

Ingenico ePayments

Developer Guide

For Direct Debits

Simple Order API
SCMP API

October 2018

CyberSource[®]
the power of payment

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Contents

Recent Revisions to This Document 5

About This Guide 6

Audience and Purpose 6

Conventions 6

 Note and Important Statements 6

 Text and Command Conventions 6

Related Documents 7

Customer Support 7

Chapter 1 **Getting Started** 8

Bank Account Requirements 8

API Versions for the XML Schema 8

Order Tracking 8

 Reconciliation IDs and Transaction Reference Numbers 8

 Request IDs 9

Chapter 2 **Direct Debits and Direct Debit Refunds Using the Simple Order API** 10

Requesting Direct Debits 10

Requesting Direct Debit Refunds 11

API Fields 12

 Request Fields 12

 Reply Fields 20

Request and Reply Examples 23

 Direct Debit Request 23

 Direct Debit Reply 24

 Stand-Alone Direct Debit Refund Request 25

 Follow-On Direct Debit Refund 27

Chapter 3 Direct Debits and Direct Debit Refunds Using the SCMP API 28

Requesting Direct Debits	28
Requesting Direct Debit Refunds	29
API Fields	30
Request Fields	30
Offer-Level Fields	36
Reply Fields	37
Reply Flags	39
Request and Reply Examples	40
Direct Debit Request	40
Stand-Alone Direct Debit Refund	42
Follow-On Direct Debit Refund	43

Chapter 4 Testing 44

Sending Test Requests	44
Testing Direct Debits and Refunds	44
Going Live	46

Appendix A Product Codes 47

Appendix B Reason Codes 48

Index	50
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Recent Revisions to This Document

Release	Changes
October 2018	Removed information about bank transfers and real-time bank transfers. CyberSource has developed a next generation Alternative Payments solution that replaces the Ingenico ePayments bank transfer and real-time bank transfer functionality. The Alternative Payments solution supports multiple kinds of bank transfer payment methods. Contact your account representative for details about using the platform.
August 2017	<ul style="list-style-type: none"> ■ Updated the “Real-Time Bank Transfer Types” section.
April 2017	<p>Removed the following payment types:</p> <ul style="list-style-type: none"> ■ giropay ■ iDEAL ■ Sofort
January 2017	<ul style="list-style-type: none"> ■ Added the following Simple Order API reply fields: <ul style="list-style-type: none"> ● <code>directDebitReply_reconciliationReferenceNumber</code> (page 20) ● <code>directDebitRefundReply_reconciliationReferenceNumber</code> (page 20) ■ Added the following SCMP API reply fields: <ul style="list-style-type: none"> ● <code>direct_debit_reconciliation_reference_number</code> (page 37) ● <code>direct_debit_refund_reconciliation_reference_number</code> (page 37)
May 2016	<ul style="list-style-type: none"> ■ Renamed document from CyberSource Global Payment Service Developer Guide to <i>Ingenico ePayments Developer Guide</i>.
April 2016	<ul style="list-style-type: none"> ■ Renamed <i>Global Collect</i> to <i>Ingenico ePayments</i>. ■ Moved Boleto Bancario information to the Boleto Bancario Processing Implementation Guide.

About This Guide

Audience and Purpose

This guide is written for merchants who want to use the Ingenico ePayments processor to offer the payment services to customers. This guide describes the tasks that a merchant must complete in order to make direct debits and direct debit refunds.

Conventions

Note and Important Statements



Note

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



Important

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

Text and Command Conventions

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

Related Documents

- The *Ingenico ePayments Planning Guide* ([PDF](#) | [HTML](#)) describes the business and technical implementations a merchant must complete in order to make direct debits and direct debit refunds.
- *Credit Card Services Using the Simple Order API* ([PDF](#) | [HTML](#)) describes the tasks you must complete to integrate the credit card services into your existing management system.
- *Credit Card Services Using the SCMP API* ([PDF](#) | [HTML](#)) describes the tasks you must complete to integrate the credit card services into your existing order management system.
- *Getting Started with CyberSource Advanced for the Simple Order API* ([PDF](#) | [HTML](#)) describes how to get started using the Simple Order API.
- *Getting Started with CyberSource Advanced for the SCMP API* ([PDF](#) | [HTML](#)) describes how to get started using the SCMP API.
- The *Classic Reporting Developer Guide* ([PDF](#) | [HTML](#)) describes how to download reports.

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>

Getting Started

Bank Account Requirements

Become familiar with the bank account requirements for the countries in which you will be processing payments. Contact CyberSource Customer Support for required country-specific bank account information.

API Versions for the XML Schema

For general information about the API versions, see [Getting Started with CyberSource Advanced for the Simple Order API](#).

Order Tracking

For general information about order tracking, see [Getting Started with CyberSource Advanced for the Simple Order API](#) or [Getting Started with CyberSource Advanced for the SCMP API](#).

Reconciliation IDs and Transaction Reference Numbers

The following table lists the field names for the reconciliation IDs and transaction reference numbers for the Ingenico ePayments payment methods.

Table 1 Reconciliation IDs and Transaction Reference Numbers

Service	Field Names
Direct debit	<ul style="list-style-type: none"> ■ Simple Order API: directDebitReply_reconciliationID ■ SCMP API: direct_debit_trans_ref_no
Direct debit refund	<ul style="list-style-type: none"> ■ Simple Order API: directDebitRefundReply_reconciliationID ■ SCMP API: direct_debit_refund_trans_ref_no

Request IDs

The request ID is returned in the reply message in:

- **requestID** for the Simple Order API
- **request_id** for the SCMP API

The field names for the Ingenico ePayments request IDs in request messages are:

- Simple Order API: **directDebitRefundService_directDebitRequestID**
- SCMP API: **direct_debit_request_id**

Direct Debits and Direct Debit Refunds Using the Simple Order API



Important

Our processing partner requires us to pre-populate their fields to show that the mandate has been signed and dated. The MANDATEDATE field is populated with the system date, the MANDATEPLACE field is populated with the customer city, and the MANDATESIGNED indicator is set to 1. These fields are for future use and will support e-mandates.

Requesting Direct Debits



Important

The IBAN must be included in each request. If you provide a BBAN it will be converted to an IBAN.

To request a direct debit, set the **directDebitService_run** field to `true`. See "[API Fields](#)," [page 12](#), for the fields to use when requesting the service. For an example Direct Debit request, see [page 23](#).

When requesting a direct debit, you may not request any of the other ICS services except Tax Calculation. For more information about the service, see [Tax Calculation Service Using the Simple Order API](#).

When you take an order that uses a direct debit, you must gather the customer's billing and bank account information. For most countries, CyberSource accepts either the traditional bank account information or the account's IBAN. The traditional bank account information and the corresponding API fields you need to provide vary by country. Contact CyberSource Customer Support for required country-specific bank account information.

CyberSource validates the format of the bank account number before processing the direct debit. If the account number does not pass the validation check, CyberSource rejects the request with a **reasonCode=244**. CyberSource recommends that you then confirm the customer entered the number correctly, and if it was incorrect, request the refund again with the correct number.

Requesting Direct Debit Refunds



The IBAN must be included in each request. If you provide a BBAN it will be converted to an IBAN.

There are two types of direct debit refunds: follow-on refunds and stand-alone refunds. A follow-on refund uses information from a previous direct debit. A stand-alone refund does not depend on a previous transaction.

A follow-on refund must occur within 60 of the request for the direct debit. When the time limit for a follow-on refund expires, the only kind of refund you can perform is a stand-alone refund.

To request a direct debit refund:

- Set the **directDebitRefundService_run** field to `true`.
- Do not request any other ICS services except Tax Calculation, which is optional. For more information about this service, see [Tax Calculation Service Using the Simple Order API](#).
- Send the fields required for a direct debit refund request. See "[API Fields](#)," [page 12](#). For a follow-on refund, the fields and values must match the fields and values you sent in the original direct debit request.
- For a stand-alone refund, the **directDebitRefundService_directDebitRequestID** field is optional. See [page 25](#).
- For a follow-on refund, include the **directDebitRefundService_directDebitRequestID** field with the request ID from the direct debit reply is required. See [page 27](#).
- The easiest way to implement direct debit refunds is to always send the request ID from the original direct debit with every direct debit refund request.
- CyberSource recommends that when you request a refund, you use the same value for **merchantReferenceCode** that you used for the direct debit. This makes it easier for you to link the refund to the original direct debit in your own system as well as in CyberSource reports and Transaction Search Screens.

