007
ap_refund_trans_ref_no=6LBP2Y395ISZ
currency=EUR
ics_rcode=1
ics_rmsg=Request was processed successfully.
ics_rflag=SOK
merchant_ref_number=007
request_token=AhjnrwSTB8UkMYfw//LQohjhgxnN7LODLcVqaswikhjD+H/5aAAAygtN
request_id=4865699224970179113680
```

---

# API Fields

## Formatting Restrictions

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



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

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

**Table 2 Data Type Definitions**

Data Type	Description
Date and time	Format is YYYY-MM-DDThhmmssZ, where: <ul style="list-style-type: none"><li>■ T separates the date and the time</li><li>■ Z indicates Coordinated Universal Time (UTC), also known as Greenwich Mean Time (GMT)</li></ul> <b>Example</b> 2020-01-11T224757Z equals January 11, 2020, at 22:47:57 (10:47:57 p.m.)
Decimal	Number that includes a decimal point <b>Example</b> 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-Level Fields

**Table 3 Request-Level Fields**

Field	Description	Required (R) / Optional (O)	Data Type & Length
ap_auth_preapproval_token	Token generated by Klarna. When Klarna authorizes the order, Klarna generates a preapproval token and sends it to the browser. See <a href="#">"Overview of a Klarna Transaction," page 11.</a>	Authorization (R)	String (60)
ap_auth_request_id	Request ID of the authorization that you want to reverse or capture. Set the value of this field to the value of the request ID that was returned in the authorization reply message.	Authorization Reversal (R) Capture (R)	String (26)
ap_check_status_request_id	Request ID of the authorization for which you want to verify the status. Set the value of this field to the value of the request ID that was returned in the authorization reply message.	Check Status (R)	String (26)
ap_payment_type	Identifier for the payment type. Set the value for this field to <code>KLI</code> .	Authorization (R) Authorization Reversal (R) Capture (R) Check Status (R) Refund (R) Sessions (R)	String (3)

**Table 3 Request-Level Fields (Continued)**

Field	Description	Required (R) / Optional (O)	Data Type & Length
ap_refund_request_id	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.	Refund (R)	String (26)
ap_sessions_cancel_url	<p>Your web site URL that the customer is directed to after canceling the Klarna payment:</p> <ol style="list-style-type: none"> <li>1 You direct the customer to the Klarna URL that is included in the authorization response.</li> <li>2 If the customer cancels the payment, Klarna directs the customer to this cancel URL.</li> </ol>	Sessions (R)	String (255)
ap_sessions_failure_url	<p>Your web site URL that the customer is directed to after the Klarna payment fails:</p> <ol style="list-style-type: none"> <li>1 You direct the customer to the Klarna URL that is included in the authorization response.</li> <li>2 If the payment fails, Klarna directs the customer to this failure URL.</li> </ol>	Sessions (R)	String (255)
ap_sessions_request_id	Request ID of the session that you want to update. Set the value of this field to the value of the request ID that was returned in the new session reply message.	Sessions (Required when the <b>ap_sessions_type</b> is update; otherwise, it is optional.)	String (26)
ap_sessions_success_url	<p>Your web site URL that the customer is directed to after successfully completing the Klarna payment:</p> <ol style="list-style-type: none"> <li>1 You direct the customer to the Klarna URL that is included in the authorization response.</li> <li>2 If the customer successfully completes the payment, Klarna directs the customer to this success URL.</li> </ol>	Sessions (R)	String (255)
ap_sessions_type	<p>Whether the request is to create a new session or update an existing session. Possible values:</p> <ul style="list-style-type: none"> <li>■ N (default): Create a session.</li> <li>■ U: Update a session.</li> </ul>	Sessions (R)	String (5)

**Table 3 Request-Level Fields (Continued)**

Field	Description	Required (R) / Optional (O)	Data Type & Length
