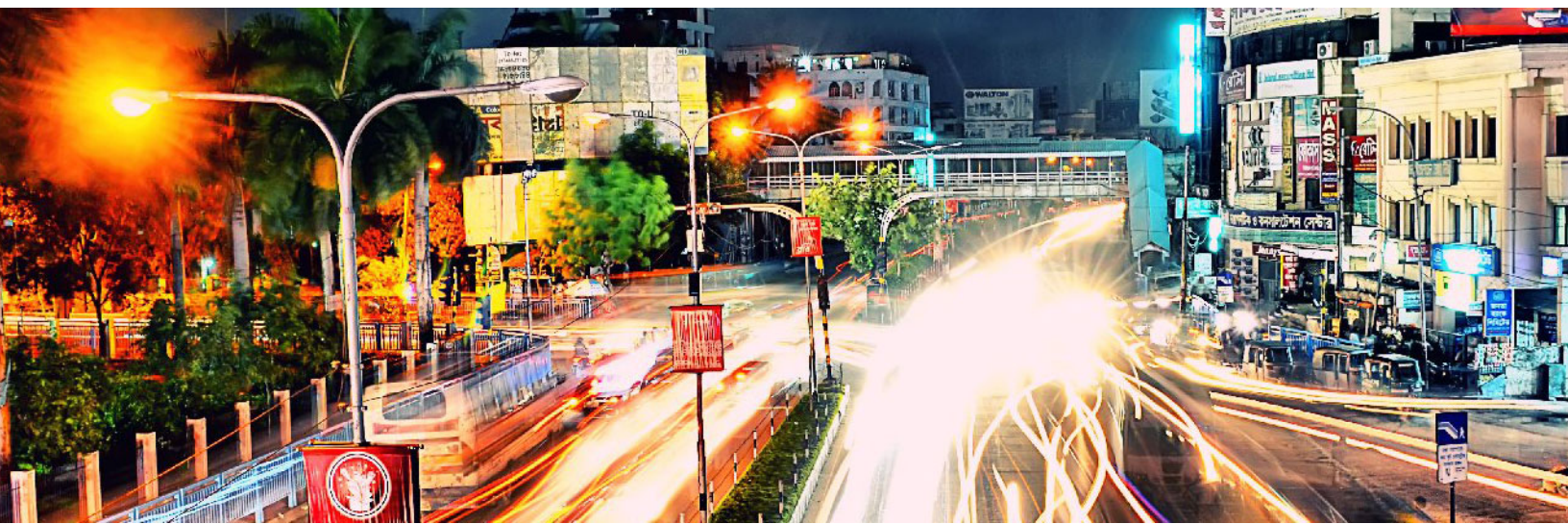


Authorizations with Payment Network Tokens Using the Simple Order API

Supplement to *Credit Card Services
Using the Simple Order API*



CyberSource[®]
A Visa Solution

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Recent Revisions to This Document

Release	Changes
July 2020	Added support for the processor <i>Cielo</i> 3.0. See Table 2, "Processors and Card Types," on page 8 .
May 2020	Updated information about recurring payments. See "Recurring Payments," page 14 .
April 2020	Added the following request fields. See "Request Fields," page 20 . <ul style="list-style-type: none"> ■ subsequentAuth ■ subsequentAuthFirst ■ subsequentAuthOriginalAmount ■ subsequentAuthReason ■ subsequentAuthStoredCredential ■ subsequentAuthTransactionID
February 2020	Updated support for the processor <i>Moneris</i> . See Table 2, "Processors and Card Types," on page 8 , Table 3, "Processors That Support Merchant-Initiated Transactions," on page 11 , and Table 5, "Processors That Support Recurring Payments," on page 14 .
January 2020	Updated the purchaseTotals_grandTotalAmount request field. See purchaseTotals_grandTotalAmount, page 26 .
November 2019	<p>Changed the name of this document to <i>Authorizations with Payment Network Tokens Using the Simple Order API</i>.</p> <p>Changed <i>payment network tokenization</i> to <i>authorizations with payment network tokens</i> throughout.</p> <p>SIX: added an Important statement. See SIX, page 9, and SIX, page 15.</p>

About This Guide

Audience and Purpose

This document is written for application developers who want to use payment network tokens in an order management system that already uses CyberSource credit card services. This document assumes that you are already familiar with the CyberSource credit card services as described in [Credit Card Services Using the Simple Order API](#).

Updating the CyberSource credit card services requires software development skills. You must write code that uses the API request and reply fields to integrate authorizations with payment network tokens into your existing order management system.

Conventions

The following special statement is used in this document:



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
bold	Field and service names in text; for example: Include the ccAuthService_run field.
Screen text	<ul style="list-style-type: none"> ■ XML elements. ■ Code examples. ■ Values for API fields; for example: Set the ccAuthService_run field to <code>true</code>.

Related Documents

- *Apple Pay Using the Simple Order API* ([PDF](#) | [HTML](#))
- *Card-Present Processing Using the Simple Order API* ([PDF](#) | [HTML](#))
- *Credit Card Services Using the Simple Order API* ([PDF](#) | [HTML](#))
- *Getting Started with CyberSource Advanced for the Simple Order API* ([PDF](#) | [HTML](#))
- *Google Pay Using the Simple Order API* ([PDF](#) | [HTML](#))
- *Samsung Pay Using the Simple Order API* ([PDF](#) | [HTML](#))

Refer to the Support Center for complete CyberSource technical documentation:

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

Customer Support

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

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

Authorizations with Payment Network Tokens

This guide explains how to request an authorization with a token instead of a primary account number (PAN).

This document describes how to integrate the pass-through processing of tokens into your order management system. It does not describe the process of substituting a PAN with a token, also known as *token provisioning*. For information about token provisioning, contact your token service provider.

For an incremental authorization, you do not need to include any payment network tokenization fields in the authorization request because CyberSource obtains the payment network tokenization information from the original authorization request.