CyberSource performs basic checks on the format of the bank account number before processing the direct debit refund. If the account number does not pass the validation check, CyberSource rejects the request with a **reasonCode=244**. CyberSource recommends that you then confirm the customer entered the number correctly, and if it was incorrect, request the refund again with the correct number.

You may perform multiple partial refunds against a direct debit. The sum of the refunds may not exceed the amount of the payment.

You will not receive an error in the reply for any of the following conditions:

- The **directDebitRefundService_requestID** field is invalid.
- The customer's payment has not yet been received.

Instead, CyberSource will not process the refund and the transaction will appear in the daily Transaction Exception Detail Report. You should monitor this report daily to determine if any of your transactions have problems. For descriptions of the reason codes that can appear in the report, see "[Reason Codes](#)," page 48. For more information about the report, see the [Ingenico ePayments Planning Guide](#). For details about downloading the report and its format, see the [Classic Reporting Developer Guide](#).

API Fields

For information about the data types, see [Getting Started with CyberSource Advanced for the Simple Order API](#).

Request Fields

The following table lists the fields to use in a request for the **directDebitService** service or the **directDebitRefundService** service.

Table 2 Request Fields

Request Field	Description	Required (R) or Optional (O)	Data Type & Length
bankInfo_address	Bank's address.	Direct Debit (O) Refund (O)	String (255)
bankInfo_bankCode	Bank's code. Used for some countries when you are not using the IBAN. Contact CyberSource Customer Support for required country-specific bank account information.	Direct Debit (See description) Refund (See description)	String (See description)
bankInfo_branchCode	Code that identifies the branch of the customer's bank when you are not using the IBAN. Contact CyberSource Customer Support for required country-specific bank account information.	Direct Debit (See description) Refund (See description)	String (15)

Table 2 Request Fields

Request Field	Description	Required (R) or Optional (O)	Data Type & Length
bankInfo_city	City in which the bank is located. If you do not send this field, Ingenico ePayments assumes that the billTo_city field contains the bank name. Some banks validate the bank account information, so consider sending this field if the bank is not located in billTo_city .	Direct Debit (See description) Refund (See description)	String (35)
bankInfo_country	Country in which the bank is located. Possible values are the two-character ISO Standard Country Codes .	Direct Debit (R) Refund (R)	String (2)
bankInfo_name	Bank's name. Required when using the Ingenico ePayments processor to make one of the following types of direct debit transactions: <ul style="list-style-type: none"> ■ Direct debit ■ Stand-alone direct debit refund Otherwise it is optional.	Direct Debit (See description) Refund (See description)	String (40)
bankInfo_swiftCode	Bank's SWIFT code. Unique address of the bank. Also known as the Bank Identification Code (BIC).	Direct Debit (O) Refund (O)	String (30)
billTo_city	City for the billing address.	Direct Debit (R) Refund (R)	String (50)
billTo_country	Country for the billing address. Possible values are the two-character ISO Standard Country Codes .	Direct Debit (R) Refund (R)	String (2)
billTo_email	Customer's email address, including the full domain name. For example, jdoe@example.com.	Direct Debit (R) Refund (R)	String (255)
billTo_firstName	Customer's first name.	Direct Debit (R) Refund (R)	String (60)
billTo_lastName	Customer's last name.	Direct Debit (R) Refund (R)	String (60)
billTo_phoneNumber	Customer's telephone number.	Direct Debit (O) Refund (O)	String (15)

Table 2 Request Fields

Request Field	Description	Required (R) or Optional (O)	Data Type & Length
billTo_postalCode	<p>Postal code for the billing address. The postal code must consist of 5 to 9 digits.</p> <p>If the value of billTo_country is US, the 9-digit postal code must follow this format: [5 digits][dash][4 digits] Example: 12345-6789</p> <p>If the value of billTo_country is CA, the 6-digit postal code must follow this format: [alpha][numeric][alpha][numeric][alpha][numeric] Example: A1B 2C3</p>	<p>Direct Debit (R if billTo_country is US or CA)</p> <p>Refund (R if billTo_country is US or CA)</p>	String (10)
billTo_state	<p>State for the billing address. Required if billTo_country is US or CA. Otherwise optional. Possible values are the State, Province, and Territory Codes for the United States and Canada.</p>	<p>Direct Debit (See description)</p> <p>Refund (See description)</p>	String (2)
billTo_street1	Street address for the billing address.	<p>Direct Debit (R)</p> <p>Refund (R)</p>	String (60)
billTo_street2	Additional street address information for the billing address.	<p>Direct Debit (O)</p> <p>Refund (O)</p>	String (60)
directDebitRefundService_directDebitRequestID	The requestID value returned from a previous request for directDebitService .	Refund (R for follow-on refunds. Not used for stand-alone refunds.)	String (26)
directDebitRefundService_reconciliationID	To use this field, contact CyberSource Customer Support.	Refund (R)	String (60)
directDebitRefundService_run	<p>Flag indicating whether or not to include the directDebitRefundService service in your request. Possible values:</p> <ul style="list-style-type: none"> ■ <code>true</code>: Include the service in your request ■ <code>false</code> (default): Do not include the service in your request 	Refund (R)	String (5)
directDebitService_dateCollect	Date on which the direct debit should be debited. This field is only for the Ingenico ePayments processor. Format: YYYYMMDD	Direct Debit (O)	Numeric (8)

Table 2 Request Fields

Request Field	Description	Required (R) or Optional (O)	Data Type & Length
directDebitService_ directDebitText	Text describing the reason for the direct debit. This field is required only for the Ingenico ePayments processor. Appears on the customer's bank statement. Austria: Max 28 characters Germany: Max 50 characters Netherlands: Max 32 characters Spain: Max 40 characters	Direct Debit (See description)	String (See description)
directDebitService_ directDebitType	Type of direct debit. This field is required only for the Ingenico ePayments processor. The possible values are: <ul style="list-style-type: none"> ■ 001: Austria ■ 003: Netherlands ■ 004: Spain ■ 005: German ELV direct debit 	Direct Debit (See description)	String (3)
directDebitService_ mandate AuthenticationDate	The date the direct debit mandate was authenticated. Format: YYYYMMDD	Direct Debit (O)	Numeric (8)
directDebitService_ recurringType	Whether the direct debit is the first or last direct debit associated with the mandate, or one in between. This field is only for the United Kingdom. The possible values are: <ul style="list-style-type: none"> ■ 001: First direct debit associated with this mandate. Use this value for a one-time direct debit. ■ 002: Subsequent direct debits associated with this mandate. ■ 003: Last direct debit associated with this mandate. 	Direct Debit (See description)	String (3)
directDebitService_ run	Flag indicating whether or not to include the directDebitService service in your request. Possible values: <ul style="list-style-type: none"> ■ <code>true</code>: Include the service in your request ■ <code>false</code> (default): Do not include the service in your request 	Direct Debit (R)	String (5)

Table 2 Request Fields

Request Field	Description	Required (R) or Optional (O)	Data Type & Length
directDebitService_transactionType	Type of direct debit transaction. This field is required only for the Netherlands when using the Ingenico ePayments processor. The possible values are: <ul style="list-style-type: none"> 01: First collection using this account 02: Other <p>Note For first collections on a Post giro account called <i>onzuivere posten</i>, the account number is verified against the account name and city by the Post bank. This verification requires one additional processing day.</p>	Direct Debit (See description)	String (2)
fundTransfer_accountName	Name used on the bank account.	Direct Debit (R) Refund (R)	String (30)
fundTransfer_accountNumber	Bank account number. <p>Important The IBAN must be included in each request. If you provide a BBAN it will be converted to an IBAN. Do not use the IBAN in this field. include the IBAN in the fundTransfer_iban field.</p> <p>Note Do not use the IBAN in this field. include the IBAN in the fundTransfer_iban field.</p>	Direct Debit (See description) Refund (See description)	String (See description)
fundTransfer_bankCheckDigit	Code used to validate the customer's account number when you are not using the IBAN. Contact CyberSource Customer Support for required country-specific bank account information.	Direct Debit (See description)	String (2)
fundTransfer_iban	International Bank Account Number (IBAN) for the bank account. <p>Important The IBAN must be included in each request. If you provide a BBAN it will be converted to an IBAN.</p>	Direct Debit (See description)	Alphanumeric (50)

