

Card-Present Processing Using the SCMP API

Supplement to *Credit Card Services
Using the SCMP API*
and
*PIN Debit Processing
Using the SCMP API*

April 2019

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the power of payment

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Contents

Recent Revisions to This Document 5

About This Guide 6

Audience and Purpose 6

Conventions 6

Related Documentation 7

Customer Support 7

Chapter 1 **Introduction to Card-Present Transactions** 8

Supported Processors 8

Prerequisites 9

Chapter 2 **Optional Features** 10

CyberSource Integration 10

Dynamic Currency Conversion (DCC) 10

Europay, Mastercard, Visa (EMV) 11

Apple Pay and Google Pay 14

EMV Host Validation and Device Certification 14

EMV Cards and Cardholder Verification Methods (CVMs) 15

EMV Transactions 16

Payment Network Tokenization 16

PCI P2P Encryption with Bluefin 17

Requirements 17

Overview 18

Bluefin P2PE Contact Center 18

Creating a Request for an Authorization or Stand-Alone Credit That Uses
Bluefin PCI P2PE 19

Relaxed Requirements for Address Data and Expiration Date 19

Appendix A API Fields 20

- Formatting Restrictions 20
- Data Type Definitions 21
- EMV Request-Level Fields 22
- Clear Text Request-Level Fields 28
- General Card-Present Request-Level Fields 29
- General Card-Present Offer-Level Fields 50
- P2PE Request Fields 51
- Reply Fields 52

Appendix B Examples 55

- Sale Using Swiped Track Data 55
- Sale Using Keyed Data 56
- Sale Using EMV Technology with a Contact Read 58
 - American Express Direct 58
 - Credit Mutuel-CIC, FDC Nashville Global, or SIX 60
 - Dynamic Currency Conversion on FDC Nashville Global or SIX 62
 - All Other Processors 63
- Sale Using EMV Technology with a Contactless Read 64
 - American Express Direct 64
 - Credit Mutuel-CIC, FDC Nashville Global, or SIX 66
 - All Other Processors 67
- Authorization Using Bluefin PCI P2PE 69

Appendix C Bluefin PCI P2PE Error Codes 70

Appendix D Card Types 71

Recent Revisions to This Document

| Release | Changes |
|---------------|---|
| April 2019 | This revision contains only editorial changes and no technical updates. |
| December 2018 | <p>CyberSource integrations:</p> <ul style="list-style-type: none"> Added new section "CyberSource Integration," page 10. Added the terminal_type request field. See "General Card-Present Request-Level Fields," page 29. |
| October 2018 | <p>Added support for Credit Mutuel-CIC. See "Supported Processors," page 8.</p> <p>FDC Nashville Global: added information about PIN data decryption. See "EMV Cards and Cardholder Verification Methods (CVMs)," page 15.</p> |
| August 2018 | <p>All processors that support online PIN transactions: added support for the following PIN data fields. For field descriptions, see "EMV Request-Level Fields," page 22.</p> <ul style="list-style-type: none"> pin_data_encrypted_pin pin_data_key_serial_number pin_data_pin_block_encoding_format |
| July 2018 | <p>All processors that are supported for card-present transactions: added "Bluefin P2PE Contact Center," page 18.</p> <p>American Express Direct: updated the description for the card_type reply field. See "Reply Fields," page 52.</p> <p>FDC Nashville Global: updated the description for the card_type reply field. See "Reply Fields," page 52.</p> <p>SIX: updated the description for the card_type reply field. See "Reply Fields," page 52.</p> |
| June 2018 | Little: changed the name of this processor to <i>Worldpay VAP</i> . |

About This Guide

Audience and Purpose

This guide is written for application developers who want to use the CyberSource SCMP API to integrate credit card processing with card-present data into their order management system. *Credit Card Services Using the SCMP API* provides the basic information about credit card processing with CyberSource. This supplement provides information about additional requirements and options for card-present transactions.

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



Note

Information in this guide about Europay, Mastercard, and Visa (EMV) applies to credit card processing and PIN debit processing. All other information in this guide applies only to credit card processing. PIN debit processing is available only on FDC Nashville Global.

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 |
|-------------|--|
| Bold | <ul style="list-style-type: none"> ■ API field names ■ API service names ■ Graphical user interface elements that you must act upon |
| Screen text | <ul style="list-style-type: none"> ■ XML elements ■ Code examples ■ Values for API fields; for example: Set the ics_applications field to <code>ics_auth</code>. |

Related Documentation

- *Getting Started with CyberSource Advanced for the SCMP API* ([PDF](#) | [HTML](#)) describes how to get started using the SCMP API.
- *Credit Card Services Using the SCMP API* ([PDF](#) | [HTML](#)) describes how to integrate CyberSource payment processing services into your business.
- The [CyberSource API Versions](#) page provides information about the CyberSource API versions.
- *PIN Debit Processing Using the SCMP API* ([PDF](#) | [HTML](#)) describes how to integrate CyberSource PIN debit services into your business.

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>

Introduction to Card-Present Transactions

This supplement to *Credit Card Services Using the SCMP API* describes card-present processing with CyberSource.



Note

Information in this guide about Europay, Mastercard, and Visa (EMV) applies to credit card processing and PIN debit processing. All other information in this guide applies only to credit card processing. PIN debit processing is available only on FDC Nashville Global.

Supported Processors

CyberSource supports card-present credit card transactions for the processors shown in the following table.

Table 2 Processors that CyberSource Supports for Card-Present Transactions

| Processor | EMV ¹ | Magnetic Stripe |
|--|------------------|-----------------|
| American Express Direct—supports card-present processing only for merchants in the U.S. who are transacting in U.S. dollars. | Yes | Yes |
| Chase Paymentech Solutions | Yes | Yes |
| Credit Mutuel-CIC | Yes | Yes |
| FDC Nashville Global | Yes | Yes |
| FDMS Nashville | No | Yes |
| GPN | Yes | Yes |
| OmniPay Direct—First Data Merchant Solutions (Europe) only | Yes | Yes |
| RBS WorldPay Atlanta | No | Yes |
| SIX | Yes | Yes |
| TSYS Acquiring Solutions | No | Yes |
| Worldpay VAP—Worldpay VAP was previously called <i>Little</i> . | No | Yes |

¹ For information about EMV support, see "Europay, Mastercard, Visa (EMV)," page 11.

Prerequisites

Before you start your implementation:

- Contact your acquirer to find out whether you are allowed to process card-present transactions.
- Find out from your acquirer and CyberSource Customer Support whether you must have a separate CyberSource merchant ID for your card-present transactions.
- Contact CyberSource Customer Support to have your account configured to process card-present transactions.
- Make sure that you are familiar with the CyberSource SCMP API for processing e-commerce and mail order/telephone order (MOTO) transactions as described in [Credit Card Services Using the SCMP API](#). The request and reply fields for card-present transactions are very similar to the request and reply fields for e-commerce and MOTO transactions.

Table 3 Card-Present Fields in Service Requests and Replies

| Service Request | Description |
|-----------------------|---|
| Authorization request | A card-present authorization request includes additional fields and several existing authorization request fields have different requirements when the request is for a card-present transaction. |
| Authorization reply | A card-present authorization reply includes the same fields that are included for an e-commerce or MOTO transaction. |
| Capture request | A card-present capture request includes the same fields that are included for an e-commerce or MOTO transaction. |
| Capture reply | A card-present capture reply includes the same fields that are included for an e-commerce or MOTO transaction. |

Optional Features

CyberSource Integration

Supported Processors:

- American Express Direct
- Credit Mutuel-CIC
- FDC Nashville Global
- OmniPay Direct
- SIX

CyberSource can provide the client software for your POS terminals. The client software sends the CyberSource service requests, parses the information in the CyberSource service replies, and provides information to your POS system. For details, contact your CyberSource account manager.

Dynamic Currency Conversion (DCC)

For information about dynamic currency conversion, see [Credit Card Services Using the SCMP API](#).

Europay, Mastercard, Visa (EMV)



Note

Information in this guide about EMV applies to credit card processing and PIN debit processing. All other information in this guide applies only to credit card processing. PIN debit processing is available only on FDC Nashville Global.

