

Electronic Check Services

User Guide

October 2016



CyberSource Contact Information

For technical support questions, go to the Home page in the Business Center to see the contact information appropriate for your account.

Visit the Business Center, your central location for managing your online payment transactions, at <https://businesscenter.cybersource.com>.

For general information about our company, products, and services, go to <http://www.cybersource.com>.

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

Copyright

© 2016 CyberSource Corporation. All rights reserved. CyberSource Corporation ("CyberSource") furnishes this document and the software described in this document under the applicable agreement between the reader of this document ("You") and CyberSource ("Agreement"). You may use this document and/or software only in accordance with the terms of the Agreement. Except as expressly set forth in the Agreement, the information contained in this document is subject to change without notice and therefore should not be interpreted in any way as a guarantee or warranty by CyberSource. CyberSource assumes no responsibility or liability for any errors that may appear in this document. The copyrighted software that accompanies this document is licensed to You for use only in strict accordance with the Agreement. You should read the Agreement carefully before using the software. Except as permitted by the Agreement, You may not reproduce any part of this document, store this document in a retrieval system, or transmit this document, in any form or by any means, electronic, mechanical, recording, or otherwise, without the prior written consent of CyberSource.

Restricted Rights Legends

For Government or defense agencies. Use, duplication, or disclosure by the Government or defense agencies is subject to restrictions as set forth the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 and in similar clauses in the FAR and NASA FAR Supplement.

For civilian agencies. Use, reproduction, or disclosure is subject to restrictions set forth in subparagraphs (a) through (d) of the Commercial Computer Software Restricted Rights clause at 52.227-19 and the limitations set forth in CyberSource Corporation's standard commercial agreement for this software. Unpublished rights reserved under the copyright laws of the United States.

Trademarks

CyberSource, The Power of Payment, CyberSource Payment Manager, CyberSource Risk Manager, CyberSource Decision Manager, CyberSource Connect, Authorize.Net, and eCheck.net are trademarks and/or service marks of CyberSource Corporation. All other brands and product names are trademarks or registered trademarks of their respective owners.

Contents

Recent Revisions to This Document 7

About This Guide 8

Audience 8

Purpose 8

Conventions 8

Related Documentation 9

Chapter 1 Introduction to Electronic Check Services 10

Payment Processors 10

Chase Paymentech Solutions 10

CyberSource ACH Service 11

RBS WorldPay Atlanta 11

TeleCheck 11

Legal Compliance Text 12

Internet Check Acceptance Authorization—Full Debit 12

Internet Check Acceptance Authorization—Recurring Payments 13

Checks by Phone Authorization—Full Debit 14

Determining Whether a Check Has Cleared 15

Order Tracking 16

Request IDs 16

Reconciliation IDs 16

Check Reference Numbers 17

Processor Transaction Identifiers 17

Transaction Identifiers on Wells Fargo ACH 18

Transaction Identifiers and Reply Values for Accounts That Support Merchant-Generated Transaction Identifiers 18

Transaction Identifiers and Reply Values for Accounts That Do Not Support Merchant-Generated Transaction Identifiers 19

Chapter 2	Electronic Check Processing	21
	Electronic Check Debits	21
	Requesting a Debit	21
	Handling Customer Account Information	21
	Merchant-Provided Data	21
	Notifications of Change (NOCs)	23
	Verification and Validation	24
	Validation	24
	ACH Verification	25
	Guarantees	26
	Paymentech Verification	26
	Optional Features for Debits	27
	Debit Request Fields	27
	Electronic Check Credits	28
	Requesting a Credit	28
	Follow-On Credits and Stand-Alone Credits	29
	Deciding Which Kind of Credit to Request	29
	Follow-On Credits	29
	Stand-Alone Credits	30
	ACH Verification	30
	Notifications of Change (NOCs)	31
	Optional Features for Credits	32
	Credit Request Fields	32
	Authentication	34
	Voids	35
	Requesting a Void	35

Chapter 3	Optional Features	36
	Corporate Checks	36
	Deferred and Partial Payments	36
	Chase Paymentech Solutions	37
	TeleCheck	37
	Merchant Descriptors	38
	Multiple Partial Credits	39
	Non-Sufficient Funds (NSF) Service	39
	Payment Tokenization	40
	Recurring Billing	41
	Settlement Delivery Methods	42

Chapter 4	Testing Electronic Check Services	43
	Requirements for Testing	43
	Testing Chase Paymentech Solutions Transactions	44
	Successful Transactions	44
	Testing Chase Paymentech Solutions Declines	45
	Testing CyberSource ACH Service Transactions	45
	Testing RBS WorldPay Atlanta	46
	Testing TeleCheck	46
	Going Live	46

Appendix A	API Fields	47
	Formatting Restrictions	47
	Data Type Definitions	47
	Request Fields	48
	Reply Fields	61

Appendix B	Examples	67
	Name-Value Pair Examples	67
	XML Examples	68

Appendix C	Product Codes	70
-------------------	----------------------	-----------

Appendix D	Reason Codes	71
-------------------	---------------------	-----------

Appendix E	NOC Codes	74
-------------------	------------------	-----------

Appendix F	Check Point Summary Codes	76
	Primary Result Codes	76
	Address Result Codes	77
	Phone Codes	78
	Address Type Codes	80
	Change of Address Codes	80
	Social Security Number Codes	81
	Address Unit Mismatch Codes	82

Phone Unit Mismatch Codes 82
Driver's License Result Codes 82
Date of Birth Match Codes 83
High Risk Address Codes 83
High Risk Phone Codes 84
OFAC Validation Results Codes 84
Address Residential Match Codes 85
Address Business Match Codes 85
Phone Number Residential Match Codes 85
Phone Number Business Match Codes 85

Appendix G Fraud Shield Indicator Codes 86

Appendix H Verification Codes 87
Mapped Verification Codes 87
Raw Verification Codes 88

Appendix I SEC Codes 89

Index 91

Recent Revisions to This Document

Release	Changes
October 2016	<p>Updated information about payment authorization for a debit. See "Internet Check Acceptance Authorization—Full Debit," page 12.</p> <p>Wells Fargo ACH: updated the data type and length for the invoiceHeader_merchantDescriptorAlternate field. See "Request Fields," page 48.</p>
September 2016	<p>Updated the URL and link for the returned check fees. See "Internet Check Acceptance Authorization—Full Debit," page 12.</p> <p>Updated the legal compliance language for:</p> <ul style="list-style-type: none"> ■ Payment authorizations for recurring payments. See "Internet Check Acceptance Authorization—Recurring Payments," page 13. ■ Payment authorization over the telephone. See "Checks by Phone Authorization—Full Debit," page 14. <p>Wells Fargo ACH: added support for the invoiceHeader_merchantDescriptorAlternate field. See "Request Fields," page 48.</p>
August 2016	<p>Wells Fargo ACH: added support for general ledger accounts. See the check_accountType field in "Request Fields," page 48.</p>
July 2016	<p>TeleCheck: added information about a new requirement to display a terms and conditions statement. See Step 2 in "Internet Check Acceptance Authorization—Full Debit," page 12.</p> <p>Wells Fargo ACH: added support for merchant-generated transaction identifiers. See "Transaction Identifiers on Wells Fargo ACH," page 18.</p>
April 2016	<p>This revision contains only editorial changes and no technical updates.</p>
March 2016	<p>This revision contains only editorial changes and no technical updates.</p>

About This Guide

Audience

This guide is written for application developers who want to use the CyberSource Simple Order API to integrate electronic check processing into their order management system.

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

Purpose

This guide describes tasks you must complete to integrate the electronic check services into your existing order management system.

Conventions

The following special statements are used in this document:



Note

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



Important

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

The following text conventions are used in this document:

Table 1 Text Conventions

Convention	Meaning
boldface	Boldface type indicates API field names, API service names, and graphical user interface elements that you must act upon.
monospace	Monospace type indicates URLs, code in examples, or possible values for API fields.

Related Documentation

- *Getting Started with CyberSource Essentials* describes how to get started using the Simple Order API. ([PDF](#) | [HTML](#))
- The *Reporting User Guide* describes how to download reports. ([PDF](#) | [HTML](#))
- The *Secure Acceptance Silent Order POST Development Guide* describes how to create a Secure Acceptance Silent Order POST profile. ([PDF](#) | [HTML](#))
- The *Secure Acceptance Web/Mobile Configuration Guide* describes how to create a Secure Acceptance Web/Mobile profile. ([PDF](#) | [HTML](#))

Introduction to Electronic Check Services

Payment Processors

To use the CyberSource Electronic Check Services, you must register with one of these processors:

- Chase Paymentech Solutions
- CyberSource ACH Service
- RBS WorldPay Atlanta
- TeleCheck

Chase Paymentech Solutions

Supports U.S. Dollars (USD) for U.S. bank accounts.

Chase Paymentech Solutions provides you with unique identification numbers for your account. You must provide these identification numbers to your CyberSource Sales Representative.

Chase Paymentech Solutions acts as both a processor and a merchant bank, which is a bank that offers accounts for businesses that accept credit card or electronic check payments. If you choose Chase Paymentech Solutions as your processor, you must also open a check-enabled merchant bank account with them. However, you can set up the account to deposit the electronic check funds you receive directly into your primary account at another bank.

CyberSource ACH Service

Supports U.S. Dollars (USD) for U.S. bank accounts.

If CyberSource ACH Service is your processor, you must have a treasury relationship with one of the following originating depository financial institutions (ODFIs):

- Bank of America
- Wells Fargo

CyberSource ACH Solutions provides you with unique identification numbers for your account. You must provide these identification numbers to your CyberSource sales representative.

RBS WorldPay Atlanta

Supports U.S. Dollars (USD) for U.S. bank accounts.

RBS WorldPay Atlanta provides you with unique identification numbers for your account. You must provide these identification numbers to your CyberSource sales representative.

TeleCheck

Supports U.S. Dollars (USD) for U.S. bank accounts.

TeleCheck provides you with unique identification numbers for your account. You must provide these identification numbers to your CyberSource sales representative.

If TeleCheck is your processor, you do not need to open a check-enabled merchant bank account. TeleCheck can deposit funds directly into your existing bank account.

Legal Compliance Text

Internet Check Acceptance Authorization— Full Debit

To process electronic checks:

- Step 1** On your web site, add a link to the table of current state returned check fees:
http://www.firstdata.com/support/telecheck_returned_check/returned_check_fees.htm.
 Because this table is updated regularly, CyberSource recommends that you link directly to it. You can display the state fees table in a pop-up window, a full browser window, or directly on the checkout page.
- Step 2** If TeleCheck is your processor, you must display a terms and conditions statement for electronic checks as part of the checkout process. For specific instructions, see *TeleCheck® Non-Face-To-Face Electronic Check Acceptance (NF2F) – Host Based Capture (HBC) Specifications*.
- Step 3** At the end of the checkout process on your web site, display a consent statement for the check authorization that your customer *must accept* before submitting the order. The authorization consent statement must:
- Be readily identifiable as an authorization.
 - Clearly and conspicuously state its terms, including the transfer amount and the effective date of the transfer, as specified in the following language examples.
 - Include the routing number and bank account number to be debited, as specified in the following language examples.

Example 1 Language for a Payment Authorization for a Debit

Today, being [date], I, [insert consumer's name], by entering my routing and account number above and clicking "Authorize," I authorize my payment in the amount indicated above to be processed as an electronic funds transfer (EFT) or draft drawn from my checking or savings account as indicated above and, if necessary, to have my account electronically credited to correct erroneous debits. I understand that my payment will be processed within 1-2 banking days. If the payment returns unpaid, I authorize you or your service provider to collect the payment and my state's return item fee and, if applicable, costs, by EFT(s) or draft(s) drawn from my account. **Click here to view your state's returned item fee and, if applicable, costs.** I understand that this authorization will remain in full force and effect until I notify you that I wish to revoke it by calling [insert phone #] and allow you reasonable opportunity to act on my notice.

PLEASE PRINT A COPY OF THIS PAGE FOR YOUR RECORDS. ALTERNATIVELY, CONTACT US AT [(XXX) XXX-XXXX] TO LEARN HOW YOU CAN OBTAIN A COPY.

Internet Check Acceptance Authorization— Recurring Payments

Example 2 Language for a Payment Authorization for Recurring Payments

Today, being [date], by entering my routing and account number above and clicking “Authorize,” I authorize my payments [insert information on payments - amounts, dates, and/or frequency of debits] to be processed as electronic funds transfers (EFT) or drafts drawn from my checking or savings account as indicated above and, if necessary, electronic credits to my account to correct erroneous debits. I understand that my payment will process within 1-2 banking days. If any of my payments return unpaid, I authorize you or your service provider to collect the returned payment and my state’s return item fee for each such payment by EFT(s) or draft(s) drawn from my account. **Click here to view your state’s returned item fee and, if applicable, costs.** I understand that this authorization will remain in full force and effect until I notify you that I wish to revoke it by calling [insert phone number] and allowed you reasonable opportunity to act on my notice.

**PLEASE PRINT A COPY OF THIS PAGE FOR YOUR RECORDS. ALTERNATIVELY,
CONTACT US AT [(XXX) XXX-XXXX] TO LEARN HOW YOU CAN OBTAIN A COPY.**

Checks by Phone Authorization—Full Debit

At the end of the checkout process, the consent text must be read to the customer, and you must either audio record the customer's authorization or send a written notification of the authorization and the transaction to the customer prior to settlement of the transaction. The consent text for the customer to accept prior to submitting the payment authorization is as follows:

Example 3 Language for a Payment Authorization over the Telephone

Today, [insert today's date], I'd like to confirm that you, [insert first and last name of consumer], are authorizing a one-time payment in the amount of [insert amount] to be processed as an electronic funds transfer or draft drawn from your [specify checking or savings] account identified as routing number [insert routing number] and account number [insert bank account number] and, if necessary, electronic credits to your account to correct erroneous debits.