Table 2 Request Fields

Request Field	Description	Required (R) or Optional (O)	Data Type & Length
item_#_productCode	<p>Type of product. This value is also used to determine the category that the product falls under: electronic, handling, physical, service, or shipping. The default value is <code>default</code>. See "Product Codes," page 47, for a list of valid values.</p> <p>For direct debits, if you set this field to a value other than <code>default</code>, <code>stored_value</code>, or any of the values related to shipping or handling, the item_#_quantity, item_#_productName field and the item_#_productSKU fields are required.</p>	<p>Direct Debit (O)</p> <p>Refund (O)</p>	String (30)
item_#_productName	<p>Product's name. For direct debits, required if item_#_productCode is not <code>default</code>, <code>stored_value</code>, or one of the values related to shipping and/or handling.</p>	<p>Direct Debit (See description)</p> <p>Refund (O)</p>	String (30)
item_#_productSKU	<p>Product identifier code. For direct debits, required if item_#_productCode is not <code>default</code>, <code>stored_value</code>, or one of the values related to shipping or handling.</p>	<p>Direct Debit (See description)</p> <p>Refund (O)</p>	String (30)
item_#_quantity	<p>Quantity of the product being purchased. The default is 1. For direct debits, required if item_#_productCode is not <code>default</code>, <code>stored_value</code>, or one of the values related to shipping or handling.</p>	<p>Direct Debit (See description)</p> <p>Refund (O)</p>	Integer (10)
item_#_taxAmount	<p>Tax amount associated with this item. The field is additive. For example, if you send one item with unitPrice of 10.00 and taxAmount of 0.80, and you send another item with unitPrice of 20.00 and taxAmount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included.</p> <p>The item_#_taxAmount and the item_#_unitPrice fields must use the same currency.</p> <p>If you include item_#_taxAmount field, and you also include taxService service in your request, the taxService service does not calculate tax for the item. Instead, it returns the value in the item_#_taxAmount field.</p>	<p>Direct Debit (O)</p> <p>Refund (O)</p>	String (15)

Table 2 Request Fields

Request Field	Description	Required (R) or Optional (O)	Data Type & Length
item_#_unitPrice	<p>Per-item price of the product. You must include either this field or purchaseTotals_grandTotalAmount in your request. This value cannot be negative. For more information about items and grand totals, see Getting Started with CyberSource Advanced for the Simple Order API.</p> <p>You can include a decimal point (.) in this field, but you cannot include any other special characters. The amount will be truncated at the request level to the correct number of decimal places.</p>	<p>Direct Debit (See description)</p> <p>Refund (See description)</p>	String (15)
linkToRequest	Value that links the current request to a previous authorization request for a debit card or prepaid card. This value is useful when multiple payment methods are being used to complete an order. For more information, see Credit Card Services Using the Simple Order API .	Direct Debit (O)	String (26)
merchantID	<p>Your CyberSource merchant ID.</p> <p>Note When opening your account with CyberSource, make sure that you inform CyberSource whether you plan to use multiple CyberSource merchant IDs. For example, if you have separate business units within your company, each with a separate CyberSource merchant ID. You must have a separate processor merchant ID for each CyberSource merchant ID. For more information, contact CyberSource Customer Support.</p>	<p>Direct Debit (R)</p> <p>Refund (R)</p>	String (30)
merchantReferenceCode	Merchant-generated order reference or tracking number. For more information, see Getting Started with CyberSource Advanced for the Simple Order API .	<p>Direct Debit (R)</p> <p>Refund (R)</p>	String (50)
purchaseTotals_currency	Currency used for the order. Possible values are the ISO Standard Currency Codes .	<p>Direct Debit (R)</p> <p>Refund (R)</p>	String (5)
purchaseTotals_grandTotalAmount	Grand total for the order. You must include either this field or the item_#_unitPrice field in your request. For more information, see, Getting Started with CyberSource Advanced for the Simple Order API .	<p>Direct Debit (See description)</p> <p>Refund (See description)</p>	String (15)

Table 2 Request Fields

Request Field	Description	Required (R) or Optional (O)	Data Type & Length
shipTo_city	City of the shipping address.	Direct Debit (Required if any shipping information is included)	String (50)
shipTo_country	Country of the shipping address. Possible values are the two-character <i>ISO Standard Country Codes</i> .	Direct Debit (O)	String (2)
shipTo_firstName	First name of the person receiving the product.	Direct Debit (O)	String (60)
shipTo_lastName	Last name of the person receiving the product.	Direct Debit (O)	String (60)
shipTo_phoneNumber	Phone number for the shipping address.	Direct Debit (O)	String (15)
shipTo_postalCode	<p>Postal code for the shipping address. The postal code must consist of 5 to 9 digits.</p> <p>If the value of shipTo_country is US, the 9-digit postal code must follow these rules: [5 digits][dash][4 digits] Example: 12345-6789</p> <p>If the value of shipTo_country is CA, the 6-digit postal code must follow these rules: [alpha][numeric][alpha] [numeric][alpha][numeric] Example: A1B 2C4</p> <p>If the postal code for the shipping address is not included in the request message, CyberSource uses the postal code from the billing address. If the postal code for the billing address is not included in the request message, the postal code for the shipping address is required.</p>	Direct Debit (R if shipTo_country=US or CA)	String (10)
shipTo_state	State or province of the shipping address. Required if shipTo_country=US or CA. Possible values are the <i>State, Province, and Territory Codes for the United States and Canada</i> .	Direct Debit (See description)	String (2)
shipTo_street1	First line of the shipping address.	Direct Debit (Required if any shipping information is included)	String (60)
shipTo_street2	Second line of the shipping address.	Direct Debit (O)	String (60)

Reply Fields

The following table lists the fields returned in a reply from the **directDebitService** service or the **directDebitRefundService** service.

Table 3 Reply Fields

Reply Field	Description	Returned By	Data Type & Length
decision	Summary of the result for the overall request. Possible values: <ul style="list-style-type: none"> ■ ACCEPT ■ ERROR ■ REJECT 	Direct Debit and Refund	String (6)
directDebitRefundReply_amount	Total amount for the direct debit refund.	Refund	String (15)
directDebitRefundReply_iban	International Bank Account Number (IBAN) for the bank account.	Refund	Alphanumeric (50)
directDebitRefundReply_processorResponse	Response code from the processor.	Refund	String (10)
directDebitRefundReply_reasonCode	Numeric value that indicates the result of the direct debit refund request. See "Reason Codes," page 48 , for a list of possible values.	Refund	Integer (5)
directDebitRefundReply_reconciliationID	Unique value generated by CyberSource. For more information, see Getting Started with CyberSource Advanced for the Simple Order API .	Refund	String (60)
directDebitRefundReply_reconciliationReferenceNumber	Unique value generated by CyberSource that identifies the transaction. Use this value to identify transactions in the Collections Report, which provides settlement information.	Refund	String (20)
directDebitRefundReply_requestDateTime	Time of the direct debit refund request in UTC. Format: YYYY-MM-DDThh:mm:ssZ. Example: 2018-08-11T22:47:57Z equals August 11, 2018, at 22:27:57 (10:47:57 p.m.). The T separates the date and the time. The Z indicates UTC.	Refund	String (20)
directDebitReply_amount	Total amount for the direct debit.	Direct Debit	String (15)
directDebitReply_iban	International Bank Account Number (IBAN) for the bank account.	Direct Debit	Alphanumeric (50)
directDebitReply_mandateID	The identification reference for the direct debit mandate.	Direct Debit	Alphanumeric (16)