Services:

- Authorization
- Authorization reversal
- Capture
- Credit
- PIN debit credit—supported only on FDC Nashville Global
- PIN debit purchase—supported only on FDC Nashville Global
- PIN debit reversal—supported only on FDC Nashville Global

Processors:

- American Express Direct
- Chase Paymentech Solutions
- Credit Mutuel-CIC
- FDC Nashville Global
- GPN
- OmniPay Direct—First Data Merchant Solutions (Europe) only
- SIX

Card Types:

- Contact EMV:

Table 4 Supported Card Types for Contact Transactions

| Card Type | American Express Direct | Chase Paymentech Solutions | Credit Mutuel-CIC | FDC Nashville Global | GPN | OmniPay Direct | SIX |
|------------------|-------------------------|----------------------------|-------------------|----------------------|-----|----------------|-----|
| American Express | Yes | Yes | No | Yes | Yes | No | No |

Table 4 Supported Card Types for Contact Transactions (Continued)

| Card Type | American Express Direct | Chase Paymentech Solutions | Credit Mutuel-CIC | FDC Nashville Global | GPN | OmniPay Direct | SIX |
|-------------------------|--------------------------------|-----------------------------------|--------------------------|-----------------------------|------------|-----------------------|------------|
| Cartes Bancaires | No | No | Yes | No | No | No | No |
| China UnionPay | No | No | No | Yes | No | No | Yes |
| Diners Club | No | Yes | No | Yes | Yes | No | Yes |
| Discover | No | Yes | No | Yes | Yes | No | Yes |
| JCB | No | No | No | Yes | Yes | No | Yes |
| Maestro (International) | No | No | Yes | Yes | No | No | Yes |
| Maestro (UK Domestic) | No | No | Yes | No | No | No | Yes |
| Mastercard | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Visa | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Visa Electron | No | No | Yes | No | No | No | Yes |

- Contactless EMV:

Table 5 Supported Card Types for Contactless Transactions

| Card Type | American Express Direct | Chase Paymentech Solutions | Credit Mutuel-CIC | FDC Nashville Global | GPN | OmniPay Direct | SIX |
|-----------------------------|-------------------------|----------------------------|-------------------|----------------------|-----|----------------|-----|
| American Express ExpressPay | Yes | Yes | No | Yes | Yes | No | No |
| Cartes Bancaires | No | No | Yes | No | No | No | No |
| China UnionPay | No | No | No | Yes | No | No | No |
| Diners Club | No | Yes | No | Yes | Yes | No | No |
| Discover | No | Yes | No | Yes | Yes | No | No |
| JCB | No | No | No | Yes | Yes | No | No |
| Mastercard PayPass | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Visa payWave | No | Yes | Yes | Yes | Yes | Yes | Yes |

EMV is a global standard for exchanging information between chip cards and POS terminals. A chip card is a credit or debit card with an embedded microchip. A chip card also has a magnetic stripe on the back of the card that can be used for a back-up transaction when the card's chip cannot be read. The EMV standards define the protocols for all levels of transmission between chip cards and chip card processing devices: physical, electrical, data, and application.

Apple Pay and Google Pay

CyberSource supports contactless EMV for Apple Pay and Google Pay transactions.

Processors:

- FDC Nashville Global
- OmniPay Direct
- SIX

Card Types:

Table 6 Supported Card Types for Contactless Apple Pay and Google Pay Transactions

| Card Type | FDC Nashville Global | OmniPay Direct | SIX |
|------------------|----------------------|----------------|-----|
| American Express | Yes | No | No |
| Discover | Yes | No | No |
| Mastercard | Yes | Yes | Yes |
| Visa | Yes | Yes | Yes |

EMV Host Validation and Device Certification

As a payment services provider, CyberSource uses a two-step process for host validation and device certification for EMV. Both steps must be completed to have a fully certified EMV solution.

- 1 Host validation: CyberSource obtained host validation for the following processors:
 - American Express Direct
 - Chase Paymentech Solutions
 - Credit Mutuel-CIC
 - FDC Nashville Global
 - GPN
 - OmniPay Direct—First Data Merchant Solutions (Europe) only
 - SIX
- 2 Device certification: CyberSource is working on device certification with Credit Mutuel-CIC, FDC Nashville Global, and SIX.



Before you purchase a device for use with EMV, contact your CyberSource representative.

EMV Cards and Cardholder Verification Methods (CVMs)

Table 7 Processor Support for CVMs

| Processor | Chip and PIN | Chip and Online PIN | Chip and Signature |
|----------------------------|--------------|---------------------|--------------------|
| American Express Direct | Yes | Yes | Yes |
| Chase Paymentech Solutions | No | No | Yes |
| Credit Mutuel-CIC | Yes | No | Yes |
| FDC Nashville Global | Yes | Yes | Yes |
| GPN | No | No | Yes |
| OmniPay Direct | Yes | No | Yes |
| SIX | Yes | Yes | Yes |

Most chip-and-PIN cards allow a cardholder to provide a signature as a back-up option. Other EMV cards are chip-and-signature cards. For these cards, a signature is the preferred CVM, and a PIN can be used as a back-up option.



Note

Chip-and-signature cards are more widespread in the U.S. Chip-and-PIN cards are more widespread outside the U.S.

On FDC Nashville Global, there are two ways to decrypt PIN data:

- With the CyberSource solution, which is the default solution, CyberSource injects the terminal with a fixed key and decrypts the PIN data.
- With the third-party solution, CyberSource sends the encrypted PIN data to a third party who decrypts it and forwards it to the processor on your behalf. To enable third-party PIN data decryption for your CyberSource account, contact CyberSource Customer Support.

EMV Transactions

EMV transactions are more secure from fraud than are magnetic stripe transactions, which require a visual inspection of the card. Chip-and-PIN cards are more secure from fraud than chip-and-signature cards. When an EMV chip card is used in a POS environment, it generates a cryptogram that changes with each transaction. This dynamic authentication provides an extra layer of security for POS transactions.

For an EMV transaction, use the fields documented in ["EMV Request-Level Fields," page 22](#). The following fields and values are specifically for EMV:

- Request fields: see ["EMV Request-Level Fields," page 22](#).
- Reply fields: see ["Reply Fields," page 52](#).
- Values for **pos_entry_mode**:
 - `contact`: Read from direct contact with chip card.
 - `contactless`: Read from a contactless interface using chip data.
 - `msd`: Read from a contactless interface using magnetic stripe data (MSD). The `msd` value is not supported on OmniPay Direct.
- Values for **terminal_capability**:
 - 4: Terminal can read chip cards.
 - 5: Terminal can read contactless chip cards.

Payment Network Tokenization

Payment network tokenization enables you to request a credit card authorization with a token instead of a primary account number (PAN). For information about adding payment network tokenization functionality to an order management system that already uses CyberSource credit card services, see [Payment Network Tokenization Using the SCMP API](#).

PCI P2P Encryption with Bluefin

Services:

- Authorization
- Stand-alone credit

Processors:

CyberSource supports this feature for all processors that are supported for card-present transactions. See "[Supported Processors](#)," page 8.

Device:

- ID TECH SREDKey PCI Key Pad with Encrypted MagStripe Reader



You must use a device that meets the following requirements:

- Is provided by Bluefin Payment Systems unless otherwise agreed to by CyberSource and Bluefin
- Is injected with encryption keys for the CyberSource payment card industry (PCI) point-to-point encryption (P2PE) solution, which is powered by Bluefin

You must have separate devices for sandbox testing and production.

Requirements

You must have a contractual relationship with Bluefin Payment Systems for PCI-validated P2PE services, which include:

- Key injection
- Decryption, which is performed by CyberSource
- Hardware

You must manage your Bluefin devices through the Bluefin P2PE Manager portal, which enables you to:

- Track device shipments
- Deploy or terminate devices
- Manage users and administrators
- View P2PE transactions
- Download and export reports for PCI compliance



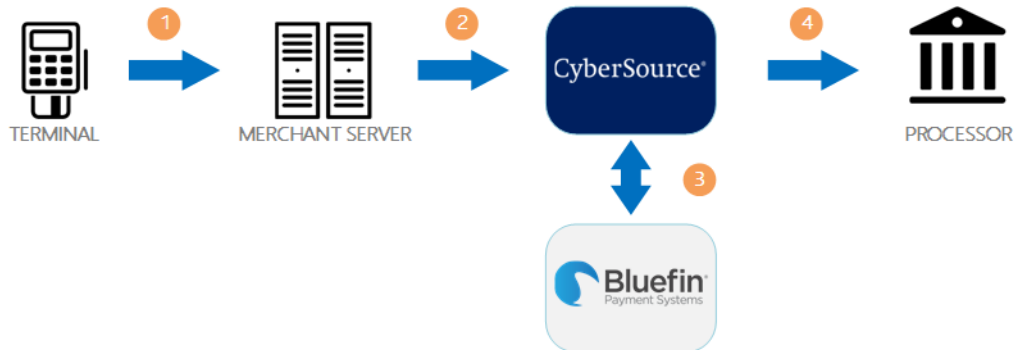
Do not use terminal configuration #3 or #5, which causes the device to prompt you for the cardholder's street address. To include the cardholder's street address in your order management system, include the CyberSource API field for the billing street address in your request to CyberSource.

Overview

The CyberSource PCI P2PE solution, which is powered by Bluefin, does the following:

- Safeguards card data at the terminal hardware level
- Reduces your PCI burden by minimizing the number of PCI audit questions to which you must respond
- Provides device life cycle management through the Bluefin P2PE Manager portal
- Supports magnetic stripe read (MSR) and manual key entry

The following diagram illustrates the steps in a transaction that uses encryption:



- 1** When a customer swipes a card through the Bluefin device, the device encrypts the card details at the hardware level and in accordance with PCI P2PE standards. The device sends the encrypted payload to your order management system.
- 2** Your order management system sends the encrypted payload to CyberSource in an authorization request or stand-alone credit request.
- 3** CyberSource sends the encrypted payload to Bluefin to be decrypted and parsed. Bluefin sends the decrypted data to CyberSource over a secure channel.
- 4** CyberSource sends the decrypted data and additional transaction information to your processor.

Bluefin P2PE Contact Center

The Bluefin P2PE Contact Center solution is supported on the Virtual Terminal in the CyberSource Business Center. For details, see the [Business Center Overview](#).

Creating a Request for an Authorization or Stand-Alone Credit That Uses Bluefin PCI P2PE

For examples that use Bluefin PCI P2PE, see ["Authorization Using Bluefin PCI P2PE,"](#) page 69.