Supported Processors and Card Types

Table 2 Processors and Card Types

Processor	Card Types
American Express Direct	American Express
Barclays	Visa, Mastercard, JCB, Maestro (International), Maestro (UK Domestic) Note If you support Maestro (UK Domestic), you must also support Maestro (International), and you must support Mastercard Identity Check for both card types.
Chase Paymentech Solutions	Visa, Mastercard, American Express, Discover, Diners Club, JCB, Carte Blanche, Maestro (International)
Cielo 3.0	Visa, Mastercard, Elo
Credit Mutuel-CIC	Visa, Mastercard, Cartes Bancaires
CyberSource through VisaNet	Visa, Mastercard, American Express, Discover, JCB, Diners Club
Elavon Americas	Visa, Mastercard, American Express, JCB, Diners Club, Discover, China UnionPay

Table 2 Processors and Card Types (Continued)

Processor	Card Types
FDC Compass	Visa, Mastercard, American Express, Discover, Diners Club, JCB
FDC Nashville Global	Visa, Mastercard, American Express, Discover, Diners Club, JCB, China UnionPay
GPN	Visa, Mastercard, American Express, Discover, Diners Club, JCB
JCN Gateway	JCB
Moneris	Visa, Mastercard, American Express
OmniPay Direct	Visa, Mastercard, Discover, Diners Club, Maestro (UK Domestic), Maestro (International)
SIX	Visa, Mastercard Important SIX is supported only for card-present processing.
Streamline	Visa, Mastercard
TSYS Acquiring Solutions	Visa, Mastercard, American Express
Worldpay VAP Worldpay VAP was previously called Litle. Litle was purchased by Vantiv, which was then purchased by Worldpay VAP. If you have any questions about this situation, contact your account manager at Worldpay VAP.	Visa, Mastercard

In-App Transactions

For in-app transactions, include the following required fields in the authorization request:

- billTo_city
- billTo_country
- billTo_email
- billTo_firstName
- billTo_lastName
- billTo_postalCode—required only for transactions in the U.S. and Canada.
- billTo_state—required only for transactions in the U.S. and Canada.
- billTo_street1

- `card_accountNumber`—set to the token value that you received from the token service provider.
- `card_cardType`—CyberSource strongly recommends that you send the card type even if it is optional for your processor. Omitting the card type can cause the transaction to be processed with the wrong card type.
- `card_expirationMonth`—set to the token expiration month that you received from the token service provider.
- `card_expirationYear`—set to the token expiration year that you received from the token service provider.
- `ccAuthService_cavv`—for 3D Secure in-app transactions, set to the 3D Secure cryptogram. Otherwise, set to the network token cryptogram.
- `ccAuthService_commerceIndicator`
- `ccAuthService_networkTokenCryptogram`
- `ccAuthService_run`—set to `true`.
- `merchantID`
- `merchantReferenceCode`
- `purchaseTotals_currency`
- `purchaseTotals_grandTotalAmount` or `item_#_unitPrice`
- `paymentNetworkToken_transactionType`

Include 3D Secure data in the following fields:

- For Visa requests, include the `ccAuthService_cavv` field set to the Visa Secure cryptogram.
- For Mastercard requests, include:
 - `ucaf_authenticationData`—set to the Identity Check cryptogram.
 - `ucaf_collectionIndicator`—set to `2`.
- For JCB requests, include the `ccAuthService_cavv` field set to the J/Secure cryptogram.

See [Appendix A, "API Fields," on page 18](#) for:

- Detailed descriptions of these required request fields
- Optional request fields
- Reply fields

After a successful authorization request, the rest of the credit card processing proceeds as described in *Credit Card Services Using the Simple Order API* ([PDF](#) | [HTML](#)).

Optional Features

Merchant-Initiated Transactions

Service:

- Authorization

Card type:

- Visa

Processors:

- See the following table.

Table 3 Processors That Support Merchant-Initiated Transactions

Processors	Supported Digital Payments
Chase Paymentech Solutions	Apple Pay, Google Pay, Samsung Pay Note The only scenarios supported on Chase Paymentech Solutions are reauthorizations and unscheduled card-on-file transactions.
CyberSource through VisaNet	Apple Pay, Google Pay, Samsung Pay
Elavon Americas	Apple Pay, Google Pay, Samsung Pay
Moneris	Apple Pay, Google Pay

For details on merchant-initiated transactions, see [Credit Card Services Using the Simple Order API](#).

Multiple Partial Captures

Processors:

- See the following table.

Table 4 Processors That Support Multiple Partial Captures

Processors	Supported Digital Payments
American Express Direct	Apple Pay, Samsung Pay
Barclays	Apple Pay, Google Pay, Samsung Pay
Chase Paymentech Solutions	Apple Pay, Samsung Pay
Elavon Americas	Apple Pay, Google Pay, Samsung Pay
FDC Compass	Apple Pay, Samsung Pay
FDC Nashville Global	Apple Pay, Google Pay, Samsung Pay
	Note Multiple partial captures are supported only for card-not-present transactions; they are not supported for card-present transactions.
JCN Gateway	Apple Pay, Google Pay, Samsung Pay
Omnipay Direct	Apple Pay, Google Pay, Samsung Pay
Streamline	Apple Pay, Samsung Pay
	Note See " Multiple Partial Captures on Streamline ," page 13.
TSYS Acquiring Solutions	Apple Pay, Samsung Pay
Worldpay VAP	Apple Pay, Google Pay
Worldpay VAP was previously called Litle. Litle was purchased by Vantiv, which was then purchased by Worldpay VAP. If you have any questions about this situation, contact your account manager at Worldpay VAP.	



Multiple partial captures and split shipments are not the same feature.

- The multiple partial captures feature is provided by the processor. This feature enables you to request multiple partial captures for one authorization.
- The split shipments feature is provided by CyberSource. This feature supports three different scenarios: multiple authorizations, multiple captures, and multiple authorizations with multiple captures. For more information, see "[Split Shipments](#)," page 16.

This feature enables you to request multiple partial captures for one authorization. You must ensure that the total amount of all the captures does not exceed the authorized amount.

Special Request Fields for Multiple Partial Captures

Processors:

- Barclays. The special request fields are required.
- FDC Compass. To avoid a downgrade for a Visa transaction, the special request fields are required. For other card types, CyberSource strongly recommends that you include the special request fields.
- FDC Nashville Global. The special request fields are required for Visa and Mastercard transactions. They are not supported for other card types.
- FDMS Nashville. The special request fields are required for Visa and Mastercard transactions. They are not supported for other card types.
- OmniPay Direct. CyberSource strongly recommends that you include the special request fields.
- TSYS Acquiring Solutions. The special request fields are required.

Include the following special request fields in each capture request when you are requesting multiple partial captures:

- ccCaptureService_sequence
- ccCaptureService_totalCount

When you do not know the total number of captures that you are going to request, set the capture total count to an estimated value or 99 for all capture requests except the final one. For the final capture request, set the capture total count and the capture sequence to the same value.

Multiple Partial Captures on Streamline

Streamline might consider a partial capture to be a duplicate and reject the transaction when one or more of the following fields are the same for a merchant ID. You must ensure that you do not submit duplicate transaction information when using multiple partial captures; otherwise Streamline might reject the transaction.

- transaction date
- card_accountNumber
- merchantReferenceCode
- purchaseTotals_grandTotalAmount

Recurring Payments

Service:

- Authorization

Processors:

- See the following table.