Table 3 Reply Fields

Reply Field	Description	Returned By	Data Type & Length
directDebitReply_processorResponse	Response code from the processor.	Direct Debit	String (10)
directDebitReply_reasonCode	Numeric value that indicates the result of the direct debit request. See " Reason Codes ," page 48, for a list of possible values.	Direct Debit	Integer (5)
directDebitReply_reconciliationID	Unique value generated by CyberSource. For more information, see Getting Started with CyberSource Advanced for the Simple Order API .	Direct Debit	String (60)
directDebitReply_reconciliationReferenceNumber	Unique value generated by CyberSource that identifies the transaction. Use this value to identify transactions in the Collections Report, which provides settlement information.	Direct Debit	String (20)
directDebitReply_requestDateTime	Time of the direct debit request in UTC. Format: YYYY-MM-DDThh:mm:ssZ. Example: 2018-08-11T22:47:57Z equals August 11, 2018, at 22:27:57 (10:47:57 p.m.). The T separates the date and the time. The Z indicates UTC.	Direct Debit	String (20)
invalidField_0...N	Fields in the request that contained invalid data. These reply fields are included as an aid to software developers only. No attempt should be made to use these fields for end user interaction. For more information, see Getting Started with CyberSource Advanced for the Simple Order API .	Direct Debit and Refund	String (100)
merchantReferenceCode	Order reference or tracking number that you provided in the request. If you included multi-byte characters in this field in the request, the returned value might contain corrupted characters.	Direct Debit and Refund	String (50)
missingField_0...N	Required fields that were missing from the request. These reply fields are included as an aid to software developers only. No attempt should be made to use these fields for end user interaction. For more information, see Getting Started with CyberSource Advanced for the Simple Order API .	Direct Debit and Refund	String (100)
purchaseTotals_currency	Currency used for the order. Possible values are the ISO Standard Currency Codes .	Direct Debit and Refund	String (5)

Table 3 Reply Fields

Reply Field	Description	Returned By	Data Type & Length
reasonCode	Numeric value that indicates the result of the overall request. See "Reason Codes," page 48 , for a list of possible values.	Direct Debit and Refund	Integer (5)
requestID	Identifier for the request.	Direct Debit and Refund	String (26)

Request and Reply Examples



Note

In the direct debit example below the customer includes the BBAN in the request. The BBAN is converted to an IBAN in the direct debit reply.

Direct Debit Request

Example 1 Direct Debit Request

```
<requestMessage xmlns="urn:schemas-cybersource-com:transaction-data-1.103">
  <merchantID>demo123</merchantID>
  <merchantReferenceCode>demoRef</merchantReferenceCode>
  <billTo>
    <firstName>Orlando</firstName>
    <lastName>Bloom</lastName>
    <street1>Kaerntner Strasse 22</street1>
    <city>Vienna</city>
    <postalCode>1010</postalCode>
    <country>ES</country>
    <phoneNumber>431427721010</phoneNumber>
    <email>borlando@cybersource.com</email>
  </billTo>
  <purchaseTotals>
    <currency>EUR</currency>
    <grandTotalAmount>41</grandTotalAmount>
  </purchaseTotals>
  <fundTransfer>
    <accountNumber>0001155325</accountNumber>
    <bankCheckDigit>90</bankCheckDigit>
  </fundTransfer>
  <bankInfo>
    <bankCode>0081</bankCode>
    <name>SloveniaBank_testing</name>
    <country>ES</country>
    <branchCode>5394</branchCode>
    <swiftCode>ABNA NL 2A</swiftCode>
  </bankInfo>
  <directDebitService run="true">
    <directDebitText>abcd</directDebitText>
    <directDebitType>004</directDebitType>
    <mandateAuthenticationDate>20180610</mandateAuthenticationDate>
  </directDebitService>
</requestMessage>
```

Direct Debit Reply

Example 2 Direct Debit Reply

```
<c:replyMessage xmlns:c="urn:schemas-cybersource-com:transaction-data-1.103">
  <c:merchantReferenceCode>demoRef</c:merchantReferenceCode>
  <c:requestID>4024443213630181552683</c:requestID>
  <c:decision>ACCEPT</c:decision>
  <c:reasonCode>100</c:reasonCode>
  <c:purchaseTotals>
    <c:currency>eur</c:currency>
  </c:purchaseTotals>
  <c:directDebitReply>
    <c:reasonCode>100</c:reasonCode>
    <c:amount>41.00</c:amount>
    <c:requestDateTime>2018-06-10T23:52:01Z</c:requestDateTime>
    <c:reconciliationID>2149564611</c:reconciliationID>
    <c:reconciliationReferenceNumber>3002687348</c:reconciliationReferenceNumber>
    <c:mandateID>159799546111146963</c:mandateID>
    <c:iban>IE64BOFI0001155325</c:iban>
  </c:directDebitReply>
</c:replyMessage>
```

Stand-Alone Direct Debit Refund Request



In the direct debit refund example below the customer includes the BBAN in the request. The BBAN is converted to an IBAN in the direct debit refund reply.

Example 3 Stand-Alone Direct Debit Refund Request

```
<requestMessage xmlns="urn:schemas-cybersource-com:transaction-data-1.103">
  <merchantID>demo123</merchantID>
  <merchantReferenceCode>demoRef</merchantReferenceCode>
  <billTo>
    <firstName>Orlando</firstName>
    <lastName>Bloom</lastName>
    <street1>33, rue Dauphine</street1>
    <city>Bergheim</city>
    <postalCode>75006</postalCode>
    <country>DE</country>
    <phoneNumber>33 3 69 20 45 63</phoneNumber>
    <email>borlando@cybersource.com</email>
  </billTo>
  <purchaseTotals>
    <currency>EUR</currency>
    <grandTotalAmount>12</grandTotalAmount>
  </purchaseTotals>
  <fundTransfer>
    <accountNumber>0044497071</accountNumber>
    <accountName>BRADFORD NICKLES</accountName>
  </fundTransfer>
  <bankInfo>
    <bankCode>79050000</bankCode>
    <name>SloveniaBank_testing</name>
    <country>DE</country>
    <swiftCode>BSLJSI2X</swiftCode>
  </bankInfo>
  <directDebitService run="">
    <reconciliationID>335556323</reconciliationID>
  </directDebitService>
  <directDebitRefundService run="true"/>
</requestMessage>
```

Example 4 Stand-Alone Direct Debit Refund Reply

```
<c:replyMessage xmlns:c="urn:schemas-cybersource-com:transaction-data-1.103">
  <c:merchantReferenceCode>demoRef</c:merchantReferenceCode>
  <c:requestID>4024444278270181551532</c:requestID>
  <c:decision>ACCEPT</c:decision>
  <c:reasonCode>100</c:reasonCode>
  <c:purchaseTotals>
    <c:currency>eur</c:currency>
  </c:purchaseTotals>
  <c:directDebitRefundReply>
    <c:reasonCode>100</c:reasonCode>
    <c:amount>12.00</c:amount>
    <c:requestDateTime>2018-06-10T23:53:50Z</c:requestDateTime>
    <c:reconciliationID>335556323</c:reconciliationID>
    <c:processorResponse>800</c:processorResponse>
    <c:iban>DE58790500000044497071</c:iban>
  </c:directDebitRefundReply>
</c:replyMessage>
```

Follow-On Direct Debit Refund

Example 5 Follow-On Direct Debit Refund Request

```
<requestMessage xmlns="urn:schemas-cybersource-com:transaction-data-1.103">
  <merchantID>demo123</merchantID>
  <merchantReferenceCode>demoRef</merchantReferenceCode>
  <purchaseTotals>
    <grandTotalAmount>41</grandTotalAmount>
  </purchaseTotals>
  <directDebitRefundService run="true">
    <directDebitRequestID>4024443213630181552683</directDebitRequestID>
  </directDebitRefundService>
</requestMessage>
```

Example 6 Follow-On Direct Debit Refund Reply

```
<c:replyMessage xmlns:c="urn:schemas-cybersource-com:transaction-data-1.103">
  <c:merchantReferenceCode>demoRef</c:merchantReferenceCode>
  <c:requestID>4024443591910181552683</c:requestID>
  <c:decision>ACCEPT</c:decision>
  <c:reasonCode>100</c:reasonCode>
  <c:purchaseTotals>
    <c:currency>eur</c:currency>
  </c:purchaseTotals>
  <c:directDebitRefundReply>
    <c:reasonCode>100</c:reasonCode>
    <c:amount>41.00</c:amount>
    <c:requestDateTime>2018-06-10T23:52:39Z</c:requestDateTime>
    <c:reconciliationID>2149564611</c:reconciliationID>
    <c:reconciliationReferenceNumber>3002687348</c:reconciliationReferenceNumber>
    <c:iban>IE64BOFI0001155325</c:iban>
  </c:directDebitRefundReply>
</c:replyMessage>
```

Direct Debits and Direct Debit Refunds Using the SCMP API



Important

Our processing partner requires us to pre-populate their fields to show that the mandate has been signed and dated. The MANDATEDATE field is populated with the system date, the MANDATEPLACE field is populated with the customer city, and the MANDATESIGNED indicator is set to 1. These fields are for future use and will support e-mandates.

Requesting Direct Debits



Important

The IBAN must be included in each request. If you provide a BBAN it will be converted to an IBAN.