ap_ui_border_radius	<p>Radius for the corners of the borders displayed on the widget. Format:</p> <p>&lt;val1&gt;px&lt;val2&gt;px&lt;val3&gt;px&lt;val4&gt;px</p> <p>where:</p> <ul style="list-style-type: none"> <li>■ &lt;val1&gt; is the radius for the right top corner.</li> <li>■ &lt;val2&gt; is the radius for the left top corner.</li> <li>■ &lt;val3&gt; is the radius for the right bottom corner.</li> <li>■ &lt;val4&gt; is the radius for the left bottom corner.</li> </ul> <p><b>Example</b> 25px10px25px10px</p>	Sessions (O)	String (25)
ap_ui_color_border	<p>Color for the border of an area. Use one of three supported formats:</p> <ul style="list-style-type: none"> <li>■ Hex. Example: #3333FF</li> <li>■ Partial hex. Example: #33F</li> <li>■ Name. Example: neon blue</li> </ul>	Sessions (O)	String (10)
ap_ui_color_border_selected	<p>Color for the border of a selected area. Use one of three supported formats:</p> <ul style="list-style-type: none"> <li>■ Hex. Example: #3333FF</li> <li>■ Partial hex. Example: #33F</li> <li>■ Name. Example: neon blue</li> </ul>	Sessions (O)	String (10)
ap_ui_color_button	<p>Color for buttons. Use one of three supported formats:</p> <ul style="list-style-type: none"> <li>■ Hex. Example: #3333FF</li> <li>■ Partial hex. Example: #33F</li> <li>■ Name. Example: neon blue</li> </ul>	Sessions (O)	String (10)
ap_ui_color_button_text	<p>Color for text on buttons. Use one of three supported formats:</p> <ul style="list-style-type: none"> <li>■ Hex. Example: #3333FF</li> <li>■ Partial hex. Example: #33F</li> <li>■ Name. Example: neon blue</li> </ul>	Sessions (O)	String (10)
ap_ui_color_check_box	<p>Color for check boxes. Use one of three supported formats:</p> <ul style="list-style-type: none"> <li>■ Hex. Example: #3333FF</li> <li>■ Partial hex. Example: #33F</li> <li>■ Name. Example: neon blue</li> </ul>	Sessions (O)	String (10)



**Table 3 Request-Level Fields (Continued)**

Field	Description	Required (R) / Optional (O)	Data Type & Length
ap_ui_color_checkbox_checkmark	Color for a selected check box. Use one of three supported formats: <ul style="list-style-type: none"> <li>■ Hex. Example: #3333FF</li> <li>■ Partial hex. Example: #33F</li> <li>■ Name. Example: neon blue</li> </ul>	Sessions (O)	String (10)
ap_ui_color_header	Color for headings. Use one of three supported formats: <ul style="list-style-type: none"> <li>■ Hex. Example: #3333FF</li> <li>■ Partial hex. Example: #33F</li> <li>■ Name. Example: neon blue</li> </ul>	Sessions (O)	String (10)
ap_ui_color_link	Color for links. Use one of three supported formats: <ul style="list-style-type: none"> <li>■ Hex. Example: #3333FF</li> <li>■ Partial hex. Example: #33F</li> <li>■ Name. Example: neon blue</li> </ul>	Sessions (O)	String (10)
ap_ui_color_text	Color for text. Use one of three supported formats: <ul style="list-style-type: none"> <li>■ Hex. Example: #3333FF</li> <li>■ Partial hex. Example: #33F</li> <li>■ Name. Example: neon blue</li> </ul>	Sessions (O)	String (10)
ap_ui_theme	Your name for the UI theme.	Sessions (O)	String (100)
bill_address1	First line of the billing street address.	Authorization (R) Sessions (Required when updating a session.)	String (60)
bill_address2	Additional address information.	Authorization (O) Sessions (Required when updating a session.)	String (60)
bill_city	City of the billing address.	Authorization (R) Sessions (Required when updating a session.)	String (50)
bill_country	Country of the billing address. Use the two-character <a href="#">ISO Standard Country Codes</a> .  <b>Authorizations</b> The value for this field must be the same value that was used for the sessions request.	Authorization (R) Sessions (Required for creating and updating a session.)	String (2)

**Table 3 Request-Level Fields (Continued)**

Field	Description	Required (R) / Optional (O)	Data Type & Length
bill_district	Customer's neighborhood, community, or region within the city or municipality. When you include this field in a request, the value for this field must be the same as the value for the <b>bill_state</b> field.	Authorization (O)  Sessions (Required when updating a session.)	String (50)
bill_state	State or province of the billing address. For an address in the U.S. or Canada, use the <a href="#">State, Province, and Territory Codes for the United States and Canada</a> .	Authorization (R when the billing country is the U.S. or Canada)  Sessions (Required when updating a session.)	String (50)