Your payment will be processed within 1-2 banking days. Do you authorize your account to be debited or credited as described on or after [insert date]? **(If consumer answers "Yes", continue. If consumer answers "No", stop the authorization process).**

If your payment returns unpaid, do you authorize [insert company's name] or its service provider to collect the payment and your state's return item fee and, if applicable, any costs in the amount of [insert state returned item fee and applicable costs] by electronic funds transfer(s) or draft(s) drawn from your account? **(If consumer answers "Yes", continue. If consumer answers "No", stop the authorization process).**

You may call [insert company's customer service phone number] during [insert company's customer service hours of operation] with any questions.

Do you understand that you will have until the end of this phone call to revoke this authorization by telling me you wish to revoke it? **(If consumer answers "Yes", continue. If consumer answers "No", stop the authorization process).**

Based on the terms and conditions we have discussed, and the disclosures made to you, do you agree to and authorize the payment? **(If consumer answers "Yes", continue. If consumer answers "No", stop the authorization process).**

Determining Whether a Check Has Cleared

You can use the Payment Events Report to keep track of your electronic check debits and identify problems that occur with funds transfers. The report is available daily and includes information from the past 24 hours that the processor has provided about your transactions, such as the clearing of a check or the denial of a check due to insufficient funds. The following table describes the event types that indicate that a check has probably cleared. For a list of all event values, see the description of the Payment Events Report in the [Reporting User Guide](#).



Important

Due to the nature of electronic check processing, CyberSource does not guarantee that a check has truly cleared.

Table 2 Event Types Related to Determining Whether a Check Has Cleared

Processor	Event Type
Chase Paymentech Solutions	The Payment Events Report does not indicate that a check has cleared; it shows only problems that occur with funds transfers. Important If you use Chase Paymentech Solutions, you must contact them and request that they send their electronic check declines file to CyberSource. Then contact CyberSource Sales with your Chase Paymentech Solutions MA number so that your CyberSource account can be configured appropriately.
CyberSource ACH Service	The event type listed in the Payment Events Report is "Payment" when the ODFI receives a debit request. <ul style="list-style-type: none"> ■ <i>Bank of America ACH</i>: to see an event type of "Completed" when the check clears, contact Customer Support to have your account configured. CyberSource does not recommend using this event type because it is not a reliable indication that a check has cleared. ■ <i>Wells Fargo ACH</i>: after receiving the debit request, the ODFI waits for three days, and if the bank does not inform them of any problems with the funds transfer, they consider the check cleared. The event type listed in the report is "Completed" when the check clears. CyberSource does not guarantee that the check has truly cleared.
TeleCheck	The event type listed in the Payment Events Report is "Payment" when a check clears.

Order Tracking

See *Getting Started with CyberSource Essentials* for information about order tracking. This section provides the names of the API fields that are used for order tracking for the electronic check services.

Request IDs

For all CyberSource services, the request ID is returned in the reply messages in **requestID**. The following table lists the field names for the request IDs in request messages.

Table 3 Field Names for Request IDs in Request Messages

Service	Request ID Field
Electronic check credit	ecCreditService_debitRequestID
Electronic check debit	ecDebitService_debitRequestID
Void	voidService_voidRequestID

Reconciliation IDs

The following table lists the field names for the reconciliation IDs, which are returned in the reply messages.

Table 4 Field Names for Reconciliation IDs

Service	Reconciliation ID Field Name
Electronic check debit	ecDebitReply_reconciliationID
Electronic check credit	ecCreditReply_reconciliationID

Check Reference Numbers

The information in this section applies to all processors except Wells Fargo ACH. For information about check reference numbers for Wells Fargo ACH, see "[Transaction Identifiers on Wells Fargo ACH](#)," page 18.

The check reference number is a value you can send in a request to track transactions through to the processor for reconciliation. If you do not include this field in your request, CyberSource generates a unique value for you and returns it in the reply message.

The following table lists the field names for the check reference numbers in request and reply messages.

Table 5 Field Names for Check Reference Numbers

Service	Check Reference Number Field Name in Requests	Check Reference Number Field Name in Replies ¹
Electronic check debit	ecDebitService_referenceNumber	ecDebitReply_reconciliationID
Electronic check credit	ecCreditService_referenceNumber	ecCreditReply_reconciliationID

¹ The reply fields for the check reference numbers are the same as the reconciliation ID fields.

Processor Transaction Identifiers

The information in this section applies to all processors except Wells Fargo ACH. For information about processor transaction identifiers for Wells Fargo ACH, see "[Transaction Identifiers on Wells Fargo ACH](#)," page 18.

The processor transaction identifier is a value assigned by the processor that you can use for reconciliation. The following table lists the field names for the processor transaction identifiers, which are returned in the reply messages.

Table 6 Field Names for Processor Transaction Identifiers

Service	Processor Transaction Identifier Field Name
Electronic check debit ¹	ecDebitReply_processorTransactionID
Electronic check credit ²	ecCreditReply_processorTransactionID

¹ Not supported for Chase Paymentech Solutions.
² Not supported for Chase Paymentech Solutions and TeleCheck.

Transaction Identifiers on Wells Fargo ACH

By default, CyberSource sends CyberSource-generated transaction identifiers to the processor. When Wells Fargo ACH is your processor, you can contact CyberSource Customer Support to have your CyberSource account configured to support merchant-generated transaction identifiers.

Transaction Identifiers and Reply Values for Accounts That Support Merchant-Generated Transaction Identifiers



Note

The information in this section is applicable for your implementation only if Wells Fargo ACH is your processor and only if you contact CyberSource Customer Support to have your CyberSource account configured to support merchant-generated transaction identifiers.

When you include the **ecDebitService_referenceNumber** field in a debit request:

- The transaction identifier sent to the processor is the **ecDebitService_referenceNumber** value that was included in the request.
- Reply field **ecDebitReply_reconciliationID** is the **ecDebitService_referenceNumber** value that was included in the request.
- Reply field **ecDebitReply_processorTransactionID** is the **ecDebitService_referenceNumber** value that was included in the request.

When you include the **ecCreditService_referenceNumber** field in a stand-alone credit or follow-on credit request:

- The transaction identifier sent to the processor is the **ecCreditService_referenceNumber** value that was included in the request.
- Reply field **ecCreditReply_reconciliationID** is the **ecCreditService_referenceNumber** value that was included in the request.
- Reply field **ecCreditReply_processorTransactionID** is the **ecCreditService_referenceNumber** value that was included in the request.

When you do not include the **ecDebitService_referenceNumber** field in a debit request:

- The transaction identifier sent to the processor is a CyberSource-generated value.
- Reply field **ecDebitReply_reconciliationID** is the CyberSource-generated transaction identifier.
- Reply field **ecDebitReply_processorTransactionID** is the CyberSource-generated transaction identifier.

When you do not include the **ecCreditService_referenceNumber** field in a stand-alone credit request:

- The transaction identifier sent to the processor is a CyberSource-generated value.
- Reply field **ecCreditReply_reconciliationID** is the CyberSource-generated transaction identifier.
- Reply field **ecCreditReply_processorTransactionID** is the CyberSource-generated transaction identifier.

When you do not include the **ecCreditService_referenceNumber** field in a follow-on credit request:

- The transaction identifier sent to the processor is the transaction identifier that was used for the corresponding debit transaction.
- Reply field **ecCreditReply_reconciliationID** is the transaction identifier that was used for the corresponding debit transaction.
- Reply field **ecCreditReply_processorTransactionID** is the transaction identifier that was used for the corresponding debit transaction.

For additional information about the preceding fields, see [Appendix A, "API Fields,"](#) on page 47.

Transaction Identifiers and Reply Values for Accounts That Do Not Support Merchant-Generated Transaction Identifiers



Note

The information in this section applies to Wells Fargo ACH only.

When you include the **ecDebitService_referenceNumber** field in a debit request:

- The transaction identifier sent to the processor is a CyberSource-generated value.
- Reply field **ecDebitReply_reconciliationID** is the **ecDebitService_referenceNumber** value that was included in the request.
- Reply field **ecDebitReply_processorTransactionID** is the CyberSource-generated transaction identifier.

When you include the **ecCreditService_referenceNumber** field in a stand-alone credit request:

- The transaction identifier sent to the processor is a CyberSource-generated value.
- Reply field **ecCreditReply_reconciliationID** is the **ecCreditService_referenceNumber** value that was included in the request.
- Reply field **ecCreditReply_processorTransactionID** is the CyberSource-generated transaction identifier.

When you include the **ecCreditService_referenceNumber** field in a follow-on credit request:

- The transaction identifier sent to the processor is the transaction identifier that was used for the corresponding debit transaction.
- Reply field **ecCreditReply_reconciliationID** is the transaction identifier that was used for the corresponding debit transaction.
- Reply field **ecCreditReply_processorTransactionID** is the transaction identifier that was used for the corresponding debit transaction.

When you do not include the **ecDebitService_referenceNumber** field in a debit request:

- The transaction identifier sent to the processor is a CyberSource-generated value.
- Reply field **ecDebitReply_reconciliationID** is a CyberSource-generated value that is not the same as the transaction identifier.
- Reply field **ecDebitReply_processorTransactionID** is the CyberSource-generated transaction identifier.

When you do not include the **ecCreditService_referenceNumber** field in a stand-alone credit or follow-on credit request:

- The transaction identifier sent to the processor is a CyberSource-generated value.
- Reply field **ecCreditReply_reconciliationID** is a CyberSource-generated value that is not the same as the transaction identifier.
- Reply field **ecCreditReply_processorTransactionID** is the CyberSource-generated transaction identifier.

For additional information about the preceding fields, see [Appendix A, "API Fields," on page 47](#).

Electronic Check Processing

Electronic Check Debits

Requesting a Debit

To request an electronic check debit, set the **ecDebitService_run** field to `true`. When you request a debit, do not request any of the following services at the same time:

- Any credit card services: **ccAuthService**, **ccAuthReversalService**, **ccCaptureService**, **ccCreditService**. For information about these services, see [Credit Card Services User Guide](#).
- Electronic check credit: **ecCreditService**. For information about this service, see "Electronic Check Credits," page 28.
- PayPal payment or credit: **paypalPaymentService**, **paypalCreditService**. For information about these services, see the [PayPal Services User Guide](#).

Handling Customer Account Information

Merchant-Provided Data

Service:

- Debit

Processors:

- Chase Paymentech Solutions
- CyberSource ACH Service
- RBS WorldPay Atlanta
- TeleCheck

Merchant-provided data handling requires you to collect the customer's account information and provide it in your service request. The required fields are:

- check_accountNumber
- check_accountType
- check_bankTransitNumber

You must modify your web site to collect the account information. Retain the account information for future transactions, such as credits.

Customers might not know how to use their printed checks to find the bank routing number and the bank account number. Consider using a graphic like this on your web site:

Example 4 Check Showing Routing Number and Account Number

The diagram shows a check form with the following fields and labels:

- NAME** (with sub-fields ADDRESS and CITY, STATE ZIP)
- 0123** (top right)
- 01-23456789** (top right)
- DATE** (with a line for input)
- PAY TO THE ORDER OF** (with a line for input)
- \$** (with a box for amount)
- DOLLARS** (with a line for input)
- BANK NAME** (with sub-fields ADDRESS and CITY, STATE ZIP)
- FOR** (with a line for input)
- 01 234 5678 90 1234 5678 90 1234** (MICR line)
- 01 234** (MICR line)
- Routing Number** (label pointing to the first three digits of the MICR line)
- Account Number** (label pointing to the next eight digits of the MICR line)

The following events occur when you request a debit:

- 1 Your customer places an order.
- 2 You request an electronic check debit.
- 3 In your request, you provide the customer's account information.
- 4 CyberSource sends the customer's account information and other information about the transaction to the check processor.
- 5 The payment processor validates the information and performs basic fraud screening. The processor does not contact the customer's bank to verify the existence of the customer's account; it makes sure that only the information provided by the customer is reasonable and that the account is not a known source of fraud. Depending on which processor you use, if there are problems with the account that prevent the transaction from being completed, the processor might charge you a returned check fee.
- 6 The payment processor sends a reply to CyberSource indicating whether or not the debit will be processed.
- 7 CyberSource sends a reply to you.

- 8 You display an appropriate message to your customer.
- 9 The processor sends the request for clearing.

Notifications of Change (NOCs)

Services:

- Credit
- Debit

Processors:

- CyberSource ACH Service
- RBS WorldPay Atlanta

A Notification of Change (NOC) is a notice from a customer's bank indicating that an electronic check transaction included incorrect customer or payment information. The customer's bank:

- 1 Corrects the information.
- 2 Posts the transaction to the customer's bank account.
- 3 Notifies you that payment information needs to be updated.

Each NOC includes a code that specifies what needs to be changed. You are responsible for taking the appropriate action when you receive a NOC.

You must correct all applicable records before submitting additional electronic check transactions for the customer. If you are using Payment Tokenization or Recurring Billing, you must update the information in your subscriptions or customer profiles.



Note

CyberSource maintains a database of all NOC entries. Repeated attempts to resubmit an uncorrected transaction could result in a fine and possible sanctions from the National Automated Clearing House Association (NACHA).

To get information about the NOCs for your transactions:

- Step 1** Create a PGP key pair as described in [Creating and Using Security Keys](#).
- Step 2** Log in to the Business Center and view the NOC Report, which is listed under Reports.

You can also talk to your bank about getting a report that includes NOCs. NOC codes are described in [Appendix E, "NOC Codes," on page 74](#).