Table 5 Processors That Support Recurring Payments

Processors	Card Types	Supported Digital Payments
American Express Direct	American Express	Apple Pay, Google Pay, Samsung Pay
Barclays	Visa, Mastercard, JCB	Apple Pay, Google Pay, Samsung Pay
Chase Paymentech Solutions	Visa, Mastercard, American Express, Discover	Apple Pay, Chase Pay, Google Pay, Samsung Pay
Credit Mutuel-CIC	Visa, Mastercard, Cartes Bancaires	Apple Pay, Google Pay
CyberSource through VisaNet	Visa, Mastercard, American Express, Diners Club, JCB, Discover	Australia and New Zealand Banking Group Ltd.—Apple Pay, Google Pay CitiBank Singapore Ltd.—Apple Pay Global Payments Asia Pacific—Apple Pay Vantiv—Apple Pay, Google Pay, Samsung Pay Westpac—Apple Pay, Google Pay
Elavon Americas	Visa, Mastercard, American Express, JCB, Diners Club, Discover, China UnionPay When you request a recurring payment transaction with Visa, Elavon Americas requires you to be in compliance with the Visa merchant-initiated transactions mandate by including additional data in the request. You must do one of the following: <ul style="list-style-type: none"> ■ Include additional data as described in "Merchant-Initiated Transactions," page 11. ■ Make the request using the Token Management Service, which meets the merchant-initiated transactions requirements. 	Apple Pay, Google Pay, Samsung Pay

Table 5 Processors That Support Recurring Payments (Continued)

Processors	Card Types	Supported Digital Payments
FDC Compass	Visa, Mastercard, American Express, Discover, Diners Club, JCB	Apple Pay, Google Pay, Samsung Pay
FDC Nashville Global	Visa, Mastercard, American Express, Discover, China UnionPay	Apple Pay, Google Pay, Samsung Pay
Moneris	Visa, Mastercard, American Express, Discover	Apple Pay, Google Pay
OmniPay Direct	Visa, Mastercard Visa, Mastercard, Discover, Diners Club Visa, Mastercard	Bank of America Merchant Services—Apple Pay, Google Pay, Samsung Pay First Data Merchant Solutions (Europe)—Apple Pay, Google Pay, Samsung Pay Global Payments International Acquiring—Apple Pay, Google Pay, Samsung Pay
SIX	Visa, Mastercard, Discover, Diners Club, JCB, Maestro (International), Maestro (UK Domestic), China UnionPay, Visa Electron	Apple Pay, Google Pay Important SIX is supported only for card-present processing.
Streamline		Apple Pay, Google Pay, Samsung Pay
<p>Note To process recurring payments with Streamline, contact the CyberSource European office. For the European office's phone number, go to the CyberSource web site and click the Contact Us link: www.cybersource.com</p>		
Worldpay VAP Worldpay VAP was previously called Litle. Litle was purchased by Vantiv, which was then purchased by Worldpay VAP. If you have any questions about this situation, contact your account manager at Worldpay VAP.	Visa, Mastercard, American Express, Discover, Diners Club, JCB	Apple Pay, Google Pay

The recurring payments feature is described in *Credit Card Services Using the Simple Order API* ([PDF](#) | [HTML](#)).

Relaxed Requirements for Address Data and Expiration Date

To enable relaxed requirements for address data and expiration date, contact CyberSource Customer Support to have your account configured for this feature. For details about relaxed requirements, see the [Relaxed Requirements for Address Data and Expiration Date page](#).

Split Shipments

For details about split shipments, see [Credit Card Services Using the Simple Order API](#).

Services:

- Authorization
- Capture

Processors:

- See the following table.

Table 6 Processors That Support Split Shipments

Processor	Supported Digital Payments
CyberSource through VisaNet	Apple Pay, Samsung Pay Important Split shipments are not available for Mastercard transactions in the IDR currency on CyberSource through VisaNet.
GPN	Apple Pay, Google Pay, Samsung Pay

The split-shipment feature enables you to split an order into multiple shipments with multiple captures.



Multiple partial captures and split shipments are not the same feature.

- The multiple partial captures feature is provided by the processor. This feature enables you to request multiple partial captures for one authorization. For more information, see ["Multiple Partial Captures," page 12](#).
 - The split shipments feature is provided by CyberSource. This feature supports three different scenarios: multiple authorizations, multiple captures, and multiple authorizations with multiple captures.
-

Subsequent Authorizations

Service:

- Authorization

Processors and card types:

- See the following table.

Table 7 Processors That Support Subsequent Authorizations

Processor	Card Types	Supported Digital Payments
FDC Nashville Global	Discover	Apple Pay
JCN Gateway	JCB	Apple Pay
Streamline	Visa, Mastercard	Apple Pay, Samsung Pay

When a customer purchases multiple items in one order, authorize and capture the amount of each item when you are ready to ship it.

Requesting a Subsequent Authorization

To request a subsequent authorization:

- Step 1** Request the authorization for the first item.
- Step 2** In each subsequent authorization request:
- Do not include the `ccAuthService_cavv` field.
 - Include `subsequentAuth=true`.
 - On FDC Nashville Global, include `subsequentAuthOriginalAmount=true`.
-

API Fields

Formatting Restrictions

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

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.

Moneris

Values for request-level and item-level fields must not contain these special characters: ampersands (&), single quotes ('), double quotes ("), less than signs (<), and greater than signs (>).

Data Type Definitions

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

Table 8 Data Type Definitions

Data Type	Description
Date and time	Format is YYYY-MM-DDThh:mm:ssZ, where: <ul style="list-style-type: none"> ■ T separates the date and the time ■ Z indicates Coordinated Universal Time (UTC), also known as Greenwich Mean Time (GMT) Example 2020-01-11T22:47:57Z equals January 11, 2020, at 22:47:57 (10:47:57 p.m.).
Integer	Whole number {..., -3, -2, -1, 0, 1, 2, 3, ...}
String	Sequence of letters, numbers, spaces, and special characters

Numbered Elements

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

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

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

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

Example 1 Numbered XML Schema Element Names and Name-Value Pair Field Names

XML Schema Element Names	Corresponding Name-Value Pair Field Names
<pre><item id="0"> <unitPrice> <quantity> </item></pre>	<pre>item_0_unitPrice item_0_quantity</pre>
<pre><item id="1"> <unitPrice> <quantity> </item></pre>	<pre>item_1_unitPrice item_1_quantity</pre>



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

Request Fields

Table 9 Request Fields

Field	Description	Used By: Required (R) or Optional (O)	Data Type (Length)
billTo_city	City of the billing address.	ccAuthService (R) ²	String (50)
billTo_country	Country of the billing address. Use the two-character ISO Standard Country Codes .	ccAuthService (R) ²	String (2)
billTo_email	Customer's email address.	ccAuthService (R) ²	String (255)
billTo_firstName	Customer's first name. For a credit card transaction, this name must match the name on the card.	ccAuthService (R) ²	String (60)
billTo_lastName	Customer's last name. For a credit card transaction, this name must match the name on the card.	ccAuthService (R) ²	String (60)
billTo_phoneNumber	Customer's phone number. CyberSource recommends that you include the country code when the order is from outside the U.S.	ccAuthService (O)	String (15)
billTo_postalCode	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	ccAuthService (R) ²	String (9)
billTo_state	State or province of the billing address. For an address in the U.S. or Canada, use the State, Province, and Territory Codes for the United States and Canada .	ccAuthService (R) ²	String (2)
billTo_street1	First line of the billing street address.	ccAuthService (R) ²	String (60)

- 1 The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.
- 2 This field is optional if your CyberSource account is configured for relaxed requirements for address data and expiration date. See "Relaxed Requirements for Address Data and Expiration Date," page 16. **Important** It is your responsibility to determine whether a field is required for the transaction you are requesting.