bill_zip	Postal code for the billing address. The postal code must consist of 5 to 9 digits.  When the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] <b>Example</b> 12345-6789  When the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space] [numeric][alpha][numeric] <b>Example</b> A1B 2C3	Authorization (R when the billing country is the U.S. or Canada)  Sessions (Required when updating a session.)	String (10)
currency	Currency for the transaction. Use the three-character <a href="#">ISO Standard Currency Codes</a> .	Required for all services.	String (5)
customer_email	Customer's email address.	Authorization (R)  Refund (O but recommended)  Sessions (Required when updating a session.)	String (255)
customer_firstname	Customer's first name.	Authorization (R)  Refund (O but recommended)  Sessions (Required when updating a session.)	String (60)

**Table 3 Request-Level Fields (Continued)**

Field	Description	Required (R) / Optional (O)	Data Type & Length
customer_language	<p>Language code and country code used for the transaction.</p> <p>Format: [language code][dash][country code]</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>■ DA-DK: Danish-Denmark</li> <li>■ DE-AT: German-Austria</li> <li>■ DE-DE: German-Germany</li> <li>■ EN-GB: English-United Kingdom</li> <li>■ EN-US: English-United States</li> <li>■ FI-FI: Finnish-Finland</li> <li>■ NB-NO: Norwegian-Norway</li> <li>■ NL-NL: Dutch-Netherlands</li> <li>■ SV-FI: Swedish-Finland</li> <li>■ SV-SE: Swedish-Sweden</li> </ul>	<p>Authorization (O)</p> <p>Sessions (Required when updating a session.)</p>	String (5)
customer_lastname	Customer's last name.	<p>Authorization (R)</p> <p>Refund (O but recommended)</p> <p>Sessions (Required when updating a session.)</p>	String (60)
customer_phone	Customer's phone number. CyberSource recommends that you include the country code when the order is from outside the U.S.	<p>Authorization (O)</p> <p>Sessions (O)</p>	String (15)
date_of_birth	<p>Customer's date of birth.</p> <p>Format: YYYYMMDD</p>	<p>Authorization (O)</p> <p>Sessions (O)</p>	String (8)
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><b>Authorizations</b></p> <p>The value for this field must be the same value that was used for the sessions request.</p> <p><b>Sessions</b></p> <p>See <a href="#">"Calculating the Grand Total," page 19</a>.</p>	<p>Authorization (R)</p> <p>Capture (R)</p> <p>Refund (R)</p> <p>Sessions (R)</p>	Decimal (15)

**Table 3 Request-Level Fields (Continued)**

Field	Description	Required (R) / Optional (O)	Data Type & Length
ics_applications	CyberSource services to process for the request. At least one service must be specified in the request.	Required for all services.	String (255)
merchant_id	Your CyberSource merchant ID. Use the same merchant ID for evaluation, testing, and production.	Required for all services.	String (30)
merchant_ref_number	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 <a href="#">Getting Started with CyberSource Advanced for the SCMP API</a> .	Required for all services.	String (50)
order_discount_amount	Total discount for the entire order.	Sessions (O)	Decimal (15)
ship_to_address1	First line of the shipping address.	Authorization (O) Sessions (Required when updating a session.)	String (60)
ship_to_address2	Second line of the shipping address.	Authorization (O) Sessions (Required when updating a session.)	String (60)
ship_to_city	City of the shipping address.	Authorization (O) Sessions (Required when updating a session.)	String (40)
ship_to_country	Country of the shipping address. Use the two-character <a href="#">ISO Standard Country Codes</a> .	Authorization (O) Sessions (Required when updating a session.)	String (2)
ship_to_district	Neighborhood, community, or region within a city or municipality.	Authorization (O) Sessions (Required when updating a session.)	String (50)

**Table 3 Request-Level Fields (Continued)**

Field	Description	Required (R) / Optional (O)	Data Type & Length
ship_to_email	Email of the recipient.	Authorization (O) Sessions (Required when updating a session.)	String (255)