Step 1 Include the following fields in the request:

- encrypted_payment_data
- encrypted_payment_descriptor

These fields are described in ["P2PE Request Fields,"](#) page 51.

Step 2 Include general card-present request fields in the request as needed. See ["General Card-Present Request-Level Fields,"](#) page 29, and ["General Card-Present Offer-Level Fields,"](#) page 50.

Step 3 Follow instructions in [Credit Card Services Using the SCMP API](#) for creating an authorization request or stand-alone credit request.



Most of the fields that are normally required for an authorization request or stand-alone credit request are not required for a Bluefin PCI P2PE request because the encrypted data includes most of the required data.

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.

API Fields

**Important**

When you send an authorization, authorization reversal, capture, or credit request that includes card-present data, you must include the basic fields required for every authorization, authorization reversal, capture, or credit request. For information about card-not-present fields required for these requests, see [Credit Card Services Using the SCMP API](#).

Formatting Restrictions

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

**Note**

Values for request-level and offer-level fields must not contain carets (^) or colons (:). However, they can contain embedded spaces and any other printable characters. When you use more than one consecutive space, CyberSource removes the extra spaces.

Data Type Definitions

Table 8 Data Type Definitions

| Data Type | Description |
|---------------------|---|
| Date and time | <p>Format is YYYY-MM-DDThhmmssZ, where:</p> <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) <p>Example 2018-08-11T224757Z equals August 11, 2018, at 22:47:57 (10:47:57 p.m.)</p> |
| Decimal | <p>Number that includes a decimal point</p> <p>Example 23.45, -0.1, 4.0, 90809.0468</p> |
| Integer | Whole number {..., -3, -2, -1, 0, 1, 2, 3, ...} |
| Nonnegative integer | Whole number greater than or equal to zero {0, 1, 2, 3, ...} |
| Positive integer | Whole number greater than zero {1, 2, 3, ...} |
| String | Sequence of letters, numbers, spaces, and special characters |

EMV Request-Level Fields

Table 9 EMV Request-Level Fields

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|----------------------------------|---|---|--|
| cardholder_verification_method | <p>Method that was used to verify the cardholder's identity. See "Europay, Mastercard, Visa (EMV)," page 11. Possible values:</p> <ul style="list-style-type: none"> ■ 0: No verification ■ 1: Signature ■ 2: PIN <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10.</p> | ics_auth (R for successful EMV transactions and EMV fallback transactions) | Integer (1) |
| emv_request_card_sequence_number | <p>Number assigned to a specific card when two or more cards are associated with the same primary account number. This value enables issuers to distinguish among multiple cards that are linked to the same account. This value can also act as a tracking tool when the issuer reissues cards. When this value is available, it is provided by the chip reader. When the chip reader does not provide this value, do not include this field in your request. See "Europay, Mastercard, Visa (EMV)," page 11.</p> <p>Note Information in this guide about EMV applies to credit card processing and PIN debit processing. All other information in this guide applies only to credit card processing. PIN debit processing is available only on FDC Nashville Global.</p> | <p>ics_auth (O)</p> <p>ics_pin_debit_credit (O)</p> <p>ics_pin_debit_purchase (O)</p> <p>Note The PIN debit services are supported only on FDC Nashville Global.</p> | <p>American Express Direct: String with numbers only (2)</p> <p>All other processors: String with numbers only (3)</p> |

Table 9 EMV Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|-------------------------------|---|--|-----------------------|
| emv_request_ combined_tags | <p>EMV data that is transmitted from the chip card to the issuer and from the issuer to the chip card. The EMV data is in the tag-length-value format and includes chip card tags, terminal tags, and transaction detail tags. See "Europay, Mastercard, Visa (EMV)," page 11.</p> <p>For information about the individual tags, see the "Application Specification" section in the <i>EMV 4.3 Specifications</i>: http://emvco.com</p> <p>Important The following tags contain sensitive information and must not be included in this field:</p> <ul style="list-style-type: none"> ■ 56: Track 1 equivalent data ■ 57: Track 2 equivalent data ■ 5A: Application PAN ■ 5F20: Cardholder name ■ 5F24: Application expiration date ■ 99: Transaction PIN ■ 9F0B: Cardholder name (extended) ■ 9F1F: Track 1 discretionary data ■ 9F20: Track 2 discretionary data <p>For information about the individual tags, see the "Application Specification" section in the <i>EMV 4.3 Specifications</i>: http://emvco.com</p> <p>For captures, this field is required for contact EMV transactions. Otherwise, it is optional.</p> <p>For credits, this field is required for contact EMV stand-alone credits and contactless EMV stand-alone credits. Otherwise, it is optional.</p> <p>Important For contact EMV captures, contact EMV stand-alone credits, and contactless EMV stand-alone credits, you must include the following tags in this field. For all other types of EMV transactions, the following tags are optional.</p> <ul style="list-style-type: none"> ■ 95: Terminal verification results ■ 9F10: Issuer application data ■ 9F26: Application cryptogram <p>Note Information in this guide about EMV applies to credit card processing and PIN debit processing. All other information in this guide applies only to credit card processing. PIN debit processing is available only on FDC Nashville Global.</p> | <p>ics_auth (O)</p> <p>ics_auth_reversal (O)</p> <p>ics_bill (See description)</p> <p>ics_credit (See description)</p> <p>ics_pin_debit_credit (O)</p> <p>ics_pin_debit_purchase (O)</p> <p>ics_pin_debit_reversal (O)</p> <p>Note The PIN debit services are supported only on FDC Nashville Global.</p> | String (999) |

Table 9 EMV Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|----------------------|--|---|-----------------------|
| emv_request_fallback | <p>Indicates that a fallback method was used to enter credit card information into the POS terminal. When a technical problem prevents a successful exchange of information between a chip card and a chip-capable terminal:</p> <ol style="list-style-type: none"> 1 Swipe the card or key the credit card information into the POS terminal. 2 Use the pos_entry_mode field to indicate whether the information was swiped or keyed. <p>See "Europay, Mastercard, Visa (EMV)," page 11. Possible values:</p> <ul style="list-style-type: none"> ■ Y: Fallback method was used. ■ N (default): Fallback method was not used. <p>This field is supported only on American Express Direct, Chase Paymentech Solutions, FDC Nashville Global, GPN, OmniPay Direct, and SIX.</p> | <p>ics_auth (O) ics_credit (O)</p> | String (1) |

Table 9 EMV Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|--------------------------------|--|---|-----------------------|
| emv_request_fallback_condition | <p>Reason for the EMV fallback transaction.</p> <p>An EMV fallback transaction occurs when an EMV transaction fails for one of these reasons:</p> <ul style="list-style-type: none"> ■ Technical failure: the EMV terminal or EMV card cannot read and process chip data. ■ Empty candidate list failure: the EMV terminal does not have any applications in common with the EMV card. EMV terminals are coded to determine whether the terminal and EMV card have any applications in common. EMV terminals provide this information to you. <p>See "Europay, Mastercard, Visa (EMV)," page 11. Possible values:</p> <ul style="list-style-type: none"> ■ 1: Transaction was initiated with information from a magnetic stripe, and the previous transaction at the EMV terminal either used information from a successful chip read or it was not a chip transaction. ■ 2: Transaction was initiated with information from a magnetic stripe, and the previous transaction at the EMV terminal was an EMV fallback transaction because the attempted chip read was unsuccessful. <p>This field is supported only on GPN.</p> | <p>ics_auth (R with all card types for an EMV fallback transaction that occurs when an EMV transaction fails for a technical reason; otherwise, not used.)</p> <p>ics_bill (R for a forced capture with Visa for an EMV fallback transaction that occurs when an EMV transaction fails for a technical reason; otherwise, not used.)</p> <p>ics_credit (R for a stand-alone credit with Visa for an EMV fallback transaction that occurs when an EMV transaction fails for a technical reason; otherwise, not used.)</p> <p>Note Do not include this field when the EMV terminal does not have any applications in common with the EMV card.</p> | String (1) |
| pin_data_encrypted_pin | <p>Encrypted PIN. This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10, and only for processors that support chip and online PIN transactions as indicated in Table 7, "Processor Support for CVMs," on page 15.</p> | ics_auth (R for online PIN transactions) | String (16) |

Table 9 EMV Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|------------------------------------|--|---|-----------------------|
| pin_data_key_serial_number | <p>Combination of the POS terminal's unique identifier and a transaction counter that is used when decrypting the encrypted PIN. The entity that injected the PIN encryption keys into the terminal decrypts the encrypted PIN and creates this value.</p> <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10, and only for processors that support chip and online PIN transactions as indicated in Table 7, "Processor Support for CVMs," on page 15.</p> | ics_auth (R for online PIN transactions) | String (20) |
| pin_data_pin_block_encoding_format | <p>Format that is used to encode the PIN block.</p> <p>Possible values:</p> <ul style="list-style-type: none"> ■ 0: ISO 9564 format 0 ■ 1: ISO 9564 format 1 ■ 2: ISO 9564 format 2 ■ 3: ISO 9564 format 3 <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10, and only for processors that support chip and online PIN transactions as indicated in Table 7, "Processor Support for CVMs," on page 15.</p> | ics_auth (R for online PIN transactions) | Integer (1) |