To request a direct debit, set the **ics_applications** field to **ics_direct_debit**. See "[API Fields](#)," [page 30](#), for a list of the fields to use.

When requesting a direct debit, you may not request any of the other ICS services except **ics_tax**. For more information about the service, see [Tax Calculation Service Using the SCMP API](#).

When you take an order that uses a direct debit, you must gather the customer's billing and bank account information. For most countries, CyberSource accepts either the traditional bank account information or the account's IBAN. The traditional bank account information and the corresponding API fields you need to provide vary by country. Contact CyberSource Customer Support for required country-specific bank account information.

CyberSource validates the format of the bank account number before performing the direct debit. If the account number does not pass the validation check, CyberSource rejects the request with a **rflag=DINVALIDACCOUNT**. CyberSource recommends that you confirm the customer entered the number correctly, and if it was incorrect, request the direct debit again with the correct number.

Requesting Direct Debit Refunds



The IBAN must be included in each request. If you provide a BBAN it will be converted to an IBAN.

There are two types of direct debit refunds: follow-on refunds and stand-alone refunds. A follow-on refund uses information from a previous direct debit. A stand-alone refund does not depend on a previous transaction.

A follow-on refund must occur within 60 of the request for the direct debit. When the time limit for a follow-on refund expires, the only kind of refund you can perform is a stand-alone refund.

To request a direct debit refund:

- Set the **ics_applications** field to **ics_direct_debit_refund**.
- Do not request any other ICS services except Tax Calculation, which is optional. For more information about this service, see [Tax Calculation Service Using the SCMP API](#).
- Send the fields required for a direct debit refund request. See "[API Fields](#)," [page 30](#). For a follow-on refund, the fields and values must match the fields and values you sent in the original direct debit request.
- For a stand-alone refund, the **direct_debit_request_id** field is optional. See [page 42](#).
- For a follow-on refund, include the **direct_debit_request_id** field with the request ID from the direct debit reply. See [page 43](#).
- The easiest way to implement direct debit refunds is to always send the request ID from the original direct debit with every direct debit refund request.
- CyberSource recommends that when you request a refund, you use the same value for the **merchant_ref_number** field that you used for the direct debit. This makes it easier for you to link the refund to the original direct debit in your own system as well as in CyberSource reports and Transaction Search Screens.

CyberSource validates the format of the bank account number before processing the direct debit refund. If the account number does not pass the validation check, CyberSource rejects the request with a **rflag=DINVALIDACCOUNT**. CyberSource recommends that you then confirm the customer entered the number correctly, and if it was incorrect, request the refund again with the correct number.

You can perform multiple partial refunds against a direct debit. The sum of the refunds must not exceed the amount of the payment.

You will not receive an error in the reply for either of the following conditions:

- The **direct_debit_request_id** field is invalid.
- The customer's payment has not yet been received.

Instead, CyberSource does not process the refund, and the transaction appears in the daily Transaction Exception Detail Report. You should monitor this report daily to determine whether any of your transactions have problems. For descriptions of the reason codes that can appear in the report, see [Appendix B, "Reason Codes," on page 48](#). For information about the report and how to use it, see the [Ingenico ePayments Planning Guide](#). For details about downloading the report and its format, see the [Classic Reporting Developer Guide](#).

API Fields

In the "Required or Optional" column, the services are referred to by shortened names: Direct Debit and Refund. For information about the data types, see [Getting Started with CyberSource Advanced for the SCMP API](#).

Request Fields

The following table lists the fields to use in a request for the **ics_direct_debit** service or the **ics_direct_debit_refund** service.

Table 4 Request Fields

Request-Level Field	Description	Required (R) or Optional (O)	Data Type & Length
bank_account_name	Name used on the bank account.	Direct Debit (O) Refund (O)	String (30)
bank_account_number	Bank account number. Important The IBAN must be included in each request. If you provide a BBAN it will be converted to an IBAN. Do not use the IBAN in this field. include the IBAN in the bank_iban field. Note Do not use the IBAN in this field. include the IBAN in the bank_iban field.	Direct Debit (See description) Refund (See description)	String (See description)
bank_address	Bank's address.	Direct Debit (O) Refund (O)	String (255)
bank_check_digit	Code used to validate the customer's account number when you are not using the IBAN. Contact CyberSource Customer Support for required country-specific bank account information.	Direct Debit (See description)	String (2)

Table 4 Request Fields (Continued)

Request-Level Field	Description	Required (R) or Optional (O)	Data Type & Length
bank_city	City in which the bank is located. If you do not send this field, Ingenico ePayments assumes the bank is located in the bill_city field. Some banks validate the bank account information, so include this field if the bank is not included in the bill_city field.	Direct Debit (O) Refund (O)	String (35)
bank_code	Bank's code. Used for some countries when you are not using the IBAN. Contact CyberSource Customer Support for required country-specific bank account information.	Direct Debit (See description) Refund (See description)	String (See description)
bank_country	Country in which the bank is located. Possible values are the two-character <i>ISO Standard Country Codes</i> .	Direct Debit (R) Refund (R)	String (2)
bank_iban	International Bank Account Number (IBAN) for the bank account. Important The IBAN must be included in each request. If you provide a BBAN it will be converted to an IBAN.	Direct Debit (See description)	Alphanumeric (50)
bank_name	Bank's name. Required when using the Ingenico ePayments processor to make one of the following types of direct debit transactions: <ul style="list-style-type: none"> ■ Direct debit ■ Stand-alone direct debit refund Otherwise optional.	Direct Debit (See description) Refund (See description)	String (40)
bank_swiftcode	Bank's SWIFT code. Unique address of the bank. Also known as the Bank Identification Code (BIC).	Direct Debit (O) Refund (O)	String (30)
bill_address1	Billing street address.	Direct Debit (R) Refund (R)	String (60)
bill_address2	Additional billing address information.	Direct Debit (O) Refund (O)	String (60)
bill_city	Billing address city.	Direct Debit (R) Refund (R)	String (50)
bill_country	Billing address country. Possible values are the two-character <i>ISO Standard Country Codes</i> .	Direct Debit (R) Refund (R)	String (2)
bill_state	Billing address state. Required if bill_country =US or CA. Possible values are the <i>State, Province, and Territory Codes for the United States and Canada</i> .	Direct Debit (See Description) Refund (See Description)	String (2)

Table 4 Request Fields (Continued)

Request-Level Field	Description	Required (R) or Optional (O)	Data Type & Length
bill_zip	<p>ZIP code for the shipping address. The ZIP code must consist of 5 to 9 digits.</p> <p>If the value of bill_country is US, the 9-digit ZIP code must follow this format: [5 digits][dash][4 digits] Example: 12345-6789</p> <p>If the value of bill_country is CA, the 6-digit ZIP code must follow this format: [alpha][numeric][alpha] [numeric][alpha][numeric] Example: A1B 2C3</p>	<p>Direct Debit (R if bill_country=US or CA)</p> <p>Refund (R if bill_country=US or CA)</p>	String (10)
branch_code	Code that identifies the branch of the customer's bank when you are not using the IBAN. Contact CyberSource Customer Support for required country-specific bank account information.	<p>Direct Debit (See description)</p> <p>Refund (See description)</p>	String (15)
currency	Currency used for the order. Possible values are the ISO Standard Currency Codes .	<p>Direct Debit (R)</p> <p>Refund (R)</p>	String (5)
customer_email	Customer's email address, including the full domain name. For example, jdoe@example.com.	<p>Direct Debit (R)</p> <p>Refund (R)</p>	String (255)
customer_firstname	Customer's first name.	<p>Direct Debit (R)</p> <p>Refund (R)</p>	String (60)
customer_lastname	Customer's last name.	<p>Direct Debit (R)</p> <p>Refund (R)</p>	String (60)
customer_phone	Customer's telephone number.	<p>Direct Debit (O)</p> <p>Refund (O)</p>	String (15)
date_collect	Date the direct debit should be debited. Format: YYYYMMDD	Direct Debit (O)	String (8)
direct_debit_mandate_authentication_date	The date the direct debit mandate was authenticated. Format: YYYYMMDD	Direct Debit (O)	Numeric (8)

Table 4 Request Fields (Continued)