ship_to_firstname	First name of the recipient.	Authorization (O) Sessions (Required when updating a session.)	String (60)
ship_to_lastname	Last name of the recipient.	Authorization (O) Sessions (Required when updating a session.)	String (60)
ship_to_phone	Phone number for the shipping address.	Authorization (O) Sessions (O)	String (20)
ship_to_state	State or province of the shipping address. Use the <a href="#">State, Province, and Territory Codes for the United States and Canada</a> .	Authorization (O) Sessions (Required when updating a session.)	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] <b>Example</b> 12345-6789  When the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space] [numeric][alpha][numeric] <b>Example</b> A1B 2C3	Authorization (O) Sessions (Required when updating a session.)	String (20)
total_tax_amount	Total tax amount for the order.	Authorization (Recommended for the U.S.; not used for other countries.) Sessions (Recommended for the U.S.; not used for other countries.)	Decimal (15)

## Offer-Level Fields

**Table 4 Offer-Level Fields**

Field	Description	Required (R) / 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><b>Authorization and Sessions</b></p> <p>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.</p> <p>Do not include the tax amount in this value.</p>	<p>Authorization (O)</p> <p>Capture (O but recommended)</p> <p>Refund (O but recommended)</p> <p>Sessions (R)</p>	Decimal (15)
discount_amount	Offer-level discount amount. If the offer quantity is 1, this value is the discount for the offer. If the offer quantity is more than 1, this value is the discount for the entire quantity of the offer.	<p>Authorization (O)</p> <p>Sessions (O)</p>	Decimal (15)
merchant_product_sku	Identification code for the product.	<p>Authorization (R for coupons; otherwise, not used.)</p> <p>Capture (R for coupons; otherwise, not used.)</p> <p>Refund (R for coupons; otherwise, not used.)</p> <p>Sessions (R for coupons; otherwise, not used.)</p>	String (255)
product_code	Type of product. For coupons, set the value for this field to <code>coupon</code> . See <a href="#">"Coupons," page 19</a> .	<p>Authorization (R for coupons; otherwise, not used.)</p> <p>Capture (R for coupons; otherwise, not used.)</p> <p>Refund (R for coupons; otherwise, not used.)</p> <p>Sessions (R for coupons; otherwise, not used.)</p>	String (6)

**Table 4 Offer-Level Fields (Continued)**

Field	Description	Required (R) / Optional (O)	Data Type & Length
product_name	Product name.  <b>Note</b> To include a shipping amount in a request, set the value of this field to <code>shipping</code> and include the <b>amount</b> , <b>total_amount</b> , and <b>quantity</b> offer-level fields for the shipping item. You can optionally include the <b>tax_amount</b> offer-level field for the shipping item.	Authorization (O)  Capture (O but recommended)  Refund (O but recommended)  Sessions (R)	String (255)
quantity	The default is 1.	Authorization (O)  Capture (O but recommended)  Refund (O but recommended)  Sessions (R)	Nonnegative integer (10)
tax_amount	Offer-level tax amount. If the offer quantity is 1, this value is the tax for the offer. If the offer quantity is more than 1, this value is the tax for the entire quantity of the offer.	Authorization (Not used for the U.S.; recommended for other countries.)  Sessions (Not used for the U.S.; recommended for other countries.)	Decimal (15)
tax_rate	Tax rate for the item.	Authorization (O)  Sessions (O)	String (15)
total_amount	Offer-level total amount. If the offer quantity is 1, this value is the total amount for the offer. If the offer quantity is more than 1, this value is the total amount for the entire quantity of the offer.	Authorization (O)  Capture (O but recommended)  Refund (O but recommended)  Sessions (R)	Decimal (15)

# Reply Fields

**Table 5**    **Reply Fields**

Field	Description	Returned By	Data Type & Length
ap_auth_amount	Authorized amount.	Authorization	Decimal (15)
ap_auth_date_time	Date and time when the service was requested. See <a href="#">"Data Type Definitions," page 37</a> , for the field's format.	Authorization	String (20)