Table 9 Request Fields (Continued)

Field	Description	Used By: Required (R) or Optional (O)	Data Type (Length)
billTo_street2	Additional address information. Example Attention: Accounts Payable	ccAuthService (R)	String (60)
card_accountNumber	The payment network token value.	ccAuthService (R)	Nonnegative integer (20)
card_cardType	Type of card to authorize. Possible values: <ul style="list-style-type: none"> ■ 001: Visa ■ 002: Mastercard ■ 003: American Express ■ 004: Discover ■ 005: Diners Club ■ 007: JCB 	ccAuthService (R)	String (3)
card_cvNumber	CVN. See Credit Card Services Using the Simple Order API for a list of processors that support CVN.	ccAuthService (O)	String with numbers only (4)
card_expirationMonth	Two-digit month in which the payment network token expires. Format: MM. Possible values: 01 through 12.	ccAuthService (R)	String (2)
card_expirationYear	Four-digit year in which the payment network token expires. Format: YYYY.	ccAuthService (R)	Nonnegative integer (4)

- 1 The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.
- 2 This field is optional if your CyberSource account is configured for relaxed requirements for address data and expiration date. See "Relaxed Requirements for Address Data and Expiration Date," page 16. **Important** It is your responsibility to determine whether a field is required for the transaction you are requesting.

Table 9 Request Fields (Continued)

Field	Description	Used By: Required (R) or Optional (O)	Data Type (Length)
ccAuthService_cavv	<p>Cardholder authentication verification value. The value for this field must be 28-character Base64 or 40-character hex binary.</p> <p>Transactions without 3D Secure Data Set to the value of the network token cryptogram.</p> <p>Visa and JCB Transactions with 3D Secure Data This value is a transaction identifier generated by the issuing bank during Visa Secure or JCB J/Secure payer authentication.</p> <p>CyberSource through VisaNet The value for this field corresponds to the following data in the TC 33 capture file¹:</p> <ul style="list-style-type: none"> ■ Record: CP01 TCR8 ■ Position: 77-78 ■ Field: CAVV version and authentication action. 	ccAuthService (R for in-app transactions with 3D Secure data.)	String (40)
ccAuthService_commerceIndicator	<p>Type of transaction.</p> <p>Possible values:</p> <ul style="list-style-type: none"> ■ <code>aesk</code>: American Express card type ■ <code>dipb</code>: Discover card type ■ <code>internet</code>: Visa or JCB card type without 3D Secure data ■ <code>js</code>: J/Secure transaction ■ <code>recurring</code>: see "Recurring Payments," page 14. ■ <code>spa</code>: Mastercard card type ■ <code>vbv</code>: Visa Secure transaction <p>Important For Visa in-app transactions, the <code>internet</code> value is mapped to the Visa ECI value 7.</p> <p>Note For recurring payments, set this field to a value from the preceding list for the first payment and set this field to <code>recurring</code> for subsequent payments.</p>	ccAuthService (R)	String (20)
ccAuthService_directoryServerTransactionID	<p>Identifier generated during the authentication transaction by the Mastercard Directory Server and passed back with the authentication results.</p>	ccAuthService (O)	String (36)
<p>1 The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.</p> <p>2 This field is optional if your CyberSource account is configured for relaxed requirements for address data and expiration date. See "Relaxed Requirements for Address Data and Expiration Date," page 16. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p>			

Table 9 Request Fields (Continued)

Field	Description	Used By: Required (R) or Optional (O)	Data Type (Length)
ccAuthService_ firstRecurringPayment	<p>Flag that indicates whether this transaction is the first in a series of recurring payments. See "Recurring Payments," page 14.</p> <p>FDC Nashville Global Possible values:</p> <ul style="list-style-type: none"> ■ <code>true</code>: The first payment in a series of recurring payments. ■ <code>false</code> (default): Not the first payment in a series of recurring payments. <p>OmniPay Direct Possible values:</p> <ul style="list-style-type: none"> ■ <code>Y</code>: Yes, the first payment in a series of recurring payments. ■ <code>N</code> (default): No, not the first payment in a series of recurring payments. 	ccAuthService (See description)	String (1)
ccAuthService_ networkTokenCryptogram	<p>Token authentication verification value. For token-based transactions with 3D Secure or Identity Check, you must submit both types of cryptograms: network token and 3D Secure/Identity Check.</p> <p>The value for this field must be 28-character Base64 or 40-character hex binary. All cryptograms use one of these formats.</p>	ccAuthService (O)	String (40)
ccAuthService_ paSpecificationVersion	The 3D Secure version that you used for strong customer authentication (SCA); for example, 3D Secure version 1.0.2 or 2.0.0.	ccAuthService (O)	String (20)
ccAuthService_run	<p>Whether to include ccAuthService in your request.</p> <p>Possible values:</p> <ul style="list-style-type: none"> ■ <code>true</code>: Include the service in your request. ■ <code>false</code> (default): Do not include the service in your request. 	ccAuthService (R)	String (5)

- 1 The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.
- 2 This field is optional if your CyberSource account is configured for relaxed requirements for address data and expiration date. See "Relaxed Requirements for Address Data and Expiration Date," page 16. **Important** It is your responsibility to determine whether a field is required for the transaction you are requesting.