Request-Level Field	Description	Required (R) or Optional (O)	Data Type & Length
direct_debit_recurring_type	Whether the direct debit is the first or last direct debit associated with the mandate, or one in between. Required only for the United Kingdom. Possible values: <ul style="list-style-type: none"> ■ 001: First direct debit associated with this mandate. Use this value if a one-time direct debit). ■ 002: Subsequent direct debits associated with this mandate. ■ 003: Last direct debit associated with this mandate. 	Direct Debit (See description)	String (3)
direct_debit_request_id	The request_id value returned from a previous request for ics_direct_debit .	Refund (R)	String (26)
direct_debit_text	Text describing reason for the direct debit. Required only for the Ingenico ePayments processor. Appears on the customer's bank statement. <p>Austria: Max 28 characters</p> <p>Germany: Max 50 characters</p> <p>Netherlands: Max 32 characters</p> <p>Spain: Max 40 characters</p>	Direct Debit (R)	String (See description)
direct_debit_trans_ref_no	To use this field, contact CyberSource Customer Support.	Refund (R)	String (60)
direct_debit_type	Type of direct debit. Required only for the Ingenico ePayments processor. Possible values: <ul style="list-style-type: none"> ■ 001: Austria ■ 003: Netherlands ■ 004: Spain ■ 005: German ELV direct debit 	Direct Debit (See description)	String (3)
grand_total_amount	Grand total for the order. You must include either this field or the offer0 field and the offer-level field amount . For more information about offers and grand totals, see Getting Started with CyberSource Advanced for the SCMP API .	Direct Debit (See description) Refund (See description)	Decimal (15)
ics_applications	ICS services to process for the request.	Direct Debit (R) Refund (R)	String (255)
link_to_request	Value that links the current request to a previous authorization request for a debit card or prepaid card. This value is useful when using multiple payment methods to complete an order. For more information, see Credit Card Services Using the SCMP API .	Direct Debit (O)	String (26)

Table 4 Request Fields (Continued)

Request-Level Field	Description	Required (R) or Optional (O)	Data Type & Length
mandate_id	The mandate ID. Required only for the United Kingdom.	Direct Debit (See description)	String (16)
merchant_id	Your CyberSource merchant ID. Note When opening your account with CyberSource, tell CyberSource whether you plan to use multiple CyberSource merchant IDs. For example, if you have separate business units within your company, each with a separate CyberSource merchant ID. You must have a separate processor merchant ID for each CyberSource merchant ID. For more information, contact CyberSource Customer Support.	Direct Debit (R) Refund (R)	String (30)
merchant_ref_number	Merchant-generated order reference or tracking number. For more information, see Getting Started with CyberSource Advanced for the SCMP API .	Direct Debit (R) Refund (R)	String (50)
offer0...N	Offers for the request. An offer is a line item for the order.	Direct Debit (O) Refund (O)	String (50)
ship_to_address1	First line of the shipping address. Required if any shipping information is included.	Direct Debit (See description)	String (60)
ship_to_address2	Second line of the shipping address.	Direct Debit (O)	String (60)
ship_to_city	City of the shipping address. Required if any shipping information is included.	Direct Debit (See description)	String (50)
ship_to_country	Country of the shipping address. Possible values are the two-character ISO Standard Country Codes .	Direct Debit (O)	String (2)
ship_to_firstname	First name of person receiving the product.	Direct Debit (O)	String (60)
ship_to_lastname	Last name of person receiving the product.	Direct Debit (O)	String (60)
ship_to_phone	Phone number for the shipping address.	Direct Debit (O)	String (15)
ship_to_state	State or province of the shipping address. Required if ship_to_country =US or CA. Possible values are the State, Province, and Territory Codes for the United States and Canada .	Direct Debit (See description)	String (2)

Table 4 Request Fields (Continued)

Request-Level Field	Description	Required (R) or Optional (O)	Data Type & Length
ship_to_zip	<p>ZIP code for the shipping address.</p> <p>If the value of ship_to_country is US, the 9-digit ZIP code must follow this format: [5 digits][dash][4 digits] Example: 12345-6789</p> <p>If the value of ship_to_country is CA, the 6-digit ZIP code must follow this format: [alpha][numeric][alpha] [numeric][alpha][numeric] Example: A1B 2C3</p> <p>If the postal code for the shipping address is not included in the request message, CyberSource uses the postal code from the billing address. If the postal code for the billing address is not included in the request message, the postal code for the shipping address is required.</p>	Direct Debit (R if ship_to_country =US or CA)	String (10)
timeout	Number of seconds until the transaction times out. The default is 110 seconds.	Direct Debit (O) Refund (O)	Positive integer (3)
transaction_type	<p>Type of direct debit transaction. Required only for the Netherlands when using the Ingenico ePayments processor. Possible values:</p> <ul style="list-style-type: none"> ■ 01: First collection using this account ■ 02: Other <p>Note For first collections on a Post giro account called <i>onzuivere posten</i>, the account number is verified against the account name and city by the Post bank. This verification requires one additional processing day.</p>	Direct Debit (See description)	String (2)

Offer-Level Fields

The following table lists the fields to use in a request for the **ics_direct_debit** service or the **ics_direct_debit_refund** service.

Table 5 Offer-Level Fields

Offer-Level Field	Description	Required (R) or Optional (O)	Data Type & Length
amount	<p>Per-item price of the product. You must include either this field and the offer0 field, or the request-level field grand_total_amount in your request. This value cannot be negative. For more information about offers and grand totals, see Getting Started with CyberSource Advanced for the SCMP API.</p> <p>You can include a decimal point (.) in this field, but you cannot include any other special characters. The amount will be truncated at the request level to the correct number of decimal places.</p>	<p>Direct Debit (See description)</p> <p>Refund (See description)</p>	Decimal (15)
merchant_product_sku	Product identifier code. For direct debits, required if product_code is not <code>default</code> , <code>stored_value</code> , or one of the values related to shipping or handling.	<p>Direct Debit (See description)</p> <p>Refund (O)</p>	String (30)
product_code	<p>Type of product. This value is also used to determine the product category: electronic, handling, physical, service, or shipping. The default value is <code>default</code>. See "Product Codes," page 47, for a list of valid values.</p> <p>For direct debits, if you set this to a value other than <code>default</code>, <code>stored_value</code>, or any of the values related to shipping or handling, the quantity, product_name, and merchant_product_sku fields are required.</p>	<p>Direct Debit (O)</p> <p>Refund (O)</p>	String (30)
product_name	Product's name. For direct debits, required if product_code is not <code>default</code> , <code>stored_value</code> , or one of the values related to shipping or handling.	<p>Direct Debit (See description)</p> <p>Refund (O)</p>	String (30)
quantity	Quantity of the product being purchased. The default is 1. For direct debits, required if product_code is not <code>default</code> , <code>stored_value</code> , or one of the values related to shipping or handling.	<p>Direct Debit (See description)</p> <p>Refund (O)</p>	Non-negative integer (10)

Table 5 Offer-Level Fields (Continued)

Offer-Level Field	Description	Required (R) or Optional (O)	Data Type & Length
tax_amount	<p>Tax amount associated with this item. The field is additive. For example, if you send the following offer lines:</p> <pre>offer0=amount:10.00^ quantity:1^tax_amount:0.80 offer1=amount:20.00^ quantity:1^tax_amount:1.60</pre> <p>the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included.</p> <p>The tax_amount and amount values must be in the same currency.</p> <p>If you include tax_amount, and you request the ics_tax service, ics_tax will not calculate tax for the offer. Instead, it will return the value in the tax_amount field.</p>	<p>Direct Debit (O)</p> <p>Refund (O)</p>	Decimal (15)

Reply Fields

The following table lists the fields returned in a reply from **ics_direct_debit** service request or the **ics_direct_debit_refund** service request.