ap_auth_merchant_url	Klarna URL. Direct the customer to this URL after the transaction is completed.	Authorization	String (2048)
ap_auth_payment_status	<p>Klarna authorization status. Possible values:</p> <ul style="list-style-type: none"> <li>■ AUTHORIZED: Payment successfully authorized.</li> <li>■ PENDING: Request received and waiting to be processed.</li> <li>■ FAILED: Request failed.</li> </ul>	Authorization	String (15)
ap_auth_processor_response	Code from Klarna that describes why the authorization is pending or failed. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes," on page 55</a> .	Authorization	String (5)
ap_auth_processor_transaction_id	Klarna-generated transaction identifier.	Authorization	String (50)
ap_auth_rcode	<p>Indicates whether the service request was successful. Possible values:</p> <ul style="list-style-type: none"> <li>■ -1: An error occurred.</li> <li>■ 0: The request was declined.</li> <li>■ 1: The request was successful.</li> </ul>	Authorization	Integer (1)
ap_auth_response_code	Klarna response code. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes," on page 55</a> .	Authorization	String (5)
ap_auth_reversal_amount	Amount that was reversed.	Authorization Reversal	Decimal (15)
ap_auth_reversal_date_time	Date and time when the service was requested. See <a href="#">"Data Type Definitions," page 37</a> , for the field's format.	Authorization Reversal	String (20)



**Table 5** Reply Fields (Continued)

Field	Description	Returned By	Data Type & Length
ap_auth_reversal_payment_status	Klarna authorization reversal status. Possible values: <ul style="list-style-type: none"> <li>■ <code>AUTH_REVERSED</code>: Authorization successfully reversed.</li> <li>■ <code>FAILED</code>: Request failed.</li> </ul>	Authorization Reversal	String (15)
ap_auth_reversal_processor_response	Code from Klarna that describes why the authorization reversal failed. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes,"</a> on page 55.	Authorization Reversal	String (5)
ap_auth_reversal_rcode	Indicates whether the service request was successful. Possible values: <ul style="list-style-type: none"> <li>■ <code>-1</code>: An error occurred.</li> <li>■ <code>0</code>: The request was declined.</li> <li>■ <code>1</code>: The request was successful.</li> </ul>	Authorization Reversal	Integer (1)
ap_auth_reversal_response_code	Klarna response code. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes,"</a> on page 55.	Authorization Reversal	String (5)
ap_auth_reversal_rflag	One-word description of the result of the <code>ics_ap_auth_reversal</code> request. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes,"</a> on page 55.	Authorization Reversal	String (50)
ap_auth_reversal_rmsg	Message that explains the reply flag <code>ap_auth_reversal_rflag</code> . Do not display this message to the customer, and do not use this field to write an error handler.	Authorization Reversal	String (255)
ap_auth_reversal_status	Klarna authorization reversal status. Possible values: <ul style="list-style-type: none"> <li>■ <code>AUTH_REVERSED</code>: Authorization successfully reversed.</li> <li>■ <code>FAILED</code>: Request failed.</li> </ul>	Authorization Reversal	String (15)
ap_auth_reversal_trans_ref_no	CyberSource-generated reference number. You can use this value to reconcile your transactions with information from Klarna and information in CyberSource reports.	Authorization Reversal	String (60)
ap_auth_rflag	One-word description of the result of the <code>ics_ap_auth</code> request. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes,"</a> on page 55.	Authorization	String (50)

Table 5 Reply Fields (Continued)

Field	Description	Returned By	Data Type & Length
ap_auth_rmsg	Message that explains the reply flag <b>ap_auth_rflag</b> . Do not display this message to the customer, and do not use this field to write an error handler.	Authorization	String (255)
ap_auth_status	Klarna authorization status. Possible values: <ul style="list-style-type: none"> <li>■ <b>AUTHORIZED</b>: Payment successfully authorized.</li> <li>■ <b>PENDING</b>: Request received and waiting to be processed.</li> <li>■ <b>FAILED</b>: Request failed.</li> </ul>	Authorization	String (15)