Table 9 EMV Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|-----------------|--|---|-----------------------|
| pos_environment | <p>Operating environment.</p> <p>Possible values for all card types except Mastercard:</p> <ul style="list-style-type: none"> ■ 0: No terminal used or unknown environment. ■ 1: On merchant premises, attended. ■ 2: On merchant premises, unattended. Examples: oil, kiosks, self-checkout, mobile telephone, personal digital assistant (PDA). ■ 3: Off merchant premises, attended. Examples: portable POS devices at trade shows, at service calls, or in taxis. ■ 4: Off merchant premises, unattended. Examples: vending machines, home computer, mobile telephone, PDA. ■ 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>Possible values for Mastercard:</p> <ul style="list-style-type: none"> ■ 2: On merchant premises, unattended. Examples: oil, kiosks, self-checkout. ■ 4: Off merchant premises, unattended, or cardholder terminal. Examples: vending machines. <p>This field is supported only on American Express Direct.</p> | ics_auth (O) | String (1) |

Clear Text Request-Level Fields

Table 10 Clear Text Request-Level Fields

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|------------|---|---|-----------------------|
| track_data | <p>Card's track 1 and 2 data. For all processors except FDMS Nashville, this value consists of one of the following:</p> <ul style="list-style-type: none"> ■ Track 1 data ■ Track 2 data ■ Data for both tracks 1 and 2 <p>For FDMS Nashville, this value consists of one of the following:</p> <ul style="list-style-type: none"> ■ Track 1 data ■ Data for both tracks 1 and 2 <p>Example %B41111111111111111111111111111111^SMITH/JOHN ^1612101976110000868000000?;41111111111111111111=16121019761186800000?</p> | <p>ics_auth:</p> <ul style="list-style-type: none"> ■ Chase Paymentech Solutions, Credit Mutuel-CIC, FDC Nashville Global, OmniPay Direct, and SIX: required if pos_entry_mode= contact, contactless, msd, or swiped; otherwise, not used. ■ All other processors: required if pos_entry_mode= swiped; otherwise, not used. | String (119) |

General Card-Present Request-Level Fields

Table 11 General Card-Present Request-Level Fields

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|---|---|--|---|
| bill_address1 | <p>Credit card billing street address as it appears in credit card issuer's records.</p> <p>FDMS Nashville When the street name is numeric, it must be sent in numeric format. For example, if the address is <i>One First Street</i>, it must be sent as <i>1 1st Street</i>.</p> | <p>ics_auth:</p> <ul style="list-style-type: none"> ■ FDMS Nashville: required if keyed; not used if swiped. ■ TSYS Acquiring Solutions: required when bill_payment=true and pos_entry_mode=keyed. ■ All other processors: optional | <p>FDMS Nashville: String (20)</p> <p>All other processors: String (60)</p> |
| bill_address2 | <p>Used for additional address information. For example: Attention: Accounts Payable</p> <p>FDMS Nashville bill_address1 and bill_address2 together cannot exceed 20 characters.</p> | ics_auth (O) | <p>FDMS Nashville: String (20)</p> <p>All other processors: String (60)</p> |
| <p>¹ 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 19. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p> | | | |

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|---|---------------------------|--|-----------------------|
| bill_city | Credit card billing city. | ics_auth: <ul style="list-style-type: none"> ■ Chase Paymentech Solutions: optional. ■ Credit Mutuel-CIC: optional. ■ OmniPay Direct: optional. ■ SIX: optional. ■ TSYS Acquiring Solutions: required when bill_payment=true and pos_entry_mode=keyed. ■ Worldpay VAP: optional. (Worldpay VAP was previously called <i>Lite</i>.) ■ All other processors: not used. | String (50) |
| <p>¹ 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 19. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p> | | | |

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|--------------|--|--|-----------------------|
| bill_country | Credit card billing country. Use the ISO Standard Country Codes . | ics_auth: <ul style="list-style-type: none"> ■ Chase Paymentech Solutions: optional. ■ Credit Mutuel-CIC: optional. ■ OmniPay Direct: optional. ■ SIX: optional. ■ TSYS Acquiring Solutions: required when bill_payment=true and pos_entry_mode=keyed. ■ Worldpay VAP: optional. (Worldpay VAP was previously called <i>Lite</i>.) ■ All other processors: not used. | String (2) |
| bill_payment | Indicates payment for bill or payment towards existing contractual loan. For information about Visa Bill Payments and Visa Debt Repayments, see Credit Card Services Using the SCMP API . Possible values: <ul style="list-style-type: none"> ■ <code>false</code> (default): Not a bill payment or loan payment. ■ <code>true</code>: Bill payment or loan payment. | ics_auth (O) | String (5) |

¹ 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 19. **Important** It is your responsibility to determine whether a field is required for the transaction you are requesting.

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|---|--|--|-----------------------|
| bill_state | Credit card billing state or province. Use the State, Province, and Territory Codes for the United States and Canada . | ics_auth: <ul style="list-style-type: none"> ■ Chase Paymentech Solutions: optional. ■ Credit Mutuel-CIC: optional. ■ OmniPay Direct: optional. ■ SIX: optional. ■ TSYS Acquiring Solutions: required when bill_payment=true and pos_entry_mode=keyed. ■ Worldpay VAP: optional. (Worldpay VAP was previously called <i>Lite</i>.) ■ All other processors: not used. | String (2) |
| <p>¹ 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 19. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p> | | | |

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|--------------|--|---|-----------------------|
| bill_zip | <p>Postal code for billing address. Postal code must consist of 5 to 9 digits.</p> <p>When the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</p> <p>Example 12345-6789</p> <p>When the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space][numeric][alpha][numeric]</p> <p>Example A1B 2C3</p> | <p>ics_auth:</p> <ul style="list-style-type: none"> ■ FDMS Nashville: required if pos_entry_mode=keyed and the address is in the U.S. or Canada. Optional if pos_entry_mode=keyed and the address is not in the U.S. or Canada. Not used if swiped. ■ RBS WorldPay Atlanta: for best card-present keyed rates, send the postal code if pos_entry_mode=keyed. ■ TSYS Acquiring Solutions: required when bill_payment=true and pos_entry_mode=keyed. ■ All other processors: optional. | String (10) |
| card_present | <p>Indicates whether the card is present at the time of the transaction. Possible values:</p> <ul style="list-style-type: none"> ■ N: Card is not present. ■ Y: Card is present. | <p>ics_auth:</p> <ul style="list-style-type: none"> ■ FDMS Nashville: not used. ■ All other processors: required. | String (1) |

1 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 19. **Important** It is your responsibility to determine whether a field is required for the transaction you are requesting.

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|--|---|--|-------------------------|
| card_type | Three-digit value that indicates the card type. For the possible values, see Appendix D, "Card Types," on page 71. | ics_auth (Required for Carte Blanche and JCB. Optional for other card types.) Important CyberSource strongly recommends that you send the card type even when it is optional for your processor and card type. Omitting the card type can cause the transaction to be processed with the wrong card type. | String (3) |
| cat_level | Type of cardholder-activated terminal. Possible values: <ul style="list-style-type: none"> ■ 1: Automated dispensing machine ■ 2: Self-service terminal ■ 3: Limited amount terminal ■ 4: In-flight commerce (IFC) terminal ■ 5: Radio frequency device ■ 6: Mobile acceptance terminal ■ 7: Electronic cash register ■ 8: E-commerce device at your location ■ 9: Terminal or cash register that uses a dial-up connection to connect to the transaction processing network <p>Chase Paymentech Solutions Only values 1, 2, and 3 are supported.</p> <p>FDC Nashville Global Only values 7, 8, and 9 are supported.</p> <p>GPN Only values 6, 7, 8, and 9 are supported.</p> <p>TSYS Acquiring Solutions Only value 6 is supported.</p> | ics_auth: <ul style="list-style-type: none"> ■ Chase Paymentech Solutions: required if terminal_id is included in the request; otherwise, optional. ■ FDC Nashville Global: optional for EMV transactions; otherwise, not used. ■ GPN: required. ■ TSYS Acquiring Solutions: required for transactions from mobile devices; otherwise, not used. ■ All other processors: not used. | Nonnegative integer (1) |
| <p>1 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 19. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p> | | | |

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|------------------------------|---|--|-------------------------|
| currency | Currency used for order. For possible values, see the ISO Standard Currency Codes . | ics_auth (R) | String (5) |
| customer_cc_cv_ indicator | Indicates whether a CVN code was sent. Possible values: <ul style="list-style-type: none"> ■ 0 (default): CVN service not requested. CyberSource uses this default when you do not include customer_cc_cv_number in the request. ■ 1 (default): CVN service requested and supported. CyberSource uses this default when you include customer_cc_cv_number in the request. ■ 2: CVN on credit card is illegible. ■ 9: CVN not imprinted on credit card. | ics_auth: <ul style="list-style-type: none"> ■ FDMS Nashville: required for American Express cards; otherwise, optional. ■ TSYS Acquiring Solutions: optional if pos_entry_mode=keyed; otherwise, not used. ■ All other processors: optional. | Nonnegative integer (1) |
| customer_cc_cv_ number | CVN. See the CVN information in Credit Card Services Using the SCMP API . | ics_auth: <ul style="list-style-type: none"> ■ FDMS Nashville: required for American Express or if swiped; otherwise, optional. ■ TSYS Acquiring Solutions: optional if pos_entry_mode=keyed; otherwise, not used. ■ All other processors: optional. | Nonnegative integer (4) |
| customer_cc_expmo | Two-digit month in which credit card expires. Format: MM. Possible values: 01 through 12. Leading 0 is required. | ics_auth: <ul style="list-style-type: none"> ■ FDMS Nashville: required. ■ All other processors: required if pos_entry_mode=keyed.¹ | String (2) |

¹ 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 19. **Important** It is your responsibility to determine whether a field is required for the transaction you are requesting.