Verification and Validation



Important

Even if an account passes validation and verification tests, the transaction can be rejected at the time of settlement. The bank from which the check is drawn does not participate in the verification or validation process. Therefore, an account can pass the verification and validation tests and the transaction can still be rejected if there are not sufficient funds in the account or if the bank account number is invalid.

The following table indicates the types of verification and validation supported for each processor.

Table 7 Types of Verification and Validation

Payment Processor	Validation	ACH Verification	Guarantees	Paymentech Verification
Chase Paymentech Solutions	Yes	No	No	Yes
CyberSource ACH Services	No	Yes	No	No
TeleCheck	Yes	No	Yes	No
RBS	No	Yes	No	No

Validation

Service:

- Debit

Processors:

- Chase Paymentech Solutions
- TeleCheck



Note

For the CyberSource ACH Service, validation is included in the ACH verification functionality, which happens automatically when you call the debit or credit services.

Chase Paymentech Solutions and TeleCheck



Important

For the TeleCheck service, contact CyberSource Customer Support for information about validation.

Validation consists of format tests, bank routing number tests, and a comparison with the check processing partner's internal negative file. Set **ecDebitService_verificationLevel** to 1 to request validation with your debit request.

ACH Verification

Services:

- Credit
- Debit

Processors:

- CyberSource ACH Service
- RBS WorldPay Atlanta

ACH verification is performed automatically for all debit and credit requests for the CyberSource ACH Service and RBS WorldPay Atlanta. ACH verification:

- 1 Validates the format and structure of the customer's bank account number. If the account number needs to be corrected, and if a corrected account number is available, CyberSource returns the corrected account number to you in one of these fields:
 - ecDebitReply_correctedAccountNumber
 - ecCreditReply_correctedAccountNumber
- 2 Verifies that the customer's routing number is a valid routing number and valid for electronic transactions. If the routing number needs to be corrected, and if a corrected routing number is available, CyberSource returns the corrected routing number to you in one of these fields:
 - ecDebitReply_correctedRoutingNumber
 - ecCreditReply_correctedRoutingNumber



Note

If a corrected account number or corrected routing number is returned to you, you can use the value to update the information in your system. You do not need to update the information for the current transaction because CyberSource already updated the information before sending the transaction request to your bank.

3 Returns verification codes to you whether or not the account number or routing number was corrected. These verification codes indicate the results of the ACH verification. One of these verification codes is a mapped value and is returned in one of these fields:

- ecDebitReply_verificationCode
- ecCreditReply_verificationCode

The other verification code is a raw value and is returned in one of these fields:

- ecDebitReply_verificationCodeRaw
- ecCreditReply_verificationCodeRaw

The verification codes have enumerated values that are described in [Table 12, "Reply Fields,"](#) on page 61.

Guarantees

Service:

- Debit

Processor:

- TeleCheck



Note

Contact TeleCheck for information about check guarantees.

Paymentech Verification

Service:

- Debit

Processor:

- Chase Paymentech Solutions



Important

If you use the Paymentech verification feature, the Fair Credit Reporting Act (FCRA) requires that you notify your customer when an electronic check transaction is declined as a result of the verification process.

Paymentech verification compares the transaction information with an external negative file to identify accounts that have a history of bad checks or that were closed for cause. Paymentech verification is available only for transactions in U.S. dollars. Set **ecDebitService_verificationLevel** to 2 to request Paymentech verification with your debit request.

Optional Features for Debits

For information about optional features such as subscriptions and deferred payments, see "Optional Features," page 36.

Debit Request Fields

For detailed descriptions of these fields, see "Request Fields," page 48.



Note

On TeleCheck, request field values must not contain ampersands (&).

- billTo_city
- billTo_company
- billTo_companyTaxID
- billTo_country
- billTo_driversLicenseNumber
- billTo_driversLicenseState
- billTo_email
- billTo_firstName
- billTo_ipAddress
- billTo_lastName
- billTo_phoneNumber
- billTo_postalCode
- billTo_state
- billTo_street1
- billTo_street2
- check_accountEncoderID
- check_accountNumber
- check_accountType
- check_bankTransitNumber
- check_checkNumber
- check_secCode
- ecDebitService_commerceIndicator
- ecDebitService_debitRequestID
- ecDebitService_paymentInfo
- ecDebitService_paymentMode
- ecDebitService_referenceNumber

- `ecDebitService_run`
- `ecDebitService_settlementMethod`
- `ecDebitService_verificationLevel`
- `invoiceHeader_merchantDescriptor`
- `item_#_productCode`
- `item_#_productName`
- `item_#_productSKU`
- `item_#_quantity`
- `item_#_taxAmount`
- `item_#_unitPrice`
- `linkToRequest`
- `merchantID`
- `merchantReferenceCode`
- `purchaseTotals_currency`
- `purchaseTotals_grandTotalAmount`
- `recurringSubscriptionInfo_subscriptionID`

Electronic Check Credits

Requesting a Credit

To request an electronic check credit, set the `ecCreditService_run` field to `true`. When you request a credit, do not request any of the following services at the same time:

- Any credit card services: **`ccAuthService`**, **`ccAuthReversalService`**, **`ccCaptureService`**, **`ccCreditService`**. For information about these services, see [Credit Card Services User Guide](#).
- Electronic check debit: **`ecDebitService`**. For information about this service, see ["Electronic Check Debits," page 21](#).
- PayPal payment or credit: **`paypalPaymentService`**, **`paypalCreditService`**. For information about these services, see the [PayPal Services User Guide](#).

Follow-On Credits and Stand-Alone Credits

There are two kinds of credits:

- Follow-on—all processors support this feature. Send the credit request with the request ID from the debit reply. CyberSource uses this value to retrieve all customer billing and account information that you sent with the debit so that you do not have to send it again with the credit.
- Stand-alone—all processors except TeleCheck support this feature. You need to include all customer billing and account information because CyberSource does not retrieve anything from the database.



Important

CyberSource stores the debit information for 60 days, so you must process follow-on credits within 60 days of the debit request. If the 60 days have passed or if you are not sure if the 60 days have passed, use a stand-alone credit and provide all customer billing and account information.

Deciding Which Kind of Credit to Request

- All processors except TeleCheck: if you are sending the credit request within 60 days of the debit request, send a follow-on credit so that you are not required to provide all customer information. If you are sending the credit request more than 60 days after the debit request, send a stand-alone credit.
- TeleCheck: you must send the credit request within 60 days of the debit request. The credit request must be a follow-on credit, which means you do not need to provide all customer information. CyberSource retrieves all required information from the database, including the identifier that the processor uses to link the credit to the debit. By linking the credit to the debit, the processor can prohibit a credit amount that exceeds the debit amount.

Follow-On Credits

A follow-on credit uses the request ID from a previous **ecDebitService** request to link the credit to the debit. Send the request ID value in the **ecCreditService_debitRequestID** field. CyberSource uses this value to look up the customer's billing and account information from the original debit; you are not required to include this field in the **ecCreditService** request.



Note

A follow-on credit must be for a debit request that included a payment; **ecDebitService_paymentMode=0** or **2**. A follow-on credit cannot be for a debit request in which **ecDebitService_paymentMode=1**.

**Important**

If you combine a request for a follow-on credit with a request for another service, you must provide the customer's billing and account information.

Stand-Alone Credits

A stand-alone credit does not link the credit to a previous debit request. Do not send the **ecCreditService_debitRequestID** field in the credit request; the request must include the fields for the customer's billing and account information.

ACH Verification

Services:

- Credit
- Debit

Processors:

- CyberSource ACH Service
- RBS WorldPay Atlanta

ACH verification is performed automatically for all debit and credit requests for the CyberSource ACH Service and RBS WorldPay Atlanta. ACH verification:

- 1 Validates the format and structure of the customer's bank account number. If the account number needs to be corrected, and if a corrected account number is available, CyberSource returns the corrected account number to you in one of these fields:
 - ecDebitReply_correctedAccountNumber
 - ecCreditReply_correctedAccountNumber
- 2 Verifies that the customer's routing number is a valid routing number and valid for electronic transactions. If the routing number needs to be corrected, and if a corrected routing number is available, CyberSource returns the corrected routing number to you in one of these fields:
 - ecDebitReply_correctedRoutingNumber
 - ecCreditReply_correctedRoutingNumber

**Note**

If a corrected account number or corrected routing number is returned to you, you can use the value to update the information in your system. You do not need to update the information for the current transaction because CyberSource already updated the information before sending the transaction request to your bank.

3 Returns verification codes to you whether or not the account number or routing number was corrected. These verification codes indicate the results of the ACH verification. One of these verification codes is a mapped value and is returned in one of these fields:

- ecDebitReply_verificationCode
- ecCreditReply_verificationCode

The other verification code is a raw value and is returned in one of these fields:

- ecDebitReply_verificationCodeRaw
- ecCreditReply_verificationCodeRaw

The verification codes have enumerated values that are described in [Table 12, "Reply Fields,"](#) on page 61.

Notifications of Change (NOCs)

Services:

- Credit
- Debit

Processors:

- CyberSource ACH Service
- RBS WorldPay Atlanta

A Notification of Change (NOC) is a notice from a customer's bank indicating that an electronic check transaction included incorrect customer or payment information. The customer's bank:

- 1** Corrects the information.
- 2** Posts the transaction to the customer's bank account.
- 3** Notifies you that payment information needs to be updated.

Each NOC includes a code that specifies what needs to be changed. You are responsible for taking the appropriate action when you receive a NOC.

You must correct all applicable records before submitting additional electronic check transactions for the customer. If you are using Payment Tokenization or Recurring Billing, you must update the information in your subscriptions or customer profiles.



Note

CyberSource maintains a database of all NOC entries. Repeated attempts to resubmit an uncorrected transaction could result in a fine and possible sanctions from the National Automated Clearing House Association (NACHA).

To get information about NOCs for your transactions:

- Step 1** Create a PGP key pair as described in [Creating and Using Security Keys](#).
- Step 2** Log in to the Business Center and view the NOC Report, which is listed under Reports.

You can also talk to your bank about getting a report that includes NOCs. NOC codes are described in [Appendix E, "NOC Codes,"](#) on page 74.

Optional Features for Credits

For information about optional features such as merchant descriptors and multiple partial credits, see [Chapter 3, "Optional Features,"](#) on page 36.

Credit Request Fields

The fields listed below are used to request an electronic check credit. For detailed descriptions of these fields, see ["Request Fields,"](#) page 48.



Note

On TeleCheck, request field values must not contain ampersands (&).

- billTo_city
- billTo_country
- billTo_dateOfBirth
- billTo_email
- billTo_firstName
- billTo_ipAddress
- billTo_lastName
- billTo_phoneNumber
- billTo_postalCode
- billTo_state
- billTo_street1
- billTo_street2
- check_accountNumber
- check_accountType
- check_bankTransitNumber
- check_checkNumber

- check_paymentInfo
- check_secCode
- ecCreditService_commerceIndicator
- ecCreditService_debitRequestID
- ecCreditService_partialPaymentID
- ecCreditService_referenceNumber
- ecCreditService_run
- ecCreditService_settlementMethod
- ecDebitService_debitRequestID
- ecDebitService_partialPaymentID
- invoiceHeader_merchantDescriptor
- item_#_productCode
- item_#_productName
- item_#_productSKU
- item_#_quantity
- item_#_taxAmount
- item_#_unitPrice
- merchantID
- merchantReferenceCode
- purchaseTotals_currency
- purchaseTotals_grandTotalAmount
- recurringSubscriptionInfo_subscriptionID

Authentication

Processor:

- RBS WorldPay Atlanta

The authentication service is an optional service you can request for RBS WorldPay Atlanta.

To request an electronic check authentication, set the **ecAuthenticateService_run** field to `true`. The following fields are required when requesting this service:

- `billTo_city`
- `billTo_country`
- `billTo_firstName`
- `billTo_lastName`
- `billTo_postalCode`—5 digits
- `billTo_state`
- `billTo_street1`
- `ecAuthenticateService_run`
- `merchantID`
- `merchantReferenceCode`

For more information about these fields, see ["API Fields," page 47](#).

The authentication service:

- Validates customer information such as name, address, and date of birth and returns information to you in the **ecAuthenticateReply_checkpointSummary** field.
- Provides you with consumer fraud information to help protect you against fraudulent transactions. Information is returned to you in the **ecAuthenticateReply_fraudShieldIndicators** field.

For more information, see:

- [Appendix F, "Check Point Summary Codes," on page 76](#)
- [Appendix G, "Fraud Shield Indicator Codes," on page 86](#)

Voids

A void cancels an electronic check debit or credit request that you have submitted to CyberSource. A transaction can be voided only if CyberSource has not already submitted the debit or credit information to your processor. CyberSource usually submits transaction information to your processor each day, so the period for successfully performing a void is relatively short. CyberSource declines your void request if the debit or credit information was already sent to the processor. You cannot undo a void, and you cannot perform a follow-on credit for a debit that has been voided.

Requesting a Void

To request a void for an electronic check debit or credit, set the **voidService_run** field to `true`. When you request a void, do not request any other services at the same time.

A void is a follow-on transaction that uses the request ID returned from a previous **ecDebitService** or **ecCreditService** request to link the void to the debit or credit. Send the request ID value in the **voidService_voidRequestID** field. CyberSource uses this value to look up the customer's billing and account information from the original debit or credit, which means that you are not required to include this field in the **voidService** request.

The fields listed below are used to request a void. For detailed descriptions of these fields, see ["Request Fields," page 48](#).

- merchantID
- merchantReferenceCode
- voidService_run
- voidService_voidRequestID

Optional Features

Corporate Checks

Set **check_accountType** to **x** to indicate that the check is a corporate check.