ap_auth_trans_ref_no	CyberSource-generated reference number. You can use this value to reconcile your transactions with information from Klarna and information in CyberSource reports.	Authorization	String (60)
ap_capture_amount	Amount that was captured.	Capture	Decimal (15)
ap_capture_date_time	Date and time when the service was requested. See <a href="#">"Data Type Definitions," page 37</a> , for the field's format.	Capture	String (20)
ap_capture_payment_status	Klarna capture status. Possible values: <ul style="list-style-type: none"> <li>■ <b>FAILED</b>: Request failed.</li> <li>■ <b>PENDING</b>: Request received and waiting to be processed.</li> <li>■ <b>SETTLED</b>: Payment successfully captured.</li> </ul>	Capture	String (15)
ap_capture_processor_transaction_id	Klarna-generated transaction identifier.	Capture	String (50)
ap_capture_processor_response	Code from Klarna that describes why the capture is pending or failed. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes," on page 55</a> .	Capture	String (5)
ap_capture_rcode	Indicates whether the service request was successful. Possible values: <ul style="list-style-type: none"> <li>■ <b>-1</b>: An error occurred.</li> <li>■ <b>0</b>: The request was declined.</li> <li>■ <b>1</b>: The request was successful.</li> </ul>	Capture	Integer (1)
ap_capture_response_code	Klarna response code. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes," on page 55</a> .	Capture	String (5)

Table 5 Reply Fields (Continued)

Field	Description	Returned By	Data Type & Length
ap_capture_rflag	One-word description of the result of the <b>ics_ap_capture</b> request. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes,"</a> on page 55.	Capture	String (50)
ap_capture_rmsg	Message that explains the reply flag <b>ap_capture_rflag</b> . Do not display this message to the customer, and do not use this field to write an error handler.	Capture	String (255)
ap_capture_status	Klarna capture status. Possible values: <ul style="list-style-type: none"> <li>■ <b>FAILED</b>: Request failed.</li> <li>■ <b>PENDING</b>: Request received and waiting to be processed.</li> <li>■ <b>SETTLED</b>: Payment successfully captured.</li> </ul>	Capture	String (15)
ap_capture_trans_ref_no	CyberSource-generated reference number. You can use this value to reconcile your transactions with information from Klarna and information in CyberSource reports.	Capture	String (60)
ap_check_status_payment_status	Klarna payment status. Possible values: <ul style="list-style-type: none"> <li>■ <b>PENDING</b>: Payment was initiated. Do not ship the goods.</li> <li>■ <b>SETTLED</b>: Payment is complete and the funds have been deposited in your merchant account. Ship the goods.</li> <li>■ <b>FAILED</b>: Payment failed.</li> <li>■ <b>ABANDONED</b>: Customer did not confirm the payment or customer canceled the payment.</li> <li>■ <b>AUTHORIZED</b>: Customer authorized the payment.</li> </ul>	Check Status	String (15)
ap_check_status_rcode	Indicates whether the service request was successful. Possible values: <ul style="list-style-type: none"> <li>■ -1: An error occurred.</li> <li>■ 0: The request was declined.</li> <li>■ 1: The request was successful.</li> </ul>	Check Status	Integer (1)
ap_check_status_rflag	One-word description of the result of the <b>ics_ap_check_status</b> request. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes,"</a> on page 55.	Check Status	String (50)

**Table 5 Reply Fields (Continued)**

Field	Description	Returned By	Data Type & Length
ap_check_status_rmsg	Message that explains the reply flag <b>ap_check_status_rflag</b> . Do not display this message to the customer, and do not use this field to write an error handler.	Check Status	String (255)
ap_check_status_trans_ref_no	CyberSource-generated reference number. You can use this value to reconcile your transactions with information from Klarna and information in CyberSource reports.	Check Status	String (60)
ap_refund_amount	Amount that was refunded.	Refund	Decimal (15)
ap_refund_date_time	Date and time when the service was requested. See <a href="#">"Data Type Definitions," page 37</a> , for the field's format.	Refund	String (20)