Table 6 Reply Fields

Reply Field	Description	Returned By	Data Type & Length
client_lib_version	Information about the client library used to request the transaction.	Direct Debit Refund	String (50)
currency	Currency used for the order. Possible values are the ISO Standard Currency Codes .	Direct Debit Refund	String (5)
direct_debit_amount	Amount of the direct debit.	Direct Debit	Decimal (15)
direct_debit_iban	International Bank Account Number (IBAN) for the bank account.	Direct Debit	Alphanumeric (50)
direct_debit_mandate_id	The identification reference for the direct debit mandate.	Direct Debit	Alphanumeric (16)
direct_debit_rcode	One-digit code that indicates if the ics_direct_debit request was successful.	Direct Debit	Integer (1)

Table 6 Reply Fields (Continued)

Reply Field	Description	Returned By	Data Type & Length
direct_debit_reconciliation_reference_number	Unique value generated by CyberSource that identifies the transaction. Use this value to identify transactions in the Collections Report, which provides settlement information.	Direct Debit	String (20)
direct_debit_refund_amount	Amount of the direct debit refund.	Refund	Decimal (15)
direct_debit_refund_iban	International Bank Account Number (IBAN) for the bank account.	Refund	Alphanumeric (50)
direct_debit_refund_rcode	One-digit code that indicates if the ics_direct_debit_refund request was successful.	Refund	Integer (1)
direct_debit_refund_reconciliation_reference_number	Unique value generated by CyberSource that identifies the transaction. Use this value to identify transactions in the Collections Report, which provides settlement information.	Refund	String (20)
direct_debit_refund_request_time	Time of the direct debit request in UTC. Format: YYYY-MM-DDThh:mm:ssZ. Example: 2018-08-11T22:47:57Z equals August 11, 2018, at 22:27:57 (10:47:57 p.m.). The T separates the date and the time. The Z indicates UTC.	Refund	Date and time (20)
direct_debit_refund_response_code	Response code from the processor.	Refund	String (10)
direct_debit_refund_rflag	One-word description of the result of the ics_direct_debit_refund request.	Refund	String (50)
direct_debit_refund_rmsg	Message that explains the reply flag direct_debit_refund_rflag .	Refund	String (255)
direct_debit_refund_trans_ref_no	Reference number for the transaction. For more information, see Getting Started with CyberSource Advanced for the SCMP API .	Refund	String (60)
direct_debit_request_time	Time of the direct debit request in UTC. Format: YYYY-MM-DDThh:mm:ssZ. Example: 2018-08-11T22:47:57Z equals August 11, 2018, at 22:27:57 (10:47:57 p.m.). The T separates the date and the time. The Z indicates UTC.	Refund	Date and time (20)
direct_debit_response_code	Response code from the processor.	Direct Debit	String (10)
direct_debit_rflag	One-word description of the result for the ics_direct_debit request.	Direct Debit	String (50)
direct_debit_rmsg	Message that explains the reply flag direct_debit_rflag .	Direct Debit	String (255)

Table 6 Reply Fields (Continued)

Reply Field	Description	Returned By	Data Type & Length
direct_debit_trans_ref_no	Reference number for the transaction. For more information, see Getting Started with CyberSource Advanced for the SCMP API .	Refund	String (60)
ics_rcode	One-digit code that indicates whether the entire request was successful.	Direct Debit and Refund	Integer (1)
ics_rflag	One-word description of the result for the entire request.	Direct Debit and Refund	String (50)
ics_rmsg	Message that explains the reply flag ics_rflag .	Direct Debit and Refund	String (255)
merchant_ref_number	Order reference or tracking number that you provided in the request. If you included multi-byte characters in this field in the request, the returned value might contain corrupted characters.	Direct Debit and Refund	String (50)
request_id	Identifier for the request generated by the client.	Direct Debit and Refund	String (26)

Reply Flags

The following table lists the reply flags for the **ics_direct_debit** service request and the **ics_direct_debit_refund** service request.

Table 7 Reply Flags for Direct Debits and Direct Debit Refunds for the SCMP API

Reply Flag	Description	Returned By
DINVALIDACCOUNT	The bank account number did not pass the validation. Verify with the customer that the account number is correct; if it was incorrect, request the service again with the correct information.	Direct Debit and Refund
DINVALIDDATA	Data provided is not consistent with the request.	Direct Debit and Refund
DMISSINGFIELD	The request is missing a required field.	Direct Debit and Refund
ESYSTEM	System error. Wait a few minutes before re-sending your request. You must design your transaction management system to correctly handle CyberSource system errors. Depending on the payment processor handling the transaction, the error may indicate a valid CyberSource system error or a processor rejection caused by invalid data. In either case, CyberSource recommends that you do not design your system to endlessly retry sending a transaction. See the documentation for your CyberSource client for information on handling system errors and retries.	Direct Debit and Refund

Table 7 Reply Flags for Direct Debits and Direct Debit Refunds for the SCMP API (Continued)

Reply Flag	Description	Returned By
ETIMEOUT	The request timed out.	Direct Debit and Refund
SOK	The transaction was successful.	Direct Debit and Refund

Request and Reply Examples



Note

In the direct debit example below the customer includes the BBAN in the request. The BBAN is converted to an IBAN in the direct debit reply.

Direct Debit Request

Example 7 Direct Debit Request

```

ics_applications=ics_direct_debit
bank_account_name=Direct Debit Testing
bank_account_number=55500643635
bank_address=Vienna Central Branch
bank_city=Hinterbruhl
bank_code=31000
bank_country=AT
bank_swiftcode=ABNA NL 2A
bill_address1=Parkstrasse 4
bill_city=Hinterbruhl
bill_country=AT
bill_zip=2371
currency=eur
customer_email=null@cybersource.com
customer_firstname=John
customer_lastname=Smith
customer_phone=999-999-9999
direct_debit_mandate_authentication_date=20180610
direct_debit_text=Direct Debit Text
direct_debit_type=001
grand_total_amount=21.11
merchant_id=mercid123
merchant_ref_number=merRef123

```


Example 8 Direct Debit Reply

```
currency=eur
direct_debit_amount=21.11
direct_debit_iban=IE64BOFI55500643635
direct_debit_mandate_id=697458823683278238
direct_debit_rcode=1
direct_debit_rflag=SOK
direct_debit_rmsg=Request was processed successfully.
direct_debit_time=2018-06-10T211943Z
direct_debit_trans_ref_no=2149562887
direct_debit_reconciliation_reference_number=3002686613
ics_decision_reason_code=100
ics_rcode=1
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
merchant_ref_number=merRef123
request_id=4024351829300172492137
```

Stand-Alone Direct Debit Refund



Note

In the direct debit refund example below the customer includes the BBAN in the request. The BBAN is converted to an IBAN in the direct debit refund reply.

Example 9 Stand-Alone Direct Debit Refund Request

```
ics_applications=ics_direct_debit_refund
bank_account_name=Direct_Debit_Testing
bank_account_number=55500643635
bank_address=Vienna_Central_Branch
bank_check_digit=77
bank_code=31000
bank_country=AT
bank_name=Raiffeisen_Zentral
bank_swiftcode=BNPA_FR_PP_PLZ
bill_address1=PARK
bill_city=HINTERBRUHL
bill_country=AT
branch_code=99999
currency=EUR
customer_email=null@cybersource.com
customer_firstname=John
customer_lastname=Smith
customer_phone=999-999-9999
date_collect=20180821
direct_debit_text=Direct_Debit_Text
direct_debit_type=001
grand_total_amount=100.00
mandate_id=1
merchant_id=mercid123
merchant_ref_number=merRef123
```

Example 10 Stand-Alone Direct Debit Refund Reply

```
currency=eur
direct_debit_refund_amount=100.00
direct_debit_refund_iban=IE64BOFI55500643635
direct_debit_refund_rcode=1
direct_debit_refund_rflag=SOK
direct_debit_refund_rmsg=Request was processed successfully.
direct_debit_refund_time=2018-06-10T211934Z
direct_debit_refund_trans_ref_no=Reference No
ics_rcode=1
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
merchant_ref_number=merRef123
request_id=4024351740870172492137
```

Follow-On Direct Debit Refund

Example 11 Follow-On Direct Debit Refund Request

```
ics_applications=ics_direct_debit_refund
direct_debit_request_id=4024351829300172492137
grand_total_amount=21.11
merchant_id=mercid123
merchant_ref_number=merRef123
```

Example 12 Follow-On Direct Debit Refund Reply

```
currency=eur
direct_debit_refund_amount=21.11
direct_debit_refund_iban=IE64BOFI55500643635
direct_debit_refund_rcode=1
direct_debit_refund_rflag=SOK
direct_debit_refund_rmsg=Request was processed successfully.
direct_debit_refund_time=2018-06-10T211943Z
direct_debit_refund_trans_ref_no=2149562887
direct_debit_refund_reconciliation_reference_number=3002686613
ics_rcode=1
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
merchant_ref_number=merRef123
request_id=4024351832340172492137
```

Testing

Sending Test Requests

You can send test requests for direct debits, refunds, and mandates to the CyberSource test server. CyberSource performs the same basic validations that are performed for production transactions. Test transactions are not forwarded to the payment processor.