Service:

- Debit

Processors:

- Chase Paymentech Solutions
- CyberSource ACH Service
- RBS WorldPay Atlanta
- TeleCheck

To process corporate checks with TeleCheck, include one of these fields in your debit request:

- **billTo_driversLicenseNumber** and **billTo_driversLicenseState**
- **billTo_companyTaxID**

Deferred and Partial Payments

Services:

- Debit
- Credit

Processors:

- Chase Paymentech Solutions—debit only.
- TeleCheck

Definitions:

- *Deferred payment*—if there is a delay between the time you take the order and the time you ship the product, you need to defer your payment request.

- *Partial payment*—if a customer orders multiple products but you ship them separately on different dates, you need to perform multiple partial payments as you ship the products.

Chase Paymentech Solutions

To request a deferred or partial payment:

- Step 1** For the first debit request, set **ecDebitService_paymentMode** to 1 to indicate that the debit uses deferred payment and full payment. If you do not, partial payments will occur later. The default value of 0 indicates a normal debit with immediate payment.
- Step 2** When you are ready to process a payment, whether it is for the full amount or a partial amount, send another debit request with **ecDebitService_paymentMode** set to 2 to indicate that you are triggering a payment.
- Step 3** Repeat Step 2 for each partial payment for the order.
-

TeleCheck

To request a deferred or partial payment:

- Step 1** For the first debit request, set the value of the **ecDebitService_paymentMode** field to 1 to indicate that the debit uses deferred payment and full payment. If you do not, partial payments will occur later. The default value of 0 indicates a normal debit with immediate payment. Including the **ecDebitService_referenceNumber** field in the request is optional.
- Step 2** When you are ready to process a payment, whether it is for the full amount or a partial amount, send another debit request and do the following:
- Set the value of the **ecDebitService_paymentMode** field to 2 to indicate that you are triggering a payment.
 - Set the value of the **ecDebitService_debitRequestID** field to the same value as the **ecDebitService_debitRequestID** field that you received from the original debit request in Step 1.
- Step 3** Repeat Step 2 for each partial payment for the order.
- Step 4** For a credit request, set the value of the **ecCreditService_debitRequestID** field to the value contained in the **ecDebitService_debitRequestID** field that you received from the debit request in Step 2. This value is used to complete the follow-on capture of the initial request.
-

Merchant Descriptors

Services:

- Debit
- Credit

Processor:

- Chase Paymentech Solutions
- CyberSource ACH Service
- RBS WorldPay Atlanta

You can provide a merchant descriptor that will be displayed on the customer's bank account statement. The descriptor includes your company's name and a description of the product or service that was purchased.

The merchant descriptor field overrides the corresponding value in your CyberSource account. If you do not include this field in the request, CyberSource uses the company name from your merchant account.

Before sending a merchant descriptor with a debit or credit request, check with your processor to find out if you need to register your merchant descriptor information with them.

The **invoiceHeader_merchantDescriptor** field requires a particular format:

- Characters 1-15: name of your company. If the name is fewer than 15 characters, use spaces to fill in the full 15 characters. If the name is more than 15 characters, provide only the first 15 characters of the name.
- Characters 16-25: description of the product or service.

**Note**

If you use more than one consecutive space, extra spaces will be removed.

Multiple Partial Credits

Service:

- Credit

Processors:

- RBS WorldPay Atlanta
- TeleCheck

When you perform multiple partial credits:

- The amount of each individual credit cannot exceed the debit amount.
- The total amount of all the credits cannot exceed the debit amount.

In your follow-on credit request, use the ID returned in the **ecDebitService_debitRequestID** field. Do not use the **ecCreditService_debitRequestID** from a previous partial credit. For each partial credit, set the **ecCreditService_partialPaymentID** field to a value of your choice that is unique within the scope of the order. The processor uses the payment IDs to identify the credits that are related to an order.

If you performed partial payments for this order, you specified a unique value for the **ecDebitService_partialPaymentID** field for each payment. You cannot reuse any of those values for the order's partial credits. For example, if you used 1 and 2 for the partial payments, you must use different values, such as 3 and 4, for the partial credits.

Non-Sufficient Funds (NSF) Service

Service:

- Debit

Processor:

- CyberSource ACH Service

A non-sufficient funds (NSF) return occurs when the customer's bank account does not have sufficient funds to cover a specific electronic check transaction. CyberSource does not automatically resubmit charges returned from a customer's bank due to NSF. You can resubmit transactions returned as NSF one or two additional times for a total of three submissions. Continued attempts after this point may result in a fine and possible sanctions from the National Automated Clearing House Association (NACHA).

Contact your ODFI to enable the NSF service at your bank.

Payment Tokenization

Services:

- Debit
- Credit

Processors:

- Chase Paymentech Solutions
- CyberSource ACH Service
- RBS WorldPay Atlanta
- TeleCheck

If you are using Payment Tokenization, you can process a debit or credit by using information that is stored in a customer profile. CyberSource uses the subscription ID to reference the customer profile information in the CyberSource database. Instead of providing all the information that is normally required for a transaction, you need to provide only the following values:

- Merchant ID
- Merchant reference code
- Amount of the payment or credit
- Subscription ID

You can override most of the information stored in the customer profile by including the relevant API fields in the debit or credit request. For example, you could provide a different billing or shipping address in the request. You cannot override the account number.

For complete information about Payment Tokenization, see [Payment Tokenization Using the Simple Order API for CyberSource Essentials](#).

Recurring Billing

Services:

- Debit
- Credit

Processors:

- Chase Paymentech Solutions
- CyberSource ACH Service
 - Recurring debits and credits for telephone-initiated orders are supported. The **check_secCode** must be TEL.
- RBS WorldPay Atlanta
- TeleCheck

If you are using Recurring Billing, you can process a debit or credit by using information that is stored in a subscription. CyberSource uses the subscription ID to reference the subscription information in the CyberSource database. Instead of providing all the information that is normally required for a transaction, you need to provide only the following values:

- Merchant ID
- Merchant reference code
- Amount of the payment or credit
- Subscription ID

You can override most of the information stored in the subscription by including the relevant API fields in the debit or credit request. For example, you could provide a different billing or shipping address in the request. You cannot override the account number.

For complete information about Recurring Billing, see [Recurring Billing Using the Simple Order API for CyberSource Essentials](#).

Settlement Delivery Methods

Services:

- Debit
- Credit

Processor:

- Chase Paymentech Solutions

You must specify a default method for delivering settlements to and receiving them from the customer's bank. For debits, you can use the **ecDebitService_settlementMethod** field to override the default method for a single transaction. For credits, you can use the **ecCreditService_settlementMethod** field to override the default method for a single transaction.

The following delivery methods are available:

- Automated Clearing House (ACH) for U.S. accounts or the Canadian Payment Association (CPA) for Canadian accounts:
The transaction is deposited through the ACH or CPA. If the check fails the validation or verification process, the transaction is rejected.
- Facsimile draft:
The transaction is deposited as a facsimile draft. Available only for transactions in U.S. dollars. Use this method when the issuing bank is not an ACH member.
- Best possible:
The transaction is deposited through the ACH system unless the customer's bank is not an ACH participant, in which case, a facsimile draft is created and deposited on your behalf. Available only for transactions in U.S. dollars.

Testing Electronic Check Services

Requirements for Testing



Before you can test, you must contact Sales to activate Electronic Check Services and configure your account for electronic check testing. You must also contact your processor to set up your processor account.

- Use your regular merchant ID to perform testing.
- Use the test server `ics2wstesta.ic3.com`.
- Use a real city and state, as well as the correct postal code for that city and state.
- Use a real combination for the area code and telephone number.
- Use a non-existent account and domain name for the customer's email address. For example: `random@example.com`.

Testing Chase Paymentech Solutions Transactions

Successful Transactions

Use the data in the following table to simulate successful debits and credits for Chase Paymentech Solutions.

Table 8 Test Data for Chase Paymentech Solutions Debits and Credits

Field	Test Values	Required / Optional
check_accountNumber	For transactions in U.S. dollars: <ul style="list-style-type: none"> ■ 4100 ■ 4101 ■ 4102 ■ 4103 	Required
check_accountType	For transactions in U.S. dollars: <ul style="list-style-type: none"> ■ C ■ S ■ X 	Required
check_bankTransitNumber	For transactions in U.S. dollars: <ul style="list-style-type: none"> ■ 121042882 ■ 121107882 ■ 071923284 ■ 122101191 	Required
ecDebitService_settlementMethod	For transactions in U.S. dollars: <ul style="list-style-type: none"> ■ A ■ B ■ F 	Optional
ecDebitService_verificationLevel	For transactions in U.S. dollars: <ul style="list-style-type: none"> ■ 1 ■ 2 	Optional

Testing Chase Paymentech Solutions Declines

For Chase Paymentech Solutions, you can simulate electronic check declines using specific bank account numbers for debits. For a list of these values and the expected results, see [Using the Test Simulator](#).

Testing CyberSource ACH Service Transactions

Use the data in the following table to simulate ACH verification by requesting a debit for the CyberSource ACH Service. As an alternative, you can simulate ACH verification by requesting a credit: the reply fields will be for the credit service instead of the debit service.

Table 9 ACH Verification Test Data

Type of Field	Triggers		Reply Fields			
	Account Number	Routing Number	Mapped ACH Verification Code	Raw ACH Verification Code	Corrected Account Number	Corrected Routing Number
Field Name	check_account Number	check_bankTransit Number	ecDebitReply_verification Code	ecDebitReply_verification CodeRaw	ecDebitReply_corrected Account Number	ecDebitReply_corrected Routing Number
	12345678	112200439	00	1	—	—
	00111111111111	011000028	01	2	00111111	—
	1231231230	231385154	00	3	—	—
	123123123	231385154	00	4	—	—
	00111111	011201762	02	5	—	011201830
	001234567895	011400039	03	6	1234567895	011401533
	01111111	011301073	02	7	—	211070175
	1231231230	011001742	02	8	—	011000138
	1231231230	231382704	04	9 ¹	—	—
	12345678	115101438	04	10 ¹	—	—

¹ See the following table for the reply values for this error.

Table 10 ACH Verification Error Reply Values

Raw ACH Verification Code	Error Reply Values
9	decision=REJECT reasonCode=388
10	decision=REJECT reasonCode=388

Testing RBS WorldPay Atlanta

See *Using the Test Simulator*.

Testing TeleCheck

See *Using the Test Simulator*.

Going Live

You must go live with CyberSource before you start submitting production transactions. When you go live, your account is updated so that you can send transactions to the CyberSource production server. If you have not already done so, provide your banking information to CyberSource so that your processor can deposit funds to your merchant bank account. For information about going live, see [Getting Started with CyberSource Essentials](#).

API Fields

Formatting Restrictions

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

**Note**

The values of the **item_#_** fields must not contain carets (^) or colons (:) because these characters are reserved for use by the CyberSource services.

Values for request-level and item-level fields must not contain new lines or carriage returns. However, they can contain embedded spaces and any other printable characters. CyberSource removes all leading and trailing spaces.

TeleCheck

Request fields must not contain ampersands (&).

Data Type Definitions

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

Data Type	Description
Integer	Whole number {..., -3, -2, -1, 0, 1, 2, 3, ...}
String	Sequence of letters, numbers, spaces, and special characters

Request Fields



Note

If you are using Payment Tokenization or Recurring Billing and you include a subscription ID in your request, many of the fields in the following table that are normally required for a debit or credit become optional. See "[Payment Tokenization](#)," page 40, and "[Recurring Billing](#)," page 41.

Table 11 Request Fields

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
billTo_city	City in the billing address.	ecAuthenticateService (R) ecCreditService (R) ¹ ecDebitService (R)	TeleCheck: String (30) All other processors: String (50)
billTo_company	Name of the customer's company.	ecDebitService (Optional for TeleCheck and Wells Fargo ACH. Not used for any other processor.)	TeleCheck: String (60) Wells Fargo ACH: String (40)
billTo_companyTaxID	Company's tax identifier. TeleCheck Contact your TeleCheck representative to find out whether this field is required or optional. All Other Processors Not used.	ecDebitService (See the field description.)	String with numbers only (9)
billTo_country	Country in the billing address. Use the two-character ISO Standard Country Codes .	ecAuthenticateService (R) ecCreditService (R) ¹ ecDebitService (R)	String (2)
billTo_dateOfBirth	Date of birth of the customer. Format: YYYY-MM-DD or YYYYMMDD	ecAuthenticateService (Optional for RBS WorldPay Atlanta. Not used by any other processor.)	String (10)

¹ Required for RBS WorldPay Atlanta for both stand-alone and follow-on credits. Required only for stand-alone credits for all other processors.

Table 11 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
billTo_ driversLicenseNumber	<p>Driver's license number of the customer.</p> <p>TeleCheck Contact your TeleCheck representative to find out whether this field is required or optional.</p> <p>If you include this field in your request, you must also include billTo_driversLicenseState.</p> <p>All Other Processors Not used.</p>	ecDebitService (See the field description.)	String (30)
billTo_ driversLicenseState	<p>State or province where the customer's driver's license was issued. Use the two-character State, Province, and Territory Codes for the United States and Canada.</p> <p>TeleCheck Contact your TeleCheck representative to find out whether this field is required or optional.</p> <p>All Other Processors Not used.</p>	ecDebitService (See the field description.)	String (2)
billTo_email	<p>Customer's email address, including the full domain name.</p> <p>Format: name@host.domain</p>	ecCreditService (R) ¹ ecDebitService (R)	String (255)
billTo_firstName	<p>Customer's first name. If the first name is unavailable or inapplicable, such as for a corporate account, enter a dummy value such as NA.</p>	ecAuthenticateService (R) ecCreditService (R) ¹ ecDebitService (R)	TeleCheck: String (50) All other processors: String (60)
billTo_ipAddress	<p>IP address for the customer. Example: 10 . 1 . 27 . 63.</p> <p>For debits:</p> <p>Chase Paymentech Solutions Optional.</p> <p>TeleCheck It is recommended that you use this field if check_secCode is WEB.</p> <p>All Other Processors Not used.</p>	ecCreditService (O) ecDebitService (See the field description.)	String (15)

¹ Required for RBS WorldPay Atlanta for both stand-alone and follow-on credits. Required only for stand-alone credits for all other processors.