ap_refund_payment_status	Klarna refund status. Possible values: <ul style="list-style-type: none"> <li>■ REFUNDED: Payment successfully refunded.</li> <li>■ FAILED: Request failed.</li> </ul>	Refund	String (15)
ap_refund_processor_response	Code from Klarna that describes why the refund failed. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes," on page 55</a> .	Refund	String (5)
ap_refund_processor_transaction_id	Klarna-generated transaction identifier.	Refund	String (50)
ap_refund_rcode	Indicates whether the service request was successful. Possible values: <ul style="list-style-type: none"> <li>■ -1: An error occurred.</li> <li>■ 0: The request was declined.</li> <li>■ 1: The request was successful.</li> </ul>	Refund	Integer (1)
ap_refund_response_code	Klarna response code. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes," on page 55</a> .	Refund	String (5)
ap_refund_rflag	One-word description of the result of the <b>ics_ap_refund</b> request. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes," on page 55</a> .	Refund	String (50)
ap_refund_rmsg	Message that explains the reply flag <b>ap_refund_rflag</b> . Do not display this message to the customer, and do not use this field to write an error handler.	Refund	String (255)

**Table 5     Reply Fields (Continued)**

Field	Description	Returned By	Data Type & Length
ap_refund_status	Klarna refund status. Possible values: <ul style="list-style-type: none"> <li>■ <b>REFUNDED</b>: Payment successfully refunded.</li> <li>■ <b>FAILED</b>: Request failed.</li> </ul>	Refund	String (15)
ap_refund_trans_ref_no	CyberSource-generated reference number. You can use this value to reconcile your transactions with information from Klarna and information in CyberSource reports.	Refund	String (60)
ap_sessions_processor_token	Klarna-generated token. Include this value when you call the <b>Klarna.Credit.init</b> function to initialize the Klarna SDK. See <a href="#">"Overview of a Klarna Transaction," page 11.</a>	Sessions	String (500)
ap_sessions_rcode	Indicates whether the service request was successful. Possible values: <ul style="list-style-type: none"> <li>■ -1: An error occurred.</li> <li>■ 0: The request was declined.</li> <li>■ 1: The request was successful.</li> </ul>	Sessions	Integer (1)
ap_sessions_response_code	Klarna response code. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes," on page 55.</a>	Sessions	String (5)
ap_sessions_rflag	One-word description of the result of the <b>ics_ap_sessions</b> request. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes," on page 55.</a>	Sessions	String (50)
ap_sessions_rmsg	Message that explains the reply flag <b>ap_sessions_rflag</b> . Do not display this message to the customer, and do not use this field to write an error handler.	Sessions	String (255)
currency	Currency for the transaction. Use the three-character <a href="#">ISO Standard Currency Codes</a> .	Authorization Capture Refund Sessions	String (5)
ics_rcode	Indicates whether the entire request was successful. Possible values: <ul style="list-style-type: none"> <li>■ -1: An error occurred.</li> <li>■ 0: The request was declined.</li> <li>■ 1: The request was successful.</li> </ul>	All services.	Integer (1)

**Table 5**    **Reply Fields (Continued)**

Field	Description	Returned By	Data Type & Length
ics_rflag	One-word description of the result of the entire request. See <a href="#">Appendix B, "Reply Flags and Klarna Response Codes,"</a> on page 55.	All services.	String (50)
ics_rmsg	Message that explains the reply flag <b>ics_rflag</b> . Do not display this message to the customer, and do not use this field to write an error handler.	All services.	String (255)
merchant_ref_number	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 <a href="#">Getting Started with CyberSource Advanced for the SCMP API</a> .	All services	String (50)
request_id	Identifier for the request.	All services	String (26)
request_token	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.	All services	String (256)

# Reply Flags and Klarna Response Codes



CyberSource recommends using the reply flag value and the Klarna response code to determine the transaction result.