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|--------------------|---|--|--|
| customer_cc_expyr | Four-digit year in which credit card expires. Format: YYYY. | ics_auth: <ul style="list-style-type: none">■ FDMS Nashville: required.■ All other processors: required if pos_entry_mode=keyed.¹ | Nonnegative integer (4) |
| customer_cc_number | Customer's credit card number. | ics_auth: <ul style="list-style-type: none">■ FDMS Nashville: required.■ All other processors: required if pos_entry_mode=keyed. | FDMS Nashville: Nonnegative integer (19) All other processors: Nonnegative integer (20) |
| customer_email | Customer's email address, including full domain name. Format: name@host.domain | ics_auth: <ul style="list-style-type: none">■ Chase Paymentech Solutions: optional.■ Credit Mutuel-CIC: optional.■ OmniPay Direct: optional■ SIX: optional■ TSYS Acquiring Solutions: required when bill_payment=true and pos_entry_mode=keyed.■ Worldpay VAP: optional. (Worldpay VAP was previously called <i>Lite</i>.)■ All other processors: not used. | String (255) |

¹ 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 19. **Important** It is your responsibility to determine whether a field is required for the transaction you are requesting.

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|--------------------|--|--|-----------------------|
| customer_firstname | Customer's first name. Value should match value on card. | ics_auth: <ul style="list-style-type: none"> ■ Chase Paymentech Solutions: optional. ■ Credit Mutuel-CIC: optional. ■ OmniPay Direct: optional. ■ SIX: optional. ■ TSYS Acquiring Solutions: required when bill_payment=true and pos_entry_mode=keyed. ■ Worldpay VAP: optional. (Worldpay VAP was previously called <i>Lite</i>.) ■ All other processors: not used. | String (60) |

¹ 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 19. **Important** It is your responsibility to determine whether a field is required for the transaction you are requesting.

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|-------------------|---|---|-----------------------|
| customer_lastname | Customer's last name. Value should match value on card. | ics_auth: <ul style="list-style-type: none"> ■ Chase Paymentech Solutions: optional. ■ Credit Mutuel-CIC: optional. ■ OmniPay Direct: optional. ■ RBS WorldPay Atlanta: optional. ■ SIX: optional. ■ TSYS Acquiring Solutions: required when bill_payment=true and pos_entry_mode=keyed. ■ Worldpay VAP: optional. (Worldpay VAP was previously called <i>Lite</i>.) ■ All other processors: not used. | String (60) |
| customer_phone | Customer's phone number. CyberSource recommends that you include the country code when order is from outside the U.S. | ics_auth: <ul style="list-style-type: none"> ■ Chase Paymentech Solutions: optional. ■ Credit Mutuel-CIC: optional ■ OmniPay Direct: optional. ■ SIX: optional. ■ TSYS Acquiring Solutions: optional. ■ Worldpay VAP: optional. (Worldpay VAP was previously called <i>Lite</i>.) ■ All other processors: not used. | String (15) |

¹ 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 19. **Important** It is your responsibility to determine whether a field is required for the transaction you are requesting.

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|--|---|---|-----------------------|
| e_commerce_indicator | Type of transaction. For a card-present transaction, you must set this field to <code>retail</code> . | ics_auth (R) | String (13) |
| grand_total_amount | Grand total for the order. You must include either this field or offer0 and the offer-level field amount . For information about offers and grand totals, see Getting Started with CyberSource Advanced for the SCMP API . | ics_auth (See description) | String (15) |
| ics_applications | CyberSource services to process for the request. | ics_auth (R) | String (255) |
| merchandise_code | Identifier for the merchandise. Possible value: <ul style="list-style-type: none"> ■ 1000: Gift card <p>This field is supported only on American Express Direct.</p> | ics_auth (O) | Integer (7) |
| merchant_id | Your CyberSource merchant ID. | ics_auth (R) | String (30) |
| merchant_ref_number | 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 SCMP API . FDC Nashville Global The value for this field must be numeric and must be less than 9 digits. When you do not send a valid value, CyberSource creates one for you. However, the value is not returned to you, so you cannot use the merchant reference number to track the order. | ics_auth (R) | String (50) |
| <p>1 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 19. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p> | | | |

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|--|--|---|-----------------------|
| partner_original_transaction_id | <p>Value that links the previous transaction to the current follow-on request. This value is assigned by the client software that is installed on the POS terminal, which makes it available to the terminal's software and to CyberSource. Therefore, you can use this value to reconcile transactions between CyberSource and the terminal's software.</p> <p>CyberSource does not forward this value to the processor. Instead, the value is forwarded to the CyberSource reporting functionality.</p> <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10.</p> | ics_auth (O) ics_auth_reversal (O) ics_bill (O) ics_credit (O) | String (32) |
| partner_sdk_version | <p>Version of the software installed on the POS terminal.</p> <p>CyberSource does not forward this value to the processor. Instead, the value is forwarded to the CyberSource reporting functionality.</p> <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10.</p> | ics_auth (O) ics_credit (O) | String (32) |
| pos_device_id | <p>Value created by the client software that uniquely identifies the POS device.</p> <p>CyberSource does not forward this value to the processor. Instead, the value is forwarded to the CyberSource reporting functionality.</p> <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10.</p> | ics_auth (O) ics_credit (O) | String (32) |
| <p>1 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 19. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p> | | | |

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|---|---|--|-----------------------|
| pos_entry_mode | <p>Method of entering credit card information into the POS terminal. Possible values:</p> <ul style="list-style-type: none"> ■ contact: Read from direct contact with chip card. ■ contactless: Read from a contactless interface using chip data. ■ keyed: Manually keyed into POS terminal. This value is not supported on OmniPay Direct. ■ msd: Read from a contactless interface using magnetic stripe data (MSD). This value is not supported on OmniPay Direct. ■ swiped: Read from credit card magnetic stripe. <p>The contact, contactless, and msd values are supported only for EMV transactions. See "Europay, Mastercard, Visa (EMV)," page 11.</p> | ics_auth (R) | String (11) |
| ship_to_address1 | First line of shipping address. | ics_auth (Required if any shipping address information is included in the request; otherwise, optional.) | String (60) |
| ship_to_address2 | Second line of shipping address. | ics_auth (O) | String (60) |
| ship_to_city | City of shipping address. | ics_auth (Required if any shipping address information is included in the request and shipping to the U.S. or Canada; otherwise, optional.) | String (50) |
| ship_to_country | Country of shipping address. Use the ISO Standard Country Codes . | ics_auth (Required if any shipping address information is included in the request; otherwise, optional.) | String (2) |
| <p>¹ 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 19. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p> | | | |

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|-------------------|--|--|-----------------------|
| ship_to_firstname | First name of the person receiving the shipment. | ics_auth (O) | String (60) |
| ship_to_lastname | Last name of the person receiving the shipment. | ics_auth (O) | String (60) |
| ship_to_state | State or province to ship the product to. Use the State, Province, and Territory Codes for the United States and Canada . | ics_auth (Required if any shipping address information is included in the request and shipping to the U.S. or Canada; otherwise, optional.) | String (2) |
| ship_to_zip | Postal code for the shipping address. The postal code must consist of 5 to 9 digits. When the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] Example 12345-6789 When the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space][numeric][alpha][numeric] Example A1B 2C3 | ics_auth (Required if any shipping address information is included in the request and shipping to the U.S. or Canada; otherwise, optional.) | String (10) |

¹ 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 19. **Important** It is your responsibility to determine whether a field is required for the transaction you are requesting.

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|---|--|---|-----------------------|
| store_and_forward_ indicator | <p>When connectivity is unavailable, the client software that is installed on the POS terminal can store a transaction in its memory and send it for authorization when connectivity is restored.</p> <p>CyberSource does not forward this value to the processor. Instead, the value is forwarded to the CyberSource reporting functionality.</p> <p>Possible values:</p> <ul style="list-style-type: none"> ■ Y: Transaction was stored and then forwarded. ■ N (default): Transaction was not stored and then forwarded. <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10, but is not supported for Credit Mutuel-CIC.</p> | ics_auth (O) ics_credit (O) | String (1) |
| <p>¹ 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 19. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p> | | | |

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|---|---|--|-----------------------|
| terminal_capability | <p>POS terminal's capability. Possible values:</p> <ul style="list-style-type: none"> ■ 1: Terminal has a magnetic stripe reader only. ■ 2: Terminal has a magnetic stripe reader and manual entry capability. ■ 3: Terminal has manual entry capability only. ■ 4: Terminal can read chip cards. ■ 5: Terminal can read contactless chip cards. <p>The values of 4 and 5 are supported only for EMV transactions. See "Europay, Mastercard, Visa (EMV)," page 11.</p> | <p>ccAuthService:</p> <ul style="list-style-type: none"> ■ For the following processors, this field is required: <ul style="list-style-type: none"> ● American Express Direct ● Chase Paymentech Solutions ● Credit Mutuel-CIC ● FDC Nashville Global ● FDMS Nashville ● OmniPay Direct ● SIX ● Worldpay VAP (Worldpay VAP was previously called <i>Little</i>.) ■ For the following processors, this field is optional: <ul style="list-style-type: none"> ● GPN ● RBS WorldPay Atlanta ● TSYS Acquiring Solutions | Integer (1) |
| terminal_card_capture_capability | <p>Indicates whether the terminal can capture the card. Possible values:</p> <ul style="list-style-type: none"> ■ 1: Terminal can capture card. ■ 0: Terminal cannot capture card. <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10, but is not supported for FDC Nashville Global or SIX.</p> | <p>ics_auth (O)</p> <p>ics_credit (O)</p> | String (1) |
| <p>¹ 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 19. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p> | | | |