Table 9 Request Fields (Continued)

Field	Description	Used By: Required (R) or Optional (O)	Data Type (Length)
ccCaptureService_ sequence	Capture number when requesting multiple partial captures for one authorization. Used along with ccCaptureService_totalCount to track which capture is being processed. For example, the second of five captures would be passed to CyberSource as ccCaptureService_sequence = 2 and ccCaptureService_totalCount = 5. For the list of processors that support this field, see "Special Request Fields for Multiple Partial Captures," page 13.	ccCaptureService (See "Special Request Fields for Multiple Partial Captures," page 13.)	Integer (2)
ccCaptureService_ totalCount	Total number of captures when requesting multiple partial captures for one authorization. Used along with ccCaptureService_sequence to track which capture is being processed. For example, the second of five captures would be passed to CyberSource as ccCaptureService_sequence = 2 and ccCaptureService_totalCount = 5. For the list of processors that support this field, see "Special Request Fields for Multiple Partial Captures," page 13.	ccCaptureService (See "Special Request Fields for Multiple Partial Captures," page 13.)	Integer (2)
merchantID	Your CyberSource merchant ID. Use the same merchant ID for evaluation, testing, and production.	ccAuthService (R)	String (30)
merchantReferenceCode	Merchant-generated order reference or tracking number. CyberSource recommends that you send a unique value for each transaction so that you can perform meaningful searches for the transaction. For information about tracking orders, see Getting Started with CyberSource Advanced for the Simple Order API .	ccAuthService (R)	String (50)
paymentNetworkToken_ assuranceLevel	Confidence level of the tokenization. This value is assigned by the token service provider. Note This field is supported only for CyberSource through VisaNet and FDC Nashville Global.	ccAuthService (O)	String (2)
<p>1 The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.</p> <p>2 This field is optional if your CyberSource account is configured for relaxed requirements for address data and expiration date. See "Relaxed Requirements for Address Data and Expiration Date," page 16. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p>			

Table 9 Request Fields (Continued)

Field	Description	Used By: Required (R) or Optional (O)	Data Type (Length)
paymentNetworkToken_ deviceTechType	Type of technology used in the device to store token data. Possible values: <ul style="list-style-type: none"> ■ 001: Secure element (SE) Smart card or memory with restricted access and strong encryption, which prevents tampering. To store payment credentials, an SE is tested against a set of requirements defined by the payment networks. Apple Pay uses this technology. ■ 002: Host card emulation (HCE) Emulation of a smart card by using software to create a virtual and exact representation of the card. Sensitive data is stored in a database that is hosted in the cloud. To store payment credentials, a database must meet very high level security requirements that exceed PCI DSS. Google Pay uses this technology. <p>Note This field is supported only for FDC Compass.</p>	ccAuthService (O)	Integer (3)
paymentNetworkToken_ requestorID	Value that identifies your business and indicates that the cardholder's account number is tokenized. This value is assigned by the token service provider and is unique within the token service provider's database. <p>Note This field is supported only for CyberSource through VisaNet, FDC Nashville Global, and Chase Paymentech Solutions.</p>	ccAuthService (O)	String (11)
paymentNetworkToken_ transactionType	Type of transaction that provided the token data. This value does not specify the token service provider; it specifies the entity that provided you with information about the token. <p>Set the value for this field to 1.</p>	ccAuthService (R)	String (1)
<p>1 The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.</p> <p>2 This field is optional if your CyberSource account is configured for relaxed requirements for address data and expiration date. See "Relaxed Requirements for Address Data and Expiration Date," page 16. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p>			

Table 9 Request Fields (Continued)

Field	Description	Used By: Required (R) or Optional (O)	Data Type (Length)
pos_environment	<p>Operating environment. Possible values:</p> <ul style="list-style-type: none"> ■ 0: No terminal used or unknown environment. ■ 1: On merchant premises, attended. ■ 2: On merchant premises, unattended, or cardholder terminal. Examples: oil, kiosks, self-checkout, home computer, mobile telephone, personal digital assistant (PDA). Cardholder terminal is supported only for Mastercard transactions on CyberSource through VisaNet. ■ 3: Off merchant premises, attended. Examples: portable POS devices at trade shows, at service calls, or in taxis. ■ 4: Off merchant premises, unattended, or cardholder terminal. Examples: vending machines, home computer, mobile telephone, PDA. Cardholder terminal is supported only for Mastercard transactions on CyberSource through VisaNet. ■ 5: On premises of cardholder, unattended. ■ 9: Unknown delivery mode. ■ S: Electronic delivery of product. Examples: music, software, or eTickets that are downloaded over the internet. ■ T: Physical delivery of product. Examples: music or software that is delivered by mail or by a courier. <p>Note This field is supported only for American Express Direct and CyberSource through VisaNet.</p> <p>CyberSource through VisaNet For Mastercard transactions, the only valid values are 2 and 4.</p>	ccAuthService (Optional for in-app transactions.)	String (1)
purchaseTotals_currency	Currency used for the order: USD	ccAuthService (R)	String (5)
purchaseTotals_grandTotalAmount	Grand total for the order. This value cannot be negative. You can include a decimal point (.), but you cannot include any other special characters. CyberSource truncates the amount to the correct number of decimal places.	ccAuthService (R)	String (15)
<p>1 The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.</p> <p>2 This field is optional if your CyberSource account is configured for relaxed requirements for address data and expiration date. See "Relaxed Requirements for Address Data and Expiration Date," page 16. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p>			

Table 9 Request Fields (Continued)

Field	Description	Used By: Required (R) or Optional (O)	Data Type (Length)
subsequentAuth	<p>Indicates whether the transaction is a merchant-initiated transaction or subsequent authorization. Possible values:</p> <ul style="list-style-type: none"> ■ <code>true</code>: Merchant-initiated transaction or subsequent authorization ■ <code>false</code>: Not a merchant-initiated transaction or subsequent authorization <p>This field is supported for:</p> <ul style="list-style-type: none"> ■ All merchant-initiated transactions. ■ Subsequent authorizations on FDC Nashville Global and Streamline. <p>CyberSource through VisaNet The value for this field does not correspond to any data in the TC 33 capture file.¹</p> <p>Related Link <i>Credit Card Services Using the Simple Order API</i> (PDF HTML)</p>	<p>ccAuthService:</p> <ul style="list-style-type: none"> ■ R for merchant-initiated transactions. ■ R for subsequent authorizations on FDC Nashville Global and Streamline. ■ Otherwise, not used. 	String (5)
subsequentAuthFirst	<p>Indicates whether the transaction is the first merchant-initiated transaction in a series, which means that the customer initiated the previous transaction. Possible values:</p> <ul style="list-style-type: none"> ■ <code>true</code>: First merchant-initiated transaction ■ <code>false</code>: Not the first merchant-initiated transaction <p>This field is supported only for merchant-initiated transactions.</p> <p>CyberSource through VisaNet The value for this field corresponds to the following data in the TC 33 capture file¹:</p> <ul style="list-style-type: none"> ■ Record: CP01 TCR1 ■ Position: 136 ■ Field: POS Environment <p>Related Link <i>Credit Card Services Using the Simple Order API</i> (PDF HTML)</p>	ccAuthService (R for merchant-initiated transactions; otherwise, not used.)	String (5)

1 The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.

2 This field is optional if your CyberSource account is configured for relaxed requirements for address data and expiration date. See "Relaxed Requirements for Address Data and Expiration Date," page 16. **Important** It is your responsibility to determine whether a field is required for the transaction you are requesting.