Table 11 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
billTo_lastName	Customer's last name. If the transaction is for a corporate account, use this field for the company name.	ecAuthenticateService (R) ecCreditService (R) ¹ ecDebitService (R)	TeleCheck: String (50) All other processors: String (60)
billTo_phoneNumber	Customer's phone number. Format for TeleCheck: NNNNNNNNNN	ecCreditService (Required for RBS WorldPay Atlanta. Optional for all other processors.) ecDebitService (Required for CyberSource ACH Service and TeleCheck. Not used by any other processor.)	TeleCheck: String (10) All other processors: String (15)
billTo_postalCode	Postal code for the billing address. The postal code must consist of 5 to 9 digits. If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] Example: 12345-6789 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] Example: 12345-6789 When the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space] [numeric][alpha][numeric] Example: A1B 2C3	ecAuthenticateService (R) ecCreditService (R) ¹ ecDebitService (R)	RBS WorldPay Atlanta: String (5) All other processors: String (10)
billTo_state	State in the billing address. Use the two-character <i>State, Province, and Territory Codes for the United States and Canada</i> .	ecAuthenticateService (R) ecCreditService (R) ¹ ecDebitService (R)	String (2)

¹ Required for RBS WorldPay Atlanta for both stand-alone and follow-on credits. Required only for stand-alone credits for all other processors.

Table 11 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
billTo_street1	First line of the billing street address.	ecAuthenticateService (R) ecCreditService (R) ¹ ecDebitService (R)	TeleCheck: String (50) All other processors: String (60)
billTo_street2	Second line of the billing street address. Used for additional address information. Example: Attention: Accounts Payable	ecCreditService (For RBS WorldPay Atlanta: required for stand-alone credits, optional for follow-on credits. Optional for all other processors.) ecDebitService (Not used by RBS WorldPay Atlanta. Optional for all other processors.)	TeleCheck: String (50) All other processors: String (60)
businessRules_declineAVSFlags	List of AVS flags that cause the request to be declined for AVS reasons. Use a space to separate the flags in the list. Important Make sure that you include the value N in the list if you want to receive declines for the AVS code N.	ecDebitService (Optional for Chase Paymentech Solutions. Not used for any other processor.)	String (255)
check_accountNumber	Account number.	ecCreditService (R) ¹ ecDebitService (R)	String with numbers only (17)
check_accountType	Account type. Possible values: <ul style="list-style-type: none"> ■ C: Checking. ■ G: General ledger. This value is supported only on Wells Fargo ACH. ■ S: Savings (U.S. dollars only). ■ X: Corporate checking (U.S. dollars only). 	ecCreditService (R) ¹ ecDebitService (R)	String (1)
check_authenticateID	Authentication ID of the check. If this field is submitted, the value must be numeric or an error is returned.	ecDebitService (Optional for RBS WorldPay Atlanta. Not used for any other processors.)	String (32)
check_bankTransitNumber	Bank routing number. This is also called the <i>transit number</i> .	ecCreditService (R) ¹ ecDebitService (R)	String with numbers only (9)

¹ Required for RBS WorldPay Atlanta for both stand-alone and follow-on credits. Required only for stand-alone credits for all other processors.

Table 11 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
check_checkNumber	Check number. Chase Paymentech Solutions Optional. CyberSource ACH Service Not used. RBS WorldPay Atlanta Optional on debits. Required on credits. TeleCheck Strongly recommended on debit requests. Optional on credits.	ecCreditService (See the field description.) ecDebitService (See the field description.)	String with numbers only (8)
check_imageReference Number	Image reference number associated with the check. You cannot include any special characters.	Used only by Paymentech for ARC and POP SEC codes.	String (32)
check_paymentInfo	Additional payment information on the customer's statement.	ecCreditService (Required for RBS WorldPay Atlanta. Not used for any other processors.)	String (80)
check_secCode	Authorization method used for the transaction. See " SEC Codes ," page 89. TeleCheck Accepts only the following values: <ul style="list-style-type: none"> ■ PPD ■ TEL ■ WEB 	ecCreditService ecDebitService Required for TeleCheck and RBS WorldPay Atlanta. Optional for all other processors.	String (3)
check_terminalCity	City in which the terminal is located. If more than four alphanumeric characters are submitted, the transaction will be declined. You cannot include any special characters.	ecCreditService ecDebitService Optional but strongly recommended if your processor is Paymentech and you include check_secCode with a value of POP.	String (4)
1 Required for RBS WorldPay Atlanta for both stand-alone and follow-on credits. Required only for stand-alone credits for all other processors.			

Table 11 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
check_terminalState	State in which the terminal is located. If more than two alphanumeric characters are submitted, the transaction will be declined. You cannot include any special characters.	ecCreditService ecDebitService Optional but strongly recommended if your processor is Paymentech and you include check_secCode with a value of POP.	String (2)
ecAuthenticateService_run	Set this field to <code>true</code> to include ecAuthenticateService in your request.	ecAuthenticateService (R)	String (5)
ecAuthenticateService_referenceNumber	Merchant-generated order number or transaction identifier.	ecAuthenticateService (Optional for RBS WorldPay Atlanta. Not used by any other processor.)	String (100)
ecCreditService_commerceIndicator	Type of transaction. Possible values: <ul style="list-style-type: none"> ■ <code>internet</code> (default): e-commerce order placed using a Web site. ■ <code>moto</code>: Mail order or telephone order. ■ <code>recurring</code>: Recurring transaction. <p>Chase Paymentech Solutions Not used.</p> <p>CyberSource ACH Services Optional.</p> <p>RBS WorldPay Atlanta Required for stand-alone credits. Optional for follow-on credits.</p> <p>TeleCheck Optional.</p>	ecCreditService (See the field description.)	String (13)
ecCreditService_debitRequestID	The request ID for the debit that is being credited. Used only for multiple partial credits. See " Follow-On Credits and Stand-Alone Credits ," page 29.	ecCreditService (Required for follow-on credits. Not used for stand-alone credits.)	String (26)
1 Required for RBS WorldPay Atlanta for both stand-alone and follow-on credits. Required only for stand-alone credits for all other processors.			

Table 11 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ecCreditService_ effectiveDate	<p>Effective date for the transaction. The effective date must be within 45 days of the current day. If you do not include this value, CyberSource sets the effective date to the next business day.</p> <p>Format: MMDDYYYY</p> <p>Supported only for the CyberSource ACH Service.</p>	ecCreditService (O)	String (8)
ecCreditService_ partialPaymentID	<p>Identifier for a partial credit. The value for each credit request must be unique within the scope of the order. See "Multiple Partial Credits," page 39.</p>	ecCreditService (Optional for RBS WorldPay Atlanta. Not used for any other processor.)	String (25)
ecCreditService_ referenceNumber	<p>Check reference number. Identifier used for tracking a request through to the payment processor for reconciliation.</p> <p>Wells Fargo ACH See "Transaction Identifiers on Wells Fargo ACH," page 18.</p> <p>All Other Processors If you do not provide this value, CyberSource generates a unique value and returns it to you in the ecCreditReply_reconciliationID field.</p> <p>For more information about tracking orders, see "Order Tracking," page 16, and Getting Started with CyberSource Essentials.</p> <p>Requirements</p> <p>Bank of America ACH: Optional.</p> <p>Chase Paymentech Solutions: Optional.</p> <p>RBS WorldPay Atlanta: Required for stand-alone credits. Optional for follow-on credits.</p> <p>TeleCheck: Required for stand-alone credits. Optional for follow-on credits.</p> <p>Wells Fargo ACH: See "Transaction Identifiers on Wells Fargo ACH," page 18.</p>	ecCreditService (See the field description.)	<p>TeleCheck: String (50)</p> <p>Wells Fargo ACH:</p> <ul style="list-style-type: none"> ■ For CyberSource accounts that support merchant-generated transaction identifiers: String (15) ■ For CyberSource accounts that do not support merchant-generated transaction identifiers: String (60) <p>All other processors: String (60)</p>
ecCreditService_ run	<p>Set this field to <code>true</code> to include ecCreditService in your request.</p>	ecCreditService (R)	String (5)
<p>¹ Required for RBS WorldPay Atlanta for both stand-alone and follow-on credits. Required only for stand-alone credits for all other processors.</p>			

Table 11 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ecCreditService_ settlementMethod	Method used for settlement. Possible values: <ul style="list-style-type: none"> ■ A: Automated Clearing House (default for credits) ■ F: Facsimile draft (U.S. dollars only) ■ B: Best possible (U.S. dollars only) (default if the field has not already been configured for your merchant ID) See " Settlement Delivery Methods ," page 42.	ecCreditService (Optional for Chase Paymentech Solutions and RBS WorldPay Atlanta. Not used for any other processor.)	String (1)
ecDebitService_ commerceIndicator	Type of transaction. Possible values: <ul style="list-style-type: none"> ■ internet (default): e-commerce order placed using a web site. ■ moto: Mail order or telephone order. ■ recurring: Recurring transaction. 	ecDebitService (Not used for Chase Paymentech Solutions. Optional for all other processors.)	String (13)
ecDebitService_ debitRequestID	The request ID for debit requests. See " Deferred and Partial Payments ," page 36. Use for deferred and partial payments.	ecDebitService (Supported only for Chase Paymentech Solutions and TeleCheck.)	String (26)
ecDebitService_ effectiveDate	Effective date for the transaction. The effective date must be within 45 days of the current day. If you do not include this value, CyberSource sets the effective date to the next business day. Format: MMDDYYYY Supported only for the CyberSource ACH Service.	ecDebitService (O)	String (8)
ecDebitService_ partialPaymentID	Identifier for a partial payment. The value for each debit request must be unique within the scope of the order. See " Multiple Partial Credits ," page 39.	ecDebitService (Optional for RBS WorldPay Atlanta. Not used by any other processor.)	String (25)
ecDebitService_ paymentInfo	Payment related information. This information is included on the customer's statement.	ecDebitService (Required for RBS WorldPay Atlanta. Not used by any other processor.)	Alpha numeric (80)
<p>1 Required for RBS WorldPay Atlanta for both stand-alone and follow-on credits. Required only for stand-alone credits for all other processors.</p>			

Table 11 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ecDebitService_ paymentMode	<p>Flag that indicates whether to process the payment. Use with deferred payments. See "Deferred and Partial Payments," page 36.</p> <p>Possible values:</p> <ul style="list-style-type: none"> ■ 0: Standard debit with immediate payment (default) ■ 1: Indicates that this is a deferred payment and that you will send a debit request with ecDebitService_paymentMode=2 in the future. ■ 2: Indicates notification to initiate payment <p>Chase Paymentech Solutions and TeleCheck Use for deferred and partial payments.</p> <p>CyberSource ACH Service Not used.</p> <p>RBS WorldPay Atlanta Not used.</p>	ecDebitService (See the field description.)	Integer (1)
<p>1 Required for RBS WorldPay Atlanta for both stand-alone and follow-on credits. Required only for stand-alone credits for all other processors.</p>			

Table 11 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ecDebitService_ referenceNumber	<p>Check reference number. Identifier used for tracking a request through to the payment processor for reconciliation.</p> <p>Wells Fargo ACH See "Transaction Identifiers on Wells Fargo ACH," page 18.</p> <p>All Other Processors If you do not provide this value, CyberSource generates a unique value and returns it to you in the ecDebitReply_reconciliationID field.</p> <p>For more information about tracking orders, see "Order Tracking," page 16, and Getting Started with CyberSource Essentials.</p> <p>Requirements</p> <p>Bank of America ACH: Optional.</p> <p>Chase Paymentech Solutions: Optional.</p> <p>RBS WorldPay Atlanta: Optional.</p> <p>TeleCheck: For deferred payments, set this field to the value you received in the ecDebitService_debitRequestID field in the reply message for the associated debit. See "Deferred and Partial Payments," page 36.</p> <p>Wells Fargo ACH: See "Transaction Identifiers on Wells Fargo ACH," page 18.</p>	ecDebitService (See the field description.)	<p>TeleCheck: String (50)</p> <p>Wells Fargo ACH:</p> <ul style="list-style-type: none"> ■ For CyberSource accounts that support merchant-generated transaction identifiers: String (15) ■ For CyberSource accounts that do not support merchant-generated transaction identifiers: String (60) <p>All other processors: String (60)</p>
ecDebitService_run	Set this field to <code>true</code> to include ecDebitService in your request.	ecDebitService (R)	String (5)
ecDebitService_ settlementMethod	<p>Method used for settlement. Possible values:</p> <ul style="list-style-type: none"> ■ A: Automated Clearing House (default for credits) ■ F: Facsimile draft (U.S. dollars only) ■ B: Best possible (U.S. dollars only) (default if the field has not already been configured for your merchant ID) <p>See "Settlement Delivery Methods," page 42.</p>	ecDebitService (Optional for Chase Paymentech Solutions. Not used by any other processor.)	String (1)
<p>1 Required for RBS WorldPay Atlanta for both stand-alone and follow-on credits. Required only for stand-alone credits for all other processors.</p>			