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|---|--|---|-----------------------|
| terminal_cvm_capabilities_# | <p>Complete list of cardholder verification methods (CVMs) supported by the terminal. Possible values:</p> <ul style="list-style-type: none"> ■ PIN ■ Signature <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10.</p> | <p>ics_auth (O)</p> <p>ics_credit (O)</p> | String (15) |
| <p>¹ 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 19. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p> | | | |

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|--|--|---|-----------------------|
| terminal_id | <p>Identifier for the terminal at your retail location. You can define this value yourself, but consult the processor for requirements.</p> <p>FDC Nashville Global</p> <p>To have your account configured to support this field, contact CyberSource Customer Support. This value must be a value that FDC Nashville Global issued to you.</p> | <p>ics_auth:</p> <ul style="list-style-type: none"> ■ For the following processors, this field is optional. If not provided, CyberSource uses the value in your CyberSource account. <ul style="list-style-type: none"> ● American Express Direct ● Credit Mutuel-CIC ● FDC Nashville Global ● SIX ■ Chase Paymentech Solutions: optional. If you include this field in your request, you must also include cat_level. ■ FDMS Nashville: CyberSource uses the value in your CyberSource account. ■ OmniPay Direct: optional. ■ For the following processors this field is not used. <ul style="list-style-type: none"> ● GPN ● RBS WorldPay Atlanta ● TSYS Acquiring Solutions ● Worldpay VAP (Worldpay VAP was previously called <i>Little</i>.) | String (8) |
| <p>1 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 19. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p> | | | |

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|--|---|--|-----------------------|
| terminal_id_altername | <p>Identifier for an alternate terminal at your retail location. You define the value for this field.</p> <p>This field is supported only for Mastercard transactions on FDC Nashville Global. Use the terminal_id field to identify the main terminal at your retail location. If your retail location has multiple terminals, use this terminal_id_altername field to identify the terminal used for the transaction.</p> <p>This field is a <i>pass-through</i>, which means that CyberSource does not check the value or modify the value in any way before sending it to the processor.</p> | <p>ics_auth:</p> <ul style="list-style-type: none"> ■ FDC Nashville Global: optional for Mastercard transactions; otherwise, not used. ■ All other processors: not used. | String (8) |
| terminal_input_capabilities_# | <p>Complete list of card input methods supported by the terminal. Possible values:</p> <ul style="list-style-type: none"> ■ Keyed: Terminal can accept card data that is entered manually. ■ Swiped: Terminal can accept card data from a magnetic stripe reader. ■ Contact: Terminal can accept card data in EMV contact mode. ■ Contactless: Terminal can accept card data in EMV contactless mode. ■ BarCode: Terminal can read bar codes. ■ QRcode: Terminal can read QR codes. ■ OCR: Terminal can perform optical character recognition (OCT). <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10.</p> | <p>ics_auth (O)</p> <p>ics_credit (O)</p> | String (15) |
| <p>1 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 19. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p> | | | |

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|---|---|---|-----------------------|
| terminal_output_capability | <p>Indicates whether the terminal can print or display messages. Possible values:</p> <ul style="list-style-type: none"> ■ 1: Neither ■ 2: Print only ■ 3: Display only ■ 4: Print and display <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10.</p> | <p>ics_auth (O)</p> <p>ics_credit (O)</p> | String (1) |
| terminal_pin_capability | <p>Maximum PIN length that the terminal can capture. Possible values:</p> <ul style="list-style-type: none"> ■ 0: No PIN capture capability ■ 1: PIN capture capability unknown ■ 4: Four characters ■ 5: Five characters ■ 6: Six characters ■ 7: Seven characters ■ 8: Eight characters ■ 9: Nine characters ■ 10: Ten characters ■ 11: Eleven characters ■ 12: Twelve characters <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10, but is not supported on FDC Nashville Global.</p> | <p>ics_auth (R for PIN transactions)</p> <p>ics_credit (R for PIN transactions)</p> | Integer (2) |
| terminal_serial_number | <p>Terminal serial number assigned by the hardware manufacturer.</p> <p>CyberSource does not forward this value to the processor. Instead, the value is forwarded to the CyberSource reporting functionality.</p> <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10.</p> | <p>ics_auth (O)</p> <p>ics_credit (O)</p> | String (32) |
| <p>¹ 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 19. Important It is your responsibility to determine whether a field is required for the transaction you are requesting.</p> | | | |

Table 11 General Card-Present Request-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|-----------------------------|--|--|-----------------------|
| terminal_type | Type of terminal. Possible values: <ul style="list-style-type: none"> ■ 21: Attended terminal, online only ■ 22: Attended terminal, offline with online capability ■ 23: Attended terminal, offline only ■ 24: Unattended terminal, online only ■ 25: Unattended terminal, offline with online capability ■ 26: Unattended terminal, offline only <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10.</p> | ics_auth (O) ics_auth_reversal (O) ics_credit (O) | String (2) |
| transaction_local_date_time | Date and time at your physical location. Format: YYYYMMDDhhmmss, where: YYYY = year MM = month DD = day hh = hour mm = minutes ss = seconds | ics_auth: <ul style="list-style-type: none"> ■ For the following processors, this field is required: <ul style="list-style-type: none"> ● American Express Direct ● Credit Mutuel-CIC ● FDC Nashville Global ● SIX ■ For all other processors, this field is optional. | String (14) |

¹ 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 19. **Important** It is your responsibility to determine whether a field is required for the transaction you are requesting.

General Card-Present Offer-Level Fields

Table 12 General Card-Present Offer-Level Fields

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|----------------------|---|---|--|
| amount | <p>Per-item price of the product. You must include either offer0 and this field or the request-level field grand_total_amount in your request. The value for this field cannot be negative. For information about offers and grand totals, see Getting Started with CyberSource Advanced for the SCMP API.</p> <p>You can include a decimal point (.) in the value for this field, but you cannot include any other special characters. CyberSource truncates the amount to the correct number of decimal places.</p> | ics_auth (See description) | <p>For GPN: Decimal (10)</p> <p>All other processors: Decimal (15)</p> |
| merchant_product_sku | Product identifier code. Required when product_code is not <code>default</code> or one of the values related to shipping and/or handling. | ics_auth (See description) | String (15) |
| product_code | <p>Type of product. The value for this field is used to identify the product category (electronic, handling, physical, service, or shipping). The default value is <code>default</code>. For a list of valid values, see the information about product codes in Credit Card Services Using the SCMP API.</p> <p>When the value for this field is not <code>default</code> or one of the values related to shipping and/or handling, the quantity, product_name, and merchant_product_sku fields are required. For information about offers and grand totals, see Getting Started with CyberSource Advanced for the SCMP API.</p> | ics_auth (O) | String (30) |
| product_name | Required when product_code is not <code>default</code> or one of the values related to shipping and/or handling. | ics_auth (See description) | String (30) |

Table 12 General Card-Present Offer-Level Fields (Continued)

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|------------|--|---|--------------------------|
| quantity | Default is 1. Required when product_code is not default or one of the values related to shipping and/or handling. | ics_auth (See description) | Nonnegative integer (10) |
| tax_amount | <p>Total tax to apply to the product. This value cannot be negative. The tax amount and the offer amount must be in the same currency.</p> <p>The tax amount field is additive. The following example uses a two-exponent currency such as USD:</p> <p>1 You include the following offer lines in your request:</p> <pre>offer0=amount:10.00^quantity: 1^tax_amount:0.80 offer1=amount:20.00^quantity: 1^tax_amount:1.60</pre> <p>2 The total amount authorized will be 32.40, not 30.00 with 2.40 of tax included.</p> <p>If you want to include tax_amount and also request the ics_tax service, see Tax Calculation Service Using the SCMP API.</p> | ics_auth (O) | Decimal (15) |

P2PE Request Fields

Table 13 P2PE Request Fields

| Field | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|------------------------------|---|---|-----------------------|
| encrypted_payment_data | Encrypted Bluefin PCI P2PE payment data. Obtain the encrypted payment data from a Bluefin-supported device. See " PCI P2P Encryption with Bluefin ," page 17. | ics_auth (R for authorizations that use Bluefin PCI P2PE) ics_credit (R for stand-alone credits that use Bluefin PCI P2PE) | String (3072) |
| encrypted_payment_descriptor | Format of the encrypted payment data. The value for Bluefin PCI P2PE is <code>Ymx1ZWZpbG==</code> . See " PCI P2P Encryption with Bluefin ," page 17. | ics_auth (R for authorizations that use Bluefin PCI P2PE) ics_credit (R for stand-alone credits that use Bluefin PCI P2PE) | String (128) |