Table 9 Request Fields (Continued)

Field	Description	Used By: Required (R) or Optional (O)	Data Type (Length)
subsequentAuthOriginal Amount	<p>Amount of the original authorization. This field is supported only for the following kinds of transactions with Discover:</p> <ul style="list-style-type: none"> ■ Merchant-initiated transactions ■ Recurring payments on FDC Nashville Global that use payment network tokens ■ Subsequent authorizations on FDC Nashville Global and Streamline <p>Related Link <i>Credit Card Services Using the Simple Order API</i> (PDF HTML)</p>	ccAuthService (See description)	String (60)
subsequentAuthReason	<p>Reason for the merchant-initiated transaction or incremental authorization. Possible values:</p> <ul style="list-style-type: none"> ■ 1: Resubmission ■ 2: Delayed charge ■ 3: Reauthorization for split shipment ■ 4: No show ■ 5: Incremental authorization <p>This field is supported only for:</p> <ul style="list-style-type: none"> ■ The five kinds of merchant-initiated transactions in the preceding list. ■ Incremental authorization service. <p>CyberSource through VisaNet The value for this field corresponds to the following data in the TC 33 capture file¹:</p> <ul style="list-style-type: none"> ■ Record: CP01 TCR0 ■ Position: 160-163 ■ Field: Message Reason Code <p>Related Link <i>Credit Card Services Using the Simple Order API</i> (PDF HTML)</p>	ccAuthService (See description)	String (1)

1 The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.

2 This field is optional if your CyberSource account is configured for relaxed requirements for address data and expiration date. See "Relaxed Requirements for Address Data and Expiration Date," page 16. **Important** It is your responsibility to determine whether a field is required for the transaction you are requesting.

Table 9 Request Fields (Continued)

Field	Description	Used By: Required (R) or Optional (O)	Data Type (Length)
subsequentAuthStored Credential	<p>Indicates whether you obtained the payment information from credentials on file (COF) instead of from the customer. Possible values:</p> <ul style="list-style-type: none"> ■ <code>true</code>: Transaction uses COF ■ <code>false</code>: Transaction does not use COF <p>When you use the Token Management Service, CyberSource sets this field to <code>true</code> for you.</p> <p>Related Links Credit Card Services Using the Simple Order API (PDF HTML) Token Management Service Using the Simple Order API (PDF HTML)</p>	ccAuthService (R for transactions that use COF information; otherwise, not used.)	String (5)
subsequentAuth TransactionID	<p>Network transaction identifier that was returned in the ccAuthReply_paymentNetworkTransactionID field in the reply message for either the original authorization in the series or the previous authorization in the series.</p> <p>CyberSource through VisaNet The value for this field does not correspond to any data in the TC 33 capture file.¹</p> <p>All Processors This field is supported for merchant-initiated transactions.</p> <p>Related Link Credit Card Services Using the Simple Order API (PDF HTML)</p>	<p>ccAuthService:</p> <ul style="list-style-type: none"> ■ R for merchant-initiated transactions. ■ Otherwise, not used. 	String (15)
ucaf_authenticationData	<p>Universal cardholder authentication field (UCAF) data. Set the value for this field to the Mastercard Identity Check cryptogram.</p>	ccAuthService (R for in-app transactions with 3D Secure data)	String (32)
ucaf_collectionIndicator	<p>Collection indicator for the universal cardholder authentication field for Mastercard.</p> <p>Set the value for this field to 2.</p>	ccAuthService (R for in-app transactions with 3D Secure data)	String with numbers only (1)

1 The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.

2 This field is optional if your CyberSource account is configured for relaxed requirements for address data and expiration date. See "Relaxed Requirements for Address Data and Expiration Date," page 16. **Important** It is your responsibility to determine whether a field is required for the transaction you are requesting.

Reply Fields



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

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



Your payment processor can include additional API reply fields that are not documented in this guide. See [Credit Card Services Using the Simple Order API](#) for detailed descriptions of additional API reply fields.

Table 10 Reply Fields

Field	Description	Returned By	Data Type & Length
card_suffix	<p>Last four digits of the cardholder's account number. This field is returned only for tokenized transactions. You can use this value on the receipt that you give to the cardholder.</p> <p>Note This field is returned only for CyberSource through VisaNet and FDC Nashville Global.</p> <p>CyberSource through VisaNet The value for this field corresponds to the following data in the TC 33 capture file¹:</p> <ul style="list-style-type: none"> ■ Record: CP01 TCRB ■ Position: 85 ■ Field: American Express last 4 PAN return indicator. 	ccAuthReply	String (4)
ccAuthReply_amount	Amount that was authorized.	ccAuthReply	String (15)
ccAuthReply_authorizationCode	Authorization code. Returned only when the processor returns this value.	ccAuthReply	String (7)
ccAuthReply_authorizedDateTime	Time of authorization.	ccAuthReply	Date and time (20)
ccAuthReply_avsCode	AVS results. See Credit Card Services Using the Simple Order API for a detailed list of AVS codes.	ccAuthReply	String (1)

¹ The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.

Table 10 Reply Fields (Continued)

Field	Description	Returned By	Data Type & Length
ccAuthReply_avsCodeRaw	AVS result code sent directly from the processor. Returned only when the processor returns this value.	ccAuthReply	String (10)
ccAuthReply_cvCode	CVN result code. See Credit Card Services Using the Simple Order API for a detailed list of CVN codes.	ccAuthReply	String (1)
ccAuthReply_cvCodeRaw	CVN result code sent directly from the processor. Returned only when the processor returns this value.	ccAuthReply	String (10)
ccAuthReply_paymentCardService	<p>Mastercard service that was used for the transaction. Mastercard provides this value to CyberSource. Possible value:</p> <p>53: Mastercard card-on-file token service</p> <p>Note This field is returned only for CyberSource through VisaNet.</p>	ccAuthReply	String (2)
ccAuthReply_paymentCardServiceResult	<p>Result of the Mastercard card-on-file token service. Mastercard provides this value to CyberSource. Possible values:</p> <ul style="list-style-type: none"> ■ C: Service completed successfully. ■ F: One of the following: <ul style="list-style-type: none"> ● Incorrect Mastercard POS entry mode. The Mastercard POS entry mode should be 81 for an authorization or authorization reversal. ● Incorrect Mastercard POS entry mode. The Mastercard POS entry mode should be 01 for a tokenized request. ● Token requestor ID is missing or formatted incorrectly. ■ I: One of the following: <ul style="list-style-type: none"> ● Invalid token requestor ID. ● Suspended or deactivated token. ● Invalid token (not in mapping table). ■ T: Invalid combination of token requestor ID and token. ■ U: Expired token. ■ W: Primary account number (PAN) listed in electronic warning bulletin. <p>Note This field is returned only for CyberSource through VisaNet.</p>	ccAuthReply	String (1)