Table 11 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ecDebitService_ verificationLevel	<p>Level of fraud screening. Possible values:</p> <ul style="list-style-type: none"> ■ 1 : Validation—default if the field has not already been configured for your merchant ID ■ 2 : Verification <p>For a description of this feature and a list of supported processors, see "Verification and Validation," page 24.</p>	ecDebitService (Optional for Chase Paymentech Solutions and TeleCheck. Not used by any other processor.)	Integer (1)
invoiceHeader_ merchantDescriptor	<p>Merchant description that appears on the customer's bank statement. This field overrides the corresponding value in your CyberSource account. If you do not include this field in the request, CyberSource uses the company name from your merchant account. For a description of this feature, a list of supported processors, and special formatting requirements, see "Merchant Descriptors," page 38.</p>	ecCreditService (O) ecDebitService (O)	String (25)
invoiceHeader_ merchantDescriptor Alternate	<p>Alternate information for your business. This API field overrides the company entry description value in your CyberSource account. This value might be displayed on the customer's account statement.</p> <p>When you do not include this value in your debit or credit request, CyberSource uses the company entry description from your CyberSource account.</p>	ecCreditService ecDebitService (Optional for Wells Fargo ACH. Not used by any other processor.)	String with numbers, letters, and spaces only (10)
item_#_productCode	<p>Type of product. This value is used to determine the category that the product is in: electronic, handling, physical, service, or shipping. The default value is <code>default</code>. See Appendix C, "Product Codes," on page 70 for a list of valid values.</p>	ecCreditService (O) ecDebitService (Not used by RBS WorldPay Atlanta. Optional for any other processor.)	String (255)
item_#_productName	<p>Name of the product.</p>	ecCreditService (O) ecDebitService (Not used for RBS WorldPay Atlanta. Optional for all other processors.)	TeleCheck: String (20) All other processors: String (30)
<p>1 Required for RBS WorldPay Atlanta for both stand-alone and follow-on credits. Required only for stand-alone credits for all other processors.</p>			

Table 11 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_productSKU	Product's identifier code.	ecCreditService (O) ecDebitService (Not used for RBS WorldPay Atlanta. Optional for all other processor.)	String (255)
item_#_quantity	Quantity of the product being purchased. The default value is 1. Required if item_#_productCode is not default or one of the values related to shipping and/or handling. Not used by RBS WorldPay Atlanta.	ecCreditService (O) ecDebitService (See the field description.)	Integer (10)
item_#_taxAmount	Total tax to apply to the product. This value cannot be negative. The tax amount and the unit price must be in the same currency. The tax amount field is additive. The following example uses a two-exponent currency such as USD: 1 You include the following items in your request: item_0_unitPrice=10.00 item_0_quantity=1 item_0_taxAmount=0.80 item_1_unitPrice=20.00 item_1_quantity=1 item_1_taxAmount=1.60 2 The total amount authorized will be 32.40, not 30.00 with 2.40 of tax included.	ecCreditService (O) ecDebitService (Not used for RBS WorldPay Atlanta. Optional for all other processors.)	String (15)

1 Required for RBS WorldPay Atlanta for both stand-alone and follow-on credits. Required only for stand-alone credits for all other processors.

Table 11 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_unitPrice	<p>Per-item price of the product. This value cannot be negative. You can include a decimal point (.) in this field, but you cannot include any other special characters. The amount is truncated at the request level to the correct number of decimal places.</p> <p>RBS WorldPay Atlanta Not used.</p> <p>All Other Processors You must include either this field or purchaseTotals_grandTotalAmount in your request.</p>	<p>ecCreditService (See the field description.)</p> <p>ecDebitService (See the field description.)</p>	String (15)
linkToRequest	Value that links the current request to a previous transaction.	ecDebitService (O)	String (26)
merchantID	Your merchant ID. Use the same merchant ID for evaluation, testing, and production.	Required for all services	String (30)
merchantReference Code	Merchant-generated order reference or tracking number. For more information about tracking orders, see Getting Started with CyberSource Essentials .	Required for all services.	String (50)
purchaseTotals_currency	<p>Currency used for the order. Possible value:</p> <ul style="list-style-type: none"> ■ USD : U.S. dollars 	<p>ecCreditService (R)¹</p> <p>ecDebitService (R)</p>	String (5)
purchaseTotals_grandTotalAmount	<p>Grand total for the order. For more information about using items or a grand total, see Getting Started with CyberSource Essentials.</p> <p>RBS WorldPay Atlanta Required for debits and credits.</p> <p>All Other Processors You must include either this field or item_#_unitPrice in your request for CyberSource ACH, Chase, and TeleCheck.</p>	<p>ecCreditService (See the field description.)</p> <p>ecDebitService (See the field description.)</p>	String (15)
recurringSubscription Info_subscriptionID	If you are using Payment Tokenization or Recurring Billing and you include this value in your request, many of the fields that are normally required for a debit or credit become optional. See "Payment Tokenization," page 40 , and "Recurring Billing," page 41 .	<p>ecCreditService (O)¹</p> <p>ecDebitService (O)</p>	String (26)
<p>¹ Required for RBS WorldPay Atlanta for both stand-alone and follow-on credits. Required only for stand-alone credits for all other processors.</p>			

Table 11 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
voidService_run	Set this field to <code>true</code> to include voidService in your request.	voidService (R)	String (5)
voidService_ voidRequestID	The request ID of the debit or credit that you want to void.	voidService (R)	String (26)

1 Required for RBS WorldPay Atlanta for both stand-alone and follow-on credits. Required only for stand-alone credits for all other processors.

Reply Fields

Table 12 Reply Fields

Field Name	Description	Returned By	Data Type & Length
decision	Summarizes the result of the overall request. The field can contain one of the following values: <ul style="list-style-type: none"> ■ ACCEPT ■ ERROR ■ REJECT 	All Electronic Check Services	String (6)
ecAuthenticateReply_ checkpointSummary	Information about the parameters sent in the authenticate message, which is described in " Check Point Summary Codes ," page 76.	ecAuthenticateReply	String (600)
ecAuthenticateReply_ fraudShieldIndicators	Information about the fraud checks performed, which is described in " Fraud Shield Indicator Codes ," page 86.	ecAuthenticateReply	String (300)
ecAuthenticateReply_ processorResponse	Result code returned by the payment processor.	ecAuthenticateReply	String (6)
ecAuthenticateReply_ reasonCode	Numeric value corresponding to the result of the overall request. See " Reason Codes ," page 71, for a list of possible values.	ecAuthenticateReply	Integer (5)
ecAuthenticateReply_ reconciliationID	Reference number you use to reconcile CyberSource reports with processor reports. For more information about tracking orders, see Getting Started with CyberSource Essentials .	ecAuthenticateReply	String (60)

Table 12 Reply Fields (Continued)

Field Name	Description	Returned By	Data Type & Length
ecAuthenticateReply_requestDateTime	Date and time at which the service was requested. Format: YYYY-MM-DDThh:mm:ssZ Example: 2016-08-11T22:47:57Z equals August 11, 2016, at 22:47:57 (10:47:57 p.m.). The T separates the date and the time. The Z indicates UTC.	ecAuthenticateReply	String (20)
ecCreditReply_amount	Total amount submitted to the payment processor.	ecCreditReply	String (15)
ecCreditReply_correctedAccountNumber	Corrected account number from the ACH verification service, which is described in " ACH Verification ," page 30.	ecCreditReply	String (17)
ecCreditReply_correctedRoutingNumber	Corrected routing number from the ACH verification service, which is described in " ACH Verification ," page 30.	ecCreditReply	String (9)
ecCreditReply_ownerMerchantID	Merchant ID that was used to create the subscription or customer profile for which the service was requested. If your CyberSource account is enabled for Recurring Billing, this field is returned only if you are using subscription sharing and if your merchant ID is in the same merchant ID pool as the owner merchant ID. See the subscription sharing information in Recurring Billing Using the Simple Order API for CyberSource Essentials . If your CyberSource account is enabled for Payment Tokenization, this field is returned only if you are using profile sharing and if your merchant ID is in the same merchant ID pool as the owner merchant ID. See the profile sharing information in Payment Tokenization Using the Simple Order API for CyberSource Essentials .	ecCreditReply	String (30)
ecCreditReply_processorResponse	Result code returned by the payment processor.	ecCreditReply	String (6)
ecCreditReply_processorTransactionID	Transaction identifier or tracking ID returned by the payment processor. For more information about tracking orders, see Getting Started with CyberSource Essentials . Wells Fargo ACH See " Transaction Identifiers on Wells Fargo ACH ," page 18.	ecCreditReply	String (87)

Table 12 Reply Fields (Continued)

Field Name	Description	Returned By	Data Type & Length
ecCreditReply_reasonCode	A numeric value corresponding to the result of the credit request. See "Reason Codes," page 71 , for a list of possible values.	ecCreditReply	Integer (5)
ecCreditReply_reconciliationID	Reference number for the transaction. Wells Fargo ACH See "Transaction Identifiers on Wells Fargo ACH," page 18 . All Other Processors For some processors, you can use this value to reconcile your CyberSource reports with your processor reports. For more information about tracking orders, see Getting Started with CyberSource Essentials .	ecCreditReply	String (60)
ecCreditReply_requestDateTime	Date and time at which the service was requested. Format: YYYY-MM-DDThh:mm:ssZ Example: 2016-08-11T22:47:57Z equals August 11, 2016, at 22:47:57 (10:47:57 p.m.). The T separates the date and the time. The Z indicates UTC.	ecCreditReply	String (20)
ecCreditReply_settlementMethod	Method used to settle the credit. Possible values: <ul style="list-style-type: none">■ A: Automated Clearing House■ B: Best possible■ F: Facsimile	ecCreditReply	String (1)
ecCreditReply_verificationCode	Indicates the results from the ACH verification service, which is described in "ACH Verification," page 30 . For the possible values, see Appendix H, "Verification Codes," on page 87 .	ecCreditReply	String (2)
ecCreditReply_verificationCodeRaw	Raw results from the ACH verification service, which is described in "ACH Verification," page 30 . For the possible values, see Appendix H, "Verification Codes," on page 87 .	ecCreditReply	String (2)
ecDebitReply_amount	Total amount submitted to the payment processor.	ecDebitReply	String (15)
ecDebitReply_correctedAccountNumber	Corrected account number from the ACH verification service, which is described in "ACH Verification," page 25 .	ecDebitReply	String (17)

Table 12 Reply Fields (Continued)

Field Name	Description	Returned By	Data Type & Length
ecDebitReply_ correctedRouting Number	Corrected routing number from the ACH verification service, which is described in " ACH Verification ," page 25.	ecDebitReply	String (9)
ecDebitReply_ ownerMerchantID	<p>Merchant ID that was used to create the subscription or customer profile for which the service was requested.</p> <p>If your CyberSource account is enabled for Recurring Billing, this field is returned only if you are using subscription sharing and if your merchant ID is in the same merchant ID pool as the owner merchant ID. See the subscription sharing information in Recurring Billing Using the Simple Order API for CyberSource Essentials.</p> <p>If your CyberSource account is enabled for Payment Tokenization, this field is returned only if you are using profile sharing and if your merchant ID is in the same merchant ID pool as the owner merchant ID. See the profile sharing information in Payment Tokenization Using the Simple Order API for CyberSource Essentials.</p>	ecDebitReply	String (30)
ecDebitReply_ processorResponse	Result code returned by the payment processor.	ecDebitReply	String (6)
ecDebitReply_ processorTransactionID	<p>Transaction identifier or tracking ID returned by the payment processor. For more information about tracking orders, see Getting Started with CyberSource Essentials.</p> <p>Wells Fargo ACH See "Transaction Identifiers on Wells Fargo ACH," page 18.</p>	ecDebitReply	String (87)
ecDebitReply_ reasonCode	A numeric value corresponding to the result of the debit request. See " Reason Codes ," page 71, for a list of possible values.	ecDebitReply	Integer (5)
ecDebitReply_ reconciliationID	<p>Reference number for the transaction.</p> <p>Wells Fargo ACH See "Transaction Identifiers on Wells Fargo ACH," page 18.</p> <p>All Other Processors</p> <p>For some processors, you can use this value to reconcile your CyberSource reports with your processor reports. For more information about tracking orders, see Getting Started with CyberSource Essentials.</p>	ecDebitReply	String (60)

Table 12 Reply Fields (Continued)

Field Name	Description	Returned By	Data Type & Length
ecDebitReply_requestDateTime	Date and time at which the service was requested. Format: YYYY-MM-DDThh:mm:ssZ Example: 2016-08-11T22:47:57Z equals August 11, 2016, at 22:47:57 (10:47:57 p.m.). The T separates the date and the time. The Z indicates UTC.	ecDebitReply	String (20)
ecDebitReply_settlementMethod	Method used to settle the debit. Possible values: <ul style="list-style-type: none"> ■ A: Automated Clearing House ■ B: Best possible ■ F: Facsimile 	ecDebitReply	String (1)
ecDebitReply_verificationCode	Results from the ACH verification service, which is described in "ACH Verification," page 25 . For the possible values, see Appendix H, "Verification Codes," on page 87 .	ecDebitReply	String (2)
ecDebitReply_verificationCodeRaw	Raw results from the ACH verification service, which is described in "ACH Verification," page 25 . For the possible values, see Appendix H, "Verification Codes," on page 87 .	ecDebitReply	String (2)
ecDebitService_debitRequestID	The request ID for debit or credit requests. See "Deferred and Partial Payments," page 36 , or "Follow-On Credits and Stand-Alone Credits," page 29 .	ecDebitReply	String (26)
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 about missing and invalid fields, see Getting Started with CyberSource Essentials .	All Electronic Check Services	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.	All Electronic Check Services	String (50)

Table 12 Reply Fields (Continued)