Reply Fields

Table 14 Reply Fields

| Field | Description | Returned By | Data Type & Length |
|--------------------------|---|------------------------|--------------------|
| acquirer_merchant_number | <p>Identifier that was assigned to you by your acquirer. This value must be printed on the receipt.</p> <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10.</p> | ics_auth ics_credit | String (15) |
| card_suffix | <p>Last four digits of the cardholder's account number. This field is included in the reply message when the client software that is installed on the POS terminal uses the token management service (TMS) to retrieve tokenized payment details.</p> <p>You must contact CyberSource Customer Support to have your account enabled to receive these fields in the credit reply message.</p> <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10.</p> | ics_credit | String (4) |
| card_type | <p>Three-digit value that indicates the card type. For the possible values, see Appendix D, "Card Types," on page 71.</p> <p>CyberSource Integrations</p> <p>This field is included in the reply message when the client software that is installed on the POS terminal uses the token management service (TMS) to retrieve tokenized payment details. You must contact CyberSource Customer Support to have your account enabled to receive these fields in the credit reply message. See "CyberSource Integration," page 10.</p> | ics_credit | String (3) |

Table 14 Reply Fields (Continued)

| Field | Description | Returned By | Data Type & Length |
|--------------------------------|---|--|--------------------|
| emv_reply_combined_tags | <p>EMV data that is transmitted from the chip card to the issuer and from the issuer to the chip card. The EMV data is in the tag-length-value format and includes chip card tags, terminal tags, and transaction detail tags. See "Europay, Mastercard, Visa (EMV)," page 11.</p> <p>For information about the individual tags, see the "Application Specification" section in the <i>EMV 4.3 Specifications</i>: http://emvco.com</p> <p>Note Information in this guide about EMV applies to credit card processing and PIN debit processing. All other information in this guide applies only to credit card processing. PIN debit processing is available only on FDC Nashville Global.</p> | <p>ics_auth</p> <p>ics_auth_reversal</p> <p>ics_pin_debit_credit</p> <p>ics_pin_debit_purchase</p> <p>ics_pin_debit_reversal</p> <p>Note The PIN debit services are supported only on FDC Nashville Global.</p> | String (999) |
| encrypted_payment_error_code | <p>Error code returned by Bluefin when the decryption fails. See Appendix C, "Bluefin PCI P2PE Error Codes," on page 70.</p> | <p>ics_auth</p> <p>ics_credit</p> | String (4) |
| encrypted_payment_reference_id | <p>Unique transaction identifier returned by Bluefin. You can use this value for tracking and reporting. See "PCI P2P Encryption with Bluefin," page 17.</p> | <p>ics_auth</p> <p>ics_credit</p> | Integer (25) |
| issuer_response_code | <p>Additional authorization code that must be printed on the receipt when returned by the processor. This value is generated by the processor and is returned only for a successful transaction.</p> <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10, but is supported only for FDC Nashville Global and SIX.</p> | <p>ics_auth</p> <p>ics_auth_reversal</p> | Integer (6) |
| routing_network_label | <p>Name of the network on which the transaction was routed.</p> <p>This field is supported only on FDC Nashville Global.</p> | ics_auth | String (10) |
| routing_network_type | <p>Indicates whether the transaction was routed on a credit network, a debit network, or the STAR signature debit network. Possible values:</p> <ul style="list-style-type: none"> ■ C: Credit network ■ D: Debit network (without signature) ■ S: STAR signature debit network <p>This field is supported only on FDC Nashville Global.</p> | ics_auth | String (1) |

Table 14 Reply Fields (Continued)

| Field | Description | Returned By | Data Type & Length |
|--------------------------------|---|-------------------------------|--------------------|
| routing_signature_cvm_required | <p>Indicates whether you need to obtain the cardholder's signature. Possible values:</p> <ul style="list-style-type: none"> ■ Y: You need to obtain the cardholder's signature. ■ N: You do not need to obtain the cardholder's signature. <p>This field is supported only on FDC Nashville Global.</p> | ics_auth | String (1) |
| sales_slip_number | <p>Transaction identifier that CyberSource generates. You can choose to print the sales slip number on the receipt.</p> <p>This field is supported only on JCN Gateway.</p> | ics_auth | Integer (5) |
| terminal_id | <p>Terminal identifier assigned by the acquirer. This value must be printed on the receipt.</p> <p>This field is supported only for CyberSource integrations as described in "CyberSource Integration," page 10.</p> | ics_auth ics_credit | String (8) |
| terminal_id_alternate | <p>Identifier for an alternate terminal at your retail location. You defined the value for this field in the request message. This value must be printed on the receipt.</p> <p>This field is supported only for MasterCard transactions on FDC Nashville Global.</p> | ics_auth ics_auth_reversal | String (8) |

Example 2 Reply Message: Sale Using Swiped Track Data

```

merchant_ref_number=ABC123
request_id=0305782650000167905080
ics_rcode=100
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
currency=usd
auth_rcode=100
auth_rflag=SOK
auth_rmsg=Request was processed successfully.
auth_auth_amount=75.00
auth_auth_code=831000
auth_auth_avs=2
auth_auth_response=00
auth_trans_ref_no=1094820975023470
auth_payment_network_transaction_id=0412MCCNYJPWY
auth_card_category=J1
auth_card_group=0
bill_rcode=100
bill_rflag=SOK
bill_rmsg=Request was processed successfully.
bill_bill_amount=75.00
bill_trans_ref_no=1094820975023470
receipt_number=260371

```

Sale Using Keyed Data

Example 3 Request Message: Sale Using Keyed Data

```

merchant_id=JanesPlants
merchant_ref_number=ABC123
currency=usd
grand_total_amount=75.00
pos_entry_mode=keyed
card_present=Y
terminal_capability=2
customer_cc_number=4111111111111111
customer_cc_expmo=12
customer_cc_expyr=2016
card_type=001
ics_applications=ics_auth,ics_bill
e_commerce_indicator=retail

```

Example 4 Reply Message: Sale Using Keyed Data

```
merchant_ref_number=ABC123
request_id=0305782650000167905080
ics_rcode=100
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
currency=usd
auth_rcode=100
auth_rflag=SOK
auth_rmsg=Request was processed successfully.
auth_auth_amount=75.00
auth_auth_code=831000
auth_auth_avs=2
auth_auth_response=00
auth_trans_ref_no=1094820975023470
auth_payment_network_transaction_id=0412MCCNYJPWY
auth_card_category=J1
auth_card_group=0
bill_rcode=100
bill_rflag=SOK
bill_rmsg=Request was processed successfully.
bill_bill_amount=75.00
bill_trans_ref_no=1094820975023470
receipt_number=260371
```

Example 6 Reply Message: Sale on American Express Direct Using EMV Technology with a Contact Read

```
merchant_ref_number=ABC123
request_id=0305782650000167905080
ics_rcode=100
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
currency=usd
auth_rcode=100
auth_rflag=SOK
auth_rmsg=Request was processed successfully.
auth_auth_amount=75.00
auth_auth_code=831000
auth_auth_avs=2
auth_auth_response=00
auth_trans_ref_no=1094820975023470
bill_rcode=100
bill_rflag=SOK
bill_rmsg=Request was processed successfully.
bill_bill_amount=75.00
bill_trans_ref_no=1094820975023470
receipt_number=260371
emv_reply_combined_tags=9F3303204000950500000000009F3704518823719F100
    706011103A000009F26081E1756ED0E2134E29F36020015820200009C01009F1A020
    8409A030006219F0206000000020005F2A0208409F0306000000000000
acquirer_merchant_number=1234567890
issuer_response_code=721100
terminal_id=ABCD1234
```

Example 8 Reply Message: Sale on Credit Mutuel-CIC, FDC Nashville Global, or SIX Using EMV Technology with a Contact Read

```
merchant_ref_number=ABC123
request_id=0305782650000167905080
ics_rcode=100
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
currency=usd
auth_rcode=100
auth_rflag=SOK
auth_rmsg=Request was processed successfully.
auth_auth_amount=75.00
auth_auth_code=831000
auth_auth_avs=2
auth_auth_response=00
auth_trans_ref_no=1094820975023470
bill_rcode=100
bill_rflag=SOK
bill_rmsg=Request was processed successfully.
bill_bill_amount=75.00
bill_trans_ref_no=1094820975023470
receipt_number=260371
emv_reply_combined_tags=9F3303204000950500000000009F3704518823719F100
    706011103A000009F26081E1756ED0E2134E29F36020015820200009C01009F1A020
    8409A030006219F0206000000020005F2A0208409F0306000000000000
acquirer_merchant_number=1234567890
issuer_response_code=721100
terminal_id=ABCD1234
```