1 The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.

Table 10 Reply Fields (Continued)

Field	Description	Returned By	Data Type & Length
ccAuthReply_processorResponse	For most processors, this is the error message sent directly from the bank. Returned only when the processor returns this value.	ccAuthReply	String (10)
ccAuthReply_reasonCode	Numeric value corresponding to the result of the credit card authorization request. See Credit Card Services Using the Simple Order API for a detailed list of reason codes.	ccAuthReply	Integer (5)
ccAuthReply_reconciliationID	Reference number for the transaction. This value is not returned for all processors.	ccAuthReply	String (60)
ccAuthReply_transactionQualification	Type of authentication for which the transaction qualifies as determined by the Mastercard authentication service, which confirms the identity of the cardholder. Mastercard provides this value to CyberSource. Possible values: <ul style="list-style-type: none"> ■ 1: Transaction qualifies for Mastercard authentication type 1. ■ 2: Transaction qualifies for Mastercard authentication type 2. <p>Note This field is returned only for CyberSource through VisaNet.</p>	ccAuthReply	String (1)
ccAuthReversalReply_paymentCardService	Mastercard service that was used for the transaction. Mastercard provides this value to CyberSource. Possible value: <p>53: Mastercard card-on-file token service</p> <p>Note This field is returned only for CyberSource through VisaNet.</p>	ccAuthReversal Reply	String (2)

1 The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.

Table 10 Reply Fields (Continued)

Field	Description	Returned By	Data Type & Length
ccAuthReversalReply_paymentCardServiceResult	<p>Result of the Mastercard card-on-file token service. Mastercard provides this value to CyberSource. Possible values:</p> <ul style="list-style-type: none"> ■ C: Service completed successfully. ■ F: One of the following: <ul style="list-style-type: none"> ● Incorrect Mastercard POS entry mode. The Mastercard POS entry mode should be 81 for an authorization or authorization reversal. ● Incorrect Mastercard POS entry mode. The Mastercard POS entry mode should be 01 for a tokenized request. ● Token requestor ID is missing or formatted incorrectly. ■ I: One of the following: <ul style="list-style-type: none"> ● Invalid token requestor ID. ● Suspended or deactivated token. ● Invalid token (not in mapping table). ■ T: Invalid combination of token requestor ID and token. ■ U: Expired token. ■ W: Primary account number (PAN) listed in electronic warning bulletin. <p>Note This field is returned only for CyberSource through VisaNet.</p>	ccAuthReversal Reply	String (1)
decision	<p>Summarizes the result of the overall request. Possible values:</p> <ul style="list-style-type: none"> ■ ACCEPT ■ ERROR ■ REJECT ■ REVIEW: Returned only when you use CyberSource Decision Manager. 	ccAuthReply	String (6)
invalidField_0...N	<p>Fields in the request that contained invalid data.</p> <p>For information about missing or invalid fields, see Getting Started with CyberSource Advanced for the Simple Order API.</p>	ccAuthReply	String (100)
<p>1 The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.</p>			

Table 10 Reply Fields (Continued)

Field	Description	Returned By	Data Type & Length
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 include corrupted characters.	ccAuthReply	String (50)
missingField_0...N	Required fields that were missing from the request. For information about missing or invalid fields, see Getting Started with CyberSource Advanced for the Simple Order API .	ccAuthReply	String (100)
paymentNetworkToken_accountStatus	Possible values: <ul style="list-style-type: none"> ■ N: Nonregulated ■ R: Regulated Note This field is returned only for CyberSource through VisaNet.	ccAuthReply	String (1)
paymentNetworkToken_assuranceLevel	Confidence level of the token. This value is assigned by the token service provider. Note This field is returned only for CyberSource through VisaNet and FDC Nashville Global.	ccAuthReply	String (2)
paymentNetworkToken_originalCardCategory	Mastercard product ID associated with the primary account number (PAN). For the possible values, see "Mastercard Product IDs" in Credit Card Services Using the Simple Order API . This field is returned only for Mastercard transactions on CyberSource through VisaNet.	ccAuthReply	String (3)
paymentNetworkToken_requestorID	Value that identifies your business and indicates that the cardholder's account number is tokenized. This value is assigned by the token service provider and is unique within the token service provider's database. This value is returned only if the processor provides it. Note This field is supported only for CyberSource through VisaNet and FDC Nashville Global.	ccAuthService	String (11)
purchaseTotals_currency	Currency used for the order. For the possible values, see the ISO Standard Currency Codes .	ccAuthReply	String (5)
reasonCode	Numeric value corresponding to the result of the overall request. See Credit Card Services Using the Simple Order API for a detailed list of reason codes.	ccAuthReply	Integer (5)
requestID	Identifier for the request.	ccAuthReply	String (26)

1 The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.

Table 10 Reply Fields (Continued)

Field	Description	Returned By	Data Type & Length
requestToken	Request token data created by CyberSource for each reply. The field is an encoded string that contains no confidential information such as an account or card verification number. The string can contain a maximum of 256 characters.	ccAuthReply	String (256)
token_expirationMonth	Month in which the token expires. CyberSource includes this field in the reply message when it decrypts the payment blob for the tokenized transaction. Format: MM. Possible values: 01 through 12.	ccAuthReply	String (2)
token_expirationYear	Year in which the token expires. CyberSource includes this field in the reply message when it decrypts the payment blob for the tokenized transaction. Format: YYYY.	ccAuthReply	String (4)
token_prefix	First 6 digits of token. CyberSource includes this field in the reply message when it decrypts the payment blob for the tokenized transaction.	ccAuthReply	String (6)
token_suffix	Last 4 digits of token. CyberSource includes this field in the reply message when it decrypts the payment blob for the tokenized transaction.	ccAuthReply	String (4)
<p>1 The TC 33 Capture file contains information about the purchases and refunds that a merchant submits to CyberSource. CyberSource through VisaNet creates the TC 33 Capture file at the end of the day and sends it to the merchant's acquirer, who uses this information to facilitate end-of-day clearing processing with payment card companies.</p>			