Field Name	Description	Returned By	Data Type & Length
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 about missing and invalid fields, see Getting Started with CyberSource Essentials .	All Electronic Check Services	String (100)
purchaseTotals_currency	Currency used for the order. Possible value: <ul style="list-style-type: none"> ■ USD: U.S. dollars 	ecCreditReply ecDebitReply	String (5)
reasonCode	Numeric value corresponding to the result of the overall request. See " Reason Codes ," page 71 , for a list of possible values.	All Electronic Check Services	Integer (5)
requestID	Identifier for the request.	All Electronic Check Services	String (26)
voidReply_amount	Total amount of the void.	voidReply	Decimal (15)
voidReply_currency	Currency used for the order. Possible value: <ul style="list-style-type: none"> ■ USD: U.S. dollars 	voidReply	String (5)
voidReply_reasonCode	Numeric value corresponding to the result of the void request. See " Reason Codes ," page 71 , for a list of possible values.	voidReply	Integer (5)
voidReply_requestDateTime	Date and time at which the service was requested. Format: YYYY-MM-DDThh:mm:ssZ Example: 2016-08-11T22:47:57Z equals August 11, 2016, at 22:47:57 (10:47:57 p.m.). The T separates the date and the time. The Z indicates UTC.	voidReply	String (20)

Examples

Name-Value Pair Examples

Example 5 Electronic Check Debit Request

```
ecDebitService_run=true
merchantID=infodev
merchantReferenceCode=15363553D21528F
billTo_firstName=John
billTo_lastName=Doe
billTo_street1=900 Metro Center Blvd.
billTo_city=Foster City
billTo_state=CA
billTo_postalCode=94404
billTo_country=US
billTo_phoneNumber=650-432-7350
billTo_email=jdoe@example.com
item_0_unitPrice=100.00
purchaseTotals_currency=USD
check_accountNumber=4100
check_accountType=c
check_bankTransitNumber=071923284
```

Example 6 Electronic Check Debit Reply

```
requestID=9980055975450167905139
merchantReferenceCode=15363553D21528F
decision=ACCEPT
reasonCode=100
ecDebitReply_reasonCode=100
ecDebitReply_settlementMethod=A
ecDebitReply_requestDateTime=2003-05-16T23:48:09Z
ecDebitReply_amount=100.00
ecDebitReply_verificationLevel=1
ecDebitReply_reconciliationID=02RYXSPGCQH60NWA
ecDebitReply_processorResponse=123456
```

XML Examples

Example 7 Electronic Check Debit Request

```
<requestMessage xmlns="urn:schemas-cybersource-com:transaction-data 1.23">
  <merchantID>infodev</merchantID>
  <merchantReferenceCode>15363553D21528F</merchantReferenceCode>
  <billTo>
    <firstName>John</firstName>
    <lastName>Doe</lastName>
    <street1>900 Metro Center Blvd.</street1>
    <city>Foster City</city>
    <state>CA</state>
    <postalCode>94404</postalCode>
    <country>US</country>
    <phoneNumber>650-432-7350</phoneNumber>
    <email>jdoe@example.com</email>
  </billTo>
  <item id="0">
    <unitPrice>100.00</unitPrice>
  </item>
  <purchaseTotals>
    <currency>USD</currency>
  </purchaseTotals>
  <check>
    <accountNumber>4100</accountNumber>
    <accountType>c</accountType>
    <bankTransitNumber>071923284</bankTransitNumber>
  </check>
  <ecDebitService run="true"/>
</requestMessage>
```

Example 8 Electronic Check Debit Reply

```
<c:replyMessage xmlns:c="urn:schemas-cybersource-com:transaction-data-1.23">
  <c:merchantReferenceCode>15363553D21528F</c:merchantReferenceCode>
  <c:requestID>9980055975450167905139</c:requestID>
  <c:decision>ACCEPT</c:decision>
  <c:reasonCode>100</c:reasonCode>
  <c:purchaseTotals>
    <c:currency>USD</c:currency>
  </c:purchaseTotals>
  <c:ecDebitReply>
    <c:reasonCode>100</c:reasonCode>
    <c:settlementMethod>A</c:settlementMethod>
    <c:requestDateTime>2003-05-16T23:48:09Z</c:requestDateTime>
    <c:amount>100.00</c:amount>
    <c:verificationLevel>1</c:verificationLevel>
    <c:reconciliationID>02RYXSPGCQH60NWA</c:reconciliationID>
    <c:processorResponse>123456</c:processorResponse>
  </c:ecDebitReply>
</c:replyMessage>
```

Product Codes

The following table lists the values that you can use for the product code. Use the `item_#_productCode` request field to specify the product code.

Table 13 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

The following table lists the Electronic Check Services reason codes returned by the Simple Order API. See the information about handling replies in [Getting Started with CyberSource Essentials](#).



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 determine the result.

Table 14 Reason Codes

Reason Code	Description
100	Successful transaction.
101	The request is missing one or more required fields. Possible action: See the reply fields missingField_0...N for which fields are missing. Resend the request with the complete information. See the information about missing and invalid fields in Getting Started with CyberSource Essentials .
102	One or more fields in the request contains invalid data. Possible action: See the reply fields invalidField_0...N for which fields are invalid. Resend the request with the correct information. See the information about missing and invalid fields in Getting Started with CyberSource Essentials .
150	Error: General system failure. See the documentation for your client for information about handling retries in the case of system errors.
151	Error: The request was received, but there was a server timeout. This error does not include timeouts between the client and the server. Possible Action: 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 client for information about handling retries in the case of system errors.

Table 14 Reason Codes (Continued)

Reason Code	Description
152	<p>Error: The request was received but there was a service timeout.</p> <p>Possible action: 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 client for information about handling retries in the case of system errors.</p>
220	<p>The processor declined the request based on a general issue with the customer's account.</p> <p>Possible action: Request a different form of payment.</p>
221	<p>The customer matched an entry on the processor's negative file.</p> <p>Possible action: Review the order and contact the payment processor.</p>
222	<p>The customer's bank account is frozen.</p> <p>Possible action: Review the order or request a different form of payment.</p>
223	<p>The customer's payment or credit has been declined because there is an existing duplicate check, the original transaction was not approved, or a valid authorization could not be located.</p> <p>Possible action: Review the order and contact the payment processor.</p>
233	<p>The processor declined the request based on an issue with the request itself.</p> <p>Possible action: Request a different form of payment.</p>
234	<p>There is a problem with your merchant configuration.</p> <p>Possible action: Do not resend the request. Contact Customer Support to correct the configuration problem.</p>
235	<p>The processor declined the request due to the requested amount exceeding the authorized amount.</p> <p>Possible action: Review the order and contact the payment processor.</p>
236	<p>Processor failure.</p> <p>Possible action: Wait a few minutes and resend the request.</p>
241	<p>The request ID is invalid for the follow-on request.</p> <p>Possible action: Verify the request ID is valid and resend the request.</p>
246	<p>The debit or credit is not voidable because the debit or credit information has already been submitted to your processor. Or, you requested a void for a type of transaction that cannot be voided.</p> <p>Possible action: No action required.</p>
247	<p>You requested a credit for a debit that was previously voided.</p> <p>Possible action: No action required.</p>
250	<p>Error: The request was received, but it timed out at the payment processor.</p> <p>Possible action: To avoid duplicating the transaction, do not resend the request until you have reviewed the transaction status in the Business Center.</p>

Table 14 Reason Codes (Continued)

Reason Code	Description
388	<p data-bbox="548 342 1317 401">Error: The routing number did not pass verification as described in "ACH Verification," page 25.</p> <p data-bbox="548 422 1414 541">Possible action: (1) Ask your customer to contact their bank to get an ACH routing number. (2) Ask your customer to provide the routing number and account number for a different bank account if they have one. (3) Request a different form of payment.</p>

NOC Codes

E

For more information, see ["Notifications of Change \(NOCs\)," page 23.](#)

Table 15 NOC Codes

Code	Reason	Description	Required Action
C01	Incorrect account number	The customer's bank account number is incorrect.	Correct all applicable records before submitting additional electronic check transactions for the customer.
C02	Incorrect routing number	The bank's routing number is incorrect.	Correct all applicable records before submitting additional electronic check transactions for the customer.
C03	Incorrect routing number and incorrect account number	The bank's routing number and the customer's bank account number are incorrect.	Correct all applicable records before submitting additional electronic check transactions for the customer.
C04	Incorrect customer name	The customer name associated with the bank account is incorrect.	Correct all applicable records before submitting additional electronic check transactions for the customer.
C05	Incorrect transaction code	The transaction was submitted to a specific type of account but includes a conflicting account type code (checking / savings).	Correct all applicable records before submitting additional electronic check transactions for the customer.
C06	Incorrect account number and incorrect transaction code	The customer's bank account number is incorrect and the transaction was submitted to a specific type of account but includes a conflicting account type code (checking / savings).	Correct all applicable records before submitting additional electronic check transactions for the customer.

Table 15 NOC Codes (Continued)

Code	Reason	Description	Required Action
C07	Incorrect routing number, incorrect account number, and incorrect transaction code	The bank's routing number and the customer's bank account number are incorrect. Additionally, the transaction was submitted to a specific type of account but includes a conflicting account type code (checking / savings).	Correct all applicable records before submitting additional electronic check transactions for the customer.

Check Point Summary Codes

The check point summary is returned in **ecAuthenticateReply_checkpointSummary** in the authenticate reply message. The check point summary provides information about the parameters sent in the authenticate request message. If no parameters are sent, no information is returned. The following tables describe the codes returned in the check point summary. For more information, see "[Authentication](#)," page 34.

Primary Result Codes

Table 16 Primary Result Codes

Code	Description
00	Data found for search request
02	Receive error
03	Link to load balancing failed
04	Converse allocation error
05	System busy
06	SYSID error
08	Term error
12	No search criteria specified, request ignored
13	Response level must be F, B, or blank
15	Match to full name only—PLC NS list
16	Match to last name and first initial—PLC NS list
17	Internal error—contact Help Desk
18	Internal error—contact Help Desk
25	System busy—try again later
50	Transaction timed out—contact Help Desk if problem persists
51	Poll error—contact Help Desk
52	Receive error—contact Help Desk
53	Create error—contact Help Desk

Table 16 Primary Result Codes (Continued)

Code	Description
54	Connect error—contact Help Desk
55	Send error—contact Help Desk
56	Link error—contact Help Desk
57	EBCDIC to ASCII convert failed—contact Help Desk
58	ASCII to EBCDIC convert failed—contact Help Desk
59	Response exceeds storage—contact Help Desk
63	Storage error during data parsing—contact Help Desk
64	Response data format invalid—contact Help Desk
65	Unable to allocate connection
66	System ID error
67	Connect/converse error
68	Checkpoint server dropped socket
69	Profile not on database
70	System change transaction fail (internal)
71	Name required but missing
72	Address required but missing
75	Audit number required but missing
77	Invalid audit number
78	Audit entry not a Checkpoint 2.0 request
79	Audit file not loaded
80	Server not available to process request
81	Error connecting to database

Address Result Codes

The address result code (**AddrCode**) identifies the results found based on the address submitted.

Table 17 Address Result Codes

Code	Description
A	Address ambiguous
B	Match to business name—residential address
BB	Match to business name—business address
BM	Match to business name—mixed-use address

Table 17 Address Result Codes (Continued)

Code	Description
E	Matching records exceed maximum defined on profile
H	House number not found on street
I	Incomplete or blank address
IV	Invalid address
N	No match to name—residential address
NA	Data not available
NB	No match to name—business address
NM	No match to name—mixed-use address
NP	Test not in profile
NS	Standardization database has expired—contact Help
R	Road name—city/ZIP mismatch
S	Match to last name—residential address
SB	Match to last name—business address
SM	Match to last name—mixed-use address
SX	Standardization database has expired—contact Help
T	City/state mismatch
U	Address unverifiable—not in database
UR	Address residential—name match unavailable
Y	Match to full name—residential address
YB	Match to full name—business address
YM	Match to full name—mixed-use address
Z	City/state—ZIP mismatch
00	Unknown message code—contact Help Desk

Phone Codes

The phone code (**PhnCode**) identifies the results found based on the phone number submitted in the authenticate message.

Table 18 Phone Codes

Code	Value
A	Match to address only—residential phone
AB	Match to address only—business phone
AM	Match to address only—mixed-use phone

Table 18 Phone Codes (Continued)

Code	Value
B	Match to business name and address—residential phone
BB	Match to business name and address—business phone
BM	Match to business name and address—mixed-use phone
C	Probable cellular phone
D	Match to business name—residential address
DB	Match to business name—business address
DM	Match to business name—mixed-use phone
E	Matching records exceed maximum defined on profile
F	Match to full name only—residential phone
FB	Match to full name only—business phone
FM	Match to full name only—mixed-use phone
H	Match to last name and address—residential phone
HB	Match to last name and address—business phone
HM	Match to last name and address—mixed-use phone
I	Phone is incorrect length
IA	Invalid area code
M	Phone missing (search information not received)
MA	Match to header data
N	No match to name or address—residential phone
NA	Data not available
NB	No match to name or address—business phone
NM	No match to name or address—mixed-use phone
NP	Test not in profile
P	Probable pager
S	Match to last name only—residential phone
SB	Match to last name only—business phone
SM	Match to last name only—mixed-use phone
U	Phone unverifiable—not in database
X	Prefix—ZIP mismatch
Y	Match to full name and address—residential phone
YB	Match to full name and address—business phone
YM	Match to full name and address—mixed-use phone
00	Unknown message code—contact Help Desk

Address Type Codes

The address type code (**AddrTypeCode**) identifies the results found based on the address submitted.