The requirements for test transactions are:

- Use your regular CyberSource merchant ID.
- Match the country and currency information. For example, if testing a direct debit in Germany, make sure that you specify Germany as the bank country and the country of the customer's address, and specify EUR as the currency.
- When testing the Simple Order API, use the test URL:
<https://ics2wstest.ic3.com/commerce/1.x/transactionProcessor>
- When testing the SCMP API, use the CyberSource test server:
<https://ics2test.ic3.com>

Testing Direct Debits and Refunds

You use specific amounts in your test transactions to trigger specific responses. This process enables you to easily generate the various responses that your system needs to handle.

The following table shows the amounts and decline or error responses that are returned by the simulator. The tables include responses for both the Simple Order API (reason code) and the SCMP API (rflag and rmsg description).

See [Appendix B, "Reason Codes," on page 48](#) for descriptions of the Simple Order API reason codes.

The rmsg you actually receive contains all capital letters with underscores between the words.

Table 8 Test Data

Amount	Simple Order API Reason Code	SCMP API rflag	SCMP API rmsg Description	Used with These Payment Types
2014	233	DINVALIDDATA	Invalid bank account number	Direct Debit
2015	233	DINVALIDDATA	Invalid Post giro account number	Direct Debit
2020	233	DINVALIDDATA	Authorization ID is required for country	Direct Debit
2024	233	DINVALIDDATA	Bank code is required for country	Direct Debit
2025	233	DINVALIDDATA	Account name is required for country	Direct Debit
2026	233	DINVALIDDATA	Account number is required for country	Direct Debit
2027	233	DINVALIDDATA	Direct debit text is required for country	Direct Debit
2028	233	DINVALIDDATA	Date collect is required for country	Direct Debit
2029	233	DINVALIDDATA	Bank check digit is required for country	Direct Debit
2030	233	DINVALIDDATA	Branch code is required for country	Direct Debit
2031	233	DINVALIDDATA	Bank name is required for country	Direct Debit
2032	233	DINVALIDDATA	Date collected.	Direct Debit
2033	233	DINVALIDDATA	Account number has invalid length	Direct Debit
2034	233	DINVALIDDATA	Invalid bank code for payment type and country combination	Direct Debit
2035	233	DINVALIDDATA	Bank code does not match bank name	Direct Debit
2036	233	DINVALIDDATA	Invalid bank account number	Direct Debit
2037	233	DINVALIDDATA	Invalid Post giro account number	Direct Debit
2038	233	DINVALIDDATA	Amount not between minimum and maximum amounts	Direct Debit
2039	233	DINVALIDDATA	Payment type invalid for country code	Direct Debit
2042	237	DINVALIDDATA	Already refunded; no multiple refunds allowed	Direct Debit Refund
2044	239	DINVALIDDATA	Refund amount too large	Direct Debit Refund
2045	150	ESYSTEM	The request refers to an unknown order	Direct Debit Refund
9999.98	250	ETIMEOUT	Time-out connecting to processor	All
9999.99	150	ESYSTEM	Unexpected error	All

Going Live

After successfully testing your account, you must go live with CyberSource before you begin accepting payments. When you go live, your CyberSource account is updated so that you can send transactions to the CyberSource production server. If you have not already done so, you will need to provide your payment processor and banking information to CyberSource so that your processor can deposit funds to your merchant bank account. For more information, see [Getting Started with CyberSource Advanced for the Simple Order API](#) or [Getting Started with CyberSource Advanced for the SCMP API](#).

Your production transactions will be available for you to view in the production version of the Business Center:

<https://ebc.cybersource.com>

Product Codes

The following table lists the values that you can use for the product code. For the Simple Order API, use the **item_#_productCode** request field to specify the product code. For the SCMP API, use the **product_code** offer-level field.

Table 9 Product Codes

Product Code	Definition
adult_content	Adult content.
coupon	Coupon applied to the entire order.
default	Default value for the product code. CyberSource uses <code>default</code> when a request message does not include a value for the product code.
electronic_good	Electronic product other than software.
electronic_software	Software distributed electronically rather than on disks or other media.
gift_certificate	Gift certificate.
handling_only	Fee that you charge your customer to cover your administrative selling costs.
service	Service that you perform for your customer.
shipping_and_handling	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.
shipping_only	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.
subscription	Subscription to a web site or other content.

Reason Codes

These reason codes apply only if you use the Simple Order API. The reason code appears in the reply that you receive immediately after you request the service. See [Getting Started with CyberSource Advanced for the Simple Order API](#) for a discussion of replies, decisions, and reason codes.



Note

CyberSource reserves the right to add new reason codes at any time. If your error handler receives a reason code that it does not recognize, it should use the **decision** field to obtain the result.

Table 10 Reason Codes for the Simple Order API

Reason Code	Description
100	Successful transaction.
101	The request is missing one or more required fields. See the reply fields missingField_0...N . Resend the request with the complete information. For more information about missing and invalid fields, see Getting Started with CyberSource Advanced for the Simple Order API .
102	One or more fields in the request contain invalid data. See the reply fields invalidField_0...N . Resend the request with the correct information. For more information about missing and invalid fields, see Getting Started with CyberSource Advanced for the Simple Order API .
150	General system failure. See the documentation for your CyberSource client for information on handling retries in the case of system errors.
151	The request was received but a server time-out occurred. This error does not include time-outs between the client and the server. To avoid duplicating the transaction, do not resend the request until you have reviewed the transaction status in the Business Center. See the documentation for your CyberSource client for information on handling retries in the case of system errors.

Table 10 Reason Codes for the Simple Order API (Continued)

Reason Code	Description
152	The request was received, but a service timed out. To avoid duplicating the transaction, do not resend the request until you have reviewed the transaction status in the Business Center. See the documentation for your CyberSource client for information on handling retries in the case of system errors.
231	Invalid account number. Request a different form of payment.
233	General decline by the processor. Request a different form of payment.
234	A problem exists with your CyberSource merchant configuration. Do not resend the request. Contact Customer Support to correct the configuration problem.
236	Processor failure. Wait a few minutes and resend the request.
239	The requested transaction amount must match the previous transaction amount. Correct the amount and resend the request.
241	The request ID is invalid. Verify the request ID is correct.
244	The bank account number failed the validation check. Verify with the customer that the account number is correct; if it was incorrect, request the service again with the corrected information.
250	The request was received, but a time-out occurred with the payment processor. To avoid duplicating the transaction, do not resend the request until you have reviewed the transaction status in the Business Center.
254	Your CyberSource account is prohibited from processing stand-alone refunds. In the refund request, provide the requestID of the payment to create a follow-on refund. If you want to process stand-alone refunds, contact your CyberSource account representative.
255	Your CyberSource account is not configured to process the service in the country you specified. If this is a direct debit, check the bankInfo_country value to make sure it is set to the correct country. If you want to process the service in a country for which you are not configured, contact your CyberSource account representative.

Index

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

B

- bank account validation
 - direct debit refunds
 - SCMP API [29](#)
 - Simple Order API [11](#)
 - direct debits
 - SCMP API [28](#)
 - Simple Order API [10](#)

C

- check reference numbers [8](#)
- coupons [47](#)

D

- direct debit refunds
 - SCMP API [29](#)
 - Simple Order API [11](#)
- direct debits
 - and direct debit refunds
 - SCMP API [28](#)
 - Simple Order API [10](#)
 - requesting
 - SCMP API [28](#)
 - Simple Order API [10](#)
- directDebitRefundService [11](#)
- directDebitService [10](#)

E

- examples
 - SCMP API [40](#)
 - Simple Order API [23](#)

F

- follow-on refunds
 - SCMP API [29](#)
 - Simple Order API [11](#)

I

- ics_direct_debit [28](#)
- ics_direct_debit_refund [29](#)

O

- order tracking [8](#)

P

- processor transaction identifiers [8](#)
- product codes [47](#)

R

- reason codes [48](#)
- reconciliation IDs [8](#)
- refunds
 - SCMP API [29](#)
 - Simple Order API [11](#)
- report, Transaction Exception Detail Report
 - SCMP API [30](#)
 - Simple Order API [12](#)
- request IDs [8](#)

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z**S**

stand-alone refunds

SCMP API [29](#)

Simple Order API [11](#)

T

test server [44](#)

Transaction Exception Detail Report

SCMP API [30](#)

Simple Order API [12](#)

transaction reference numbers [8](#)