Examples

Name-Value Pair Examples

Example 2 In-App Authorization Request for Visa

```
merchantID=Foster_City_Flowers
merchantReferenceCode=12345678
billTo_firstName=Jane
billTo_lastName=Smith
billTo_street1=100 Main Street
billTo_street2=Suite 1234
billTo_city=Foster City
billTo_state=CA
billTo_postalCode=94404
billTo_country=US
billTo_email=jsmith@example.com
purchaseTotals_currency=USD
purchaseTotals_grandTotalAmount=16.00
card_accountNumber=4650100000000839
card_expirationMonth=12
card_expirationYear=2031
ccAuthService_run=true
ccAuthService_cavv=EHuWW9PiBkWvqE5juRwDzAUFBAk=
ccAuthService_commerceIndicator=vbv
ccAuthService_networkTokenCryptogram=qE5juRwDzAUFBAkEHuWW9PiBkWv=
paymentNetworkToken_transactionType=1
```

Example 3 In-App Authorization Request for Mastercard

```

merchantID=Foster_City_Flowers
merchantReferenceCode=12345678
billTo_firstName=Jane
billTo_lastName=Smith
billTo_street1=100 Main Street
billTo_street2=Suite 1234
billTo_city=Foster City
billTo_state=CA
billTo_postalCode=94404
billTo_country=US
billTo_email=jsmith@example.com
purchaseTotals_currency=USD
purchaseTotals_grandTotalAmount=16.00
card_accountNumber=4650100000000839
card_expirationMonth=12
card_expirationYear=2031
ucaf_authenticationData=EHuWW9PiBkWvqE5juRwDzAUFBAk=
ucaf_collectionIndicator=2
ccAuthService_run=true
ccAuthService_commerceIndicator=spa
ccAuthService_networkTokenCryptogram=qE5juRwDzAUFBAkEHuWW9PiBkWv=
paymentNetworkToken_transactionType=1

```

Example 4 In-App Authorization Request for American Express

```

merchantID=Foster_City_Flowers
merchantReferenceCode=12345678
billTo_firstName=Jane
billTo_lastName=Smith
billTo_street1=100 Main Street
billTo_street2=Suite 1234
billTo_city=Foster City
billTo_state=CA
billTo_postalCode=94404
billTo_country=US
billTo_email=jsmith@example.com
purchaseTotals_currency=USD
purchaseTotals_grandTotalAmount=16.00
card_accountNumber=4650100000000839
card_expirationMonth=12
card_expirationYear=2031
ccAuthService_run=true
ccAuthService_cavv=EHuWW9PiBkWvqE5juRwD
ccAuthService_commerceIndicator=aesk
ccAuthService_networkTokenCryptogram=qE5juRwDzAUFBAkEHuWW9PiBkWv=
paymentNetworkToken_transactionType=1

```

XML Examples

Example 5 In-App Authorization Request for Visa

```

<requestMessage xmlns="urn:schemas-cybersource-com:transaction-data-1.104">
  <merchantID>Foster_City_Flowers</merchantID>
  <merchantReferenceCode>12345678</merchantReferenceCode>
  <billTo>
    <firstName>Jane</firstName>
    <lastName>Smith</lastName>
    <street1>100 Main Street</street1>
    <street2>Suite 1234</street2>
    <city>Foster City</city>
    <state>CA</state>
    <postalCode>94404</postalCode>
    <country>US</country>
    <email>jsmith@example.com</email>
  </billTo>
  <purchaseTotals>
    <currency>USD</currency>
    <grandTotalAmount>16.00</grandTotalAmount>
  </purchaseTotals>
  <card>
    <accountNumber>4650100000000839</accountNumber>
    <expirationMonth>12</expirationMonth>
    <expirationYear>2031</expirationYear>
  </card>
  <ccAuthService run="true">
    <cavv>EHuWW9PiBkWvqE5juRwDzAUFBAk=</cavv>
    <networkTokenCryptogram>qE5juRwDzAUFBAkEHuWW9PiBkWv=</networkTokenCryptogram>
    <commerceIndicator>vbv</commerceIndicator>
  </ccAuthService>
  <paymentNetworkToken>
    <transactionType>1</transactionType>
  </paymentNetworkToken>
</requestMessage>

```

Example 6 In-App Authorization Request for Mastercard

```

<requestMessage xmlns="urn:schemas-cybersource-com:transaction-data-1.104">
  <merchantID>Foster_City_Flowers</merchantID>
  <merchantReferenceCode>12345678</merchantReferenceCode>
  <billTo>
    <firstName>Jane</firstName>
    <lastName>Smith</lastName>
    <street1>100 Main Street</street1>
    <street2>Suite 1234</street2>
    <city>Foster City</city>
    <state>CA</state>
    <postalCode>94404</postalCode>
    <country>US</country>
    <email>jsmith@example.com</email>
  </billTo>
  <purchaseTotals>
    <currency>USD</currency>
    <grandTotalAmount>16.00</grandTotalAmount>
  </purchaseTotals>
  <card>
    <accountNumber>4650100000000839</accountNumber>
    <expirationMonth>12</expirationMonth>
    <expirationYear>2031</expirationYear>
  </card>
  <ucaf>
    <authenticationData>EHuWW9PiBkWvqE5juRwDzAUFBAk=</authenticationData>
    <collectionIndicator>2</collectionIndicator>
  </ucaf>
  <ccAuthService run="true">
    <networkTokenCryptogram>qE5juRwDzAUFBAkEHuWW9PiBkWv=</networkTokenCryptogram>
    <commerceIndicator>spa</commerceIndicator>
  </ccAuthService>
  <paymentNetworkToken>
    <transactionType>1</transactionType>
  </paymentNetworkToken>
</requestMessage>

```

Example 7 In-App Authorization Request for American Express

```

<requestMessage xmlns="urn:schemas-cybersource-com:transaction-data-1.104">
  <merchantID>Foster_City_Flowers</merchantID>
  <merchantReferenceCode>12345678</merchantReferenceCode>
  <billTo>
    <firstName>Jane</firstName>
    <lastName>Smith</lastName>
    <street1>100 Main Street</street1>
    <street2>Suite 1234</street2>
    <city>Foster City</city>
    <state>CA</state>
    <postalCode>94404</postalCode>
    <country>US</country>
    <email>jsmith@example.com</email>
  </billTo>
  <purchaseTotals>
    <currency>USD</currency>
    <grandTotalAmount>16.00</grandTotalAmount>
  </purchaseTotals>
  <card>
    <accountNumber>4650100000000839</accountNumber>
    <expirationMonth>12</expirationMonth>
    <expirationYear>2031</expirationYear>
  </card>
  <ccAuthService run="true">
    <networkTokenCryptogram>qE5juRwDzAUFBAkEHuWW9PiBkWv=</networkTokenCryptogram>
    <commerceIndicator>aesk</commerceIndicator>
  </ccAuthService>
  <paymentNetworkToken>
    <transactionType>1</transactionType>
  </paymentNetworkToken>
</requestMessage>

```