Table 19 Address Type Codes

Code	Value
C	Single company
E	Test error
EB	Seasonal—business
EM	Seasonal—multi-family dwelling
EX	Seasonal—mixed use
M	Multi-family dwelling
N	No information available
NA	Data not available
NP	Test not in profile
O	Office building
P	Post office box

Change of Address Codes

The change of address code (**COACode**) identifies the results found for a change of address check.

Table 20 Change of Address Codes

Code	Value
C	Change of address information found
N	No change of address information found
NA	Data not available
NP	Test not in profile
U	Test not available
YA	A high risk business was identified at this address
00	Unknown message code—contact Help Desk

Social Security Number Codes

The Social Security Number code (**SSNCode**) identifies the results found to verify the Social Security Number submitted.

Table 21 Social Security Number Codes

Code	Value
A	Match to address only
D	Deceased—unable to verify name
DN	Deceased—no match to name
DS	Deceased—match to last name
DY	Deceased—match to full name
E	Matching records exceed maximum defined on profile
F	SSN format is invalid
FF	Match to first name and address—match performed using SSN finder
FY	Match to full name and address—match performed using SSN finder
I	SSN is incorrect length
M	SSN is missing
N	No match to name or address
NA	Data not available
NI	SSN not issued
NP	Test not in profile
NV	Header search not available in NV due to state law
P	Match to previous address only
S	Match to last name only
SA	Match to last name and address
V	Valid SSN—SSN not found
Y	Match to full name only
YA	Match to full name and address—match performed using SSN
YB	Match to full name and address—match performed using name and address
Z	SSN found—no last name entered
00	Unknown message code—contact Help Desk

Address Unit Mismatch Codes

The address unit mismatch code (**AddrUnitMismatchCode**) identifies the expected unit for the address.

Table 22 Address Unit Mismatch Codes

Code	Value
EU	Unit number is extra—not expected at this address
MU	Unit number is missing—expected at this address
WU	Unit number wrong—unit number does not match unit number at this address

Phone Unit Mismatch Codes

The phone unit mismatch code (**PhnUnitMismatchCode**) identifies the expected unit for the address associated with the phone number.

Table 23 Phone Unit Mismatch Codes

Code	Value
EU	Unit number is extra—not expected at this address
MU	Unit number is missing—expected at this address
WU	Unit number wrong—unit number does not match unit number at this address

Driver's License Result Codes

The driver's license result code (**DLResultCode**) identifies the results found based on the driver's licenses information submitted.

Table 24 Driver's License Result Codes

Code	Value
A	Match to address only
I	DL state and number format invalid
M	Driver license number not submitted on inquiry
N	No match to name or address
NA	Data not available for this state
NI	Input DL state and number not on file

Table 24 Driver's License Result Codes (Continued)

Code	Value
NP	Test not in profile
S	Match to last name only
SA	Match to last name and address
V	Valid DL state and number—name match not available
Y	Match to full name only

Date of Birth Match Codes

The date of birth match code (**DateOfBirthMatch**) identifies the results found based on the date of birth information submitted.

Table 25 Date of Birth Match Codes

Code	Value
1	Match
2	Partial match
3	No match
4	Not on file
5	SSN not on file; search cannot be done
6	DOB not provided on search request
7	Invalid DOB format

High Risk Address Codes

The high risk address code (**HighRiskAddrCode**) identifies any high risk address information that is associated with the address information submitted.

Table 26 High Risk Address Codes

Parameter	Value
N	No address high risk information found
NP	Test not in profile
YA	A high risk business was identified at this address

High Risk Phone Codes

The high risk phone code (**HighRiskPhnCode**) identifies any high risk phone number information that is associated with the phone number information submitted.

Table 27 High Risk Phone Codes

Code	Values
N	No address high risk information found
NP	Test not in profile
YA	A high risk business was identified at this address

OFAC Validation Results Codes

The OFAC validation results code (**OFACValidationResult**) identifies whether the information submitted in the request is on the OFAC list and specifies which pieces of information are present on the OFAC list if there is a match.

Table 28 OFAC Validation Results Codes

Code	Value
1	No match
2	Match to full name only
3	Match to SSN only
4	Match to name and SSN
5	Match to name and DOB
6	Match to name and YOB
7	Match to SSN and DOB
8	Match to SSN and YOB
9	Match to name, SSN, and DOB
10	Match to name, SSN, and YOB
11	Match to company name only
12	Match to company address only
13	Match to company name and address
14	Match to last name and first name
15	Match to full name only—PLC NS list
16	Match to last name and first initial—PLC NS list

Address Residential Match Codes

The address residential match code is a number (0000 through 9999) that identifies the number of residential records that matched the address given during address verification.

Address Business Match Codes

The address business match code is a number (0000 through 9999) that identifies the number of business records that matched the address given during address verification.

Phone Number Residential Match Codes

The phone number residential match code is a number (0000 through 9999) that identifies the number of residential records that matched the phone number given during address verification.

Phone Number Business Match Codes

The phone number business match code is a number (0000 through 9999) that identifies the number of business records that matched the phone number given during address verification.

Fraud Shield Indicator Codes

The fraud shield indicators are returned in **ecAuthenticateReply_fraudShieldIndicators** in the authenticate reply message. The fraud shield indicators provide consumer fraud information. This information is used to protect you against fraudulent transactions. However, no fraud check is perfect, and fraudulent activity is always possible. The following table describes the codes returned in the fraud shield indicator value. For more information, see ["Authentication," page 34](#).

Table 29 Fraud Shield Indicator Codes

Code	Description
FS01	Inquiry/online current address conflict
FS02	Inquiry address first reported within 90 days
FS03	Inquiry current address not on file
FS04	Input SSN not issued as of MM/YY
FS05	Input SSN recorded as deceased
FS06	Inquiry age newer than SSN issue date
FS10	INQ: type of high risk address
FS11	INQ: non-residential address
FS13	High probability SSN belongs to another person
FS14	Input SSN invalid
FS15	INQ: address reported cautious
FS16	FILE: type of high risk address
FS17	FILE: non-residential address
FS18	FILE: reported cautious
FS21	Telephone number inconsistent with address
FS25	Best on file SSN recorded as deceased
FS26	Best on file SSN not issued as of MM/YY
FS27	SSN reported more frequently for another

Verification Codes

Verification codes indicate the results of ACH verification and are returned in the following fields. For a description of ACH verification for debits, see ["ACH Verification," page 25](#). For a description of ACH verification for credits, see ["ACH Verification," page 30](#).

Table 30 Reply Fields for Verification Codes

Service	Mapped Value	Raw Value
ecDebitService	ecDebitReply_ verificationCode	ecDebitReply_ verificationCodeRaw
ecCreditService	ecCreditReply_ verificationCode	ecCreditReply_ verificationCodeRaw

Mapped Verification Codes

Table 31 Mapped Verification Codes

Code	Description
00	Success: account number and routing number are OK.
01	Success: account number was corrected; routing number is OK.
02	Success: routing number was corrected; account number is OK.
03	Success: account number and routing number were corrected.
04	Declined: routing number did not pass verification.
98	Unavailable: unable to perform ACH verification.
99	Invalid: response from ACH verification is invalid.

Raw Verification Codes

Table 32 Raw Verification Codes

Code	Description
1	Accepted: routing number is valid. Account number is valid.
2	Accepted: routing number is valid. Account number is invalid; use corrected account number.
3	Accepted: routing number is valid. Account number is valid.
4	Accepted: routing number is valid. Account number structure not recognized; account may be valid.
5	Accepted: routing number is not usable for ACH; use corrected routing number. Account number is valid.
6	Accepted: routing number is not usable for ACH; use corrected routing number. Account number is invalid; use corrected account number.
7	Accepted: routing number is not usable for ACH; use corrected routing number. Account number is valid.
8	Accepted: routing number is not usable for ACH; use corrected routing number. Account number structure not recognized; account may be valid.
9	Declined: routing number is not usable for ACH; no corrected routing number available.
10	Declined: routing number not found.
11	Declined: invalid routing number.

SEC Codes

The **check_secCode** field specifies the authorization method for the transaction. Possible values:

- **ARC**: account receivable conversion—supports the conversion of checks received via U.S. mail into a merchant's unattended lock box. This value is used only by Paymentech. ARC is not supported in Canada. Contact your Paymentech representative to ensure that your address city field has been set up.
- **CCD**: corporate cash disbursement—a charge or credit against a business checking account. You can use one-time or recurring CCD transactions to transfer funds to or from a corporate entity. A standing authorization is required for recurring transactions. For CyberSource ACH Service, CCD is the default for **ecCreditService** if no value is set for **check_secCode**.
- **POP**: point of purchase conversion—supports single entry debits used at the point of purchase. This value is used only by Paymentech. POP is not supported in Canada. Contact your Paymentech representative to ensure that your address city field has been set up. If you submit **check_secCode** with a value of **POP**, we strongly recommend that you also submit **check_terminalCity** and **checkTerminal_State**. If you submit **check_terminalCity** and **checkTerminal_State** in a transaction and you wish to perform a follow-on transaction, you must resubmit them with the follow-on transaction. For more information, see ["Request Fields," page 48](#).
- **PPD**: prearranged payment and deposit entry—a charge or credit against a personal checking or savings account. You can originate a PPD entry only when the payment and deposit terms between you and the customer are prearranged. A written authorization from the customer is required for one-time transactions, and a written standing authorization is required for recurring transactions. For CyberSource ACH Service, PPD is the default for **ecDebitService** if no value is set for **check_secCode**.
- **TEL**: telephone-initiated entry—a one-time charge against a personal checking or savings account. You can originate a TEL entry only when there is a business relationship between you and the customer or when the customer initiates a telephone call to you. For a TEL entry, you must obtain a payment authorization from the customer over the telephone. Only the CyberSource ACH processor supports recurring telephone-initiated debits and credits. For CyberSource ACH Service, if the E-commerce Indicator for the Virtual Terminal is **MOTO**, the value of **check_secCode** will default to **TEL**.

- **WEB** : internet-initiated entry—a charge against a personal checking or savings account. You can originate a one-time or recurring WEB entry when the customer initiates the transaction over the Internet. For a WEB entry, you must obtain payment authorization from the customer over the Internet. For CyberSource ACH Service, if the e-commerce indicator for the Virtual Terminal is not set to MOTO, then the value of **check_secCode** will default to WEB.

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

A

account information [21](#)
 account numbers on checks [21](#)
 ACH verification
 for credits [30](#)
 for debits [25](#)
 authentication [34](#)

B

banking requirements [10](#)

C

Chase Paymentech Solutions
 banking requirements [10](#)
 corporate checks [36](#)
 credits [28](#)
 debits [21](#)
 deferred payments [36](#)
 merchant descriptors [38](#)
 merchant-provided data [21](#)
 partial payments [36](#)
 payment tokenization [40](#)
 recurring billing [41](#)
 settlement delivery methods [42](#)
 testing [44](#)
 validation [24](#)
 verification [26](#)
 voids [35](#)
 check point summary codes [76](#)
 check reference numbers [16](#)
 corporate checks [36](#)

credits
 follow-on [29](#)
 multiple partial [39](#)
 stand-alone [29](#)
 customer profiles [40](#)
 CyberSource ACH Service
 banking requirements [10](#)
 corporate checks [36](#)
 merchant-provided data [21](#)
 NOCs
 for credits [31](#)
 for debits [23](#)
 NSF service [39](#)
 payment tokenization [40](#)
 recurring billing [41](#)
 testing [45](#)
 verification
 for credits [30](#)
 for debits [25](#)
 CyberSource Direct ACH
 validation [25](#)

D

data types [47](#)
 debits [21](#)
 deferred payments [36](#)
 delivery methods [42](#)
 descriptors [38](#)

E

ecDebitService [21](#)
 examples [67](#)

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

F

follow-on credits [29](#)
 fraud screening [24](#)
 fraud shield indicator codes [86](#)

G

guaranteed checks [26](#)

L

live transactions [46](#)

M

merchant descriptors [38](#)
 merchant-provided data [21](#)
 multiple partial credits [39](#)

N

NOC codes [74](#)
 NOCs
 for credits [31](#)
 for debits [23](#)
 non-sufficient funds. See NSF service
 NSF service [39](#)

O

order tracking [16](#)

P

partial credits [39](#)
 partial payments [36](#)
 Payment Events Report [15](#)
 payment tokenization [40](#)
 processor transaction identifiers [16](#)
 product codes [70](#)
 profiles [40](#)

R

RBS WorldPay Atlanta
 authentication [34](#)
 banking requirements [10](#)
 corporate checks [36](#)
 merchant-provided data [21](#)
 multiple partial credits [39](#)
 NOCs
 for credits [31](#)
 for debits [23](#)
 payment tokenization [40](#)
 recurring billing [41](#)
 verification
 for credits [30](#)
 for debits [25](#)
 voids [35](#)
 reason codes [71](#)
 reconciliation IDs [16](#)
 recurring billing [41](#)
 request IDs [16](#)
 routing numbers on checks [21](#)

S

samples [67](#)
 SEC codes [52, 89](#)
 secure data [40](#)
 secure storage [40](#)
 settlement delivery methods [42](#)
 soft descriptors [38](#)
 special characters [47](#)
 stand-alone credits [29](#)
 subscriptions [41](#)

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**T**

TeleCheck

- banking requirements **10**
- corporate checks **36**
- credits **28**
- debits **21**
- deferred payments **36**
- guaranteed checks **26**
- merchant-provided data **21**
- multiple partial credits **39**
- partial payments **36**
- payment tokenization **40**
- recurring billing **41**
- validation **24**
- voids **35**

testing **43****V**

- validation **24**
- verification **24**
- voids **35**
- voidService **35**