**Table 6** Reply Flags and Klarna Response Codes

Reply Flag	Klarna Response Codes	Description
DINVALIDDATA	<ul style="list-style-type: none"> <li>10000—status: failed.</li> <li>30600—status: failed.</li> <li>30700—status: failed.</li> </ul>	Invalid request.  Possible reasons: <ul style="list-style-type: none"> <li>The request data is invalid.</li> <li>Klarna declined the transaction because of tax errors or government compliance errors.</li> </ul>
DPAYMENTREFUSED	<ul style="list-style-type: none"> <li>30200—status: failed.</li> <li>30350—status: failed.</li> <li>30500—status: failed.</li> </ul>	Possible reasons: <ul style="list-style-type: none"> <li>Klarna declined the transaction because of funding source problems.</li> <li>The transaction was flagged as high risk.</li> <li>Insufficient funds.</li> </ul>
ESYSTEM	<ul style="list-style-type: none"> <li>20000—status: failed.</li> <li>20001—status: failed.</li> <li>20002—status: failed.</li> <li>30000—status: failed.</li> <li>30100—status: failed.</li> </ul>	Possible reasons: <ul style="list-style-type: none"> <li>The signature was not included in the HTTP header.</li> <li>The signature in the HTTP header has expired or it is not a valid signature.</li> <li>The API version in the HTTP header was missing or is not supported.</li> </ul>
SOK	<ul style="list-style-type: none"> <li>00000—status: completed.</li> <li>00001—status: pending.</li> <li>00002—status: abandoned.</li> <li>00003—status: authorized.</li> <li>00004—status: settled.</li> <li>00006—status: refunded.</li> </ul>	Successful transaction.

# API Field Map

**Table 7      Field Map**

<b>Klarna API Field Name</b>	<b>SCMP API Field Name</b>
authorization_token	ap_auth_preapproval_token
billing_address.city	bill_city
billing_address.country	bill_country
billing_address.email	customer_email
billing_address.family_name	customer_firstname
billing_address.given_name	customer_lastname
billing_address.phone	customer_phone
billing_address.postal_code	bill_zip
billing_address.region	bill_district
billing_address.street_address	bill_address1
billing_address.street_address2	bill_address2
customer.date_of_birth	date_of_birth
customer.gender	customer_gender
locale	customer_language
options.color_border	ap_ui_color_border
options.color_border_selected	ap_ui_color_border_selected
options.color_button	ap_ui_color_button
options.color_button_text	ap_ui_color_button_text
options.color_checkbox	ap_ui_color_checkbox
options.color_checkbox_checkmark	ap_ui_color_checkbox_check_mark
options.color_header	ap_ui_color_header
options.color_link	ap_ui_color_link
options.color_text	ap_ui_color_text
options.radius_border	ap_ui_border_radius
order_amount	grand_total_amount
order_lines.name	product_name
order_lines.tax_rate	offer#:tax_rate



**Table 7      Field Map (Continued)**

<b>Klarna API Field Name</b>	<b>SCMP API Field Name</b>
order_lines.total_amount	offer#:total_amount
order_lines.unit_price	offer#:amount
order_lines.quantity	offer#:quantity
order_lines.tax_amount	offer#:tax_amount
purchase_currency	currency
shipping_address.city	ship_to_city
shipping_address.country	ship_to_country
shipping_address.email	ship_to_email
shipping_address.family_name	ship_to_firstname
shipping_address.given_name	ship_to_lastname
shipping_address.phone	ship_to_phone
shipping_address.postal_code	ship_to_zip
shipping_address.region	ship_to_district
shipping_address.street_address	ship_to_address1
shipping_address.street_address2	ship_to_address2