Dynamic Currency Conversion on FDC Nashville Global or SIX

Example 9 Request Message: Sale on FDC Nashville Global or SIX Using Dynamic Currency Conversion and EMV Technology with a Contact Read

```

merchant_id=Merchant12345
merchant_ref_number=FDE Contact Auth 1
currency=EUR
grand_total_amount=30
foreign_amount=30
foreign_currency=EUR
original_amount=25.44
original_currency=GBP
exchange_rate=1.1789
exchange_rate_timeStamp=20170824 10:21
dcc_indicator=1
pos_entry_mode=contact
card_present=Y
terminal_capability=4
track_data=%B41111111111111110^SMITH/BETTY^20121200123456012**XXX**
      ***?*;41111111111111110D20121200XXXX00000?*
terminal_id=99D11001
pos_device_id=device1
terminal_input_capabilities_0=swiped
terminal_input_capabilities_1=contact
terminal_input_capabilities_2=contactless
terminal_cvm_capabilities_0=signature
terminal_cvm_capabilities_1=pin
card_type=001
ics_applications=ics_auth
e_commerce_indicator=retail
cardholder_verification_method=2
partner_original_transaction_id=510be4aef90711e6acbc7d88388d803d
emv_request_combined_tags=9F3303204000950500000000009F3704518823719F100
706011103A000009F26081E1756ED0E2134E29F36020015820200009C01009F1A020
8409A030006219F02060000000020005F2A0208409F0306000000000000
emv_request_card_sequence_number=001

```

All Other Processors

Example 10 Request Message: Sale Using EMV Technology with a Contact Read

```

merchant_id=JanesPlants
merchant_ref_number=ABC123
currency=usd
grand_total_amount=75.00
pos_entry_mode=contact
card_present=Y
terminal_capability=4
track_data=%B41111111111111111111111111111111^SMITH/BETTY^16121200123456789012**XXX**
***?*;41111111111111111111111111111111=16121200XXXX00000000?*
ics_applications=ics_auth,ics_bill
e_commerce_indicator=retail
emv_request_combined_tags=9F33032040009505000000000009F3704518823719F100
706011103A000009F26081E1756ED0E2134E29F36020015820200009C01009F1A020
8409A030006219F02060000000020005F2A0208409F0306000000000000
emv_request_card_sequence_number=001

```

Example 11 Reply Message: Sale Using EMV Technology with a Contact Read

```

merchant_ref_number=ABC123
request_id=0305782650000167905080
ics_rcode=100
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
currency=usd
auth_rcode=100
auth_rflag=SOK
auth_rmsg=Request was processed successfully.
auth_auth_amount=75.00
auth_auth_code=831000
auth_auth_avs=2
auth_auth_response=00
auth_trans_ref_no=1094820975023470
auth_payment_network_transaction_id=0412MCCNYJPWY
auth_card_category=J1
auth_card_group=0
bill_rcode=100
bill_rflag=SOK
bill_rmsg=Request was processed successfully.
bill_bill_amount=75.00
bill_trans_ref_no=1094820975023470
receipt_number=260371
emv_reply_combined_tags=9F33032040009505000000000009F3704518823719F100
706011103A000009F26081E1756ED0E2134E29F36020015820200009C01009F1A020
8409A030006219F02060000000020005F2A0208409F0306000000000000

```

Example 13 Reply Message: Sale on American Express Direct Using EMV Technology with a Contactless Read

```
merchant_ref_number=ABC123
request_id=0305782650000167905080
ics_rcode=100
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
currency=usd
auth_rcode=100
auth_rflag=SOK
auth_rmsg=Request was processed successfully.
auth_auth_amount=75.00
auth_auth_code=831000
auth_auth_avs=2
auth_auth_response=00
auth_trans_ref_no=1094820975023470
bill_rcode=100
bill_rflag=SOK
bill_rmsg=Request was processed successfully.
bill_bill_amount=75.00
bill_trans_ref_no=1094820975023470
receipt_number=852734
emv_reply_combined_tags=9F33032040009505000000000009F3704518823719F100
    706011103A000009F26081E1756ED0E2134E29F36020015820200009C01009F1A020
    8409A030006219F0206000000020005F2A0208409F0306000000000000
acquirer_merchant_number=1234567890
issuer_response_code=721100
terminal_id=ABCD1234
```

Example 15 Reply Message: Sale on Credit Mutuel-CIC, FDC Nashville Global, or SIX Using EMV Technology with a Contactless Read

```

merchant_ref_number=ABC123
request_id=0305782650000167905080
ics_rcode=100
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
currency=usd
auth_rcode=100
auth_rflag=SOK
auth_rmsg=Request was processed successfully.
auth_auth_amount=75.00
auth_auth_code=831000
auth_auth_avs=2
auth_auth_response=00
auth_trans_ref_no=1094820975023470
bill_rcode=100
bill_rflag=SOK
bill_rmsg=Request was processed successfully.
bill_bill_amount=75.00
bill_trans_ref_no=1094820975023470
receipt_number=852734
emv_reply_combined_tags=9F3303204000950500000000009F3704518823719F100
    706011103A000009F26081E1756ED0E2134E29F36020015820200009C01009F1A020
    8409A030006219F02060000000020005F2A0208409F0306000000000000
acquirer_merchant_number=1234567890
issuer_response_code=721100
terminal_id=ABCD1234

```

All Other Processors

Example 16 Request Message: Sale Using EMV Technology with a Contactless Read

```

merchant_id=JanesPlants
merchant_ref_number=ABC123
currency=usd
grand_total_amount=75.00
pos_entry_mode=contactless
card_present=Y
terminal_capability=5
track_data=%B41111111111111111111111111111111^SMITH/BETTY^16121200123456789012**XXX**
    ***?*;41111111111111111111111111111111=16121200XXXX00000000?*
ics_applications=ics_auth,ics_bill
e_commerce_indicator=retail
emv_request_combined_tags=9F3303204000950500000000009F3704518823719F100
    706011103A000009F26081E1756ED0E2134E29F36020015820200009C01009F1A020
    8409A030006219F02060000000020005F2A0208409F0306000000000000
emv_request_card_sequence_number=001
auth_capture_date=0823

```

Example 17 Reply Message: Sale Using EMV Technology with a Contactless Read

```
merchant_ref_number=ABC123
request_id=0305782650000167905080
ics_rcode=100
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
currency=usd
auth_rcode=100
auth_rflag=SOK
auth_rmsg=Request was processed successfully.
auth_auth_amount=75.00
auth_auth_code=831000
auth_auth_avs=2
auth_auth_response=00
auth_trans_ref_no=1094820975023470
auth_payment_network_transaction_id=0412MCCNYJPWY
auth_card_category=J1
auth_card_group=0
bill_rcode=100
bill_rflag=SOK
bill_rmsg=Request was processed successfully.
bill_bill_amount=75.00
bill_trans_ref_no=1094820975023470
receipt_number=852734
emv_reply_combined_tags=9F3303204000950500000000009F3704518823719F100
706011103A000009F26081E1756ED0E2134E29F36020015820200009C01009F1A020
8409A030006219F02060000000020005F2A0208409F0306000000000000
```

Bluefin PCI P2PE Error Codes

The following table describes the error codes returned by Bluefin for Bluefin PCI P2PE transactions. For information about encrypted transactions, see ["PCI P2P Encryption with Bluefin," page 17](#). When an encryption error occurs:

- CyberSource sets the reply flag field to `ESYSTEM` in the authorization or stand-alone credit reply message. This value indicates that a general system failure occurred and your authorization or stand-alone credit request was not processed.
- CyberSource sets the value for `encrypted_payment_error_code` to the Bluefin PCI P2PE error code.

Table 15 Bluefin PCI P2PE Error Codes

| Error Code | Description |
|------------|---|
| 1001 | Generic or unknown error code. |
| 1101 | Internal system configuration setup error |
| 1102 | |
| 1103 | |
| 1104 | |
| 1105 | |
| 1202 | Device not found or device not recognized. |
| 1203 | Device not active. |
| 1204 | Invalid firmware version. |
| 1303 | All decryptions failed. |
| 1404 | Decryption failed for some other reason. |
| 1406 | Decrypted result did not include credit card information. |

Card Types

Table 16 lists the values that are supported for the **card_type** field in requests and replies. Even though all of these card types are supported for card-not-present transactions, many of them are not supported for card-present transactions. Contact your processor if you have questions about which card types are supported for card-present transactions.



Important

CyberSource strongly recommends that you include the card type field in request messages even if it is optional for your processor and card type. Omitting the card type can cause the transaction to be processed with the wrong card type.

Table 16 Card Types

| Value | Card Type |
|-------|---|
| 001 | Visa For card-present transactions on all processors except SIX, the Visa Electron card type is processed the same way that the Visa debit card is processed. Use card type value 001 for Visa Electron. |
| 002 | Mastercard, Eurocard ¹ : European regional brand of Mastercard. |
| 003 | American Express |
| 004 | Discover |
| 005 | Diners Club |
| 006 | Carte Blanche ¹ |
| 007 | JCB ¹ |
| 014 | EnRoute ¹ |
| 021 | JAL ¹ |
| 024 | Maestro (UK Domestic) ¹ |
| 027 | NICOS house card ¹ |
| 033 | Visa Electron ¹ Use this value only for SIX. For other processors, use 001 for all Visa card types. |
| 034 | Dankort ¹ |

¹ For this card type, you must include the **card_type** field in your request for an authorization or a stand-alone credit.

Table 16 Card Types (Continued)

| Value | Card Type |
|--------------|--------------------------------------|
| 036 | Cartes Bancaires ¹ |
| 037 | Carta Si ¹ |
| 039 | Encoded account number ¹ |
| 040 | UATP ¹ |
| 042 | Maestro (International) ¹ |
| 050 | Hipercard ² |
| 051 | Aura |
| 053 | ORICO house card ¹ |
| 054 | Elo |
| 062 | China UnionPay |

¹ For this card type, you must include the **card_type** field in your request for an authorization or a stand-alone credit.